Social and Spiritual Development Strand
Social Science

Unit 1: Natural and Cultural Environments

Module 1.2 Land Use and Settlement

Lecturer Support Material
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## Unit outline

(Based on the National Curriculum Guidelines)

<table>
<thead>
<tr>
<th>Unit</th>
<th>#</th>
<th>Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>1.1</td>
<td>Geography Skills (Core)</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>Land Use and Settlement (Core)</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>Environmental Issues (Core)</td>
</tr>
<tr>
<td></td>
<td>1.4</td>
<td>Culture (Core)</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>Resource Management (Optional)</td>
</tr>
</tbody>
</table>

## Icons

- 📖 Read or research
- 🖋 Write or summarise
- 🔴 Activity or discussion
# Table of contents

**Module 1.2 – Land Use and Settlement**  
Objectives 1  
Teaching Module 1.2: Land use and settlement 2  

**Module 1.2 Content**  

<table>
<thead>
<tr>
<th>Topic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic 1: Land use</strong></td>
<td>3</td>
</tr>
<tr>
<td>What is land use?</td>
<td>3</td>
</tr>
<tr>
<td>Land tenure</td>
<td>3</td>
</tr>
<tr>
<td>Land tenure in PNG</td>
<td>4</td>
</tr>
<tr>
<td><strong>Topic 2: Levels of Industry and land use</strong></td>
<td>6</td>
</tr>
<tr>
<td>Primary Industry</td>
<td>6</td>
</tr>
<tr>
<td>Secondary Industry</td>
<td>7</td>
</tr>
<tr>
<td>Tertiary Industry</td>
<td>7</td>
</tr>
<tr>
<td>Quaternary industry</td>
<td>7</td>
</tr>
<tr>
<td>Water and land use</td>
<td>10</td>
</tr>
<tr>
<td>Transport and communications</td>
<td>11</td>
</tr>
<tr>
<td><strong>Topic 3: Settlement</strong></td>
<td>13</td>
</tr>
<tr>
<td>Patterns of settlement</td>
<td>13</td>
</tr>
<tr>
<td>Settlement patterns in PNG and Australia</td>
<td>16</td>
</tr>
<tr>
<td>Functions of towns</td>
<td>17</td>
</tr>
<tr>
<td>Cities in developing countries</td>
<td>19</td>
</tr>
<tr>
<td><strong>Topic 4 - Extension study</strong></td>
<td>21</td>
</tr>
<tr>
<td>Settlement issues in PNG</td>
<td>21</td>
</tr>
<tr>
<td><strong>References</strong></td>
<td>24</td>
</tr>
</tbody>
</table>
Module 1.2 – Land Use and Settlement

This module involves the study of the ways humans have interacted with the natural environment, in particular in their use of the land. It also involves an examination of settlement patterns and the impact these have had on the natural environment.

Objectives

By the end of this module you will be able to:

- Examine and compare traditional and modern patterns of land use and settlement
- Examine the interrelationships between communities, work, land use and settlement
- Examine the impact of population on the surrounding environment
- Examine traditional and modern cultural attitudes to the land and its use
- Apply a range of skills such as observing, measuring and recording data, using data to explain, draw conclusions, and make predictions
- Recognise and discuss cause, effect and consequences
The traditional and modern roles of females and males in agriculture, industry and other forms of land use are different in many societies. This module provides an opportunity to examine gender roles in class discussions and research activities in each of the sections. It is important also that participants selected for interviews, surveys and as guest speakers are both male and female so that students are aware of different perspectives.

The strategies and activities outlined below may be substituted for any included in the module. The main emphasis in the teaching of each topic is to include a range of activities and to develop skills which will be useful for beginning teachers in their own classrooms.

- Survey an area close to the college to determine patterns of land use
- Make a model of a typical land use activity
- Construct a low chart or diagram which describes a local industry eg coffee production diagrams
- Compare the settlement patterns of a coastal and highlands region
- Oral history – interview local residents to find out why they live where they do
- Collect statistics on population and settlement patterns and present them as a table
- Study a series of photographs from different regions to compare and contrast land use
- Conduct an environmental impact study for an imaginary new industry to be established in a selected area
- Design a public display showing past and present uses of the local area
- Design a board game which reflects the impact of settlement on the environment
- Design a worksheet on land use suitable for a particular grade
- View and report on videos depicting land use and/or settlement patterns in other parts of the world
- Visit a farm, garden, market of factory and prepare a poster which describes activities at the selected location
Module 1.2 Content

Topic 1: Land use

Establish prior knowledge by asking students to list all the ways land is used. Do this as a class activity.

What is land use?

Land use is what use humans make of the physical environment. It includes a variety of human activity and construction such as transport routes and facilities, housing, industrial complexes, mines, agriculture and farming, urban centres, traditional settlements and water storage facilities.

Land tenure

Land use and farming is influenced a great deal by the rights people have over the land on which they work. Some farmers, especially in Europe and North America, own their farms. They are free to work them in any way they think suitable. They tend to care for their land, to improve it, to adopt new ideas and to invest in new buildings and machinery. By contrast, many farmers, particularly in Asia, are tenants who hire the land. The land belongs to landlords who may live in the cities. The tenant farmer must pay rent or a share of the crop, often as much as 50 per cent of the crop, to the landowner. The tenant may not have the use of the land for more than a few years. The tenant has little interest in making improvements or in caring for the future prosperity of the land when so much effort must be spent in producing food or money for the distant landlord.

One of the problems of land tenure in many parts of the world has been that of fragmentation - having the land in many small plots scattered between those of one's neighbours. Often this has been caused by laws of inheritance which have demanded that when a person dies the land is divided between the sons.

1.2 Activity 1 - Research

Choose one of the examples of land tenure listed below. Research the land tenure system and how it affects the lives of people (maximum one page report).

- Co-operatives (Europe)
- Collectives (USSR)
- State farms (USSR)
- Communes (China)
- Sharecropping (Asia or South America)
- Plantations (Asia or the Americas)
Land tenure in PNG

The supplementary reading ‘Land Tenure and Development in PNG’ is a valuable resource for this section. It could be copied for student use or group work.

Divide into small groups to discuss the problems of land tenure in PNG. Discuss the issue of compensation. To summarise the session get students to list the pros and cons of PNG’s land compensation practices. (This discussion could raise sensitive issues so make sure clear guidelines are established for each group).

Clans or kinship groups own 97 per cent of the land in PNG. They control its division, use, and transfer. This common ownership binds them together and is the basis of their identity in the community. Usually, they use the land collectively for hunting, fishing, gathering plants for food or other needs, or collecting firewood. Rights to use certain areas for gardens or houses are divided among individuals and can be transferred to their descendants. Boundaries are marked by natural features such as trees, rocks, ridges, and rivers. Knowledge of these rights is passed by word of mouth from one generation to another.

Dispute settlement

Many disputes over ownership arise in this customary system, especially in areas with growing populations. Some disputes are settled by village elders. Others are settled by fighting. Some areas have Land Courts, which mix traditional and western settlement procedures. The court appoints an expert to attempt to work out a peaceful compromise. If that fails, the court makes a decision.

Pressure on land leading to strife

TOLAIS are running out of land, and the shortage could soon lead to fights, a senior officer has warned. In desperation, the province is thinking of approaching the National Government to release unused State land to ease the pressure. Provincial lands chairman James Tapele revealed these fears when announcing a major land study is to be carried out in East New Britain.

The aim of the study is to ensure maximum use of all available land on the Gazelle Peninsula. The study was commissioned due to a rapidly increasing population and acute land shortage. Mr Tapele said the increasing population was causing land pressures which could explode into fights over land if the Government did not act quickly. He said there were already many land disputes, which the court systems were trying to solve.

He said the provincial government had also started negotiations with the National Government to delegate powers to forfeit unused State land in the province. Mr Tapela said a lot of allocated State land was lying idle and undeveloped, but the provincial government did not have the power to forfeit and reallocate them to others who could develop them.

He said the plantation acquisition scheme had not helped much and only landed people in financial problems with loan repayments to make. Mr Tapela said the study would look at how best to operate the plantation acquisition scheme to more effectively acquire plantations to resettle people.
Mr Tapela said the study will also look at how the customary land registration scheme could be best used to benefit people in the province. It will also look at identifying vacant freehold land for distribution and redevelopment while they hope to secure titles of vacant State lands.

Post Courier. 2 March 2000

Non-traditional owners: About 160 000 ha of PNG land is owned in freehold by missions and private individuals, who got legal title early in the colonial era. For many years, only the government has been able to buy land directly from the customary landowners. The government owns about 1 250 000 ha and has leased one-fourth of it to missions, individuals, and companies for agricultural, business, or housing purposes. Before buying land, government officials must make detailed studies to learn the rightful owners and make sure that their claim is not under dispute. Population projections must be made to make sure the owner group will have enough land left for its future needs. The land's boundaries must be surveyed and described in legal terms. A value must be set for the land and any food trees or crops. The government has powers to force the owners to sell. However, it rarely uses them. Negotiations can be complicated by the need to get the unanimous approval of all the members of the owner group, including any who are absent from the village.

The colonial government sometimes took land where there were no settlements or gardens, declaring it 'ownerless' or 'waste and vacant'. Villagers, seeking compensation, usually argue that the land was not waste but, rather, was used for hunting or was being kept in reserve. Grievances against government actions are heard by the National Land Commission.

Landowners suspend classes over claim

MOUNT HAGEN: Impatient landowners on Monday suspended classes at the Catholic Church-run Holy Trinity Teachers College here after a 30-day ultimatum given to the State to pay land compensation expired last Sunday. According to the Catholic archdiocese office, landowners were not intent on closing down the college but wanted classes suspended until they knew when their claim is going to be settled by the Government.

National Lands Title Commissioner Natanais Marum on June 19 awarded compensation for the Karmal plantation land in North Waghi, the education resource centre at Kagamuga, which is now the regional training centre of the PNG Institute of Public Administration, and the teachers college. Mr Marum announced here that the Karmal landowners would be paid by the State and Waghi Mek Plantations a total of K1.125 million. Awards for the Kagamuga and Holy Trinity lands (portions 721 and 3) were announced on Sept 13 - K700,000 and K850,000 respectively.

Staff and students were barred from attending class yesterday when a representative of the Western Highlands provincial administration, Jack Karali, visited the campus to speak to parties involved in the issue. Mr Karali explained to the landowners that compensation would take a while to arrive and the provincial administration had already written to the Lands Title Commission. He also appealed to the landowners to let the college continue its classes as this was a crucial period for students when they sit for end-of-year examinations.

The National, 3 November 1999
**Topic 2: Levels of Industry and land use**

*The four levels of industry.*

**Primary Industry**

Primary industries are those in which products are taken directly from the earth's surface layers, e.g. agriculture, mining, fishing and forestry. They are extractive industries and their products are used often as raw materials or fuel for other industries. Primary industries use:

- *Renewable* resources, such as farm crops, trees, and fish, which can be produced again and again from the same areas; and
- *Non-renewable*, or 'wasting', resources, such as iron ore and petroleum, which when once extracted can never be replaced.

They usually require the use of large areas of land.
Secondary Industry

Secondary industries, or manufacturing, are those in which products are changed into objects which are more useful to people, e.g. changing lumps of iron ore rock into sheets of steel, or changing steel into motor cars. Manufacturing usually is done in factories, where many people and machines are gathered together, but it may be done by hand at home, e.g. weaving rugs, knitting or making clay pots. Secondary industry comprises:

- **heavy** manufacturing industry, in which large bulky amounts of raw material are used, e.g. coal in a gas works, clay in a brick works, and iron ore in an iron and steel works; and
- **light** manufacturing industry, in which only small amounts of raw material are used, and normally the products are made with great skill and so have a high value for their size, e.g. watches, televisions, furniture, pharmaceutical drugs and processed foods such as breakfast cereals. Most of these may be described as luxury goods.

These industries make use of land for factories and infrastructure such as roads.

Tertiary Industry

Tertiary industries are those which provide services which assist the running of other industries or provide ways of making living more pleasant. They include:

- marketing of goods, mainly through shops;
- transport of goods and people;
- maintenance services, including the construction and repair of buildings, the upkeep of machinery, packaging of goods, advertising, banking, accountancy and insurance;
- social and cultural services, including health and medicine, education, government administration, leisure and tourist services.

The land required for tertiary industries varies from a site for buildings, to the establishment of reserves and national parks.

Quaternary industry

Quaternary industries are about management, research and consultancy services. They tend to be based in major urban areas.

1.2 Activity 2

**Industries within PNG**

Identify examples of primary, secondary, tertiary and quaternary sector industries which are found in PNG. Discuss their impact on land use?

What is subsistence agriculture? Where, why and how is it practised in PNG?
Select from one of the following PNG cash crop industries.

- Cocoa  
- Copra  
- Coffee  
- Tea  
- Palm oil  
- Vanilla  
- Rubber  
- Sugar  
- Spices.

Provide details about the importance of the crop to the country’s economy, main locations in which it is grown, and harvesting and processing methods. Present your material as a wall chart which includes a flow diagram.

Identify the primary industries practised within 50 kilometres of your college. Rank them in order of importance to the local economy.

**Made in PNG field work**

The following are examples of goods manufactured in Papua New Guinea:

- clothing; furniture and other wood products; boats; canned meats; soft drinks; beer; biscuits; glass bottles; steel drums and sheet metal products; soaps; chemicals for agricultural, industrial, and domestic use; building materials; cigarettes and tobacco; matches; packaging materials; paper products; paints; fibreglass; cooking stoves; and refrigerators.

Select a local supermarket or trade store and identify 10 products sold in the store which have been manufactured in PNG. List the product type, brand and cost.

Select 10 similar items made overseas and complete the same information.

Which products are more expensive? Why?

**Plantations**

Read the following two views on plantations carefully. Decide on the advantages and disadvantages of plantations. Write two or three paragraphs explaining your own views on the value of plantations in developing countries. Use examples from Papua New Guinea to support your views.
Plantations viewpoint no. 1

North America and Western Europe act as key markets. They specialize in secondary and tertiary industry. During the colonial period they 'developed' the farming of subtropical countries by establishing the large-scale production of crops in plantations. They supplied capital, employed managers, cleared the natural vegetation and provided employment for the local people. They improved transport by building roads, railways and ports. The standard of living was raised. Wages, health and housing were improved. Upon independence, the plantations were left for the newly independent nations to carry on as a source of income to purchase food, equipment and raw materials. Where required, western management would stay on. Western countries processed the plantation products and produced food and clothing which could be imported by the developing countries. Western people provided the drive, capital, expertise and technology. The host countries provided the labour and the land and benefited from the reorganization.

Plantations viewpoint no. 2

During the colonial period, less developed countries were exploited by colonizing powers. Their land and labour were used by the western world. Large areas of land were taken over for plantations. Peasant subsistence farming was destroyed to make way for the plantations. The cultivation of specific crops was forced on the traditional farmers. Local people provided cheap labour. Millions of people were involved in migration to form labour pools. Indians, for example, moved into Malaysia to work on the rubber plantations. American and European industry became rich by importing cheap raw materials and making them into items for sale at home and abroad. Manufacturing was limited in the developing countries. Upon independence, third world farmers keep plantations going as a source of income, though conditions of sale may not be favourable and they might be better off growing more food and developing their own industries. They should also grow a greater variety of crops. For example, sugar became the mainstay of the economy of many Caribbean countries because of the plantation system. The prices change from year to year.
Water and land use

Many industries could not exist if a suitable water supply was not readily available. To serve the demands of both urban and rural industries, dams, reservoirs, water tanks and power stations are constructed. Each of these facilities impacts on land available for other uses.

1.2 Activity 3

Water is essential for land use and settlement. Study the picture and identify all the uses of water.

Where does the water supply for your closest town come from? Where does your college get its water? Identify any problems affecting the regular supply of water.

From: Cranna & Dodd – Discover Your World
Transport and communications

Transport and communication systems are major users of available land. Transport routes converge on towns, cities or ports which are collection points. Major trunk routes link the centres. At the end of each trunk route other minor routes diverge from the centre which is a distribution point. Along the trunk route sometimes there may be a change in the means of transport, e.g. from road to sea transport.

Towns act like magnets attracting people and goods and thus attracting lines of communications. The same lines are used also for the distribution of people and goods from the towns into the surrounding countryside. Larger towns attract bigger and better roads to them than do smaller towns. Similarly, at different scales, larger towns and cities attract more air routes.

Transport and communications in PNG

Land transport is PNG's dominant system for moving people and materials, wherever roads have been built. The picture below shows where the roads are located. Each day, PMVs (public motor vehicles) carry thousands of passengers and their personal goods over local and long distance routes. Locally, trucks carry crops to ports and some food and goods to villages. However, vast areas are still not served by roads. The Highlands Highway, with its spur to Madang, is the only road system large enough to support the use of big trucks and benefit from the cost-savings they afford.

PNG road network. (from Dellasta PNG Encyclopedia)
There are more than 400 airfields scattered throughout Papua New Guinea. The national airline, Air Niugini, flies to Sydney, Brisbane, and Cairns in Australia; Jayapura in Indonesia; Honiara in the Solomon Islands; Manila in the Philippines; and Singapore. The airline also operates flights between most domestic provincial centres. Other airlines service smaller centres.

Almost all towns are linked by subscriber trunk-dialling telephones, powered by a solar energy system. There is a direct-dialling service to Australia and a number of other countries. Rural areas are linked by high-frequency radio, or very high frequency telephones. The National Broadcasting Commission of Papua New Guinea controls all broadcasting services in the country. Programmes of both general and local character are provided from Port Moresby, Lae, Daru, Alotau, Kerema, Madang, Mount Hagen, Wewak, Rabaul, Kieta, Mendi, Lorengau, Popondetta, Kimbe, Kundiawa, Kavieng, Goroka, Vanimo, and Wabag. Television was introduced in Papua New Guinea in 1987.

1.2 Activity 4 - Discussion

Explain why there are no road links between Port Moresby and Lae; Rabaul and Kimbe; Vanimo and Wabag.

Identify 5 airlines operating in PNG. How do rural airstrips differ from those in the main centres?

How does PNG's communication system make use of land? What problems are associated with this land use?
**Topic 3 - Settlement**

Read all of topic 3 before commencing the field work Activity 5. Students will have to be fully prepared before commencing this activity. Make sure they have revised mapping skills. To save time help students allocate responsibilities within their group eg some map buildings, some roads, some measure. Each group could produce one large map of the village they visited. Try not to send the whole class to one location.

Activity 6 could be completed instead of Activity 5. It involves similar skills and does not have such an impact on the local community. It could also be done in conjunction with 5 with some groups mapping villages and others mapping town functions.

The places where people live are called settlements. Where do you live?

You may have answered the question with the name of the place in which you live. If you were then asked to describe the place, you would probably use one of these descriptions:

- a city
- a small village
- a large village
- a house on its own
- a large town
- a small town
- a settlement

**Patterns of settlement**

People who live in towns are referred to as the **urban population**. Those who live in the country are called the **rural population**. Most people like to live in nucleated communities or villages, some of which, in time, may grow to become towns or cities.

The pattern of settlement in an area is usually decided by two factors. Firstly, the physical features of the land (the relief, drainage, soil and rock type) can influence the settlement pattern. Secondly, the way the people live and work on the land, and how the land is owned, can have an influence.
### 1.2 Activity 5

*Seek permission to visit two or three nearby villages (in small groups) or draw a map of villages from memory. Map the distribution of houses, buildings, roads and tracks. What pattern do they fit? Try to determine why the village is located at that particular spot.*

Villages (nucleated settlements) all over the world grew up for a variety of reasons. The following issues have influenced decisions about the sites of villages.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER SUPPLY</td>
<td>- essential for drinking and sometimes for industry, e.g. mining. Villages are found near rivers and streams, wells, springs or oases.</td>
</tr>
<tr>
<td>DRY SITE</td>
<td>- protection from flooding. Villages are found on well-drained land, e.g. limestone or sandstone areas, on 'dry points' above flood plains, or the slightly raised areas of river valleys.</td>
</tr>
<tr>
<td>GOOD AGRICULTURAL LAND</td>
<td>- for grazing and crop production. Villages in good agricultural areas have more villages per square kilometre. Alluvial plains of major rivers are very important.</td>
</tr>
<tr>
<td>DEFENCE</td>
<td>- especially important in early times. Use of hills, rocky outcrops, cliffs, rivers and coasts as natural aids to defence.</td>
</tr>
<tr>
<td>ASPECT AND SHELTER</td>
<td>- villages avoid exposed sites or sites with little sunlight.</td>
</tr>
<tr>
<td>ACCESS</td>
<td>- ease of communication with other villages. Common sites are at entrances to mountain passes; where rivers meet; where rivers are easy to cross or bridge; where roads are easily constructed.</td>
</tr>
<tr>
<td>SERVICES</td>
<td>- special sites for particular purposes e.g. new villages were planned or built by governments. Some villages were built next to castles, cathedrals or monasteries. The villages received protection and were helped to supply food.</td>
</tr>
<tr>
<td>BUILDING MATERIALS</td>
<td>- availability of building materials, wood, reeds, stone or clay, may influence the sites of villages.</td>
</tr>
</tbody>
</table>
1.2 Activity 6

Identify the reasons why village settlements were formed in PNG. What decisions influenced the selection of particular sites?

Use the map you drew for Activity 5 and add other land use details such as gardens. (You can use the map below of village land use in Gambia – Africa as a guide).

Villagers gradually began to exchange their goods for those produced in other villages. Trade started. Goods were taken on foot, (or by horse and cart), to markets which occurred at convenient meeting points – central places.

In any flat plain or gently slopping region it is likely that agricultural villages will be fairly evenly spaced. Villagers taking their goods to market found that about 5 km was far enough to travel each way and so a regular pattern of market centres was established.

Besides exchanging their goods, they would seek services which were not available in their agricultural villages. For instance, they might want entertainment, the advice of a doctor or lawyer, the services of a dentist, a chemist or a banker. Such people lived in central places so that their services could be made available to as many people as possible.
Settlement patterns in PNG and Australia

Papua New Guinea’s population is unevenly distributed throughout the country. The areas of greatest density occur in the valleys of the Central Highlands; in the Torricelli and Prince Alexander mountains; near Popondetta, Madang, Port Moresby, Kerema, and Arawa; in the Rabaul hinterland of the Gazelle Peninsula; and on Manam, Karkar, Witu, and Trobriand Islands. Few people live on the rugged, forested slopes of the higher mountain areas. The large areas of poorly drained limestone country do not support large populations, nor do the swamplands along the Sepik and Fly rivers and the Gulf of Papua.

In most parts, the main unit of population is the village. Some villages are large. But most have fewer than 500 people. In parts of the highlands, there are no real villages, because the people live in separate houses scattered over their land. In the highlands, villages were built only when the whole group gathered together for a period of religious rituals. Many villages are built around clear open spaces where public events take place. Sometimes important buildings such as men’s houses or churches are built at the centre. In some cases, the village may, in fact, consist of a series of separate small villages built close together.

Australia’s population is heavily clustered in the southeastern section of the country. Sydney was the site of the first European settlement, followed by Melbourne and Hobart. The new settlers preferred to live in towns much as they had done in Europe. The climate in these regions is the most comfortable and the rainfall adequate for agriculture. The high slopes of the eastern highlands and the harsh dry interior of the continent limited inland settlement.

Each of the Australian capitals is a shipping port. The growth of industry around these ports has provided jobs and attracted more people to live there.

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Population distribution in Papua New Guinea and Australia (From Cranna & Dodd – Discover Your World)
1.2 Activity 7

Draw up a table listing the six largest population centres in Papua New Guinea and Australia. Include the most recent population figures for each centre. Consider the reasons why people have been attracted to these centres.

Functions of towns

A town is a place where things are gathered together, exchanged, made into new forms, and then dispersed. It has inputs such as foodstuffs and raw materials for industry, and outputs such as manufactured goods and waste products.

There are four things which most towns have in common:

- They provide housing for their people
- They provide services such as shops and offices for the people who live in them as well as for people who live in the area around them
- They act as transport centres
- They usually have a range of different industries

![Functions of towns diagram]

*Functions of towns (From Graves et al – People and Environment)*
1.2 Activity 8

Map a section of your nearest town (or use an existing map), marking in the different buildings and land use areas. Decide what function each performs and construct a key/colour code to identify them e.g. professional-black, recreation-green.

As a town grows and changes, it develops certain patterns. Some parts concentrate on offices and shops. Some parts are mainly houses. Factories are often found together. The pattern made by these things is called the land use pattern.

Researchers have tried to explain how the patterns of land use in a town have developed. The main models are shown in the diagrams below. The centre of the town is called the central business district (CBD). It is occupied by businesses such as shops, banks, insurance companies and other offices. These businesses want space in the centre because it is the easiest place for people to get to from all directions. New developments often grow outwards in wedges or sectors. If a group of factories is built where a main road enters a town. The next factory to be opened will probably be built further out along the same road.

(From: Rice – The Fabric of Geography)
1.2 Activity 9

Make a list of the services you expect to find in towns in PNG? Would you expect to find the same services in a village? Why or why not?

Compare your list with the one (for a typical ‘western’ town) provided below. What differences are there? Why?

<table>
<thead>
<tr>
<th>Service</th>
<th>Town</th>
<th>Village</th>
</tr>
</thead>
<tbody>
<tr>
<td>cinema</td>
<td>mains water</td>
<td></td>
</tr>
<tr>
<td>bus station</td>
<td>mains power</td>
<td></td>
</tr>
<tr>
<td>taxi</td>
<td>mains drainage</td>
<td></td>
</tr>
<tr>
<td>hospital</td>
<td>rubbish collection</td>
<td></td>
</tr>
<tr>
<td>clinic</td>
<td>hotel/bar/club</td>
<td></td>
</tr>
<tr>
<td>farm</td>
<td>church</td>
<td></td>
</tr>
<tr>
<td>cathedral</td>
<td>theatre</td>
<td></td>
</tr>
<tr>
<td>post office</td>
<td>factory</td>
<td></td>
</tr>
<tr>
<td>public toilets</td>
<td>wharf</td>
<td></td>
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<tr>
<td>service station</td>
<td>leisure facilities</td>
<td>(playground, park)</td>
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<tr>
<td>primary school</td>
<td>trade store</td>
<td></td>
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<tr>
<td>newsagent</td>
<td>secondary school</td>
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<tr>
<td>butcher</td>
<td>elementary school</td>
<td></td>
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<tr>
<td>clothes shop</td>
<td>supermarket</td>
<td></td>
</tr>
<tr>
<td>hardware store</td>
<td>bakery</td>
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<tr>
<td>furniture shop</td>
<td>jewellers</td>
<td></td>
</tr>
<tr>
<td>university</td>
<td>technical college</td>
<td></td>
</tr>
<tr>
<td>law firm, accountancy firms</td>
<td>bank</td>
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</tbody>
</table>
Employment. Contrasting with the growth of western cities, which attracted labour to work in factories, the Third World cities have much unemployment and underemployment in only part-time jobs. A large section of the people survive by making a little money in an informal street economy. This includes petty selling of items such as drinks or recycled wastes, shoe cleaning, running errands, begging, gambling and crime. There are strong contrasts between the poverty of the informal economy and the relative wealth and security of formal employment.

Transport. In some cities the better-off are moving to new estates on the outskirts, using urban motorways or new metro lines as links to their work in central offices. Traffic jams are common in overcrowded streets.

1.2 Activity 10

Read the description of 'cities in developing countries' carefully. Select either Port Moresby or Lae and describe how it has developed, using the same headings – colonial history, rate of growth, employment and transport.
Topic 4 - Extension study

Settlement issues in PNG

Ten easy ways to a settlement

COULD the Keep-the City-Clean Mr Jamie Maxtone-Graham, Lands Department and the police please explain how we can go about creating squatter settlements? If not then I can.

First, find some vacant State land or land owned by Central Papuan people – they will never complain.

Second, build some sort of a church on it and connect power, phone and water illegally – if anyone questions you, rebuke him for being possessed by demon and being a heathen.

Third, lease part of your land, yes, it is yours now, to fellow buai sellers and can and bottle collectors because they can afford the rent.

Fourth, approach the local Member of Parliament and offer him your votes and the votes of your settlement dwellers. If anyone questions you, you may name your MP and say, “Go and see him. We are his people.”

There you have it! And oh don’t forget you have access to all the prime locations with the best views, seaside, mountain top, located close to major shopping centres, etc.

A last tip, keep your ears open for major developments then plant a garden on the site and claim damages for any destruction of the fruits of your labour.

Your rights: these are very important and every settlement dweller should know these rights by heart. Parents must instil the knowledge of these rights to their children from birth. They are the settlement dwellers ten commandments.

1. You have the right to live anywhere;
2. You have the right to build whatever you wish, wherever you wish;
3. You have the right to free electricity, water and phones;
4. You have the right to make as much noise at whatever time you wish anywhere you wish;
5. You have the privilege to litter and loiter;
6. You have the right to family planning, i.e. you can plan a very large family;
7. You have the right to care for any form of animal life, including prison escapees;
8. You have the right to stone vehicles;
9. You have the right to sell anything, anytime, anywhere; and
10. You have the right to deprive other citizens of their rights.

Now go forth and expand, be as the sands on the seashore and the stars in the sky! You are a chosen race! By whom, we do not yet know.

City urbanisation team to focus on strategies

THE National Capital District Urban Community Development Committee (NCDUCDC) is determined to devise strategies to reduce the negative effects of rapid urbanisation and to maximise the potential for creating sustainable city environments.

Chairman of the committee and Moresby South MP, Lady Carol Kidu said this when highlighting the committee’s mission statement at its launching at the Islander Travelodge in Port Moresby last Friday.

She said in its mission statement the committee recognises that, "the process of urbanisation is part of a wider global trend that cannot be stopped or reversed. Urbanisation and its effects must however be controlled and managed to balance the individual and collective interests of the people as well as the interests of the city as a whole.”

She said the committee faces a daunting challenge, and that is to address the negative impacts of urbanisation in our nation's capital. "In Port Moresby we are faced with a combined population growth rate of over 4.5% which is a combination of a high natural birth rate plus a high rate of rural to urban immigration. This growth rate is higher than the city's capacity to provide basic services for the increasing population,” she said.

Lady Kidu said that provision of basic services such as education health and available land, affordable housing, water and sanitation services is the acceptable standard of living and quality of life for our people and our city. "Uncontrolled population growth rates in one or two primate cities cannot be sustained and is not a balanced pattern of urbanisation," she said.

She added that "as a nation we must encourage urban growth centres throughout every province and decentralise the urbanisation process for a more balanced national approach to development'. Lady Kidu said businesses and industry and government services need incentives to assist in the process of decentralisation then the unemployed urban migrant population will more willingly return to their home provinces and be pioneers of development there.

Meanwhile, Lady Kidu said many areas that were once called suburbs such as Sahama and Kaugere have been neglected for years and are now being called settlements along with illegal settlements on government and traditional land. ‘The name settlement is a much abused word and settlements and the people living in settlements are often wrongly stereotyped and wrongly blamed for all sorts social problems,” she said, adding that ‘the reality is that settlements are the homes of a wide spectrum of people, professionals, public servants, business people and hard working and law abiding citizens with their families striving for a better life.

“It is time to stop the labelling and stereotyping and get on with sorting out the mess,” she said. Lady Kidu said that to do this would involve the removal of the illegal settlements not by bulldozing but using alternatives like planned repatriation schemes for the migrant population and resettlement for the working population who can afford the costs of urban living.

The National, March 7, 2000
1.2 Activity 11 - Discussion

This activity will require some time for preparation and practice. Students will have to complete the readings first to develop an understanding of the complex issues affecting settlements. There will probably not be enough time for all groups to discuss all four scenarios so decisions will have to be made about choosing one scenario and all groups do the same one or covering all the options with different groups.

For this activity you will need to form into groups of six. Each person within the group is to represent the views of one of the groups of people found in a PNG town listed below.

- Store owners
- Rascals
- Police officers
- PMV owners
- Professionals (e.g. dentists, lawyers, bankers);
- Street market sellers.

For any or all of the proposals below state how you think the people you represent may benefit or suffer from the changes.

- A proposal to demolish squatter settlements.
- A proposal to provide services to settlements (electricity, water and sewerage).
- A proposal to provide more services in rural areas.
- A proposal to make migration into towns illegal.

During the discussion list the main points. Write a summary report on the different viewpoints represented.
References


Graves, Lidstone and Naish (1994). *People and Environment*, Heinemann

*Post Courier* – various issues


*The National* – various issues