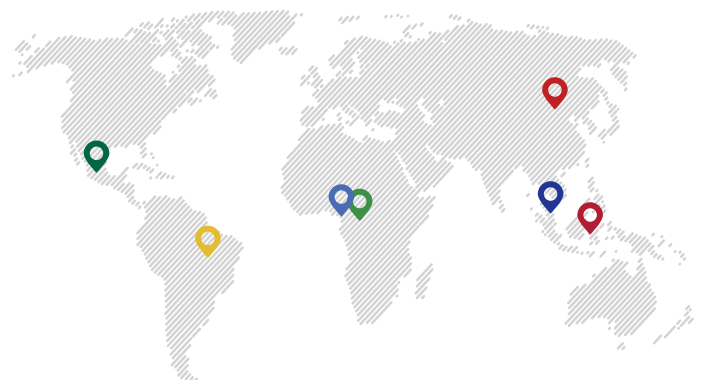


10 January 2023

GLOBAL TIMBER INDEX GTI REPORT MONTHLY

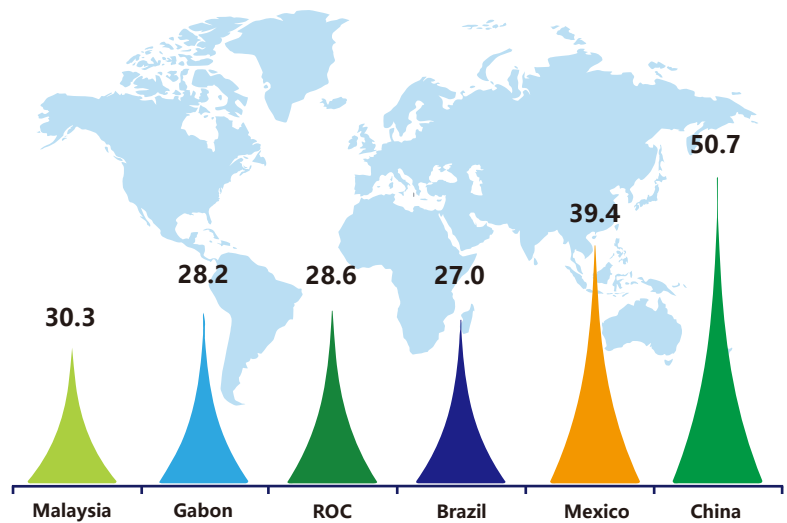
GGSC-No. 12/2022

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



Overview of the GTI Index

In December 2022, the Global Timber Index (GTI) Report showed that the global timber market has been under the lasting effect of uncertainties in global economy, declining global demand and the regular rainy season in Africa amongst others. The GTI index of the timber producing countries as Malaysia, Gabon, the Republic of the Congo, Brazil and Mexico in December were below the critical level of 50%, which represents that the prosperity of timber production and operation this month shrink from last month. On the supply side, except Mexico whose timber harvesting, process and manufacturing activities are picking up, the shrinking timber harvesting and production of Malaysia, Gabon, the Republic of the Congo and Brazil continues. The shrinking market, amongst others, is still the main



problem that plagues these countries. Besides, GTI participating enterprises in Malaysia, Gabon, the Republic of the Congo and Brazil also confessed their desire to bring down taxes and fees. Those in Mexico pointed out that large-scale imports have produced a "squeezing out effect" on their domestic timber trade. In China, the domestic demands have picked up after it adjusted its COVID-19 prevention and control policy at the beginning of December and introduced real estate stimulus policies, in spite of the intermittently decreasing on-duty workers. As production activities are resumed in timber enterprises, China scored a GTI of 50.7%. 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:

Malaysia:

Ministry of Plantation Industries & Commodities (MPIC)

Special thanks to Sarawak Timber Association (STA)

Indonesia:

Sustainable Forest Management of the Ministry of Environment and Forestry

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:

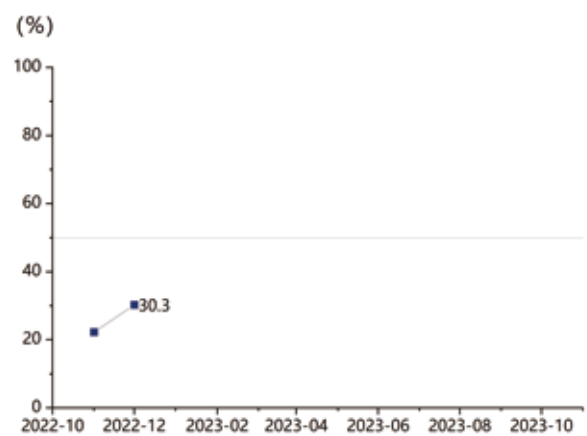
Global Green Supply Chain Initiative (GGSC)

GTI-Malaysia Index in December 2022

In 2022, Malaysia's economic development showed strong vitality, driven by the growth of private consumption and investment, a large number of exports and favorable base effects. Dato' Seri Anwar bin Ibrahim, the Prime Minister of Malaysia said Malaysia's GDP is expected to grow between 6.5 to 7 percent points this year. According to the data released by the Department of Statistics Malaysia Official Portal (DOSM), the CPI index was raised by 4% in November. However, due to the uncertainty of the global economy, OECD lowered Malaysia's GDP growth rate by 1 percentage point in 2023 in its World Economic Outlook released in June this year.

In December 2022, the excessive rain led to the continuous consumption of raw material stocks and the increase of freight costs. The development of the timber industry in Malaysia continued to shrink, and the problems of insufficient labor force, high production logistics

GTI-Malaysia Index



costs and small number of orders were more prominent. This month, the GTI-Malaysia Index registered 30.3%, an increase of 8.0 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-Malaysia Index was declined from the previous month.



Challenges

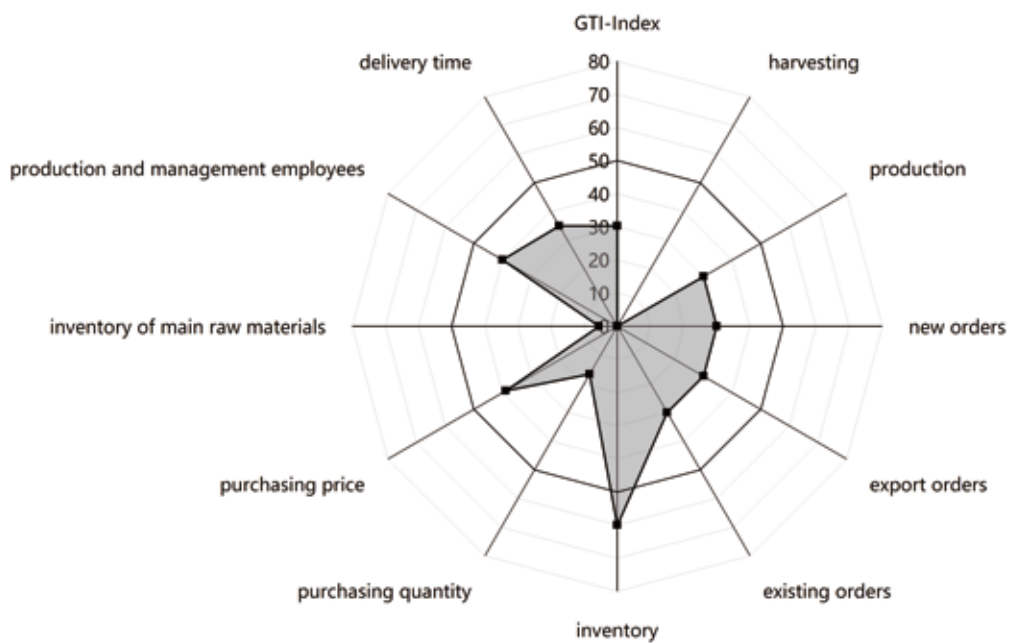
- Very few orders, shipment decrease, production slow down, high cost.
- Less export orders.
- Exchange rate fluctuation.
- Short of raw material.
- Weather conditions (too much rain).
- Rainy season causing low log stock and freight rate remain high.
- Increasing cost of raw material.

Suggestions

- To open for more sourcing countries for labor & market.
- Strict control on production cost.
- Beyond our control.
- Reduce export of woodchips/Acacia. Maybe can consider quota based.
- Government assistant in lowering log royalty rate and lowering freight rate.
- Increase harvesting of the plantation forest & improve yield of the plantation forest.

GTI-Malaysia sub-index

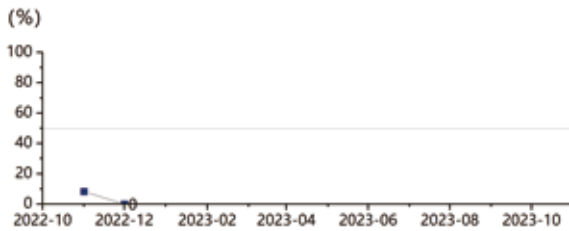
As for the GTI-Malaysia sub-index, in December 2022, only the inventory index of finished products was above the critical value (50%), while the remaining 10 sub-indexes were all below the critical value.



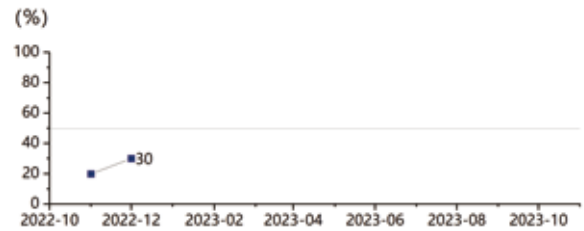
GTI-Malaysia sub-index



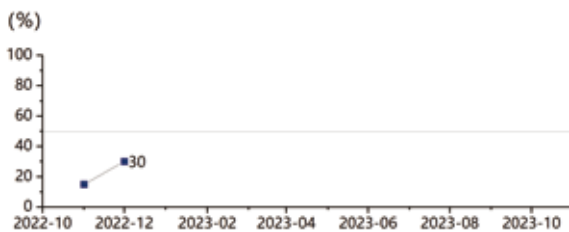
The harvesting index registered 0%, a decrease of 8.3 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Brazil was significantly less than that of last month.



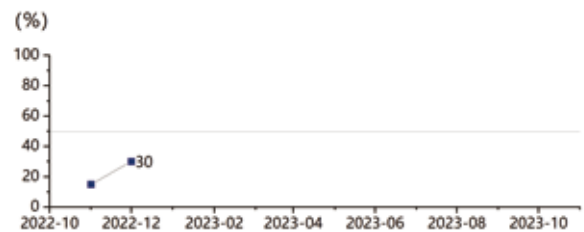
The export orders index registered 30.0%, an increase of 10.0 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the ability to obtain the export orders of the superior timber enterprises represented by the GTI-Brazil was weaker from last month.



The production index registered 30.0%, an increase of 15.0 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-Brazil was less than that of last month.



The existing orders index registered 30.0%, an increase of 15.0 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-Brazil was less than that of last month.



The new orders index registered 30.0%, an increase of 5.0 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-Brazil was shrunk from last month.

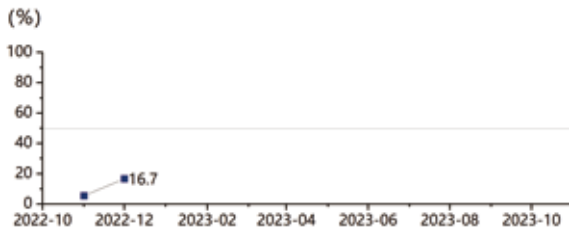


The inventory index of finished products registered 60.0%, was same with the previous month, was above the critical value for 2 consecutive months, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Brazil was more than that of month.

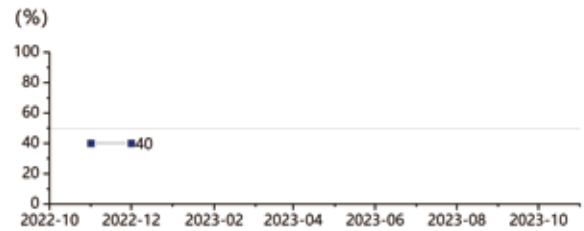




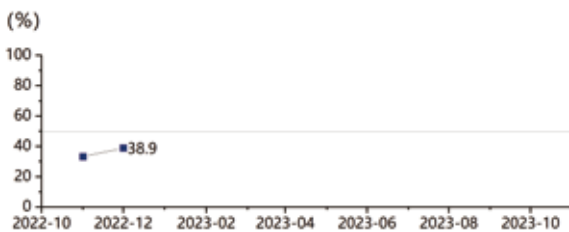
The purchasing quantity index registered 16.7%, an increase of 11.1 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchasing quantity of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



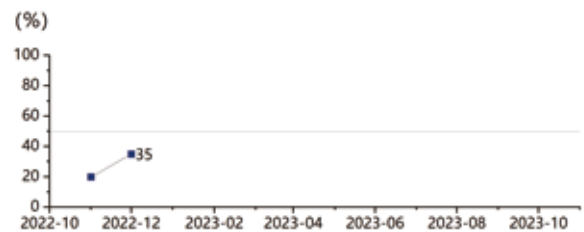
The production and management employees index registered 40.0%, was same from the previous month, was below the critical value for 2 consecutive months, indicating that the number of production and operation employees of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



The purchasing price index is 38.9%, an increase of 5.6 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchasing price of the superior timber enterprises represented by the GTI-Brazil was lower than that of last month.



The delivery time index registered 35.0%, an increase of 15.0 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Brazil was slower than last month.



The inventory index of main raw materials index registered 5.6%, an increase of 5.6 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Brazil this month were less than that of the month.

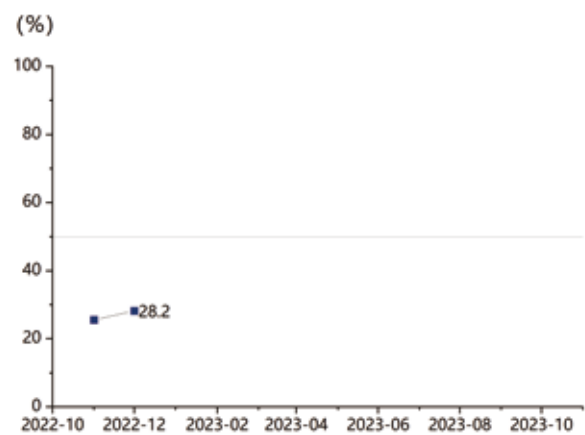


GTI-Gabon Index in December 2022

Gabon is rich in natural resources with mineral deposits such as oil, forests and manganese ore, and is a major producer country of oil, manganese ore and timber in Africa. According to a recent report released by the World Economic Forum (WEF) , Gabon has become the second largest forest coverage on the planet with 88% forest coverage, after Suriname (97%). In terms of the macro economy, International Monetary Fund (IMF) estimated that, caused by the economic growth on oil, the economic growth rate is expected to reach 2.7% in 2022 and 3.7% in 2023. From the perspective of price level, according to the economic situation analysis report of Gabon's Ministry of Economy, the Ukrainian crisis and the COVID-19 have led to a sustained increase in food import spending, which has further pushed up the inflation rate. By the end of June 2022, Gabon's inflation rate had reached 3.5%. In recent years, Gabon has accelerated the pace of green economy development. This month, Gabon and the United Nations signed the Gabon-United Nations New Cooperation Framework Agreement for 2023-2027, which takes effect on January 1, 2023. The new cooperation framework agreement has three priorities, namely, promoting good governance, transforming to a green economy and a blue economy, and strengthening equality and inclusiveness.

In December this year, due to the impact of the rainy season, the business prosperity of timber enterprises in Gabon is still in a contraction trend,

GTI- Gabon Index



with logging, production, orders, and raw material inventory all falling compared with the previous month, and the purchase price of raw materials rising. GTI participating enterprises have fed back the production and operation problems such as the reduction of orders, the shrinkage of the timber market, and the decline of sales prices. At the same time, they also face difficulties such as the shortage of trucks, poor road infrastructure, and regional taxes. The enterprises hope that the government can improve infrastructure, reduce taxes, and optimize the import process. This month, the GTI-Gabon index registered 28.2%, an increase of 2.6 percentage points ,was below the critical value (50%), indicating that the business prosperity of the superior timber enterprises represented by the GTI-Gabon index has declined compared with the previous month.

Challenges

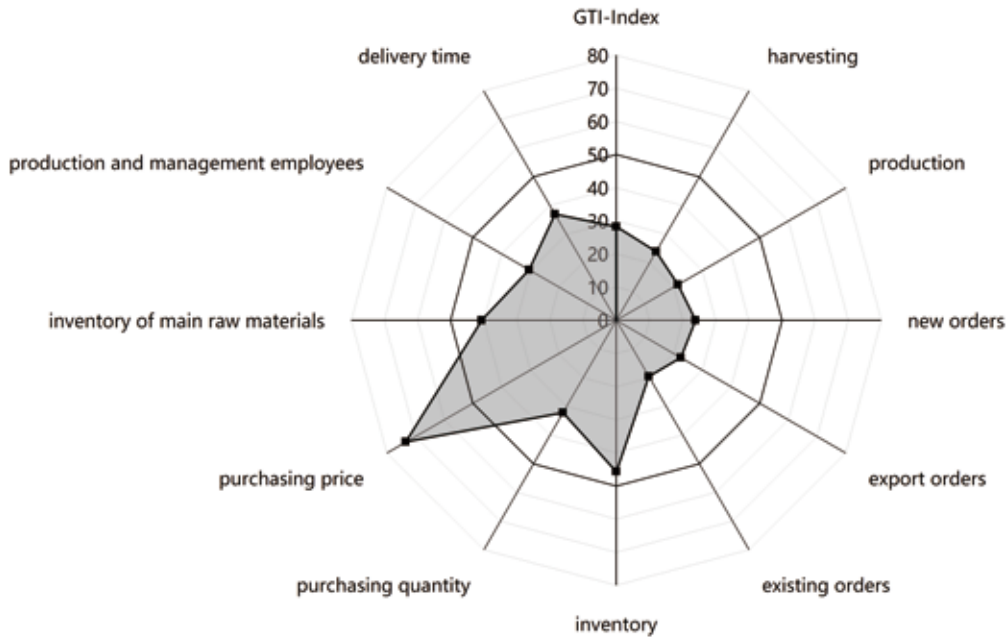
- The price of diesel has affected the marketing activities of products.
- A large number of production materials were needed in production.
- Orders were decreased, the share of the timber market were declined, and the sales prices of the timber market were also declined. There are difficulties in logistics, and customers have a large backlog of products.
- Lack of log sources; logs are controlled by TRACER; orders were reduced.
- Struggling with products selling caused by poor road and railway conditions.
- The costs of export were relatively high.
- There were many problems in the delivery of oil products and the circulation of labor.
- Poor road and railway condition, and increased fuel prices.
- Sales of timber products have fallen sharply.
- The number of orders has decreased.
- After the global crisis, some orders have been cancelled or others have been suspended; rosewood has been listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); however.
- Lack of adhesive and accessories.
- High diesel prices, and the state of Ovan-Makokou highway was poor.
- Rainy season.
- No market outlet and the operating costs were high.
- Need to pay the land tax.
- Sales in export markets have declined.
- Difficulties of export: The number of wagons of the Gabon Railway Operating Company (SETRAG) cannot meet the requirements, and it has lasted for 2 years; The national highway was impassable, and the related production costs were very high in the rainy season.

Suggestions

- Reduce the price of daily necessities and promote production.
- In view of the timber market which has been in a downward trend, relevant recovery measures should be taken.
- TRACER's privileges should be reviewed; forest concessions should be redistributed.
- Solve export problems with the governments (optimize road and railway) .
- Simplify local customs procedures.
- The price of oil should be reviewed and the qualifications of the workforce should be defined clearly.
- Improve the infrastructure of transportation to lower the costs.
- The government may provide support to economic operators.
- Looking for more customers and expand markets and solve the problem on log transportation.
- The procedures for obtaining rosewood business licenses should be simplified based on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- Simplification of various import procedures.
- The price of diesel should be adjusted according to the needs of enterprises, and permanent reconstruction works of the National Highway (RN) should be carried out during the next dry season.
- Each producer shall sign an agreement.
- SETRAG should give priority to the distribution of wagons to remote stations, strengthen SETRAG's own forest products transport capacity, and develop a railway transport contingency plan based on log production and export.

GTI-Gabon sub-index

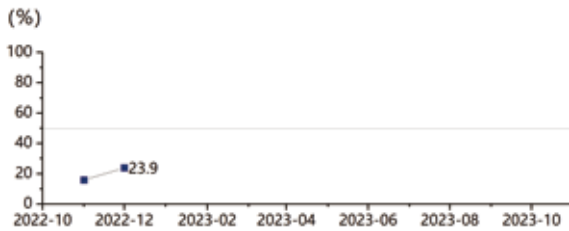
As for the GTI-Gabon sub-index, in November 2022, the inventory index of finished products index, purchasing price index and inventory index of main raw materials index were above the critical value (50%), while the remaining 8 sub-indexes were below the critical value.



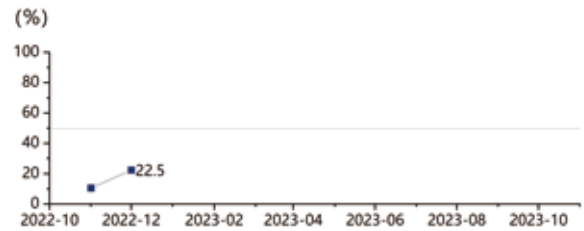
GTI-Gabon sub-index



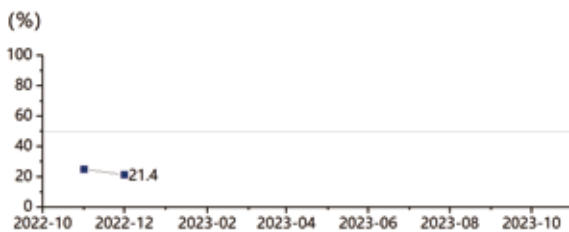
The harvesting index registered 23.9%, an increase of 8.0 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Gabon was less than that of last month.



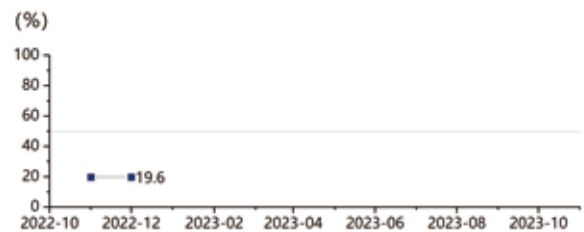
The export orders index registered 22.5%, an increase of 12.0 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the ability to obtain the export orders of the superior timber enterprises represented by the GTI-Gabon was weaker than that of last month.



The production index registered 21.4%, a decrease of 3.6 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-Gabon was less than that of last month.



The existing orders index registered 19.6%, same with 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-Gabon was less than that of last month.



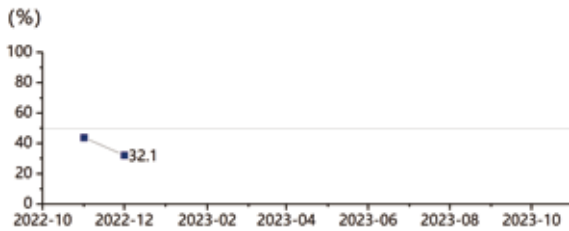
The new orders index registered 23.9%, an increase of 8.7 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of new orders of the superior timber enterprises represented by the GTI-Gabon was shrunk dramatically from last month.



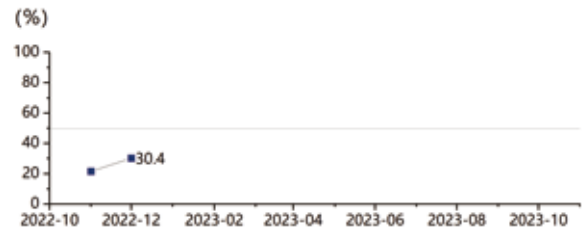
The inventory index of finished products registered 45.7%, a decrease of 6.5 percentage points from the previous month, fell below the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Gabon was less than that of last month.



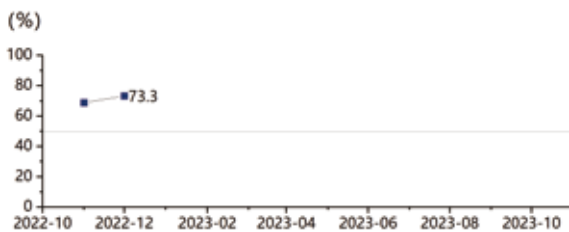
The purchasing quantity index registered 32.1%, a decrease of 11.7 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchasing quantity of the superior timber enterprises represented by the GTI-Gabon was decreased from last month.



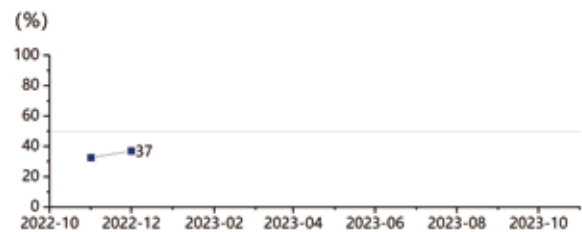
The production and management employees index registered 30.4%, increase of 8.7 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of production and operation employees of the superior timber enterprises represented by the GTI-Gabon was decreased



The purchasing price index registered 73.3%, an increase of 4.5 percentage points from the previous month, was above the critical value for 2 consecutive months, indicating that the purchasing price of the superior timber enterprises represented by the GTI-Gabon was increased from last month.



The delivery time index registered 37.1%, an increase of 4.4 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Gabon was slower than last month.



The inventory index of main raw materials index registered 40.6%, a decrease of 15.3 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-Gabon this month was less than that of last month.

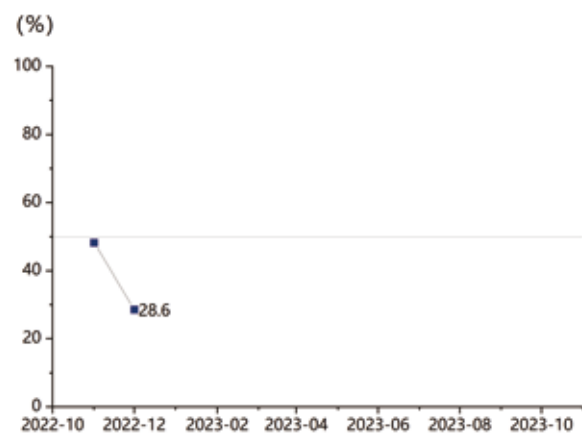


GTI-ROC Index in December 2022

Republic of the Congo is located in the middle west of Africa with rich mineral and forest resources, its forest coverage rate of more than 60% of the land area, accounting for about 10% of the forest resources in Africa. In addition to natural forestry resources, ROC has 73000 hectares of artificial cultivation forest, its main tree species are oguman, mahogany, ebony, ironwood, tamu, fruitwood, etc. Forestry industry provides a large number of jobs for local residents, forestry economy accounts for 5-6% of its GDP, and plays an important role in economic development. Forestry industry is also one of the local priority industries.

In December 2022, affected by the rainy season, the production and operation of timber industry in ROC continued to slow down. According to the feedback from GTI participating enterprises, transportation problems caused by backward road facilities were prominent this month and they were also struggling with fuel shortage, machine failure, and high taxes and fees. In addition, some polices to slow down logging affected the operation of enterprises. In this regard, ROC' s enterprises were looking forward

GTI-ROC Index



to maintaining roads and bridges, providing more incentives and support for enterprises, and extending the time to stop annual logging so as to remove the timber having been cut. In December 2022, the GTI-ROC Index registered 28.6%, a decrease of 19.6 percentage points from the previous month, was below the critical value for 2 consecutive months,, indicating that the business prosperity of the superior timber enterprises represented by the GTI-ROC index was declined from the previous month.

Challenges

- There are problems in transportation, logistics and fuel.
- The road is difficult to pass uphill, or there is water accumulation.
- Because of the poor road conditions and the need to cross the ferry, there are many inherent problems in the transportation of timber and logs.
- Industrial activity is depressed caused by fuel shortages.
- Mechanical equipment often breaks down and faces frequent rainstorms.
- Problems in forest administration and various taxes.
- There is a lack of diversified incentives/support related to timber processing, and the market channels are relatively narrow.
- Due to climate factors, the progress of forest harvesting has slowed down.
- In Annex II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), adjustments have been made to the classification of mahogany, red sandalwood and doussie.
- In accordance with the Forest Law of the Republic of the Congo, No.33-2020, July 8, 2020, after the entry into force of the rules, the provisions of Article 97, paragraph 1, have become a constraint on deforestation in 2022.
- National government has not provide effect supports.

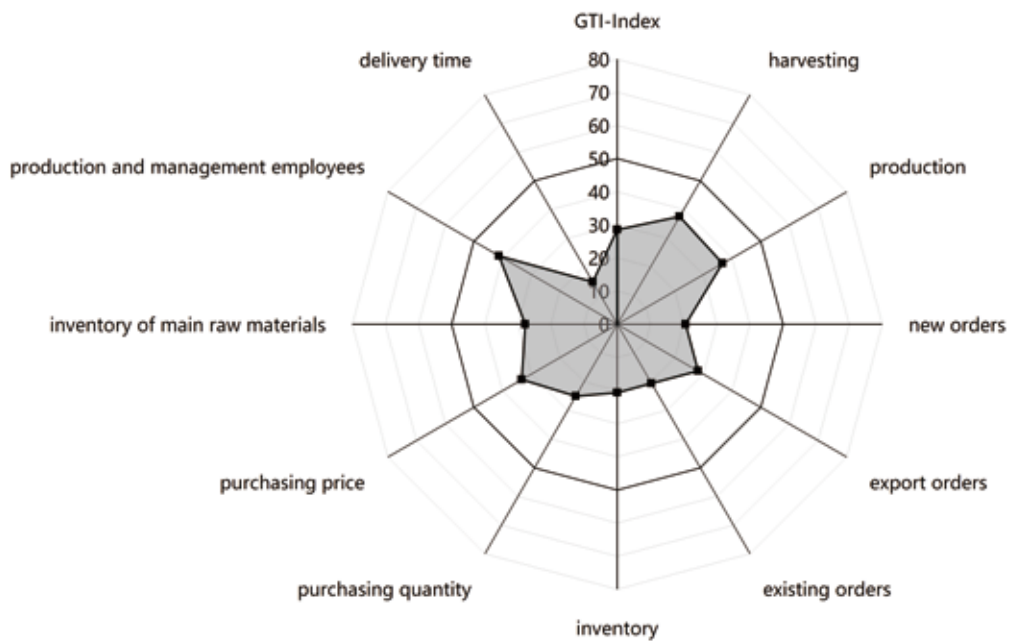
- There are problems on the road from Makokou to Ovang.
- In the case of forest concessions, there are multiple overlapping licenses (mining licenses); lack of forest log resources; and large areas that are not developed.

Suggestions

- Reconstruction of roads and bridges.
The national government may renovate the flooded forests.
The government may carry out road maintenance, especially some highways, and should build bridges to solve the difficulty of ferry transportation caused by high tolls.
Extend the period of cessation of annual felling to allow for removal of felled timber.
The government may provide more supports.
For some good enterprises, increase diversified incentives/support related to wood processing and open up market.
It is suggested to coordinate with the government and forestry enterprises.
Extend the payment period.
Carry out road renovation project.
Enhance communication with the forestry decartments.

GTI-ROC sub-index

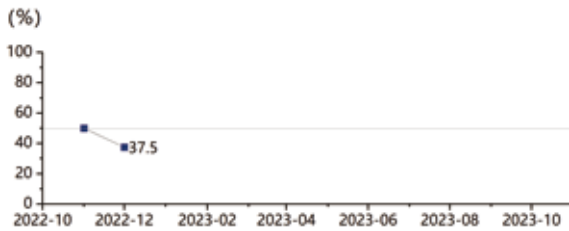
As for the GTI-ROC sub-index, in December 2022, 11 sub-indexes were all below the critical value (50%).



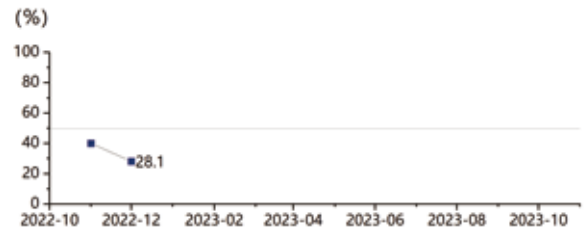
GTI-ROC sub-index



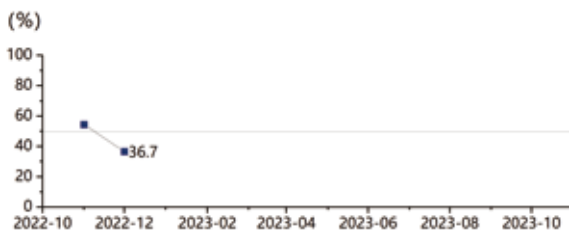
The harvesting index registered 37.5%, a decrease of 12.5 percentage points from the previous month, fell below the critical value, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-ROC was less than that of last month.



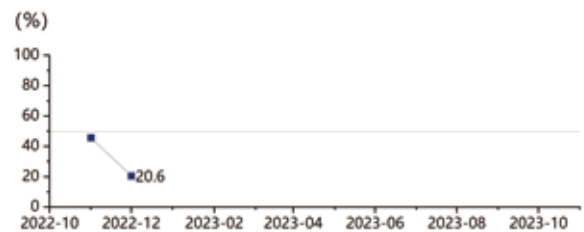
The export orders index registered 28.1%, a decrease of 11.9 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the ability to obtain the export orders of the superior timber enterprises represented by the GTI- ROC was weaker than last month.



The production index registered 36.7%, a decrease of 17.8 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-ROC was less than that of last month.



The existing orders index registered 20.6%, a decrease of 25.2 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- ROC was less than that of last month.



The new orders index registered 20.6%, a decrease of 16.9 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- ROC was shrunk from the previous month.

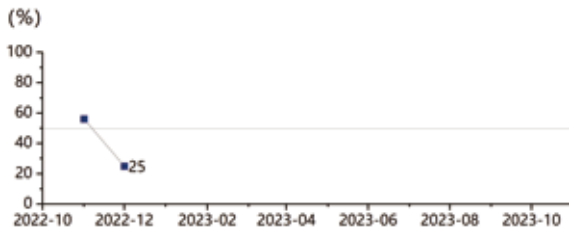


The inventory index of finished products registered 20.6%, a decrease of 29.4 percentage points from the previous month, fell below the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI- ROC was less than that of last month.

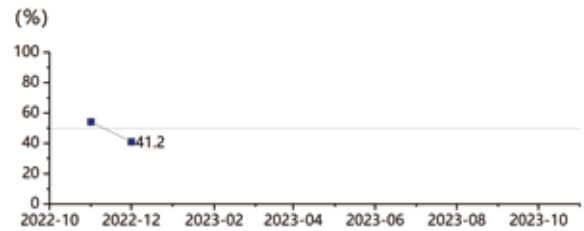




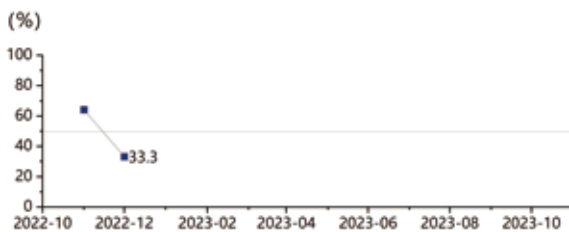
The purchasing quantity index registered 25.0%, a decrease of 31.3 percentage points from the previous month, fell below the critical value, indicating that the purchasing quantity of the superior timber enterprises represented by the GTI- ROC was less than that of last month.



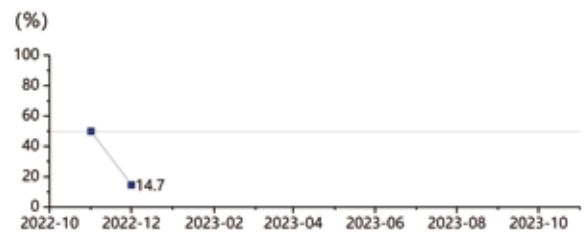
The production and management employees index registered 41.2%, a decrease of 13.0 percentage points from the previous month, fell below the critical value, indicating that the number of production and operation employees of the superior timber enterprises represented by the GTI- ROC was less than that of last month.



The purchasing price index is 33.3%, a decrease of 31.0 percentage points from the previous month, fell below the critical value, indicating that the purchasing price of the superior timber enterprises represented by the GTI-ROC was lower than that of last month.



The delivery time index registered 14.7%, a decrease of 35.3 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- ROC was longer than last month.



The inventory index of main raw materials index registered 27.8%, a decrease of 22.2 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- ROC this month were less than that of last month.

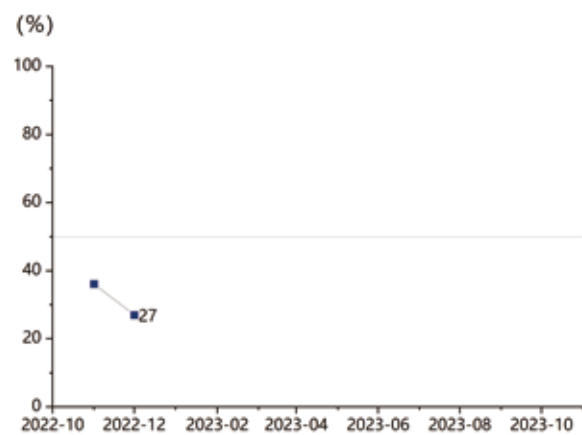


GTI-Brazil Index in December 2022

Brazil is one of the countries with the most tropical forest resources in the world, with its abundant tropical forest and natural conditions for the development of plantations. In 2022, driven by the growth of domestic consumption, private investment and export, Brazil's economic development was outstanding. According to the bulletin published by IBGE, Brazil's GDP grew by 3.6% year-on-year and 0.4% year-on-year in the third quarter this year, the fifth consecutive quarter-on-quarter growth. On December 23, the Extended National Consumer Price Index (IPCA) was released by IBGE and it showed that IPCA rose by 0.52% in December and increased by 5.90% in 2022, lower than 10.42% last year. Transportation, food and beverage were important factors for the increase of the index. As for the uncertainty of the global economy, the research of the Brazilian Economic Research Institute shows that the confidence of Brazilian businesses and service enterprises has declined.

In the second half of 2022, the decline in global market demand also affected the Brazilian wood industry market, and the development of the wood industry continued to shrink. In December, Brazil's timber enterprises were struggling with the rising costs caused by increased tax rates and

GTI- Brazil Index



freight rates, but also the problem of low market recognition of high-grade timber. The supply and demand of timber enterprises were not active, but the purchasing prices were higher, which limited the development of enterprises. Now enterprises are looking forward new markets and improving social recognition of commercial tree species. This month, the GTI-Brazil Index recorded 27.0%, a decrease of 9.1 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-Brazil Index was declined from the previous month.

Challenges

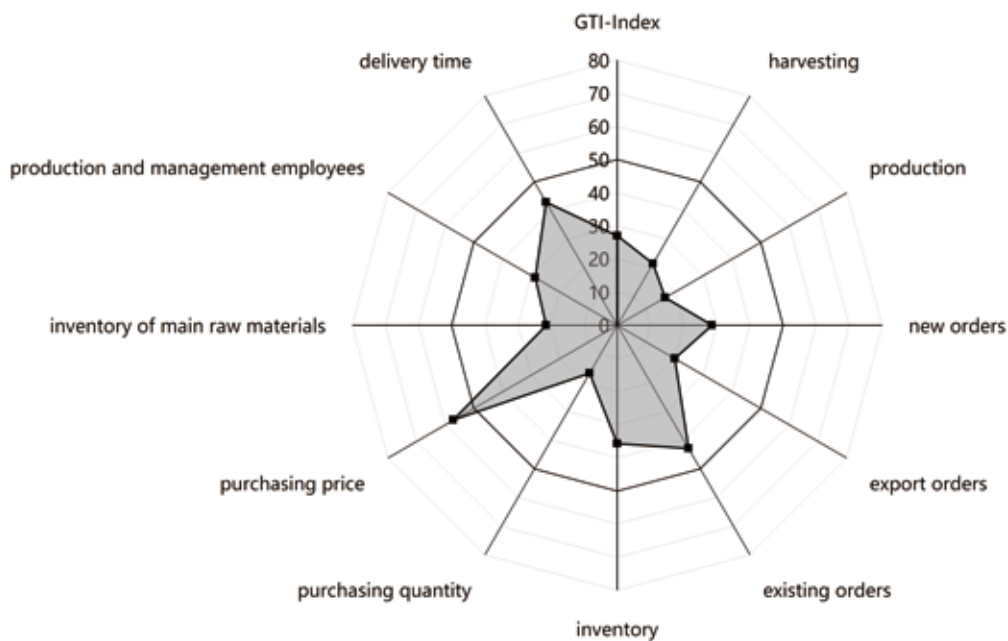
- Production plants shutdowns due to preventive maintenance of equipment.
- High taxes, inflation in importing countries and freight rates.
- Same idea as the month before: Market recognition of new noble species such as Australian cedar (*Toona ciliata*) and African

Suggestions

- Adjustment in the volume of raw material purchases and alignment with production and sales volume.
- Reduce costs and focus on new markets.
- Take advantage of the FCS certification to open a market opportunity, conscious and responsible about the use of noble wood, originating from positive socio-environmental commercial plantations.

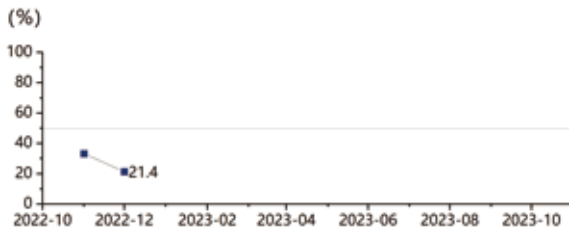
GTI-Brazil sub-index

As for the GTI-Brazil sub-index, in December 2022, the purchasing price index was above the critical value (50%), while the remaining 10 sub-indexes were below the critical value.

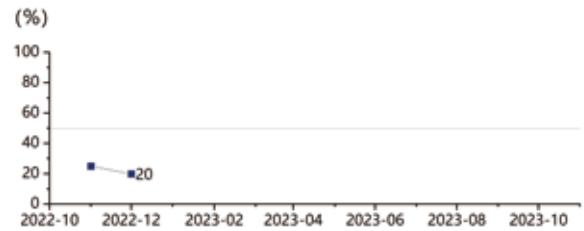


GTI-Brazil sub-index

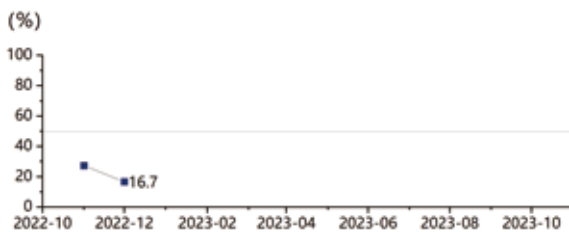
The harvesting index registered 21.4%, a decrease of 11.9 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



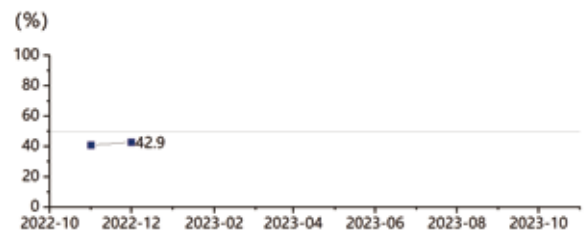
The export orders index registered 20.0%, a decrease of 5.0 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the ability to obtain the export orders of the superior timber enterprises represented by the GTI-Brazil was weaker from the previous month.



The production index registered 16.7%, a decrease of 10.6 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-Brazil was less than that of last month.



The existing orders index registered 42.9%, an increase of 2.0 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-Brazil was less than that of last month.



The new orders index registered 28.6%, an increase of 1.3 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-Brazil was shrunk from the previous month.

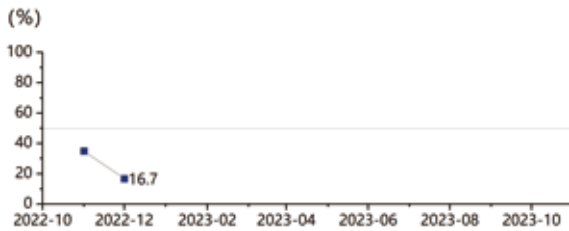


The inventory index of finished products registered 35.7%, a decrease of 37.0 percentage points from the previous month, fell below the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.

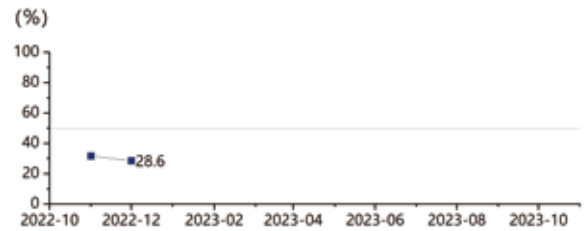




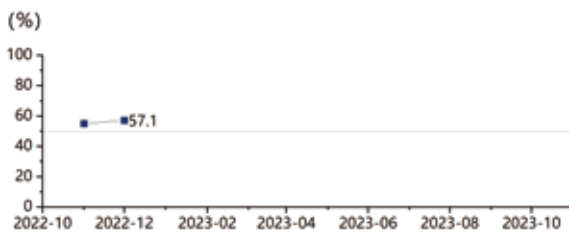
The purchasing quantity index registered 16.7%, a decrease of 18.3 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchasing quantity of the superior timber enterprises represented by the GTI-Brazil was less than that of last month.



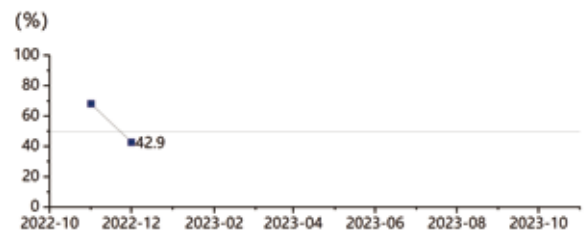
The production and management employees index registered 28.6%, a decrease of 3.2 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of production and operation employees of the superior timber enterprises represented by the GTI-Brazil was less



The purchasing price index is 57.1%, an increase of 2.1 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchasing price of the superior timber enterprises represented by the GTI-Brazil was rising from the previous month.



The delivery time index registered 42.9%, a decrease of 25.3 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.



The inventory index of main raw materials index registered 21.4%, a decrease of 23.6 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Brazil this month were less than that of last month.

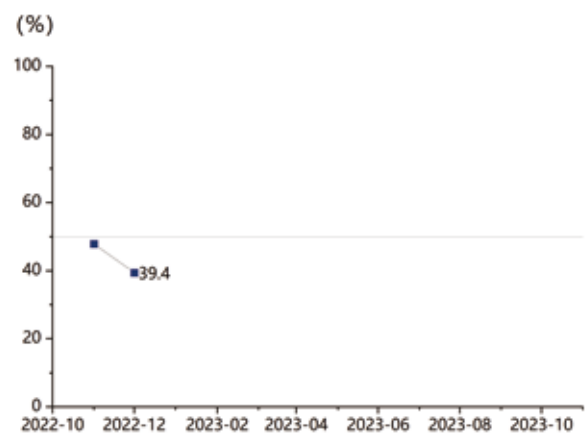


GTI-Mexico Index in December 2022

Mexico is a great entity and trading power and an important foreign investment destination in Latin America. According to the data released by Instituto Nacional de Estadística y Geografía (INEGI), Mexico's GDP was 13619 billion Peso in the first three quarters of 2022, grew by 2.9% year-on-year. In the third quarter, Mexico's economic recovery was accelerated. Excluding the price factors, GDP in the third quarter grew by 4.3% over the same period last year, 1.9 percentage points faster than the previous quarter, unchanged from the same period last year. International Monetary Fund (IMF) expected Mexico's GDP to grow by 2.1% in 2022 and 1.2% in 2023.

Mexico has 137.8 million hectares of forest vegetation and 70% of its territory is covered by forests. In the past 10 years, Mexico's export of forest products has maintained a sustained growth trend. In December 2022, on the demand side of Mexico's timber industry, international orders generally stabilized and domestic orders were decreased. On the supply side, the production of enterprises was same with the previous month, and the inventory of finished

GTI- Mexico Index



products increased. At the same time, enterprises were struggling with the rising purchase price of raw materials. Enterprises feedbacked that market demand, market turnover and sales were slow down. In December 2022, the GTI-Mexico Index registered 39.4%, a decrease of 8.5 percentage points from the previous month, and was below the critical value (50%) for 2 consecutive months, indicating that the business prosperity of the superior timber enterprises represented by the GTI-Mexico Index shrank from the previous month.

Challenges

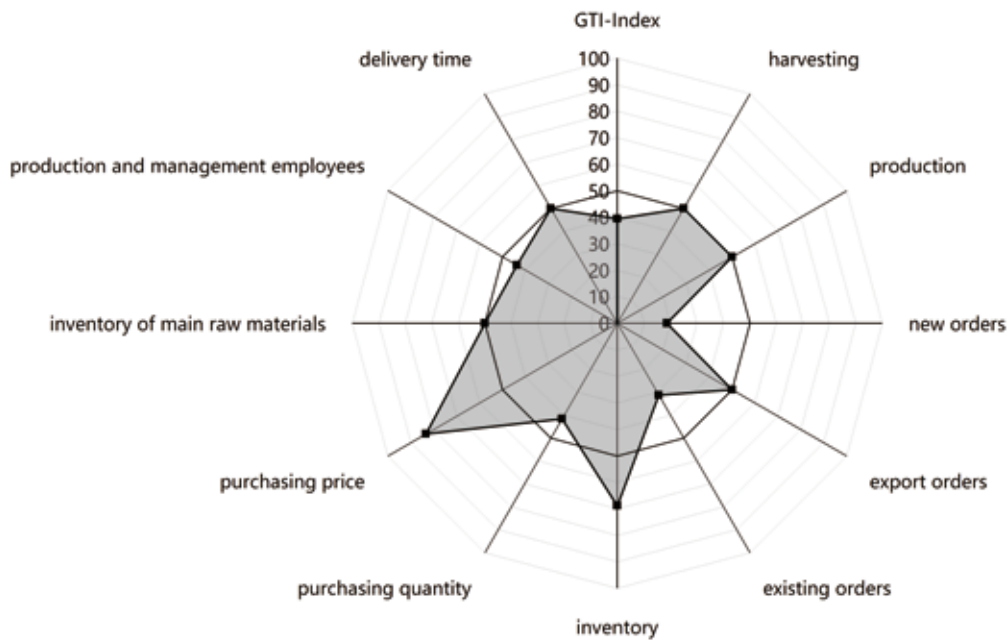
- Slower sales.
- Low demand.
- The timber market is slow.
- Termination of permits by year-end.
- The massive wave of imports of wood products degrades national trade.
- The high logistics costs of land and sea transport due to the slowness in the management processes in the requests for documents for export of products.
- Price increase.
- Lack of road maintenance due to the weather.

Suggestions

- Opening of marketing channels.
- The problem is not within our competence.
- For the issue of imports, an imposition of tariffs that help local products to have a degree of competitiveness with more equity should be analyzed.
- Seek collaboration agreements that allow exempting or reducing payments and taxes for transport of consolidated loads and review processes of document requests that allow achieving better issuance times of the documents.
- Making the most of the raw material.
- Protect the market.
- Constant rehabilitation of roads.

GTI-Mexico sub-index

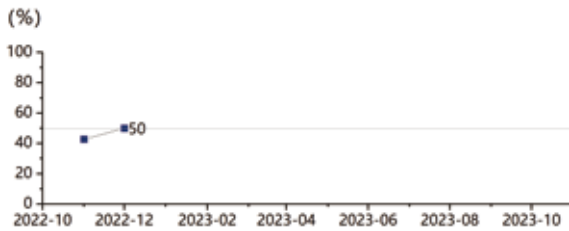
As for the GTI-Mexico sub-index, in December 2022, the inventory index of finished products and the purchasing price index were above the critical value (50%); harvesting, production, export, inventory of main raw materials and delivery time indexes were equal to the critical value, while the remaining 4 sub-indexes were below the critical value.



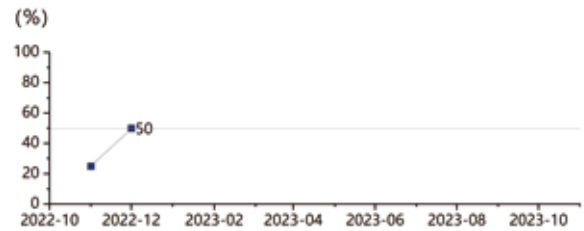
GTI-Mexico sub-index



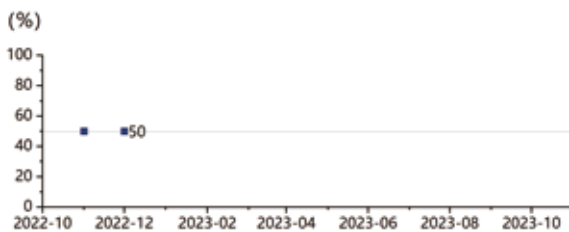
The harvesting index registered 50.0%, an increase of 7.1 percentage points from the previous month, raised to the critical value, indicating that the harvesting volume of the superior timber enterprises represented by the GTI-Mexico was same as that of last month.



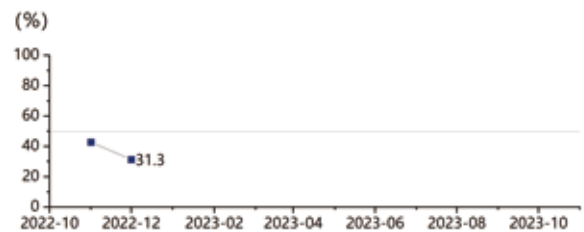
The export orders index registered 50.0%, an increase of 25.0 percentage points from the previous month, raised to the critical value, indicating that the ability to obtain the export orders of the superior timber enterprises represented by the GTI-Mexico was same as that of last month.



The production index registered 50.0%, same with the previous month, was equal to the critical value, indicating that the production volume of the superior timber enterprises represented by the GTI-Mexico was same as that of last month.



The existing orders index registered 31.3%, a decrease of 11.6 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-Mexico was less than that of last month.



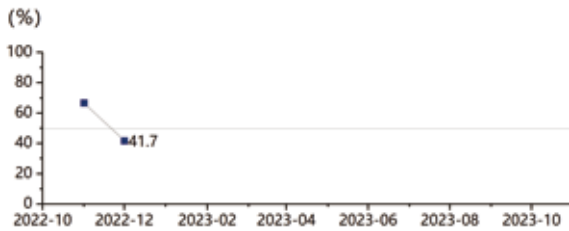
The new orders index registered 18.8%, a decrease of 24.1 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of new orders of the superior timber enterprises represented by the GTI-Mexico was decreased from the previous month.



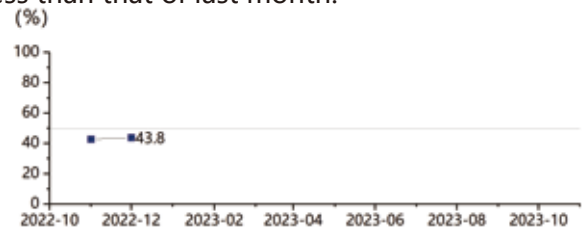
The inventory index of finished products registered 68.8%, an increase of 33.1 percentage points from the previous month, raised above the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-Mexico was more than that of last month.



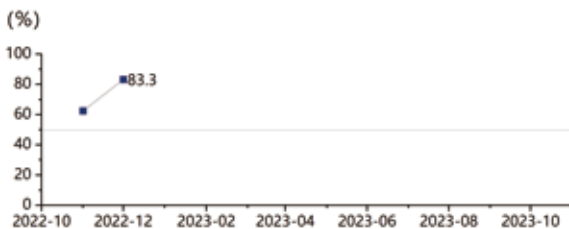
The purchasing quantity index registered 41.7%, a decrease of 25.0 percentage points from the previous month, fell below the critical value, indicating that the purchasing quantity of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



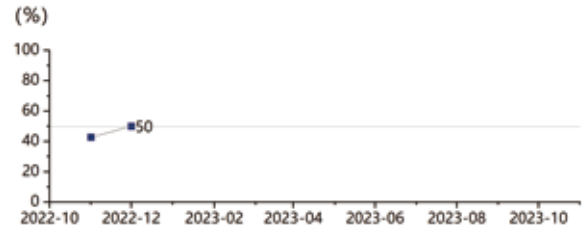
The production and management employees index registered 43.8%, an increase of 0.9 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of production and operation employees of the superior timber enterprises represented by the GTI-Mexico was less than that of last month.



The purchasing price index registered 83.3%, an increase of 20.8 percentage points from the previous month, was above the critical value for 2 consecutive months, indicating that the purchasing price of the superior timber enterprises represented by the GTI-Mexico was rising from the previous month.



The delivery time index registered 50.0%, an increase of 7.1 percentage points from the previous month, raised to the critical value, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-Mexico was same as that of last month.



The inventory index of main raw materials index registered 50.0%, a decrease of 25.0 percentage points from the previous month, fell to the critical value, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-Mexico this month were same as that of last month.

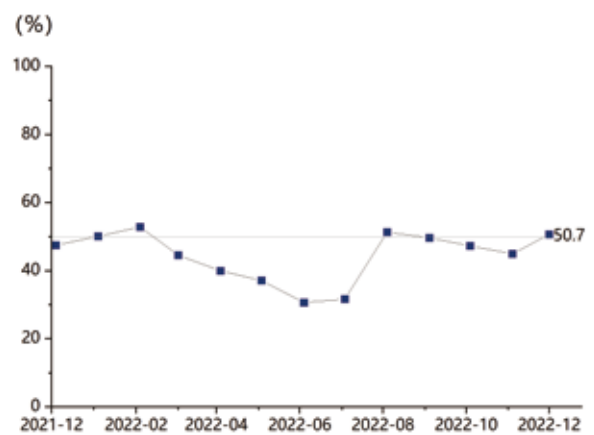


GTI-China Index in December 2022

At the beginning of December 2022, China readjusted the epidemic prevention policies. The production of manufacturing enterprises slowed down, the market demand continued to shrink, and the market price rebounded. By the end of December, all localities had resumed general production and living orders. With the publication of various economic policies, the market demand has recovered in all-round way, the production activities of enterprises were gradually on the right track, and China's economy has begun to firm up steadily.

In this context, although the number of production employees was decreased in December, the opening-up policies and the stimulus policies for real estate increased the level of domestic demand, the production activities of timber enterprises were strengthened, the overall logistics speed was accelerated, and the raw materials were mainly destocked. According to the feedback from GTI-China enterprises, the problems of single raw material procurement

GTI- China Index



channel, unstable quality of raw materials and insufficient number of production personnel were more prominent. In December, the GTI-China Index registered 50.7%, an increase of 5.7 percentage points from the previous month, raised above the critical value (50%), indicating that the business prosperity of the superior timber enterprises represented by the GTI-China Index was expanded from the previous month.



Challenges

- Lack of employees due to the pandemic.
- Poor quality raw materials and imbalance between supply and demand.

Commodity of which the price has been decreased

Furniture boards such as red oak, cherry, chipboard, Tonka bean, acacia, and taun.

Products in short supply

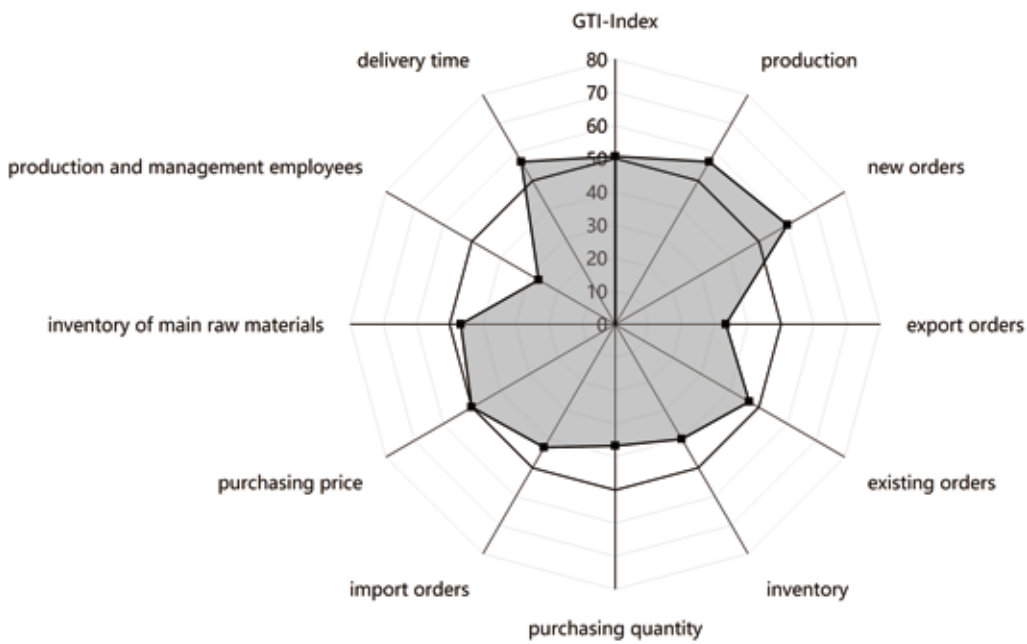
European oak longer than 1200, impregnated paper, mahogany, oak.

Commodity of which the price has been increased

Taun, OKAN.

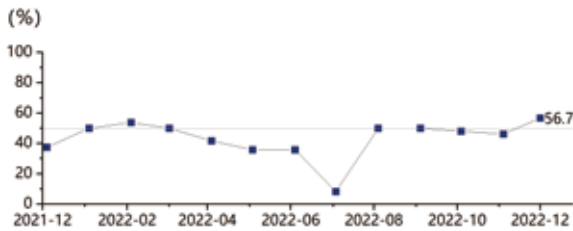
GTI-China sub-index

As for the GTI-China sub-index, in December 2022, production, new orders and delivery time index were above the critical value, delivery time index registered the critical value (50%), while the remaining 7 sub-indexes were below the critical value.

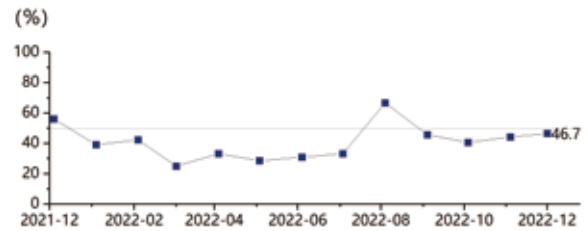


GTI-China sub-index

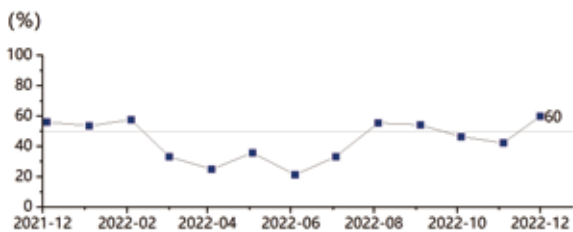
The production index registered 56.7%, an increase of 10.5 percentage points from the previous month, raised above the critical value, indicating that the production volume of the superior timber enterprises represented by the GTI-China was more than that of last month.



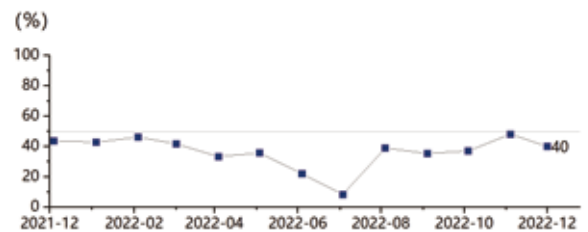
The existing orders index registered 46.7%, an increase of 2.5 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the number of existing orders of the superior timber enterprises represented by the GTI-China was less than that of last month.



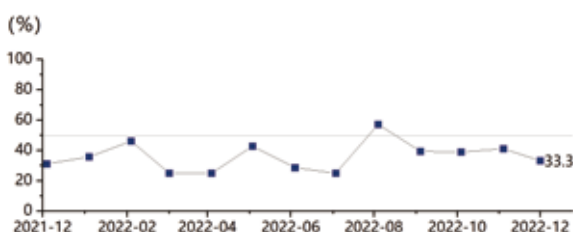
The new orders index registered 60.0%, an increase of 17.4 percentage points from the previous month, raised above the critical value, indicating that the number of new orders of the superior timber enterprises represented by the GTI-China was shrank from last month.



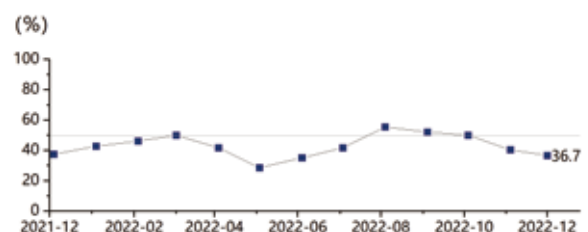
The inventory index of finished products registered 40.0%, a decrease of 8.1 percentage points from the previous month, was below the critical value, indicating that the inventory of finished products of the superior timber enterprises represented by the GTI-China was less than that of last month.



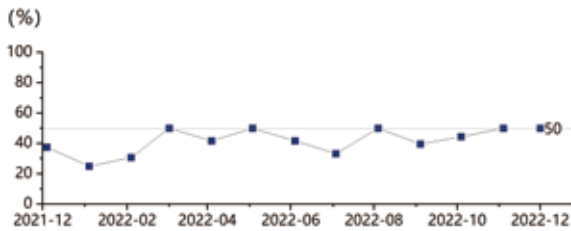
The export orders index registered 33.3%, a decrease of 7.9 percentage points from the previous month, was below the critical value for 4 consecutive months, indicating that the ability to obtain the export orders of the superior timber enterprises represented by the GTI-China was shrank from last month.



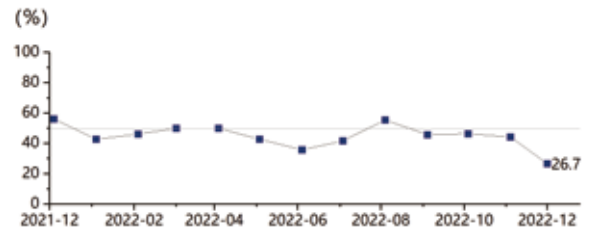
The purchasing quantity index registered 36.7%, a decrease of 3.7 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the purchasing quantity of the superior timber enterprises represented by the GTI-China was decreased from last month.



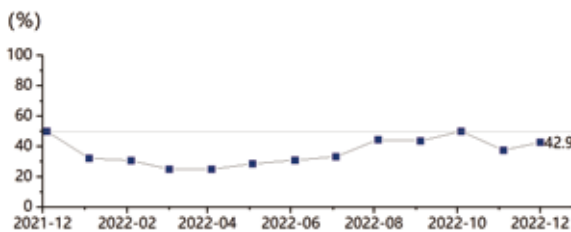
The purchasing price index is 50.0%, same with the previous month, was still above the critical value, indicating that the purchasing price of the superior timber enterprises represented by the GTI-China was same with last month.



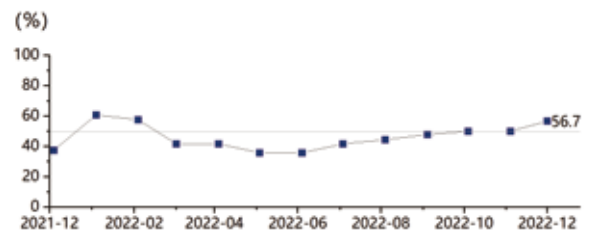
The production and management employees index registered 26.7%, a decrease of 17.5 percentage points from the previous month, was below the critical value, indicating that the number of production and operation employees of the superior timber enterprises represented by the GTI-China was less than that of last month.



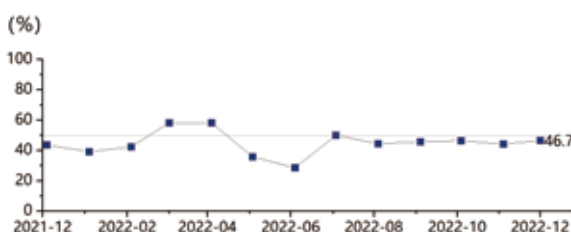
The import orders index registered 42.9%, an increase of 5.4 percentage points from the previous month, was below the critical value for 2 consecutive months, indicating that the number of import orders of the superior timber enterprises represented by the GTI-China was decreased from last month.



The delivery time index registered 56.7%, an increase of 6.7 percentage points from the previous month, was above the critical value for 3 consecutive months, indicating that the delivery time from the supplier to the superior timber enterprises represented by the GTI-China was faster than last month.



The inventory index of main raw materials index registered 46.7%, an increase of 2.5 percentage points from the previous month, was below the critical value for 5 consecutive months, indicating that the inventory of main raw materials of the superior timber enterprises represented by the GTI-China this month were all decreased from 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.

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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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