**RESOURCES IN NIGERIA**

Resources in Nigeria include:

1. Mineral resources
2. Power Resources
3. Water and vegetation resources

**MINERAL RESOURCES:**

The table below minerals resources found in Nigeria.

|  |  |  |
| --- | --- | --- |
| Mineral Resources | Location | Type of Rock |
| Coal | Enugu and Okaba in Benue | Sedimentary rock |
| Iron ore | Itakpe in Kogi and Aladja in Delta | Basement complex rock |
| Limestone | Ewekoro and Shagami in Ogun State. Ukipilla in Edo State, Nkalagwu in Anambra. Also found in Benue, Calabar and Sokoto | Sedimentary Rock |
| Lead and Zinc | Abakaliliki in Ebonyi State | Sedimentary Rock |
| Tin and Columbite | Jos in Plateau State | Basement complex Rock |
| Petroleum/ crude oil and gas | Port Harcourt, Warri and Ugehelli in Delta, Akwa Ibom | Sedimentary rock |

**METHODS OF MINERAL EXPLOITATION**

Coal is extracted by underground mining or adit method.

1. A tunnel or adit is cut into the coal seam.
2. Explosives are used to dig out the coal
3. A light rail car hauls the coal from the tunnel to the surface or into lories from where they are exported or used locally

**METHOD MINING IRON ORE**

Iron ore is mined by a method called open cast method.

1. Explosives are use to remove the over-burden rocks.
2. A powerful machine called dragline is then used to pile the iron ore into heap.
3. A monitor is then used to direct a powerful job of water to towards the heap.
4. The water washes the soil out through a series of sluice boxes
5. The iron ore sinks to the bottom of the sluice boxes while water carries the dirt away
6. The iron concentrate now formed is ready for smelting in factories.

**METHOD OF MINNIG LIMETSONE**

Petroleum is mined using drilling method.

1. Underground rocks are first samples and tested for traces of oil.
2. When oil is discovered, a well is sunk to reach with the aid of a drilling rig.
3. The oil is then pumped out mechanically or naturally if the pressure within the oil zone in the soil is high.

In the soil, three layers within the oil zone exist

1. Natural gas in found on top
2. Petroleum or crude oil the middle
3. Water at the bottom

**ADVERSE EFFECTS OF MINING OF OPERATION**

1. Mining hazard e.g. collapse of mines
2. Health hazard like asthma, lung and heart disorder
3. Displacement settlements
4. Global warming through emission of gases
5. Destruction of ecosystem,
6. Destruction of ecosystem
7. Environmental pollution
8. Development of global towns

**IMPORTANCE OF MINERALS**

1. Employment opportunities
2. Foreign exchange earning
3. Provision of essential goods
4. Raw materials industries
5. Revenue generation
6. Improvement of standard of living
7. Infrastructural development
8. Acquisition of skills
9. Growth of cities
10. Growths of ancillary industries
11. Training and returning of personnel.

**POWER RESOURCES IN NIGERIA**

There are four major sources of power in Nigeria. These sources of power are:

1. Water
2. Coal
3. Petroleum
4. Natural Gas

These sources of power are exploited in the following areas:

**1. Hydro-Electric Power (H.E.P.):** This is the power generated by water. Examples of H.E.P. projects in Nigeria are found in Kainji Dam on River Niger and Shiroro Dam on River Kaduna.

**2. Thermal Power:** This is the power generated through the use of coal, natural gas and petroleum. These minerals are used to power turbine or giant generators in other to generate electricity.

The following are places where thermal plants are in Nigeria:

**Thermal Plants Found in Nigeria:**

1. Egbin, Lagos- Petroleum
2. Ijora, Lagos- petroleum
3. Sapele, Delta- Gas
4. Oji, Anambra- Coal

**Effects of climate on the dam**

1. Inadequate rainfall reduces the volume of water in the rivers or dams.
2. Excessive rainfall also leads to overflow of water from the dams.
3. High intensity of rainfall leads to sedimentation of silts in dams.
4. Intensive heat also leads to high evaporation of water from dams.