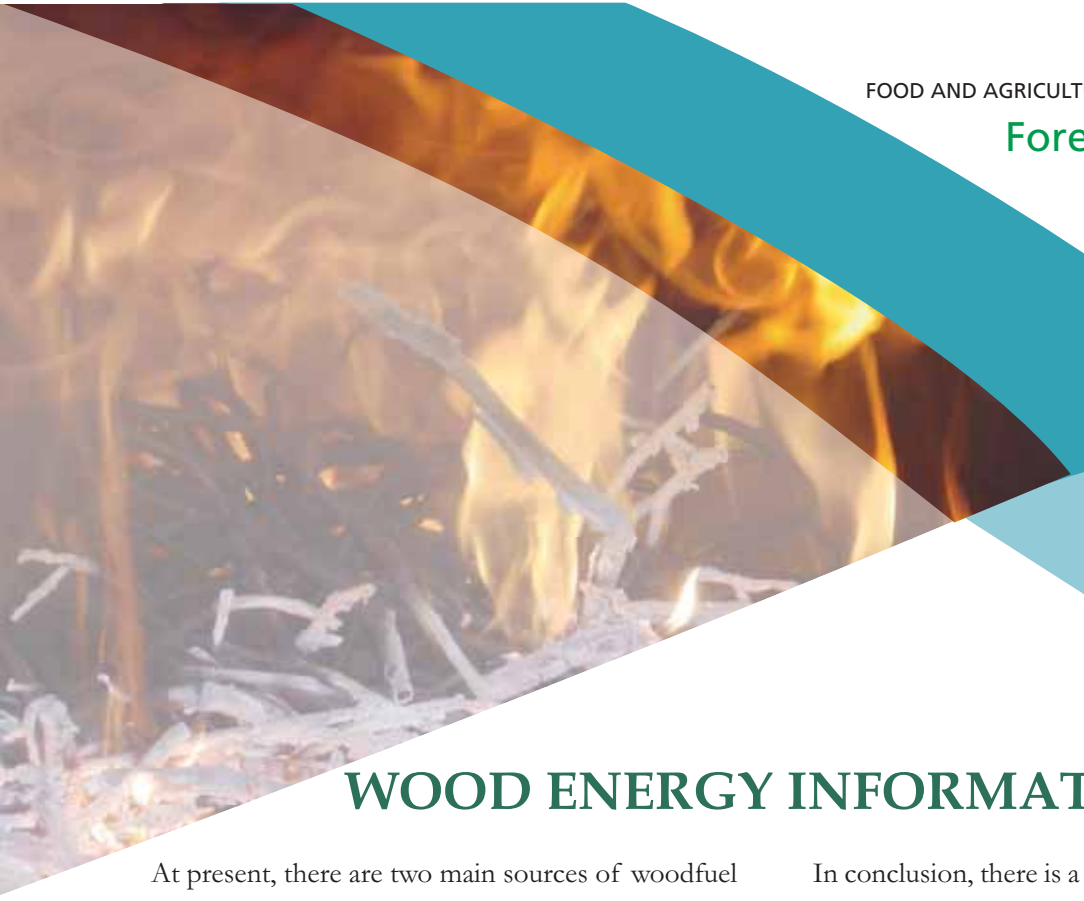
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Forestry Department



WOOD ENERGY INFORMATION

At present, there are two main sources of woodfuel information: forestry services and energy agencies, whose approaches differ significantly. Consequently, finding information on fuelwood, charcoal and black liquor in a given country by consulting and comparing different information sources is challenging because definitions are rarely consistent, measurement units are different, conversion factors used are not always available and there are many discrepancies among the reported values.

Not only are there different "forestry" and "energy" perspectives; there is also a lack of collaboration between the different forestry and energy partners in this field. In addition, there has been a tendency to work on the basis of more or less educated guesses that have not been verified, making most national and international wood energy databases weak and unreliable.

Furthermore, wood energy systems are complex and very site-specific and the process of collecting field data on woodfuel (and biofuels) is costly, time-consuming and requires properly trained and qualified personnel – a scarce resource in most countries.

Lack of data, therefore, is often the result of the absence of sectoral wood energy policies. Moreover, in most cases, the problem is not lack of reliable data *per se*, but rather the failure to give priority to wood energy topics.

In conclusion, there is a generalized, institutional lack of capacity within the main technical services responsible for keeping wood energy information systems updated, with the inevitable negative consequences on sustainability of resources and services; this is despite the increasingly important role played by bioenergy in general, and wood energy in particular, in meeting international commitments on sustainable development, the Millennium Development Goals, and climate change.

Role of wood energy statistics

Wood energy statistics are essential for:

- understanding the dynamics of wood energy systems;
- evaluating the role played by woodfuels in the energy sector;
- assessing the share of forest products used (directly and indirectly) for energy purposes;
- assessing the role of woodfuels in climate change mitigation and sustainable development; and
- formulating wood energy strategies within forestry and energy policies.

Wood energy statistics today

Over the last few years, there has been renewed interest in wood energy and bioenergy in many national and international forestry and energy agencies. Collaboration between these agencies has

increased, resulting in better structured databases, more comprehensive geographical coverage and more comparable statistics, the latter due largely to the adoption of consistent terms and definitions that were strongly and successfully promoted by FAO's Wood Energy Programme.

However, such improved attention and recognition by national and international agencies has not yet led to any significant increase in field data collection and, consequently, of overall data reliability. In fact, although woodfuel consumption can be estimated with some accuracy, the quality and quantity of data on supply sources is very limited, and this prevents an objective examination of the sustainability issue.

Conclusions

In conclusion, existing woodfuel statistics are still not adequate to meet the five functions listed above.

In order to clarify this complex issue, FAO has undertaken a series of synergic initiatives at both national and international levels. With the aim of improving understanding of bioenergy systems, FAO has:

- adopted a "Unified Bioenergy Terminology" (UBET), in close cooperation with other concerned organizations;
- prepared a "Guide for woodfuel surveys", which recommends simple methods to verify existing data rapidly, to fill gaps in the information chain and to conduct more reliable surveys;
- developed and implemented the Woodfuel Integrated Supply/Demand Overview Mapping (WISDOM) methodology as a tool to support national wood energy planning;
- enhanced collaboration with international partners in the collection of reliable information;
- assisted countries in the implementation of improved wood energy information systems; and
- developed the interactive Wood Energy Information System (i-WEIS).

Since most of the existing woodfuel information has been estimated rather than measured, and consequently its reliability and accuracy vary from country to country, it is important for users to have access to the complete range of existing estimates for a certain item (woodfuel type or commodity) in a given country or region. It was against this background that i-WEIS was developed.

i-WEIS assembles wood energy data provided by different sources, such as Faostat, FAO wood energy projects, and national and international databases; e.g. IEA, UN-New York, EUROSTAT, OLADE, AIT, ENDA[1]. The database contains over 115 000 records (collated using UBET definitions) and an advanced definition of data references: each value is defined by a primary source, basically the database of origin, and a secondary source that helps to qualify it and to understand its true value.

i-WEIS cannot resolve the problem of missing reliable data, but it can support the sector analyst in reviewing the entire range of estimates produced by different sources using harmonized terms, units and conversion factors. It is hoped that i-WEIS will strengthen the dialogue and synergies between forestry and energy agencies at national and international level and facilitate information review. It is becoming more and more evident that wood energy and bioenergy planning are matters of concern to forestry, energy, agriculture and rural development and that only a process of integration of competencies and clarification of responsibilities can lead to sound bioenergy policies and programmes.

For additional information:
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[1] IEA: International Energy Agency; UN New York: United Nations Statistics Division; EUROSTAT: European commission Statistics; OLADE: Latin America Organization of Energy; AIT: Asian Institute of Technology; ENDA: Environment and Development Action.