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Forests

FAO report forecasts spike in wood-based substitutes to non-renewables; expects 1 million new jobs

Fuelwood will remain main sources of energy for households in developing economies through 2050

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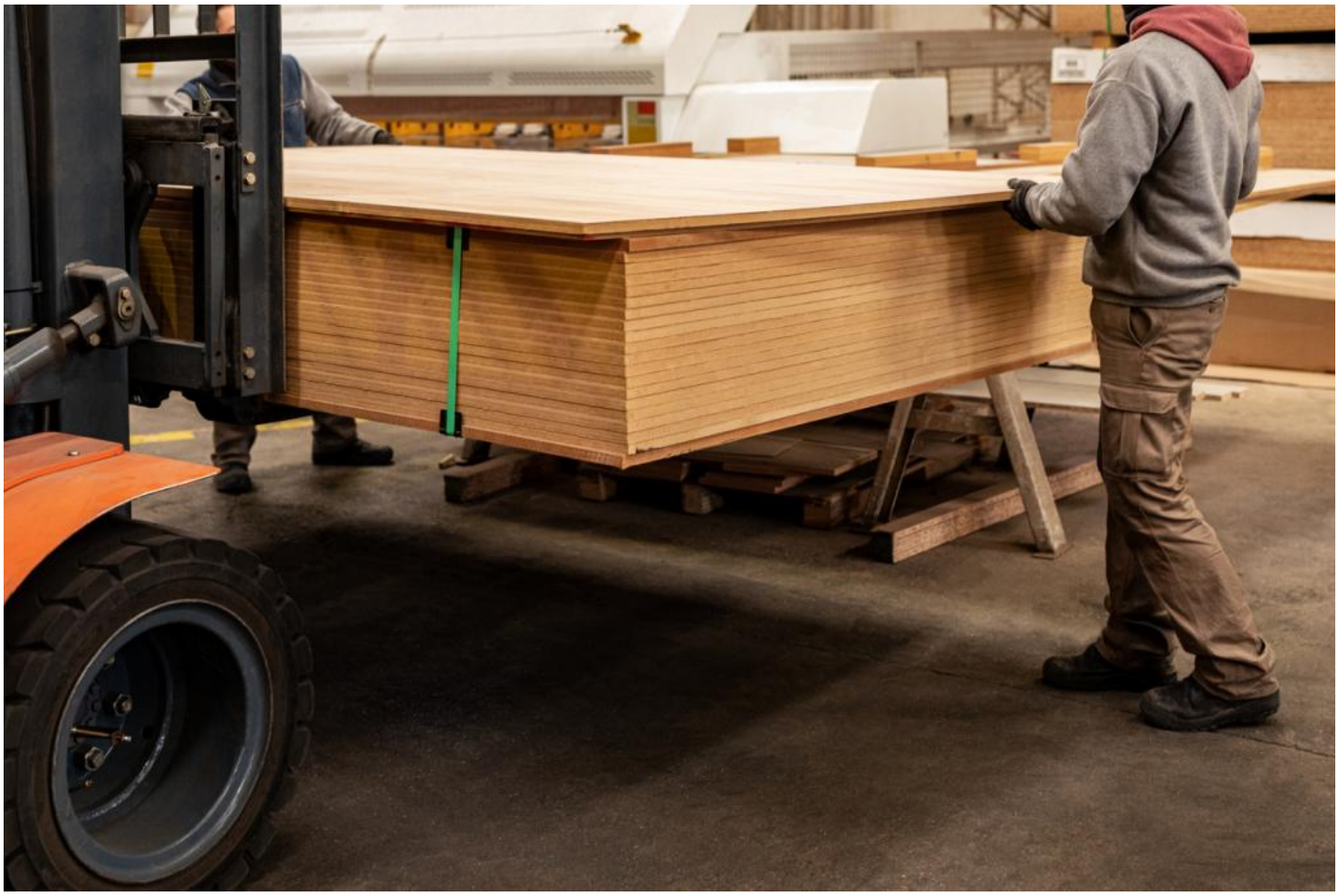

Demand for wood products like mass timber and man-made cellulose fibre used as substitutes for non-renewable materials may increase by up to 272 million cubic metres by 2050, according to a new report.

In developing countries, it will lead to the creation of around 1 million jobs, the research paper released October 5, 2022 noted.

“The global threats to climate, biodiversity and a healthy environment are mainly caused by the excessive use of non-renewable materials. This has led to political interventions to accelerate the decarbonisation of economies and to introduce a circular bioeconomy,” said the report released at the 26th Session of the Food and Agriculture Organization Committee on Forestry in Rome.

It aims to identify the potential supply gaps and needs in forest industries in roundwood production, investments and employment.

Consumption of primary processed wood products — sawnwood, veneer / plywood, particle / fibreboard and wood pulp — is expected increase to 3.1 billion cubic metre (bcm) by 2050 from 2.2 bcm in 2020, according to *The global forest sector outlook 2050: Assessing future demand and sources of timber for a sustainable economy.*

The predictions were calculated using the Global Forest Products Model, where projections depend on the historical patterns of wood products production and trade.

It further predicted that industrial roundwood (IRW) is prone to uncertainties arising from climate change-driven policy interventions in naturally regenerated production forests as well as the productivity and expansion of planted forests.

Future demands for IRW may be met by a combination of planted forests especially from the Global South and naturally regenerated temperate as well as boreal forests, the analysts noted.

In 2020, naturally regenerated temperate and boreal forests provided about 44 per cent of global IRW production, according to the report. Planted forests contributed around 46 per cent to the global IRW supply in 2020, but their actual productivity is low in the global average, it added.

An additional 33 million hectares of ‘highly productive plantation forest’ will be needed to meet the increasing IRW demand up to 2050, if the area of naturally regenerated forests remains the same, the authors observed.

A total of $40 billion (Rs 3.3 lakh crore) per annum in investment will be required to maintain and expand IRW production by 2050, according to the report. Another $25 billion per annum will be needed for modernisation and in establishing industries.

Fuelwood popular choice

The report further observed that wood energy consumption by 2050 will be shaped by the traditional use of fuelwood in regions of sub-Saharan Africa and Southern Asia as well as the projected role of modern biomass to generate renewable energy.

The global consumption of fuelwood from forests in 2050 can range from 2.1-2.7 bcm, compared to 1.9 bcm in 2020 — an 11-42 per cent rise.

In 2020, around 2.3 billion people relied on wood-fuel as their primary source of energy for cooking and heating, the report stated. These will remain the main sources of energy for households in emerging economies till 2050.

“Ensuring access to sustainable wood fuel to private consumers who rely on this source due to economic reasons is a public responsibility comparable to supplying electricity or water,” said Thais Linhares-Juvenal, team leader of sustainable forestry, value chains, innovation and investment in the forestry division of Food and Agriculture Organization.

Meeting additional fuelwood requirements in sub-Saharan Africa would require a mix of agroforestry and energy woodlots, with a total area of 21-31 million hectares, stated the report. Additional IRW and fuelwood could be sourced from agroforestry systems and tree crop plantations.

There are 45 million ha agroforestry and 7 million ha rubber plantations across the globe, which can be further increased during agricultural expansion for food production.

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