**Government Girls Secondary School Dorayi Babba Kano**

**Group: B**

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|  | **Names** |
| **1** | **Bilkisu Haruna Abdurrahman** |
| **2** | **Bahijja Lawan Kibiya** |
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| **6** | **Fatima Sadiq Tambuwal** |
| **7** | **Fatima Ibrahim Abdullahi** |
| **8** | **Fatima Mahammad Waziri** |
| **9** | **Fauziyya Idris Umar** |
| **10** | **Fatima Adam Yunus** |

**Question**

**Explain With Advantage And Dis Advantage Of Renewable And Non-Renewable Resources.**

**Renewable Resources:**

A renewable resource is a natural resource which replenishes to overcome resource depletion caused by usage and consumption, either through biological reproduction or other naturally recurring processes in a finite amount of time in a human time scale. Renewable resources are a part of Earth's natural environment and the largest components of its ecosphere. A positive life cycle assessment is a key indicator of a resource's sustainability.

Definitions of renewable resources may also include agricultural production, as in sustainable agriculture and to an extent water resources. In 1962, Paul Alfred Weiss defined Renewable Resources as: "The total range of living organisms providing man with life, fibers etc.

**Advantage of renewable resources:**

* **Wind:** Wind motion to generate electricity, wind motion is brought about by the heat from the sun, and rotation of the earth.
* **Solar:** Heat from the sun to produce energy for generation of electricity, heating, lighting homes and commercial buildings.
* **Hydropower:** Utilize moving water to produce electricity moving water creates high energy that can be harnessed and turned into power.
* **Ocean:** Takes advantage of rising and falling of tides to generate electricity

**Dis-Advantage of renewable resources:**

* Renewable energy technologies totally depend on the weather (e.g. sun and wind) to be able harness any energy.in case atmospheric condition are not good enough, renewable energy technology would lack ability to generate any electricity.
* Requires a huge upfront capital outlay setting up renewable energy generation facilities requires a huge financial outlay. Installation of wind turbine, solar panels and hydroelectricity plants.
* Renewable energy resources are still significantly new to the market, meaning, they still lack much needed efficiency.

**Renewable Resources:**

A non-renewable resource (also called a finite resource) is a resource that does not renew itself at a sufficient rate for sustainable economic extraction in meaningful human time-frames. An example is carbon-based fossil fuel. The original organic material, with the aid of heat and pressure, becomes a fuel such as oil or gas. Earth minerals and metal ores, fossil fuels (coal, petroleum, natural gas) and groundwater in certain aquifers are all considered non-renewable resources, though individual elements are always conserved (except in nuclear reactions).

On the other hand, resources such as timber (when harvested sustainably) and wind (used to power energy conversion systems) are considered renewable resources, largely because their localized replenishment can occur within time frames meaningful to humans.

**Advantage of Non- renewable resources:**

* **Coal:** energy dense, plentiful, easy to exploit by surface mining, easy to handle and transport, found in many places.
* **Oil:** found in lots of places around world, convenient to transport and use for some engineering field e.g. automobile, mechanical engineering and aeronautic engineering.
* **Nuclear:** no air pollution is produced once the plant is in operation, limits need to import oil, high energy density, and ample supply.
* **Biomass:** fuel reduces need for fossil fuels for the production of heat, steam, and electricity for residential, industrial and agricultural use waste materials reduce landfill disposal

**Dis-Advantage of Non- renewable resources:**

* **Coal:** releases impurities into the air when burned, releases greenhouse gasses, ash is left behind, used inefficiently in electricity generation.
* **Oil:** releases CO2 into the atmosphere, could leak and spills when extracted and transported, will be much less available in 40 years.
* **Nuclear:** possibility of accidents, meltdowns can be catastrophic, disposal of radioactive waste, unpopular, target for terrorist attacks.
* **Biomass:** Agricultural wastes will not be available if the basic crop is no longer grown. Projects are from animal wastes and are relatively small and therefore are limited.