GLOBAL TIMBER INDEX GTI REPORT MONTHLY

GGSC-No. 2/2023

This report was prepared by GGSC, with support of ITTO and IPIM, and Focal Points of Indonesia, Malaysia, Gabon, Republic of Gongo, Brazil, Mexico, and China.





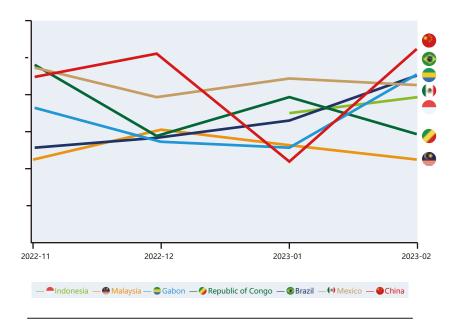






Overview of the GTI Index

In February 2023, the Global Timber Index (GTI) report showed that the the timber market in some GTI pilot countries gradually recovered and more production and operation activities were coducted. The global timber industry exhibitions and sales activities were launched one after another, which promoted the wood trade to be more active. In February, although the GTI-Gabon index and the GTI-Brazil index were below the critical value of 50%, they increased significantly compared with the previous month and the GTI-Indonesia index also rose slightly compared with the previous month, which means that the contraction of the timber industry in Gabon, Brazil and Indonesia began to slow down. GTI-China Index registered 52.4%, the production and orders quantity of Chinese timber enter prises increased compared with the previous month, the downward trend of foreign orders was eased, and activities such as procurement and supplier distribution were more active than the previous month. Affected by insufficient global demand, the timber industry market in



Malaysia, Mexico and ROC were still slightly depressed. At the same time, enterprises were facing the problems of insufficient supply of raw materials and overstock of products. The rising costs and the relatively depressed market bring challenges to the development of timber enterprises. At present, timber exhibitions in some countries have been launched, Malaysian International Furniture Fair (MIFF) and Export Furniture Exhibition (EFE) were held in Kuala Lumpur. It was expected to play a positive role in promoting global timber trade. Detailed data and analysis were shown in the GTI report of pilot countries.

Acknowledgement

Thanks to the focal points from Indonesia, Malaysia, Gabon, Republic of the Congo, Brazil, Mexico,

and China for their support and contribution to GTI.

Focal points:

Indonesia:

• Sustainable Forest Management of the Ministry of Environment and Forestry

Malaysia:

- Malaysian Timber Council (MTC)
- Special thanks to Sarawak Timber Association (STA) Gabon:
- Ministry of Water and Forests, the Sea, the Environment, Responsible for the Climate Plan and Land Use-Gabon

Republic of the Congo:

- Ministère de l'Economie Forestière Brazil:
- STCP

Mexico:

National Forestry Commission of Mexico/Comisión Nacional Forestal (CONAFOR)

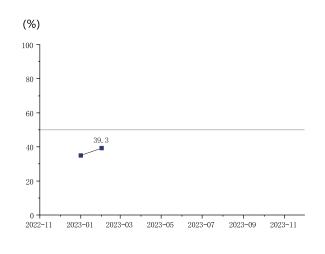
China:

• Global Green Supply Chain Initiative (GGSC)

GTI-Indonesia Index in February 2023

According to the data released by Statistics Indonesia on February 6, 2023, Indonesia's GDP increased by 5.31% year-on-year in 2022, the highest growth rate since 2013, with the highest increase in transportation and warehousing, which achieved 19.87% in 2022. While the economy was growing rapidly, Indonesia's budget deficit continues to decline, with a projected deficit of 2.84% of GDP in 2023, according to the Minister of Finance Sri Mulyani Indrawati. In terms of forestry industry, Indonesia increased the export of high value-added timber products in 2022, vigorously developing the US and European markets, and increased the annual timber export by nearly 30%. According to the International Tropical Timber Organization (ITTO), Indonesia's exports of timber products were expected to grow by 12% in 2023.

In February 2023, affected by continuous rainfall and declining market demand, the logistics speed of Indonesian timber enterprises slowed down, and the orders and production quantity decreased compared with the previous month, but the decline rate was narrowed.According to comments from the focal point in Indonesia, in January - February was the transition of harvesting operations approved by the



GTI-Indonesia Index

Government from 2022 to 2023 (the annual logging period in concessions set by the Government is January - December) where companies concentrate on completing the transportation of log production from 2022.Enterprises hope to introduce corresponding policies through forestry apartments to stimulate exports and promote sustainable certification of forest products to increase sales. This month, the GTI-Indonesia index registered 39.3%, an increase of 4.4 percentage points from the previous month, was below the critical value (50%) for 2 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-Indonesia index has shrank from last month.

Challenges

- The decline in global timber market demand has led to a decline in purchase prices and export orders.
- Imperfect road facilities and slow logistics in rainy season.
- Affected by continuous rainfall, the transportation of raw materials was slow.
- The continuous rainy weather has slowed down the transportation of logs to the factory.
- Rising fuel prices have increased the cost of production.
- Decreased orders and low log prices.
- Global plywood market has declined.

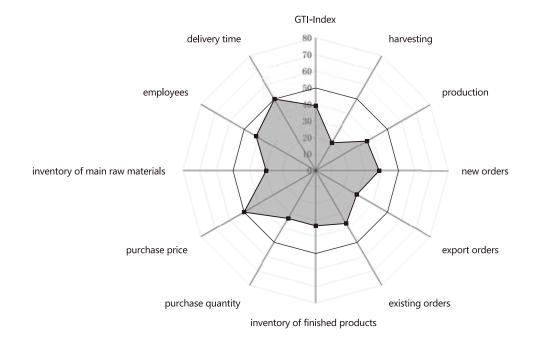
Suggestions

- Breakthrough policies and efforts are needed to revive the market for processed wood products at the domestic and global levels.
- Optimizing harvesting activities through increased contractor work for logging activities.
- Coordinate and synergize with local governments to encourage the implementation of transportation road infrastructure improvements.
- Encourage production contractors to improve their performance, so that production targets can be achieved.
- Adjusting operational activities in the field to weather conditions.
- Adjust fuel distribution to reduce fuel prices.
- Promote sustainable forest management and certification of the legality of products to improve business operations.



GTI-Indonesia sub-index(%)

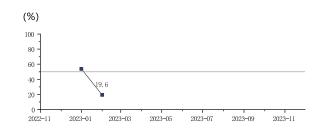
As for the GTI-Indonesia sub-index, in February 2023, only the purchase price and delivery time indexes were equal to the critical value, while the remaining 9 sub-indexes were all below the critical value.



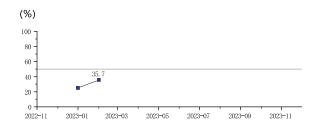
GTI-Indonesia sub-index

Global Timber Index

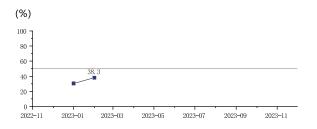
The harvesting index registered 19.6%, a decrease of 34.2 percentage points from the previous month, fell below the critical value, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Indonesia was much less than that of last month.



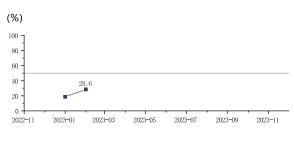
The production index registered 35.7%, an increase of 10.7 percentage points from the previous month, fell below the critical value, indicating that the production volume of the superior timber enterprises represented by the GTI-Indonesia was less than that of last month.



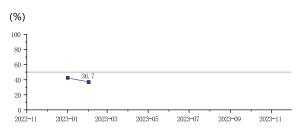
The new orders index registered 38.3%, an increase of 8.0 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of new orders of the superior timber enterprises represented by the GTI-Indonesia was less than that of last month.



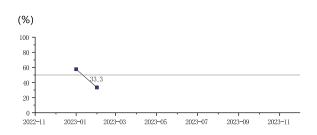
The export orders index registered 28.6%, an increase of 9.8 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of export orders of the superior timber enterprises represented by the GTI-Indonesia was less than that of last month.



The existing orders index registered 36.7%, a decrease of 5.7 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of existing orders of the superior timber enterprises represented by the GTI-Indonesia was less than that of last month.

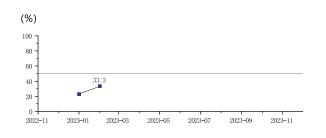


The inventory index of finished products registered 33.3%, a decrease of 24.3 percentage points from the previous month, was below the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Indonesia was less than that of month.

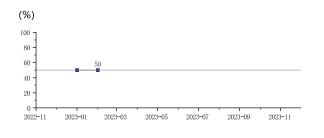




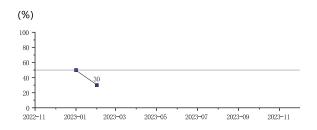
The purchase quantity index registered 33.3%, an increase of 10.6 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchase quantity of the superior timber enterprises represented by the GTI-Indonesia was less than that of last month.



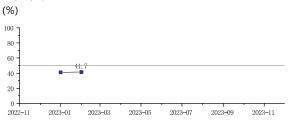
The purchase price index registered 50.0%, same with the previous month, was equal to the critical value for 2 consecutive months, indicating that the purchase price of the superior timber enterprises represented by the GTI-Indonesia was same with last month.



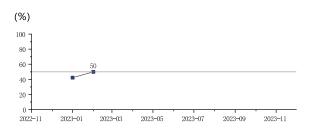
The inventory index of main raw materials registered 30.0%, a decrease of 20.0 percentage points from the previous month, fell below the critical value, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Indonesia was less than that of last month.



The production and management employees index registered 41.7%, an increase of 0.8 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of employees in the superior timber enterprises represented by the GTI-Indonesia was much less than that of last month.



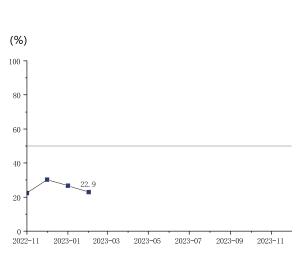
The delivery time index registered 50.0%, an increase of 7.6 percentage points from the previous month, rose to the critical value, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Indonesia was same with last month.



GTI-Malaysia Index in February 2023

According to the latest data released by the Central Bank of Malaysia in February, the Malaysia's GDP grew by 8.7% year-on-year in 2022, significantly higher than last year's forecast of 6.5% to 7%, was the fastest GDP growth since 2000, ranking first among ASEAN countries. Lower external market demand may reduce export growth in the context of slowing global economic growth, but Malaysia's economy was expected to continue to grow steadily in 2023 with improving labor market, growing external investment and recovering tourism market. In February, Peninsular Malaysia was still affected by floods, and GTI-Malaysia enterprises reported that problems such as increased production costs in rainy season, insufficient market demand and shortage of raw materials still existed. In March, the Malaysian International Furniture Fair (MIFF) and the Export Furniture Exhibition (EFE) were held in Kuala Lumpur, the capital of Malaysia. Providing opportunities for furniture enterprises in more than 100 countries to display and connect supply and demand will play a positive role in promoting timber trade.

This month, the GTI-Malaysia index registered 22.9%, a decrease of 3.7 percentage points from



the previous month, was below the critical value (50%) for 4 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-Malaysia index has shrank from last month.

GTI-Malaysia Index



Challenges

- Not enough labors and orders.
- Decreased demand in market.
- Less export order and over stock in warehouse.
- Not enough of raw materials and their quality were not stable.
- Increased production cost in rainy season.
- Slow construction sector created low demand for plywood.

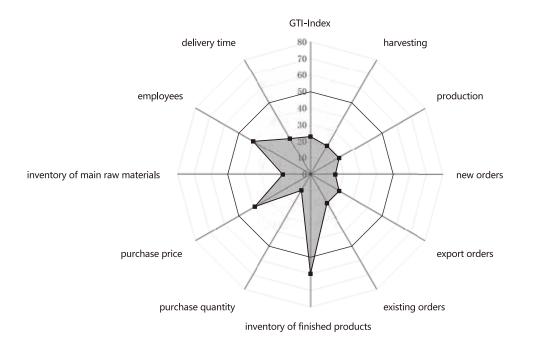
Suggestions

- To open for more sourcing countries for market and labors.
- Strict control on production cost.
- Ban or reduce export of woodchips.
- Increase harvesting of the plantation forest & improve yield of the plantation forest.
- Government supports local plywood market and assists ways to reduce production costs.



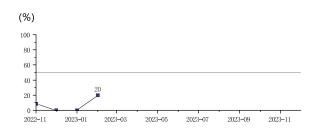
GTI-Malaysia sub-index(%)

As for the GTI-Malaysia sub-index, in February 2023, only the inventory index of finished products was above the critical value, while the remaining 10 sub-indexes were all below the critical value.

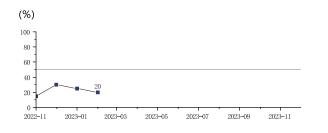


GTI-Malaysia sub-index

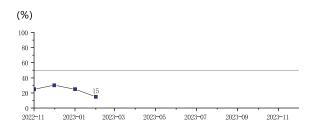
The harvesting index registered 20.0%, an increase of 20.0 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Malaysia was much less than that of last month.



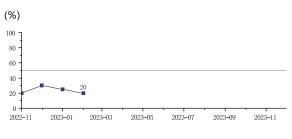
The production index registered 20.0%, a decrease of 5.0 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the production volume of the superior timber enterprises represented by the GTI- Malaysia was much less than that of last month.



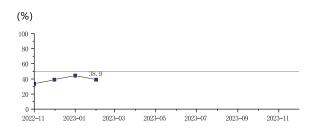
The new orders index registered 15.0%, a decrease of 10.0 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of new orders of the superior timber enterprises represented by the GTI-Malaysia was much less than that of last month.



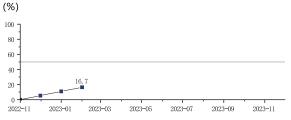
The export orders index registered 20.0%, a decrease of 5.0 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of export orders of the superior timber enterprises represented by the GTI-Malaysia was much less than that of last month.



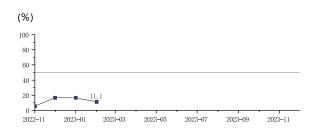
The purchase price index registered 38.9%, a decrease of 5.5 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the purchase price of the superior timber enterprises represented by the GTI-Malaysia was lower than that of last month.



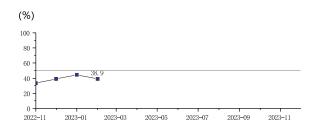
The inventory index of main raw materials registered 16.7%, an increase of 5.6 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Malaysia was much less than that of last month.



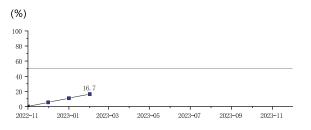
The purchase quantity index registered 11.1%, a decrease of 5.6 percentage points from previous month, was below the critical value for 4 consecutive months, indicating that the purchase quantity of the superior timber enterprises represented by the GTI-Malaysia was less than that of last month.



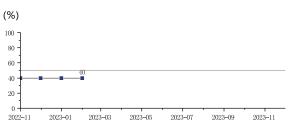
The purchase price index registered 38.9%, a decrease of 5.5 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the purchase price of the superior timber enterprises represented by the GTI-Malaysia was lower than that of last month.



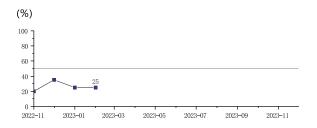
The inventory index of main raw materials registered 16.7%, an increase of 5.6 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Malaysia was much less than that of last month.



The production and management employees index for registered 40.0%, same with the previous month, was below the critical value for 4 consecutive months, indicating that the number of employees in the superior timber enterprises represented by the GTI-Malaysia was less than that of last month.



The delivery time index registered 25.0%, same with the previous month, was below the critical value for 4 consecutive months, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Malaysia was lower last month.



GTI-Gabon Index in February 2023

On February 8 this year, Setrag officially resumed the opening of the Transgabonais, mainly to ensure the transportation of oil, manganese ore, timber and other products, and gradually resume passenger transport, which has been interrupted for nearly two months. In forestry industry, the "One Forest Summit" was held in Libreville, Gabon on March 1-2, aiming to demonstrate that these two goals can be reconciled: managing forests in a sustainable way can protect the ecosystem services provided to humankind, also increase its economic value added to forest countries and local citizens. The meeting proposed new initiatives in three areas, including advancing knowledge and promoting scientific cooperation on forest ecosystem, fostering sustainable value chains in the forestry sector, unlocking innovative sources of financing including market-based biodiversity conservation solutions. This meeting was launched by Emmanuel Macron, the President of France and Ali Bongo Ondimba, the President of Gabon during COP27.

In the production and operation of Gabon's timber industry, the number of new orders in February increased compared with the previous

month, the purchase of raw materials increased significantly, and the contraction trend that lasted for many months showed a sign of easing. However, due to continuous rainfall and poor road conditions, problems such as high fuel prices and high operating costs were still existing. This month, the GTI-Gabon index registered 45.1%, an increase of 12.1 percentage points from the previous month, was below the critical value (50%) for 4 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-Gabon index has shrank from last month.

GTI- Gabon Index

Challenges

- The overall condition of the road was not good, and the impact of the train derailment was still continuing.
- Production cost increased due to the continuous rainfall.
- Increasing prices of fuel and diesel.
- Enterprises were lack of forestry license, and the local tax was too high.
- Tariffs were too high.
- Raw materials were in short supply.
- Export orders were not enough.
- Some tree species were listed in "the Convention on International Trade in Endangered Species of Wild Fauna and Flora", which was resulting cancellations of the corresponding orders.

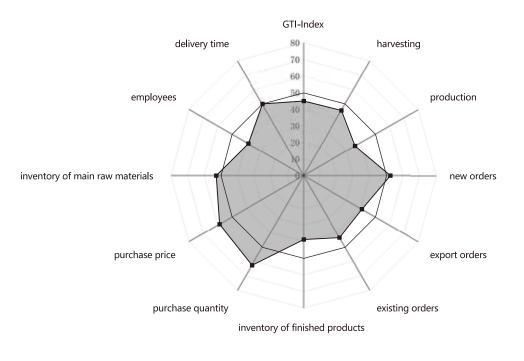
Suggestions

- Improve transportation conditions and speed up the repair of broken roads.
- Improve production tools and techniques to cope with the rainy season.
- Decrease the prices of fuel and diesel.
- Issue forest permits.
- Reduce tariffs.
- Find more reliable and efficient means of transport.
- Obtain the license of the tree species listed in the list of "the Convention on International Trade in Endangered Species of Wild Fauna and Flora" as soon as possible.



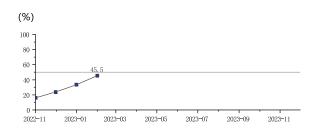
GTI-Gabon sub-index(%)

As for the GTI-Gabon sub-index, in February 2023, the 4 indexes like new orders, purchase quantity, purchase price and inventory of raw material were above the critical value, the delivery time index was equal to the critical value, while the remaining 6 sub-indexes were all below the critical value.

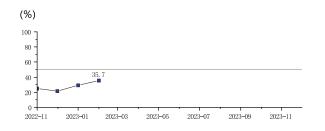


GTI-Gabon sub-index

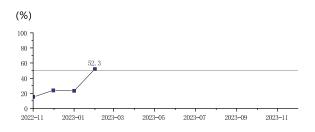
The harvesting index registered 45.5%, an increase of 12.2 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Gabon was less than that of last month.



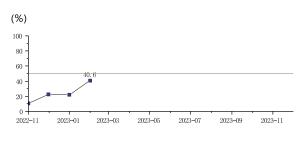
The production index registered 35.7%, an increase of 6.5 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the production volume of the superior timber enterprises represented by the GTI-Gabon was less than that of last month.



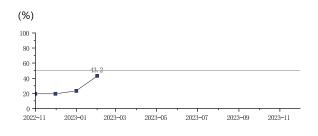
The new orders index registered 52.3%, an increase of 29.2 percentage points from the previous month, rose above the critical value, indicating that the number of new orders of the superior timber enterprises represented by the GTI-Gabon was more than that of last month.



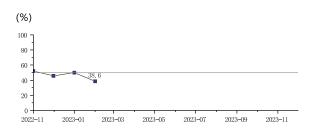
The export orders index registered 40.6%, an increase of 18.4 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of export orders of the superior timber enterprises represented by the GTI-Gabon was less than that of last month.



The existing orders index registered 43.2%, an increase of 20.1 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of existing orders of the superior timber enterprises represented by the GTI-Gabon was less than that of last month.

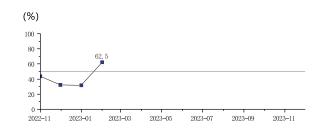


The inventory index of finished products registered 38.6%, a decrease of 11.4 percentage points from the previous month, fell below the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Gabon was less than that of month.

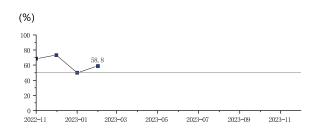




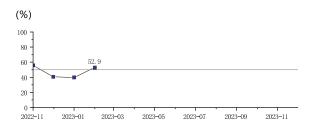
The purchase quantity index registered 62.5%, an increase of 30.7 percentage points from the previous month, rose above the critical value, indicating that the purchase quantity of the superior timber enterprises represented by the GTI-Gabon was more than that of last month.



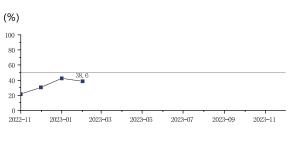
The purchase price index registered 58.8%, an increase of 8.8 percentage points from the previous month, rose above the critical value, indicating that the purchase price of the superior timber enterprises represented by the GTI-Gabon was higher than that of last month.



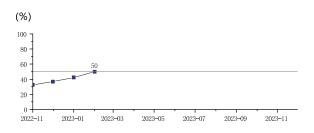
The inventory index of main raw materials registered 52.9%, an increase of 12.9 percentage points from the previous month, rose above critical value, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Gabon was more than that of last month.



The production and management employees index for registered 38.6%, a decrease of 3.7 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of employees in the superior timber enterprises represented by the GTI-Gabon was less than that of last month.



The delivery time index registered 50.0%, an increase of 7.7 percentage points from the previous month, rose to the critical value, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Gabon was same with last month.





GTI-ROC Index in February 2023

Republic of Congo, located in the central and western part of Africa, was rich in forest, mineral and oil resources, of which the forest coverage rate is more than 60% of the land area. In February this year, the World Bank and ROC government jointly held the release ceremony of the "Economic and Financial Situation Report of Republic of Congo, 2022 ". Senior economists of the World Bank predicted that, benefiting from the growth of non-oil sectors, the economic growth rate of ROC in 2023 was expected to reach 3.7%, higher than 1.2% in 2022. In early March, Emmanuel Macron, the president of France, visited four countries in Africa, including a visit to ROC. In addition to meeting with leaders, he attended local economic and trade forums, and cultural exchange activities.

In February 2023, affected by frequent rainfall and fuel shortage, the production and operation of GTI-ROC enterprises slowed down, and the problems of backward road facilities, poor logistics and high transportation costs were more prominent. Enterprises hope that relevant apartments would take measures to promote enterprises to improve production efficiency and

(%) $100 - \frac{1}{80} - \frac{29.6}{2002 - 11} - \frac{29.6}{2023 - 03} - \frac{2923 - 05}{2023 - 07} - \frac{2023 - 09}{2023 - 09} - \frac{2023 - 11}{2023 - 01}$

GTI-ROC Index

strengthen road maintenance to ensure smooth logistics. This month, the GTI-ROC index registered 29.6%, a decrease of 1.2 percentage points from the previous month, was below the critical value (50%) for 4 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-ROC index has shrank from last month.

Challenges

- Production was reduced in rainy season.
- Insufficient logistical support and bad financial condition.
- Poor road conditions and slow transportation.
- Lack of fuel and diesel.

The forest policies should be a

- The forest policies should be adjusted, and the decision-making process was relatively slow.
- The cost of the highway was too high.

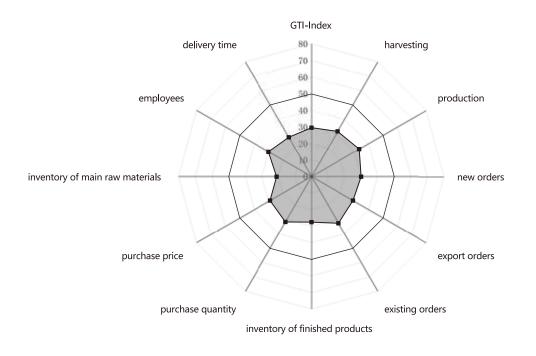
Suggestions

- Reconstruction of roads and bridge.
- Ensure fuel supply and improve fuel utilization.
- Speeding up the decision-making process of forestry management.
- Improve forest management systems to adapt to the external environment.
- Reduce the cost of highway.
- Adopt a more flexible approach to administration.



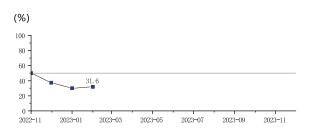
GTI-ROC sub-index(%)

As for the GTI-ROC sub-index, in February 2023, the 11 sub-indexes were all below the critical value.

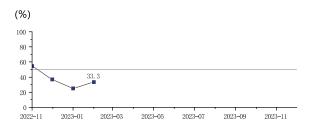


GTI-ROC sub-index

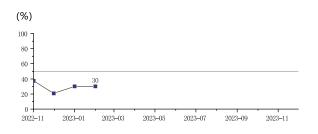
The harvesting index registered 31.6%, an increase of 1.6 percentage points from the previous month, was below the critical value for 3 consecutive months, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-ROC was less than that of last month.



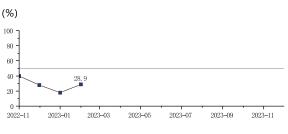
The production index registered 33.3%, an increase of 8.3 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the production volume of the superior timber enterprises represented by the GTI-ROC was less than that of last month.



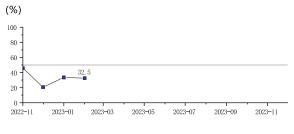
The new orders index registered 30.0%, same with the previous month, was below the critical value for 4 consecutive months, indicating that the number of new orders of the superior timber enterprises represented by the GTI-ROC was less than that of last month.



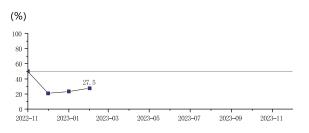
The export orders index registered 28.9%, an increase of 11.0 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of export orders of the superior timber enterprises represented by the GTI-ROC was less than that of last month.



The existing orders index registered 32.5%, a decrease of 0.8 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of existing orders of the superior timber enterprises represented by the GTI-ROC was less than that of last month.

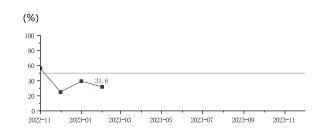


The inventory index of finished products registered 27.5%, an increase of 4.2 percentage points from the previous month, was below the critical value for 3 consecutive months, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-ROC was less than that of month.

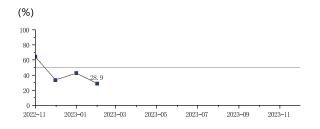


Global Timber Index

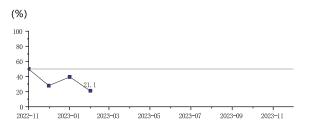
The purchase quantity index registered 31.6%, a decrease of 7.7 percentage points from the previous month, was below the critical value for 3 consecutive months, indicating that the purchase quantity of the superior timber enterprises represented by the GTI-ROC was less than that of last month.



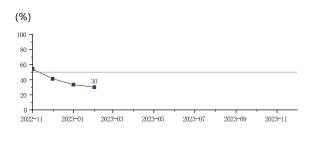
The purchase price index registered 28.9%, a decrease of 14.0 percentage points from the previous month, was below the critical value for 3 consecutive months, indicating that the purchase price of the superior timber enterprises represented by the GTI-ROC was lower than that of last month.



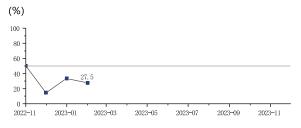
The inventory index of main raw materials registered 21.1%, a decrease of 18.2 percentage points from the previous month, was below the critical value for 3 consecutive months, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-ROC was much less than that of last month.



The production and management employees index for registered 30.0%, a decrease of 3.3 percentage points from the previous month, was below the critical value for 3 consecutive months, indicating that the number of employees in the superior timber enterprises represented by the GTI-ROC was much less than that of last month.



The delivery time index registered 27.5%, a decrease of 5.8 percentage points from the previous month, was below the critical value for 3 consecutive months, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-ROC was slower than last month.

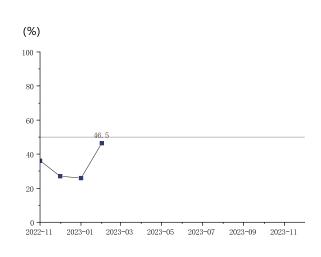


GTI-Brazil Index in February 2023

On March 2, 2023, Instituto Brasileiro de Geografia e Estatística (IBGE) released data showing that Brazil's GDP reached 9.9 trillion Reals in 2022, an increase of 2.9% over the same period last year. Among them, the service industry contributed the most, with an annual value-added of 5.8 trillion Reals, an increase of 4.2%, while the manufacturing industry experienced a 0.3% decline. Meanwhile, Brazil's overall agricultural output fell by 1.7% in 2022 due to reduced agricultural production. Brazil welcomed the Sao Paulo Carnival on February 17, hoping to take this opportunity to promote the development of tourism and accelerate economic recovery.

In February, the rainy season still had an impact on Brazil's outdoor production activities. Under the influence of factors such as insufficient external demand and insufficient supply of raw materials, the production and operation situation of Brazil's timber industry was weaker than that of the previous month, but the new orders and production were basically same with that of the previous month, and the business trend of continuous decline has eased.GTI-Brazil enterprises feedbacked the low recognition of new tree species and cumbersome export procedures,hoping the government

GTI- Brazil Index



would provide more support to timber industry, improve the road maintenance during the rainy season and simplify the export procedure. This month, the GTI-Brazil index registered 46.5%, an increase of 20.6 percentage points from the previous month, was below the critical value (50%) for 4 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-Brazil index has shrank from last month.

Challenges

- Rain affected outworks and productions.
- Weak market and logistics were compromised due to lack of efficiency.
- Foreign market was lack of demand.
- Lack of raw materials during rainy season.
- High interest rates.
- The weather was the main problem due to a lot of rain, as the company work directly in the forest the weather impacts on field operations.
- Lack of market recognition of new hardwood species such as Australian cedar (Toona Ciliata) and African mahogany (Kahya Gadifoliola) and lack of confidence of the final consumers.

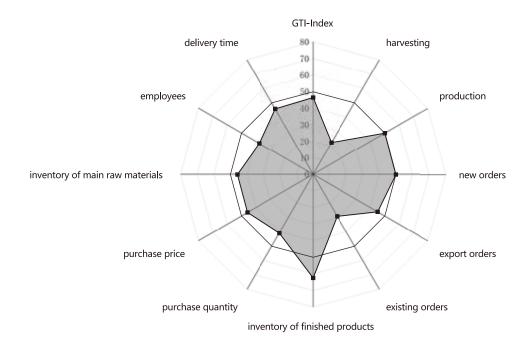
Suggestions

- Schedule field operations according to the climate seasonality.
- Improvements in the production process in order to increase wood yield.
- Improve road maintenance for product transport in rainy period to maintain the transportation.
- The Federal and State Government should have greater responsibility/commitment to the forest-based sectors.
- Take advantage of the fact that the enterprise has FCS certification to open a market and promote new tree spices.



GTI-Brazil sub-index(%)

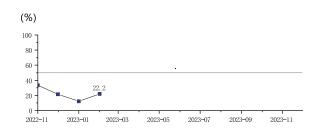
As for the GTI-Brazil sub-index, in February 2023, only the inventory index of finished products was above the critical value, the production and new order indexes were equal to the critical value, while the remaining 8 sub-indexes were all below the critical value.



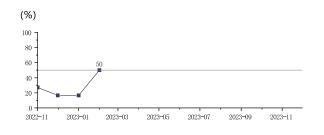
GTI-Brazil sub-index

Global Timber Index

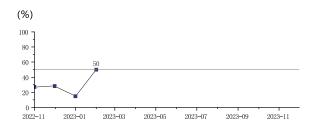
The harvesting index registered 22.2%, an increase of 9.7 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Brazil was much less than that of last month.



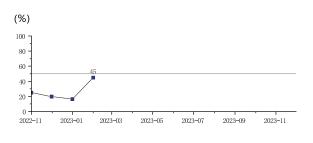
The production index registered 50.0%, an increase of 33.3 percentage points from the previous month, rose to the critical value, indicating that the production volume of the superior timber enterprises represented by the GTI-Brazil was same with last month.



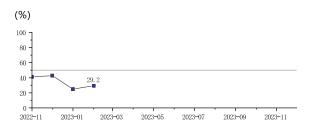
The new orders index registered 50.0%, an increase of 35.0 percentage points from the previous month, rose to the critical value, indicating that the number of new orders of the superior timber enterprises represented by the GTI-Brazil was same with last month.



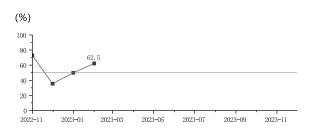
The export orders index registered 45.0%, an increase of 28.3 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of export orders of the superior timber enterprises represented by the GTI- Brazil was less than that of last month.



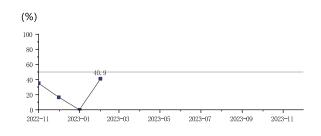
The existing orders index registered 29.2%, an increase of 4.2 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of existing orders of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



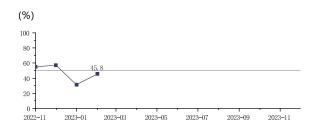
The inventory index of finished products registered 62.5%, an increase of 12.5 percentage points from the previous month, rose above the critical value after 3 months, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Brazil was more than that of month.



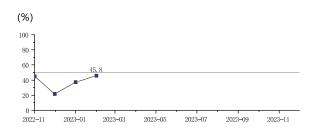
The purchase quantity index registered 40.9%, an increase of 40.9 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the purchase quantity of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



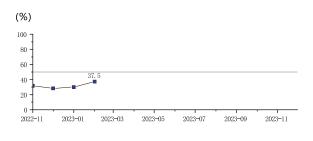
The purchase price index registered 45.8%, an increase of 14.5 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchase price of the superior timber enterprises represented by the GTI-Brazil was lower than that of last month.



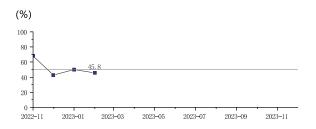
The inventory index of main raw materials registered 45.8%, an increase of 8.3 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



The production and management employees index registered 37.5%, an increase of 7.5 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of employees in the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



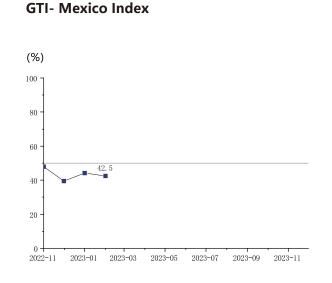
The delivery time index registered 45.8%, a decrease of 4.2 percentage points from the previous month, fell below the critical value, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Brazil was slower than last month.



GTI-Mexico Index in February 2023

The report released by National Institute of Statistics, Geography and Informatics (INEGI) at the end of February shows that against the backdrop of sustained high inflation and record high interest rates, Mexico's economy grew by 3.1% in 2022, slightly higher than the preliminary estimate of 3% in the report at the end of January. Manufacturing industry achieved an annual growth of 3.3%, while agriculture and forestry industry grew by 2.7% year-on-year. In March 22, Bank of Mexico lowered its economic growth forecast from 1.8% to 1.6% in 2023. At the same time, Mexico was taking active measures to promote the development of manufacturing industry, such as attracting Tesla to build factories there.

In February this year, the demand of South American timber market continued to decline, coupled with the low pricing of importing countries, the Mexican timber market was relatively in a downturn. GTI-Mexico enterprises reflected that the approval procedure of forestry documents was cumbersome, and the forestry license cannot be issued in time, which affects the production efficiency of enterprises. This month, the GTI-Mexico index registered 45.1%,



a decrease of 1.7percentage points from the previous month, was below the critical value (50%) for 4 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-Gabon index has shrank from last month.



Challenges

- Bad weather condition.
- Lack of production equipment.
- Lack of electricity.
- The market price of the product was too low and the sales volume was insufficient.
- High production cost.
- There was an oversupply of products.
- Market for excess of similar imports at a very low price.
- Lack of market for roundwood and sawn.
- The saturation of sawn timber markets from South America.
- Complex forestry procedures.
- Lack of documents by the Ejidos and the Government Unit that releases the forest permits.
- Lack of formal documentation for timber shipments.
- Lack of timber procurement contracts.

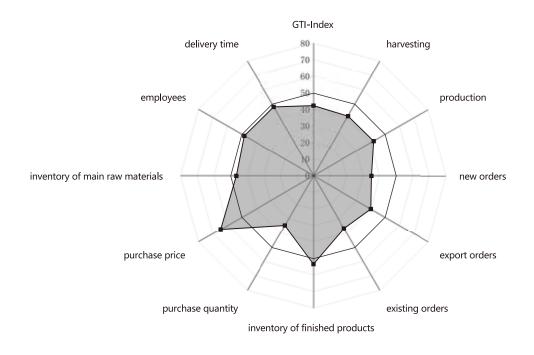
Suggestions

- Modification of the work system.
- Reactivation of the construction industry and training of company personnel.
- Introduce laws to regulate the timber trade.
- Promote international trade in wood products to other countries.
- Encourage with tax incentives to reduce costs.
- Improve the economy so that there were more flows of money.
- Open markets to export wood and wood products.
- Expedite procedures of forest documents before the authorities.
- Encouraging the use of timber in construction so that the economy improves and there were more purchases of wood.



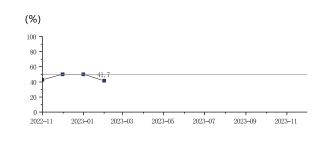
GTI-Mexico sub-index(%)

As for the GTI-Mexico sub-index, in February 2023, the inventory of finished products and purchase price indexes were above the critical value, while the remaining 9 sub-indexes were all below the critical value.

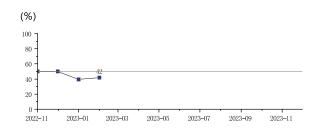


GTI-Mexico sub-index

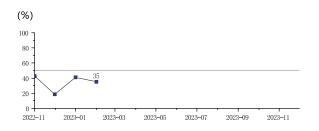
The harvesting index registered 41.7%, a decrease of 8.3 percentage points from the previous month, fell below the critical value, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



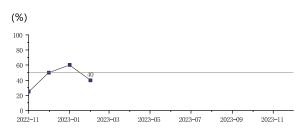
The production index registered 42.0%, an increase of 2.5 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the production volume of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



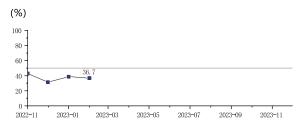
The new orders index registered 35.0%, a decrease of 5.9 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of new orders of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



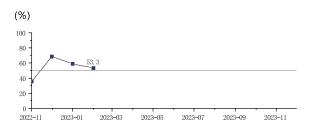
The export orders index registered 40.0%, a decrease of 20.0 percentage points from the previous month, fell below the critical value, indicating that the number of export orders of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



The existing orders index registered 36.7%, a decrease of 1.9 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of existing orders of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.

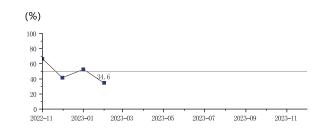


The inventory index of finished products registered 53.3%, a decrease of 5.8 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Mexico was more than that of month.

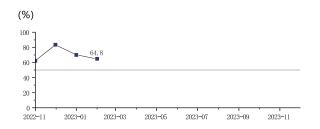


Global Timber Index

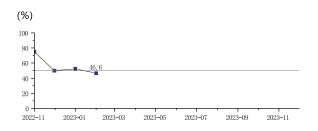
The purchase quantity index registered 34.6%, a decrease of 18.0 percentage points from the previous month, fell below the critical value, indicating that the purchase quantity of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



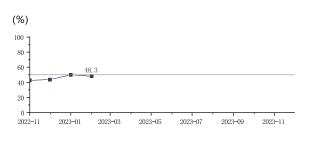
The purchase price index registered 64.8%, a decrease of 5.2 percentage points from the previous month, was above the critical value for 4 consecutive months, indicating that the purchase price of the superior timber enterprises represented by the GTI-Mexico was higher than that of last month.



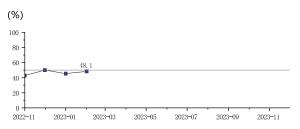
The inventory index of main raw materials registered 46.6%, a decrease of 5.8 percentage points from the previous month, fell below critical value, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



The production and management employees index registered 48.3%, a decrease of 1.7 percentage points from the previous month, fell below the critical value, indicating that the number of employees in the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



The delivery time index registered 48.1%, an increase of 2.6 percentage points from the previous month, was above the critical value for 2 consecutive months, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Mexico was slower than last month.

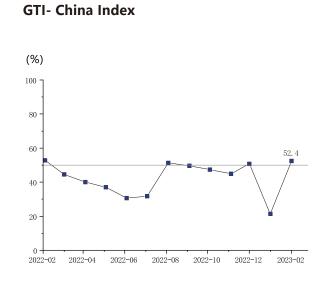




GTI-China Index in February 2023

In February 2023, after the end of the Chinese New Year holiday, all walks of life have resumed work and production, social mobility has recovered in an all-round way, the market demand of manufacturing industry has been released rapidly, the vitality of market entities has been enhanced, and China's economy is accelerating its recovery. The data released by the National Bureau of Statistics shows that, China's production and trade grew rapidly from January to February this year, industrial added value increased by 7.5% year-on-year, total import and export of products increased by 13.3% year-on-year, employment and prices were stable as a whole, showing great potential for development. China's GDP growth was expected to be 5% in 2023, according to data released by the Institute of Economics, Chinese Academy of Social Sciences.

Driven by the recovery of macroeconomic, the positive changes in China's timber processing and manufacturing industry increased significantly in February, with both supply and demand showing a growth trend.The production volume and orders of enterprises increased compared with



the previous month, the downward trend of foreign orders was alleviated, and activities such as procurement and supplier distribution were more active than the previous month. However, enterprises still feel worried about the release of current demand. This month, the GTI-China index registered 52.4%, an increase of 30.9 percentage points from the previous month, rose above the critical value, indicating that the business prosperity of the superior timber enterprises represented by the GTI-China index has expanded from last month.

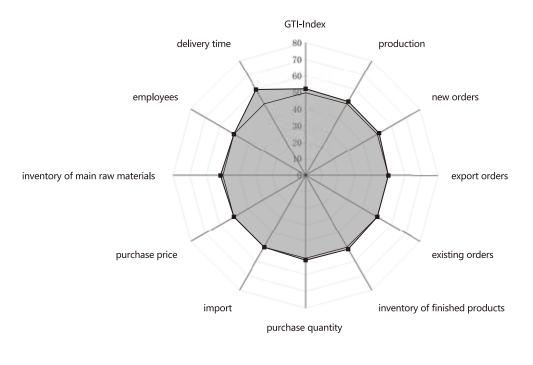
firewood, methanal, urea.

Challenges	Products in short supply
• The price of raw materials rose too fast and needed to be controlled.	Impregnated bond paper, log.
• The purchasing price of timber was too high, which increases the production cost of	
enterprises.	
Commodity of which the price has been decreased	Commodity of which the price has been increased
Oak, eucalyptus, black walnut, base material,	Fir, paraffin, water-proofing additive,



GTI-China sub-index(%)

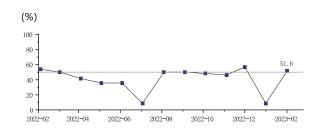
As for the GTI-China sub-index, in February 2023, the indexes like export orders, existing orders, purchase price, import and employee were equal to the critical value, while the remaining 6 sub-indexes were all above the critical value.



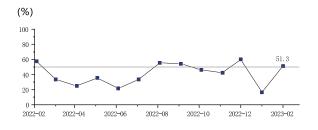
GTI-China sub-index

Global Timber Index

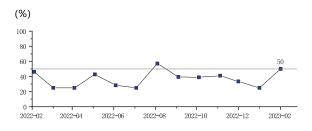
The production index registered 51.6%, an increase of 43.3 percentage points from the previous month, rose above the critical value, indicating that the production volume of the superior timber enterprises represented by the GTI-China was more than that of last month.



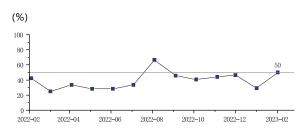
The new orders index registered 51.3%, an increase of 34.6 percentage points from the previous month, rose above the critical value, indicating that the number of new orders of the superior timber enterprises represented by the GTI-China was more than that of last month.



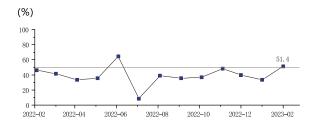
The export orders index registered 50.0%, an increase of 25.0 percentage points from the previous month, rose to the critical value, indicating that the number of export orders of the superior timber enterprises represented by the GTI-China was same with last month.



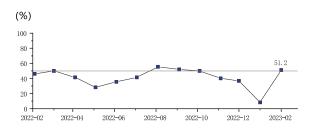
The existing orders index registered 50.0%, an increase of 20.8 percentage points from the previous month, rose to the critical value, indicating that the number of existing orders of the superior timber enterprises represented by the GTI-China was same with last month.



The inventory index of finished products registered 51.4%, an increase of 18.1 percentage points from the previous month, rose above the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-China was more than that of month.

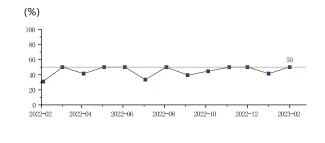


The purchase quantity index registered 51.2%, an increase of 42.9 percentage points from the previous month, rose above the critical value, indicating that the purchase quantity of the superior timber enterprises represented by the GTI-China was more than that of last month.

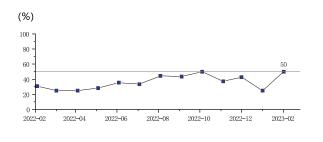


Global Timber Index

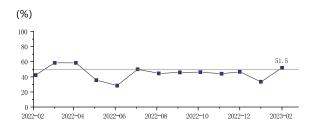
The purchase price index registered 50.0%, an increase of 8.6 percentage points from the previous month, rose to the critical value, indicating that the purchase price of the superior timber enterprises represented by the GTI-China was same with last month.



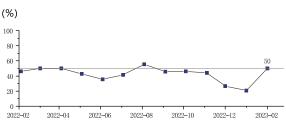
The import index registered 50.0%, an increase of 25.0 percentage points from the previous month, rose to the critical value, indicating that the import volume of the superior timber enterprises represented by the GTI-China was same with last month.



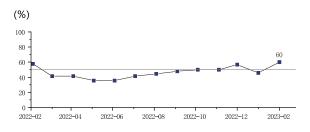
The inventory index of main raw materials registered 51.5%, an increase of 18.2 percentage points from the previous month, rose above critical value, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-China was more than that of last month.



The production and management employees index for registered 50.0%, an increase of 29.2 percentage points from the previous month, rose to the critical value, indicating that the number of employees in the superior timber enterprises represented by the GTI-China was same with last month.



The delivery time index registered 60.0%, an increase of 14.2 percentage points from the previous month, rose above the critical value, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-China was faster than last month.





Survey methodology

The Global Timber Index (hereinafter referred to as GTI) is compiled based on the a survey of leading timber enterprises from the main timber producing and consuming countries. The questionnaire is disseminated to the timber enterprises monthly and the Secretariat of Global Green Supply Chain Initiative (hereinafter referred to as GGSC) organizes the experts to calculate and compile the GTI report, based on statistical analysis of the collected data and information.

With the support of the International Tropical Timber Organization (hereinafter referred to as ITTO), GGSC has set up focal points in the pilot countries from the timber producing and consuming countries. In the initial phase (2022), the GTI platform will cover seven pilot countries: Indonesia, Malaysia , Gabon, Republic of Congo, Brazil, Mexico, and China. The questionnaires will be completed and collected by these focal points from 25th to 30th every month. The GTI reports will be regularly released to stakeholders of global forest products industry.

Based on the characteristics of the timber and timber products industry in different countries, the current GTI questionnaire is divided into two categories: the timber producer and the timber manufacturer. For the timber producing countries, the focus is the investigation on the development trend of local timber harvesting and supply, covering logs, sawn timber, plywood, etc. For the timber consuming countries (such as China), the focus is the investigation on the prosperity and development trend of local timber processing and manufacturing industry, covering wooden floor, doors and furniture, etc.

Data and Interpretation

GTI index contains diffusion index and comprehensive index.

(1)

The calculation of GTI diffusion index. GTI has 11 diffusion index (or called sub-indices) based on the data from 11 objective questions which covers production (or harvesting), new orders, new export orders, existing orders, inventory of products, purchasing quantity or import, purchasing prices of main raw materials, inventory of raw material, employees, and delivery time. The diffusion index is calculated by adding the percentage of enterprises with positive answers to half of the percentage with unchanged answers.

(2)

The calculation of GTI comprehensive index. GTI comprehensive index(GTI index for short) is calculated based on the diffusion indexes of five of the indexes with different weights: production , new orders, inventory of raw material, employees, delivery time. The five diffusion indexes and their weights are determined according to their leading influence on the industrial economy.

The value of the index is between 0-100%, and 50% is the critical value of the index. A GTI index reading above 50 percent indicates that the industry prosperity is generally expanding; below 50 percent indicates that it is generally declining.



Declaration

GTI report is compiled based on the data provided by the timber enterprises in the pilot countries. The data can not be used in investment decision-making, but can help to understand the timber industry trend.

The data and intellectual property in the reports are owned by ITTO and GGSC jointly. ITTO and GGSC hereby grant you a limited, revocable, nonsublicensable license to access and display on your individual device the GTI report (excluding any software code) solely for your personal, non-commercial use. Without the permission from ITTO and GGSC, you shall not copy, download, stream, capture, reproduce, duplicate, archive, upload, modify, translate, publish, broadcast, transmit, retransmit, distribute, perform, display, sell, or otherwise use any GTI report Content.

About ITTO

The International Tropical Timber Organization, ITTO for short, is an intergovernmental organization promoting the sustainable management and conservation of tropical forests and the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests. It's located in Yokohama, Japan. At present, there are 75 ITTO members. ITTO's membership represents about 90% of the global tropical timber trade and more than 80% of the world's tropical forests.

About GGSC

Global Green Supply Chain Initiative (abbreviated as GGSC), supported by International Tropical Timber Organization (ITTO), is a global service platform voluntarily established by enterprises, research institutes, industry associations, international organizations and other stakeholders involved in forest products R&D, design, manufacturing, distributing, consuming and recycling, to implement "the Initiative to build a collaboration network of global green supply chain of forest products" jointly launched by industry sectors, associations, international organizations and research institutions all over the world who were participants of the International Forum on "Together Towards Global Green Supply Chains – A Forest Products Industry Initiative" held in Shanghai, China in October, 2019.

Vision

Connect foresters, live in natural and harmony.

Mission

Build a sustainable development ecology of the global timber industry, promote the transformation of corporate social and environmental responsibilities into competitive advantages, and serve the better life of mankind.

Values

Openness、Share、Greenness、Collaboration.

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