

Job satisfactionexample



According to R. M. Davies D. S. Abolude, demand for fuel wood is expected to be risen to about 213.4×10^3 metric tonnes, while the supply would have decreased to about 28.4×10^3 metric tonnes by the year 2030. The deforestation rate will continue to increase if nothing is done to discourage the use of fuel wood and promote the use of alternative energy sources. It was also reported that fossil fuel shortage, fuel increasing price, global warming including other environmental problems are critical issues.

According to Owen McDougal, Richard Stanley and Seth C. Holstein, fuel/biomass briquette technology, offers a viable and cost-effective method for making fuel out of junk mail and yard waste.

It involves collecting dried, nutrient-leached field residues (cornstalks, straws, grasses, leaves, etc.), then pounding and chopping them into cornflake-sized pieces. Implements for the sizing process can vary from a mortar and pestle (East Africa), to a hand-driven thresher (West Africa), to a hammer mill (South America), or a lawn chipper (United States). Data indicate that the briquettes are safe and have a potential practical use of what to date has been a scourge to many communities nationwide.

According to Dr. David Fulford and Dr. Anne Wheldon, briquetting is a way to convert loose biomass residues, such as sawdust, straw or rice husk, into high density solid blocks that can be used as a fuel. Biomass briquettes replace fossil fuels or wood for cooking and industrial processes. They are cleaner and easier to handle, and cut greenhouse gas emissions. According to Mr. A. Karan Reddy, biomass briquettes, mostly made of green waste and other organic materials, are commonly used for electricity generation, heat, and cooking fuel.

These compressed compounds contain various organic materials, including rice husk, bagasse, round nut shells, municipal solid waste, agricultural waste, or anything that contains a high nitrogen content. The composition of the briquettes varies by area due to the availability of raw materials. The raw materials are gathered and compressed into briquette in order to burn longer and make transportation of the goods easier. These briquettes are very different from charcoal because they do not have large concentrations of carbonaceous substances and added materials. According to Julia F. Morton, the jackfruit (*Artocarpus heterophyllus*) is a tree with 30 to 70 ft. 9-21 m) tall, with evergreen, alternate, glossy, somewhat leathery leaves to 9 in (22.5 cm) long, oval on mature wood, sometimes oblong or deeply lobed on young shoots.

The fiber content helps to protect the colon mucous membrane by decreasing exposure time and as well as binding to cancer-causing chemicals in the colon. Fiber is also needed for the peelings to burn and as a variable for the fuel briquettes. According to Brenda Keir, Nguyen Van Lai, T. R. Preston and E. R. Orskov, the jackfruit (*Artocarpus heterophyllus*) leaves has a content of dry matter with 43.8% and has a nitrogen content of 15.00% which is higher by the percentage of 10-12% from the two of the most popular raw materials used in briquetting which are the sugar cane bagasse (2.96%) and rice straw (3.88%).

According to Jessica F. , coconuts supplied some families from the Pacific with shelter, food, drinks, and many of their other needs. The white meat of the coconut is eaten. The sap from unopened clusters of flowers is used to make sugar, vinegar, and the alcoholic beverage called arrack. Dried

coconut tree leaves are also used as component for cooking in some places throughout the country.

According to Ohler J. G. , Braconnier et al, 1992, analyzing 4-year-old coconut trees, 3.5 months after applying isotopically labeled nitrogen, found that total nitrogen distribution in the plant is related to the distribution of dry matter. Thus, the leaves contained 66% of total nitrogen of aerial parts.

According to Joyce Lockard, about half of the world's people use wood or charcoal for cooking and heating. Cutting of trees for fuel and for subsistence farming is resulting in loss of 2-3% of the world's forests each year.

However, individual households can reduce their need for wood and charcoal by making their own fuel, called fuel/biomass briquettes, waste plant materials in their own environment. According to P. D. Grover & S. K. Mishra, there are many factors to consider before a biomass qualifies for use as feedstock for briquetting. Moisture content should be as low as possible, generally in the range of 10-15 percent. High moisture content will pose problems in grinding and excessive energy is required for drying. Biomass residues normally have much lower ash content (except for rice husk with 20% ash) but their ashes have a higher percentage of alkaline minerals, especially potash.