



KIOO LIMITED

Kioo Limited is associated with the Madhvani Group which is one of the largest diversified groups in East Africa since 1898. The group employs over 20,000 people and has developed into a widely-diversified conglomerate operating in various African countries, the Middle East, India and North America. The Group's current turnover in East Africa exceeds USD 500 million and assets valued in excess of USD 1 billion, with a substantial presence in the following industries:

- agriculture and agro-processing
 - sugar-cane
 - tea
- sugar
- sweets & confectioneries
- renewable energy
- ethanol / potable spirits
- packaging (glass, corrugated cartons, poly-sacks, etc.)
- steel
- matches.

In the growing services sector of Uganda, the Madhvani Group has major interests in:

- hotels & tourism
- construction
- insurance
- distribution of industrial products and consumer durables.

The Group has an outstanding track record and has achieved a market leadership position in most of the sectors in which it operates.

The flagship of the group is Kakira Sugar which currently operates at a crushing capacity of over 8,000 tons cane per day (TCD) with annual sugar output of over 185,000 MT. Sugarcane is cultivated on the company's own estate of over 14,500 ha supplemented by cane from over 10,000 out-grower farmers.

Kakira Sugar has been the catalyst for socio-economic development of the rural area surrounding the mill, providing the means of livelihood to over 200,000 people in the South Busoga region. The company also generates over 51MW of green electricity of which 34MW is fed into the national grid.

Considering the Madhvani Group's long-established presence in Uganda with over 75 years' experience of business in diverse fields in East Africa and core values of integrity and long-term commitment, the Group has a vision of continuing growth and contributing to prosperity in this region.

Known as the Turner Group in the container glass business, Turner has over six decades of experience in the container glass industry. Since 1963, Turner has owned and managed container glass plants in Africa and the Middle East starting with East Africa in Kenya, Tanzania and Uganda, mainly to cater to its own breweries. With investments in Lebanon and Saudi Arabia, the group was one of the largest container glass producers in the Middle East and GCC countries.

The Lebanese business was closed in 2006 due to Israeli bombing of our premises and we hived off the Saudi Investment in 2015 to focus in Africa which has always been the group's core area of investment. The group is continuously looking for further investments in Africa and has since 2016 invested over US \$ 60 million in Kioo Limited towards expanding and modernizing the factory.



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Incorporated in Dar-Es-Salaam, Tanzania on 15th May, 1963, Kioo Limited operates from a prime industrial site of 23.3 acres held on a long lease in the vicinity of Dar es Salaam international airport. It houses the factory, administrative block, canteen, medical center and staff quarters. The location is also close to the port.

The Company is currently engaged in the manufacturing, marketing and distribution of glass containers. With Turner's support in the areas of technology, finance and marketing, the Company has achieved the status of a modern glass plant in Sub-Saharan Africa capable of meeting international standards in manufacturing technology and quality. It is the only manufacturer in the country catering to the local and neighboring countries' requirements. Kioo is very strong in technology and has been a pioneer in light-weighting bottles for different users in the region. Kioo currently serves 100 plus customers in 17 countries in sectors like Beer, Spirits & Soft Drink, supplying to all major global giants in the region including ABInBev, Heineken, Coca-Cola, Pepsi, Diageo etc. The company meets 100% of Tanzanian demand and then exports 50% of its production mainly to the EAC/SADC countries. It is a large Tanzanian exporter of manufactured goods of high quality to the region.

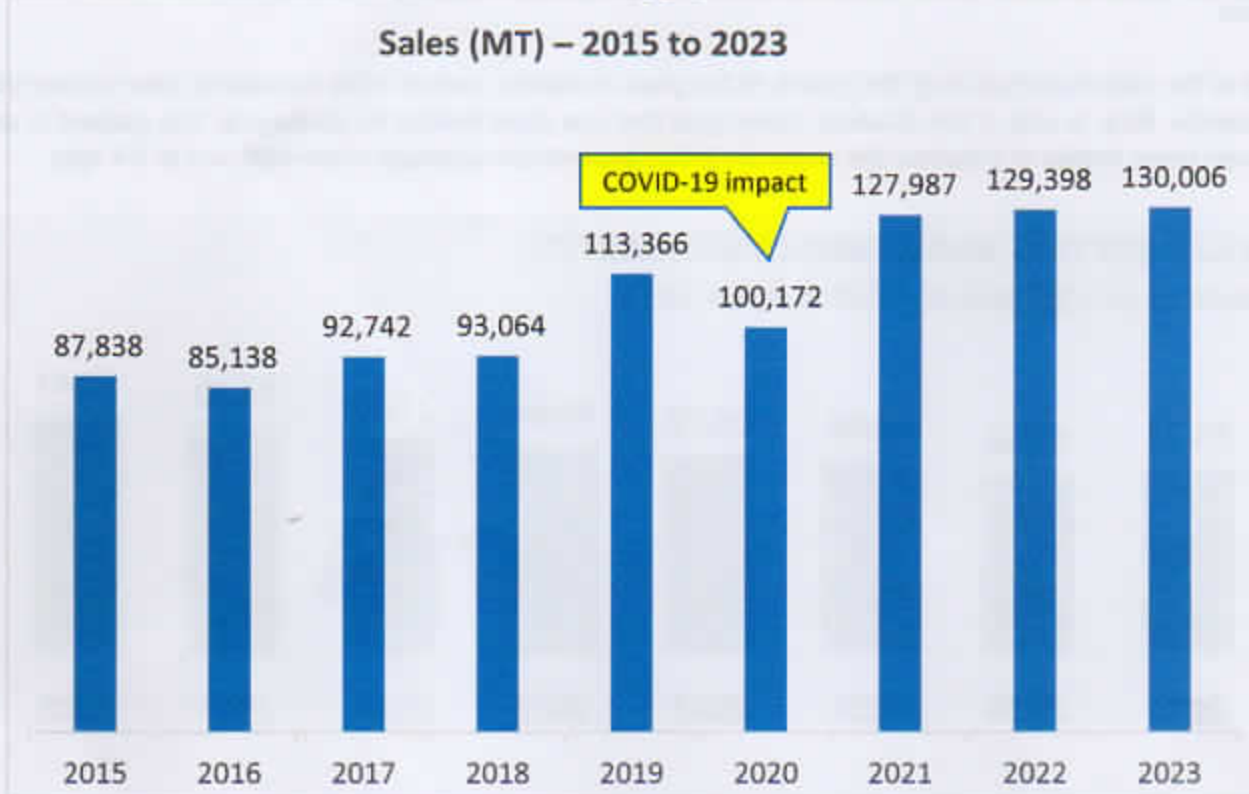
The Company has recognized the potential of Tanzania's natural and mineral resources, prospects for economic growth and the Government's efforts to accelerate the economy to which it is committed to contribute in a positive manner. Kioo uses locally available minerals like Silica Sand, Lime Stone, etc. and the furnaces and prime power use local natural gas to make a proud Tanzanian value-added product. By converting locally available Natural Gas and raw materials like Sand and Limestone, the company saves foreign exchange of over US \$ 12 million per annum for the country and is now one of the large users of Natural Gas in the Private Sector. In addition to this, the company brings in much needed foreign exchange of almost US \$ 35 million every year to the country with its exports. The Company is a net foreign exchange earner.

Apart from generating employment for over 600 people directly and over 2,000 people indirectly, the continued expansion of the Company's activity has not only provided glass containers to the user industry but has also benefited local ancillary industries such as road transport, railways, port authorities, power, mineral prospecting, manufacturers of packing materials, machinery workshops etc., which all contribute positively to the domestic economic growth. Wherever possible the Company uses local raw materials, continually work on import substitution, create opportunities for employment, provide much needed training to local workforce and participate in the industrial, social and economic development of Tanzania.

Since commencing production in 1966 with an initial capacity of 10 tons per day, the shareholders have over the period invested continually in capital development in order to maintain its competitive advantage in the market. The plant has undergone a series of upgradation and expansion culminating in total modernization during 2018-19 to meet international standard quality expectations of multinational customers. In the year 2018-19 both the furnaces were rebuilt and the total capacity was increased to 400 MT of glass per day to provide for the potential market demand for local and export supply. Post the pandemic, since 2021, Kioo has witnessed a huge surge in demand both locally and in export markets which is currently difficult to address without increase in capacity.



The historical sales trend is depicted in the following graph.



As can be seen, a capacity increase in a glass factory is usually possible only during a re-build or an investment in a new furnace. During 2018 / 2019, the capacity was increased during rebuilds by about 28%. Kioo is now contemplating investing in a new furnace with a capacity of 270 MT/day which translates to about 88,000 MT/annum of saleable glass. With this, the total saleable glass volume would become about 184,000 MT/annum.

Global Glass Container Market & Industry:

Glass bottles and containers are majorly used in the alcoholic and non-alcoholic beverage industry, due to their ability to maintain chemical inertness, sterility, and non-permeability. Alcoholic drinks, like beer, accounted for the largest segment of the market, as glass does not react with the chemicals present in drinks and, therefore, preserves the aroma, strength, and flavor of these beverages, making it a favorable option for packaging. Additionally, glass packaging is 100% recyclable, which makes it a desirable packaging option from the environmental point of view. 6 ton of recycled glass directly save 6 ton of resources and reduce the emission of CO₂ by 1 ton.

The glass bottles and containers market with a production of 689.94 units in 2020 was valued at USD 58.64 billion in 2020, and it is expected to be valued at USD 78.41 billion, and reach 922.43 billion units by 2026, registering a CAGR of 4.18%, during the forecast period. By the End-user vertical, the beverages segment occupied the largest market share of 48.17% in 2020. The cosmetics segment is expected to register the highest CAGR of 5.36%, over the forecast period. By Geography, the Asia-Pacific occupied the largest market share of 34.19% in 2020. Among Asia-Pacific countries, China accounted for highest share of 54.92%.



Additionally, the Middle East & Africa is expected to register the highest CAGR of 43%, over the forecast period.

One of the main factors driving the growth of the glass container market is the increase in beer consumption worldwide. Beer is one of the alcoholic beverages that use glass bottles for packaging. It is packed in dark-colored glass bottles to preserve the contents, which are prone to spoilage when exposed to UV light.

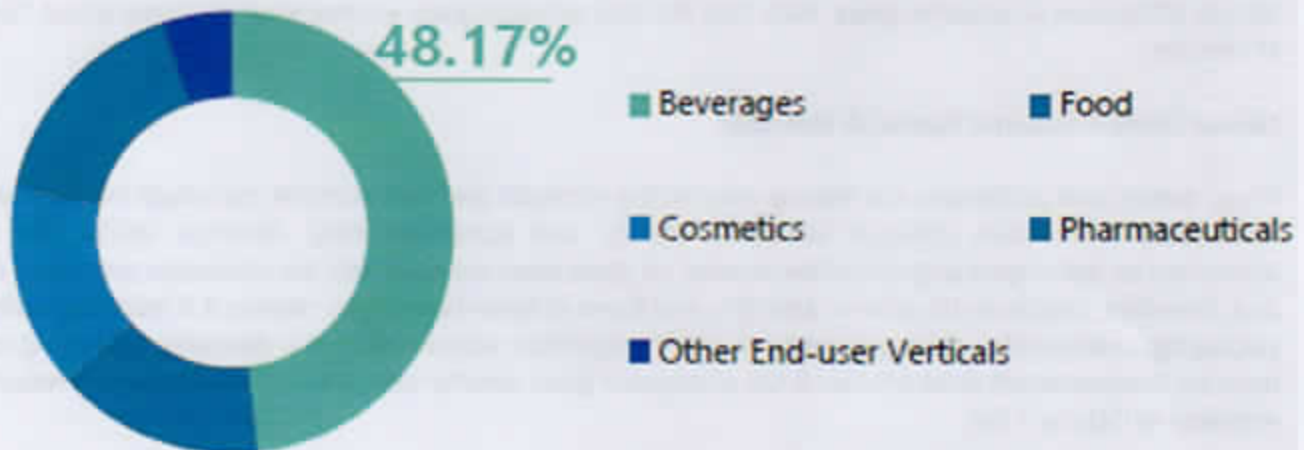
GLASS BOTTLES AND CONTAINERS MARKET

Revenue in USD billion, Global, 2019-2026



GLASS BOTTLES AND CONTAINERS MARKET

Revenue Share (%), By End-user vertical, Global, 2020





Glass Container Market & Industry in Rest of Middle East & Africa:

The Rest of Middle East and Africa have one of the highest growth rates in the world albeit the base is lower. The growth rate of this region is estimated to be 6.51% with the revenue expected to reach USD 0.65 billion by 2026.

Country	2019	2020	2021	2022	2023	2024	2025	2026	CAGR (%)
Saudi Arabia	0.30	0.30	0.33	0.36	0.38	0.40	0.43	0.46	6.79%
United Arab Emirates	0.73	0.70	0.78	0.83	0.87	0.92	0.98	1.04	5.91%
South Africa	1.06	1.01	1.10	1.15	1.19	1.24	1.29	1.35	4.15%
Rest of Middle East & Africa	0.43	0.42	0.47	0.50	0.53	0.57	0.61	0.65	6.51%

GLASS BOTTLES AND CONTAINERS MARKET

Revenue in USD billion, Rest of Middle East & Africa, 2019-2026



Kioo's Market:

Kioo's primary market lies primarily in the EAC, Indian Ocean Island Countries (IOIC) and some SADC countries. By virtue of Tanzania being a part of EAC and SADC, the customers in these regions can import Kioo's products with 0% import duty. The market size (in MT/annum) for each of Kioo's primary markets are shown in the following table.



KIOO LIMITED



Countries	Estimated Market Size (MT)	Kioo's Current Supply (MT)	Kenyan Manufacturers' Supply (MT)	Imports from outside EAC (MT)	Kioo's Current Market Share (%)
Kenya	100,000	1,500	46,000	52,500	2%
Tanzania	80,000	70,000	0	10,000	88%
Uganda	35,000	12,000	14,000	9,000	34%
Zambia	30,000	4,200	0	25,800	14%
DRC*	25,000	13,500	0	11,500	54%
IOIC	20,000	3,800	0	16,200	19%
Malawi	7,500	7,500	0	0	100%
Rwanda	5,000	4,000	1,000	0	80%
Burundi	5,000	3,000	2,000	0	60%
Total	307,500	119,500	63,000	125,000	39%

*only includes market that Kioo caters

As is evident from the table, Kioo is currently supplying 119,500 MT in these markets with the remaining volume being supplied to Mozambique, South Africa and Zimbabwe which are not included in the above table. As the demand in the above-mentioned primary market grows over the years, Kioo will divert all its supplies to these markets and the demand in the other regions like Zimbabwe, Mozambique & South Africa can be catered by setting up a plant in that region.

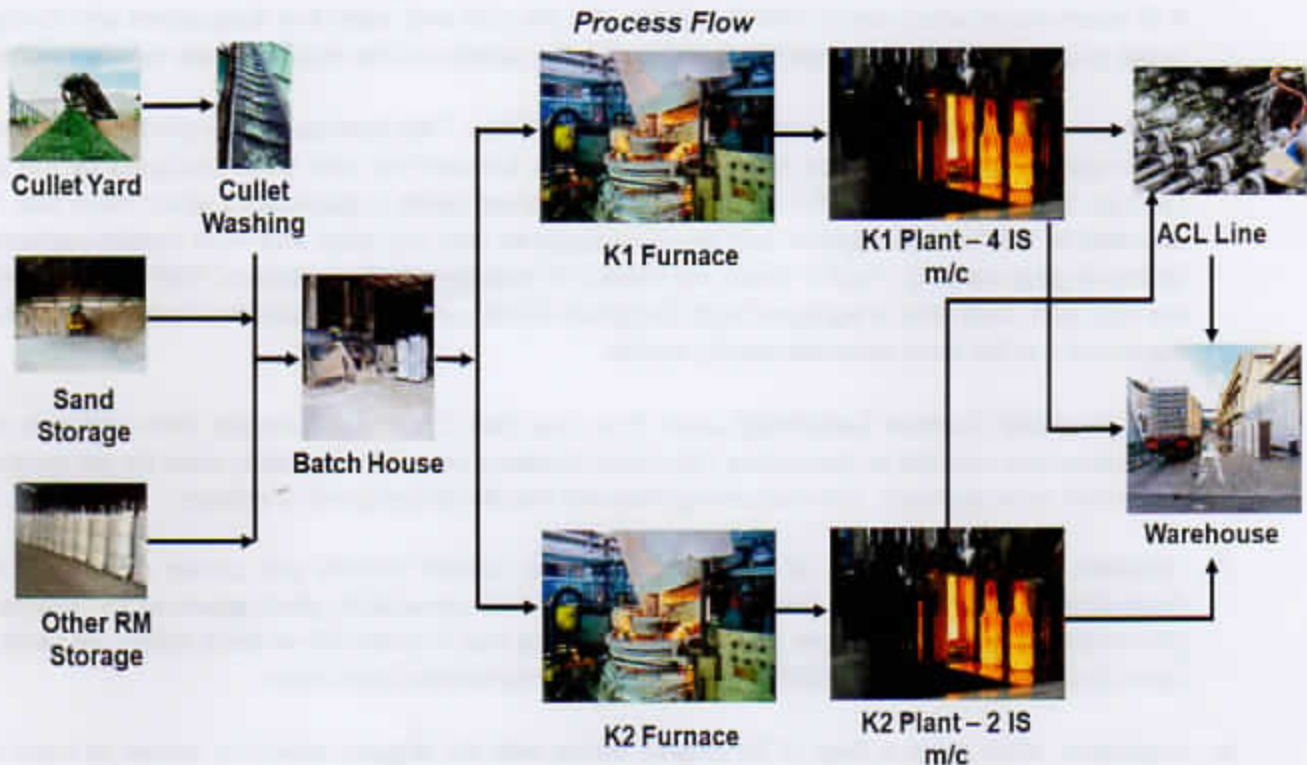
The overall market clearly justifies an investment in a new furnace in both Tanzania and Kenya. As seen in the previous section, these markets are estimated to grow at a CAGR of 6.51% over the next few years. Even considering a conservative 5% growth rate, the total gap (imports from outside EAC) in these markets will be about 155,000 MT by 2025 when the proposed new furnace in Tanzania will start production.

Projected gap in supply in above markets by 2025	155,000 MT/annum
Proposed K3 project expansion in Kioo	88,000 MT/annum

Discussions are already underway with large customers to secure medium to long term contracts for a large part of the increased capacity from K3.



Operational Capabilities:



- Sand Mining:** Kioo Ltd has its own sand mines at two locations in the Mkuranga district. Sand is transported to Processing Plant in Vianzi which is 5 km away from the mines. Vianzi Sand Processing Plant is approximately 35 kms from Kioo Glass Plant. It is well connected by road from Dar Es Salaam. It has a fully automated and sophisticated Sand Washing Plant. A laboratory is available at Sand Plant to check the quality parameters of the processed sand and same is maintained using proper maintenance procedures. Mining is carried out by local villagers as an initiative to create employment for the local people.
- Cullet Washing Plant:** Since Kioo uses 40% cullet in the production of its glass, it has an in-house cullet washing plant with 2 cullet washing lines. All 3 colour cullet – flint, amber and green are processed through these lines. The processed cullet are then fed into the 2 furnaces as per the requirement of the colour and quantity. Kioo is actively looking for ways and means to increase the % of recycled glass in the production of its bottles.
- Batch House:** Kioo has a highly automated batch house which is common to both furnaces. We have an electronically controlled weighing and mixing process wherein the batch recipes for each individual furnaces are fed into the system and the mixing happens in an automated manner.
- K1 Plant:** This plant has a furnace capacity of 225 MT/day. This furnace usually produces flint but is capable of producing coloured glass as well. The furnace was re-built in 2018. The furnace has been designed and installed by a very reputed German furnace supplier. The furnace is equipped with the latest controls and automation with very easy to use and accurate interface. The furnace gives out to



4 distributors which have also been supplied by world renowned European suppliers and are also equipped with the latest and most modern controls for optimum glass refining. Further down, we have 4 IS machines of which one is NNPB capable. On the cold end, each line is equipped with European make automated inspection machines which give the latest and the most accurate quality results.

5. **K2 Plant:** This plant has a furnace capacity of 175 MT/day. This furnace usually produces amber and green glass. The furnace was re-built in 2019. This furnace has also been designed by the same German furnace supplier as K1 Plant. The furnace gives out to 2 distributors which have also been supplied by the furnace supplier and are also equipped with the latest and most modern controls for optimum glass refining. Further down, we have 2 IS machines both capable of NNPB production. On the cold end, each line is equipped with European make automated inspection machines which give the latest and the most accurate quality results.
6. **ACL (Applied Ceramic Labelling) Line:** Kioo also has 2 online decoration lines and one offline decoration line capable of decorating 150 million bottles a year. This is mostly used for our customers in the soft drink segment. The decorating lines can handle all designs in 3 colours.
7. **Utilities:** Due to the nature of its operations, Kioo cannot tolerate any power outages or even fluctuations. Therefore, Kioo has its own captive power generation plant powered by 3 large gas generators. In addition to these generators, Kioo also has 3 Diesel Generators which are used as a back-up power source. TANESCO power is used for non-critical operations.
8. **Logistics:** Kioo owns a fleet of 50 Scania trucks with 40' flatbed trailers to deliver to most of its customers in the land locked countries of the region at competitive rates. We have an established market with long track record of supplies to most of the large bottlers across the East, Central and Southern African countries. All our trucks are equipped with best-in-class fleet management systems from Mix Telematics which does fleet tracking with various operation efficiency reports. Direct access to the customer can be given for their dedicated fleet.

Accreditations: Kioo is ISO 9001:2015 (systems & processes), FSSC 22000:2013 (food safety), ISO 14001:2015 (environmental management) & ISO 45001:2015 (health & safety) certified. In addition to this, it has also won several awards such as President's Best Manufacturer of the Year, TCCIA Exporter of the Year, Best Employer, etc. several times.



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The Project:

It is proposed to have a third furnace in Kioo (K3) with a capacity of 270 MT/day which will yield saleable glass of about 88,000 MT/annum. The project cost is expected to be as follows.

PROJECT FUNDING	USD ('000)
<i>Shareholders Contribution</i>	<i>10,000</i>
<i>Term Loan</i>	<i>60,000</i>
TOTAL	70,000
COST OF PROJECT	
<i>Capital Expenditure</i>	<i>70,000</i>
TOTAL	70,000

Given the existing business operations and availability of market, the business is expected to deliver along projected lines.