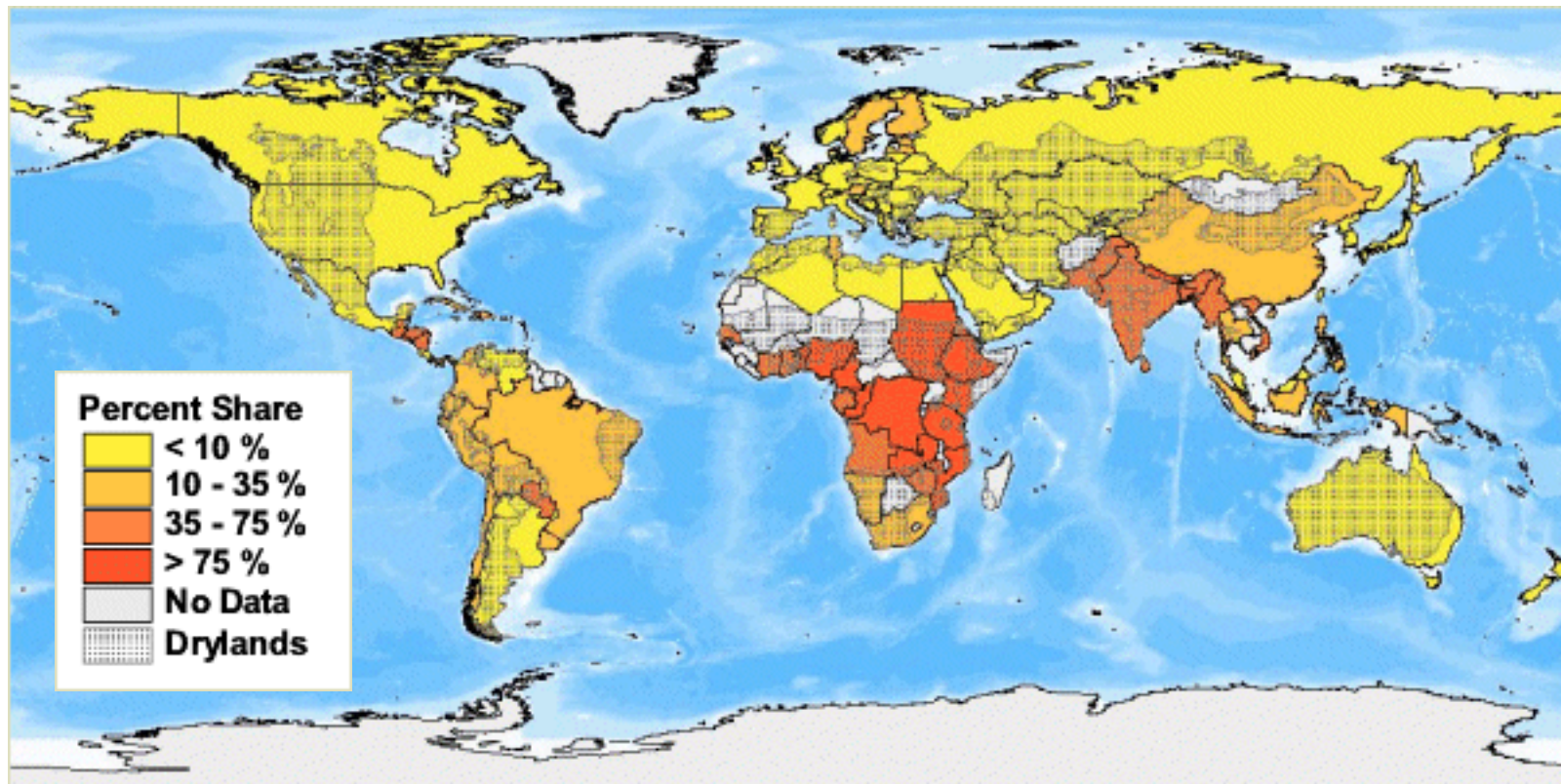


Drylands: Share of Biomass Fuels in National Energy Consumption in Drylands



Map Projection: Geographic

Citation: WRI. 2002. World Resources Institute. Drylands, People, and Ecosystem Goods and Services: A Web-based Geospatial Analysis. Available online at: <http://www.wri.org>.

Analytical Overview:

Statistics on woodfuel consumption are still inferior to those compiled for industrial roundwood production and consumption. This map is based on the International Energy Agency's combustible renewables and waste database. IEA collects information from OECD countries via annual questionnaires. The product categories listed are solid biomass and animal products, gases derived from biomass and wastes, industrial waste and municipal solid waste. Energy data are expressed in thousand tonnes of oil equivalent. The questionnaire requests data on individual fuels such as wood, vegetal wastes, black liquor, and landfill gas. For non-OECD countries, IEA follows the same classification, but relies on a variety of information sources. Sources include national publications or statistics, regional organizations, and specific studies or surveys. Where other sources are unavailable, IEA data draws on UN information. WRI calculated woodfuel consumption as a proportion of total energy consumption for each country by summing the energy consumption of fuelwood, charcoal, and black liquor, and expressing this total as a percentage of total final energy consumption. Dryland areas were overlaid in brown hatching.

Description:

This map shows the percent share of biomass fuels in national energy consumption in 1999 for the world, superimposed with global dryland area (in black cross-hatching). In general, biomass fuels in developed countries and countries with large mineral fuel resources contribute less than 10 percent to total energy consumption. Countries where biomass fuels provide greater than 75 percent of total energy consumed are located predominately in Sub-Saharan Africa. In addition, because the data presented on this map are national, sub-national patterns cannot be determined. If we had sufficient biomass fuel consumption data for smaller administrative units, patterns might emerge where greater biomass fuel consumption is concentrated within the drier portions of a country.

In contrast, small quantities of wood are used in some dryland countries. Although oil reserves may be found in different ecosystem worldwide, many drylands are associated with abundant mineral fuels. As regions with extensive dryland area, the Middle East, North Africa, and Asia contain a wealth of energy resources. In extensive dryland countries in these regions, biomass fuels contribute very low percentages of the total energy consumed. All three of these regions are major producers of mineral fuels for world markets.