



Relief Sector Study

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- The relief industry provides items and materials used for humanitarian aid by national and international relief and aid agencies, governmental authorities as well as Non-Governmental Organizations (NGOs). Relief items consist of a large variety of products including tents, tarpaulins, mosquito nets, sleeping mats, blankets, basic kitchen utensils, jerry cans and buckets. Tents, tarpaulin and mosquito nets, also known as insecticidal nets, make up the largest segments within the relief industry products.
- The need for these products arises due to natural calamities such as floods, wildfires and earthquakes or man-made crises such as wars, regional conflicts and industrial accidents. Moreover, relief items are also used to address problems that arise as a result of wealth and income inequalities in various parts of the world such as malaria, aids and malnutrition. Lately, in pre-COVID days, recreational use of certain items (mainly tents, nets, portable lights etc.) has been increasing in eco-tourism and outdoor activities.
- International organizations such as UNHCR, UNICEF, WFP as well as national organizations such as NDMA purchase the required relief materials from various manufacturers who meet specific quality criteria. Procurement by such agencies is often done through a bidding process in order to receive best price.



Overview

- The global relief industry falls in a wider category of the emergency and disaster response market, which encompasses various segments. These include threat detection equipment, protective gear, medical equipment and emergency notification systems among others.
- The demand for disaster relief and management has been rising due to the increase in unpredictable natural disasters in recent years as a consequence of climate change on the global environment as well as regional conflicts.
- The global emergency and disaster management and response market size is estimated to stand at USD~132bln in CY22, growing approximately by ~6.7% YoY basis (CY21: USD~124bln).
- While COVID-19 slowed down the overall economic activity, global conflicts and natural disasters continued to create demand for relief items globally. In addition, the persisting problem of various diseases, such as malaria, meant that demand for Long Lasting Insecticidal Nets (LLINs) was unabated. UNICEF estimates the total global LLIN production capacity to be ~480mln nets annually, against global LLIN deliveries reaching ~220mln in CY21.
- UN, through its various organizations and bodies, remains one of the largest procurers of relief goods. Total UN procurement of goods and services, through 39 organizations stood at USD~29.6bln in CY21, increasing ~32.7% from USD~22.3bln in CY20. The UN High Commissioner for Refugees procured goods and services worth USD~1,340mln during CY21 (CY20: USD~1,383mln) to provide aid and relief to refugees displaced by war and conflicts.

Overview

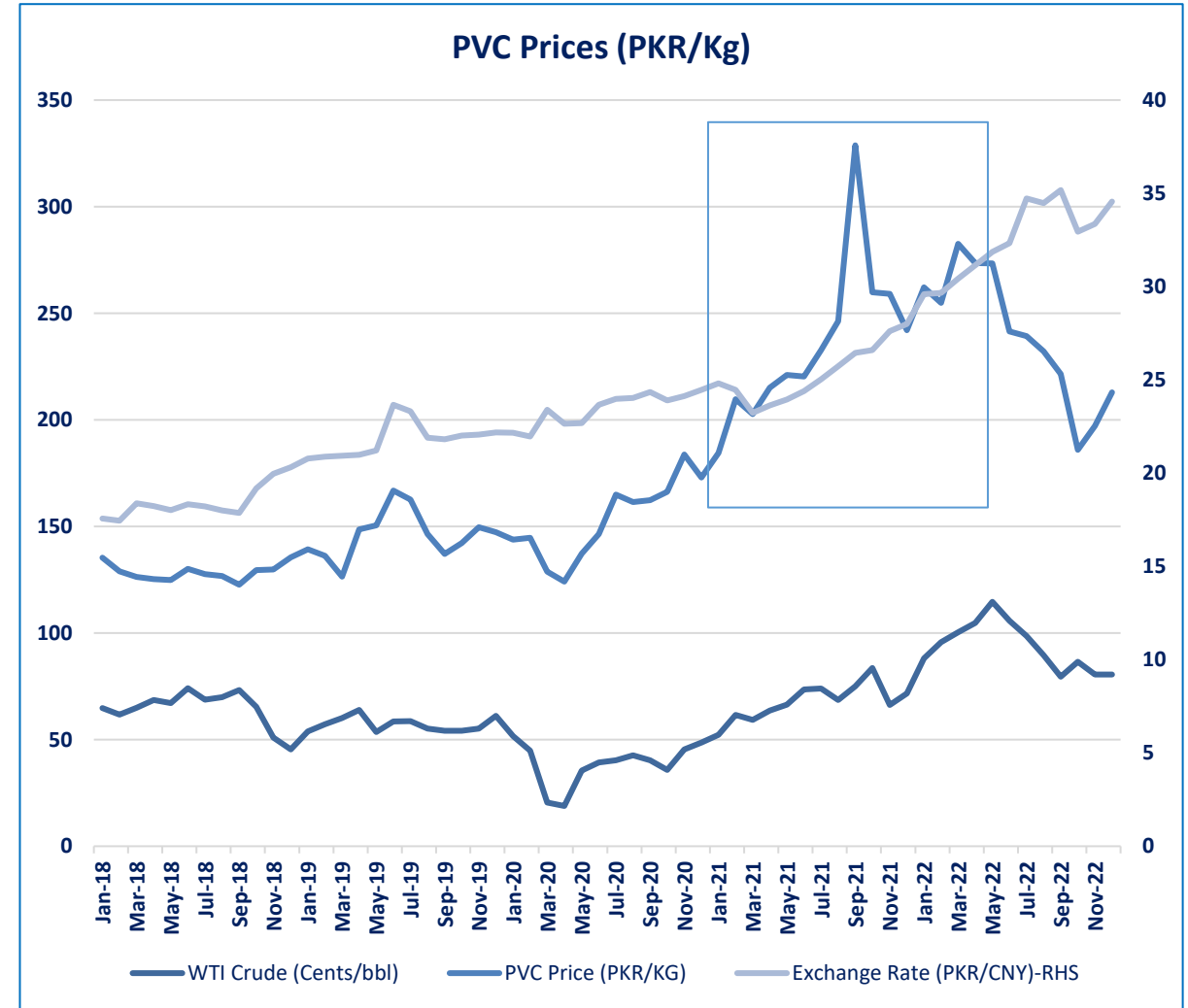
- There are ~88 tent manufacturers and exporters operating in Pakistan. However, only a few of these are involved in manufacturing and providing supplies for the purpose of disaster relief.
- Pakistan has a capacity for production of ~100mln square meters of canvas. ~60% of the canvas produced is exported while the remaining is consumed locally.
- During FY22, Pakistan's exports of tents, canvas and tarpaulin stood at PKR~19,709mln, increasing ~14% from PKR~17,728mln in FY21, largely due to higher exchange rate albeit reduced exports in quantitative terms (~35,155MT in FY22 compared to ~40,220MT in FY21).
- While there are a number of Pakistani firms on the United Nations' list of registered vendors, there are only three manufacturers of relief items such as tents, tarpaulin and mosquito nets, namely, H. Nizam Din & Sons (PVT) Limited, Paramount Tarpaulin Industries and Zahra Tents Industries (PVT) Limited.
- The sector is represented by the Pakistan Canvas and Tents Manufacturers & Exporters Association (PCTMEA).
- In the local relief market, the National Disaster Management Authority annually procures ~5,000 tents used for relief purposes for refugees or individuals displaced by floods and for maintaining its emergency stock.
- In the aftermath of torrential floods which hit Pakistan in Aug'22, ~1.7mln houses were damaged. As per latest available figures for Jan'23, ~89,000 people in Sindh remain displaced from their homes.



RELIEF | LOCAL INDUSTRY

Raw Material | PVC

- An important raw material for the production of canvases, tents and tarpaulins is Polyvinyl Chloride (PVC).
- Oil prices are a determinant of PVC prices, since polymers are derivatives from crude oil. As the adjacent graph depicts, PVC prices follow a somewhat similar trend as that of crude oil's. There was a significant decline in both prices during 1HCY20 due to the COVID-19 impact. Since then, prices have moved in tandem with global economic activity. However, PVC prices recorded a sharp peak during 3QCY21, owing to an active polymer market.
- PVC prices have climbed from PKR~135/Kg in Jan'18 to PKR~329/Kg at 1QFY22-end. However, since then, they have exhibited a plunging trajectory and recently stood at PKR~213/Kg in Dec'22. The decline of ~43% (Sep'21 till Oct'22) is likely due to slowdown in downstream construction and packaging activities. Going forward, as inflation cools down and US consumers adjust accordingly, prices are likely to swing upwards in the coming months.
- The primary producer of PVC in Pakistan is Engro Polymer & Chemicals Ltd. with a capacity of ~295,000 MT per annum. Engro produces both rigid and flexible types of PVC, however, flexible PVC that is suitable for manufacturing of tents forms a relatively smaller portion of its product portfolio. Additional demand is met through imports from countries such as China, Indonesia and United States of America.

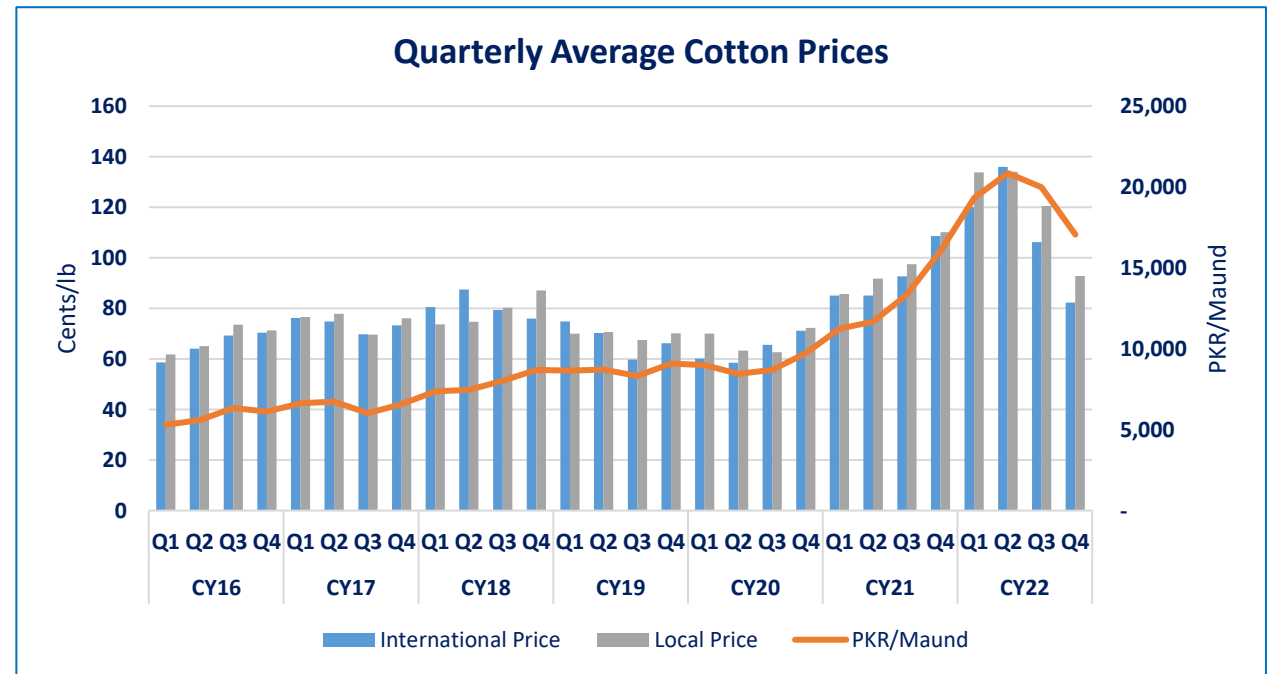


RELIEF | LOCAL INDUSTRY

Raw Material | Cotton

- Cotton forms the basic raw materials for the manufacturing of canvases and tents. While cotton tents are decreasing in popularity, they continue to occupy a significant share of the tents exported from Pakistan.
- FY22 was the first year Pakistan’s net imports of raw cotton declined after previously dipping in FY19. Prior to FY22, cotton imports rose by ~78.1% during FY17-21. However, a ~9.5% decline in volumetric imports was observed, coupled with ~18% YoY increase in local production, which came about due to an improvement in yield by ~25.4% (FY21: ~-6.3%), conducive weather conditions, smooth input supplies, and better crop management practices. However, due to the flash floods which Pakistan experienced in Aug’22, the estimated production figure for cotton has now been revised downwards to ~4.8mln bales (shortage of ~7.0mln bales, or ~60% loss).
- Global cotton prices have experienced significant volatility in CY22, which is attributable to speculators betting on global supply and demand forces. Prices jumped by ~13% between 1QCY22 and 2QCY22 before dropping by ~22% in both 3QCY22 and 4QCY22.
- Local average cotton prices (PKR/maund) seem to be moving in line with international prices, depicting a decline during 1HFY23. The dip is primarily associated with a weakening in demand forces amidst a global economic slowdown. Local cotton prices in 2QFY23 have eased at PKR~17,052/maund from the PKR~19,340/maund level observed during 3QFY22.

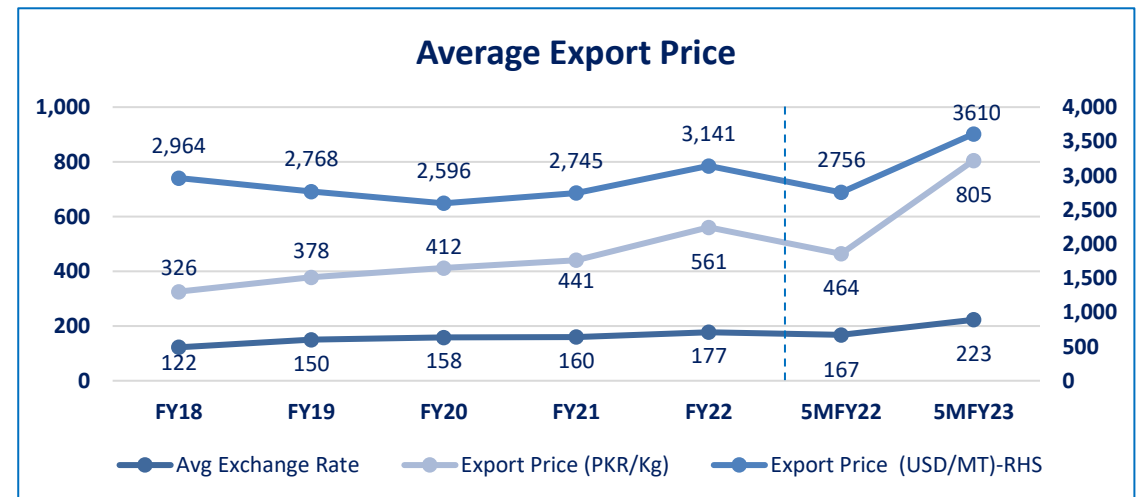
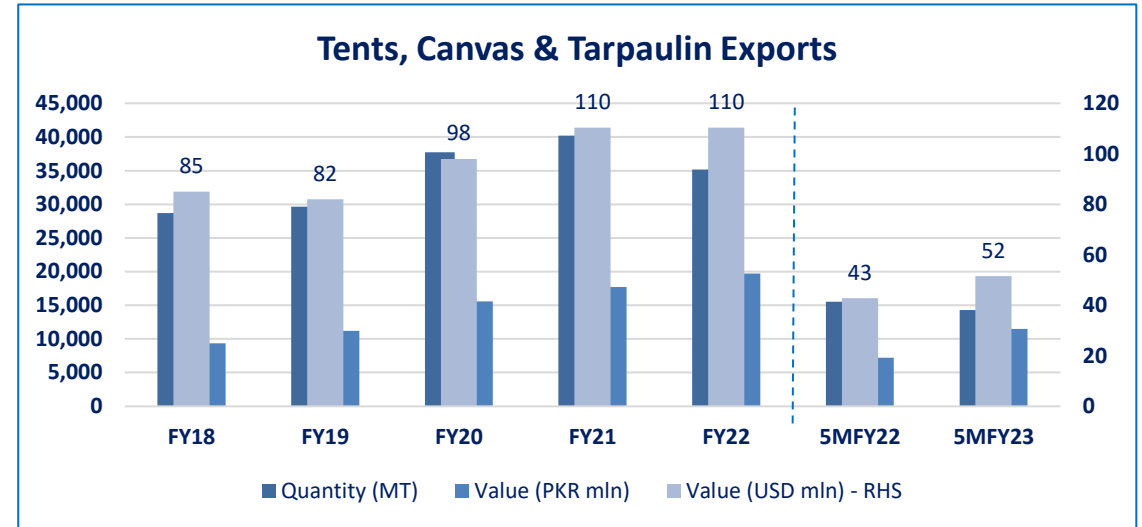
Local Cotton Supply ('000 bales)					
	FY18	FY19	FY20	FY21	FY22
Production	11,946	9,861	9,148	7,064	8,328
Imports	3,251	2,439	2,777	5,037	4,562
Total supply	15,637	12,300	12,746	13,753	14,538*



*Mill consumption has been calculated based on average total cotton consumption for FY16-21. For imports, conversion factor of 1Kg= ~170.2 bales has been used.

Exports

- Pakistan’s exports of tents, canvases and tarpaulins include exports made by the relief industry to various global organizations.
- In quantitative terms, highest level of exports during last five years was observed in FY21 with exported volumes of ~40,220MT. Export levels have generally fluctuated as increase in demand for the relief industry usually depends on occurrence of unpredictable natural events.
- During FY22, exports of tents and canvas stood at PKR~19,709mIn as compared to PKR~17,728mIn during FY21, a growth of ~11%. Meanwhile, in USD terms, exports during FY22 remained stable and clocked in at USD~110mIn similar to the last year.
- Exports during 5MFY23 were higher as compared to 5MFY22, rising to PKR~11,485mIn as compared to PKR~7,206mIn during 5MFY22, an increase of ~59.4%.
- Average export price has increased with a CAGR of ~47% since FY16 and stood at PKR~561/Kg during FY22. Moreover, average prices increased by ~73.5% from PKR~464/kg in 5MFY22 to stand at PKR~805/kg in 5MFY23. The increase is largely attributable to currency depreciation in the same period.
- However, in USD terms, prices declined from FY17-20 and started witnessing an increase from FY21 onwards due to the pandemic. Prices rose in FY22 to USD ~3,141/MT from USD~2,745/MT in FY21 and then further to USD~3,610/MT in 5MFY23.



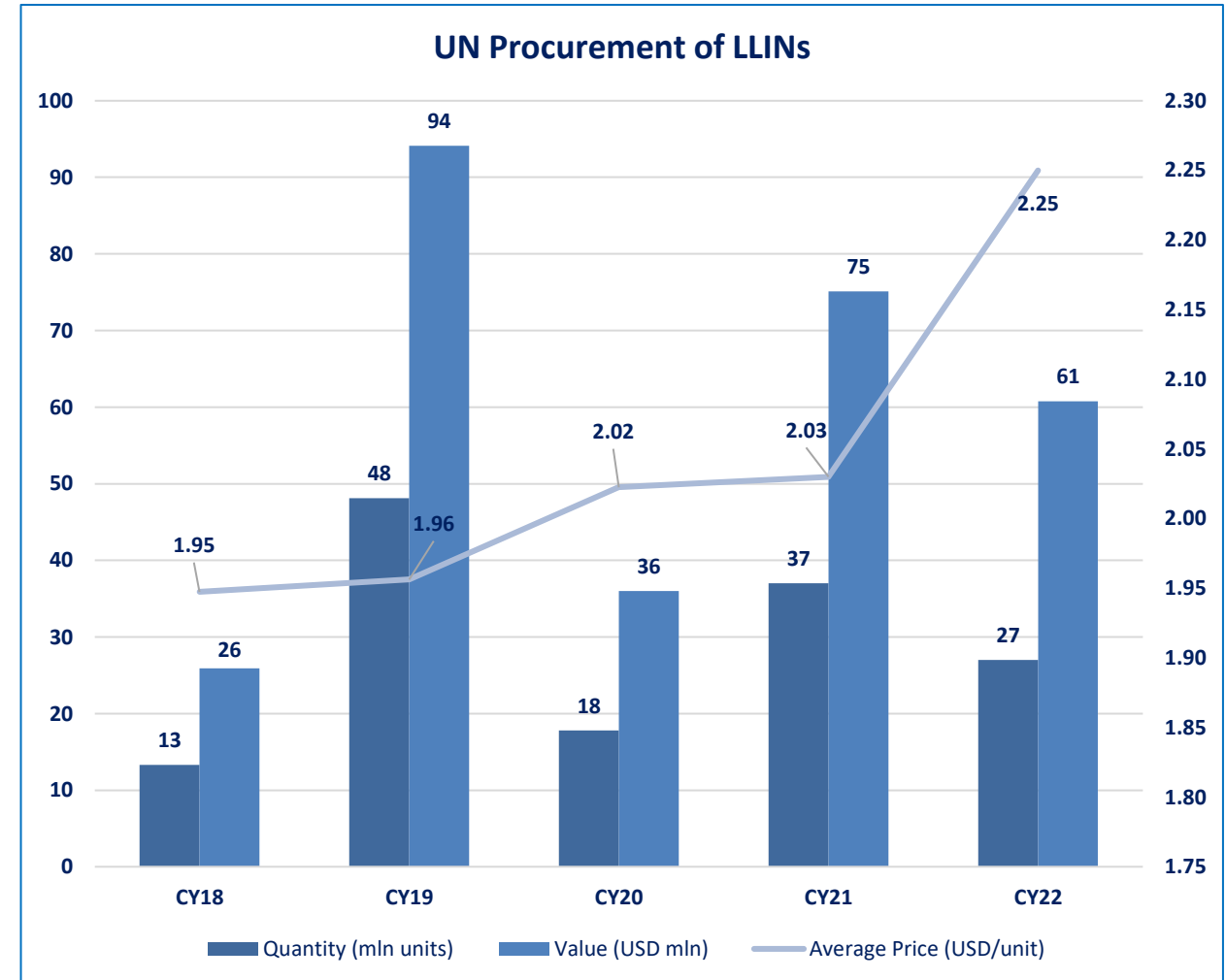
Export Destinations

- Major export destination of Pakistan's tents, canvases and tarpaulins is Saudi Arabia, which imported ~16% of the total exports in FY22. Other export destinations include Middle Eastern countries such as the U.A.E, Jordan and Turkey which contributed ~14%, ~6% and ~10%, respectively, to total exports in FY22. The Middle East is a region where relief activities have been highly concentrated in recent years due to prevalence of regional conflicts as well as presence of a large numbers of refugees.
- In addition, exports to the United States stood at ~4% of total exports in FY22. The top five export destinations collectively constituted ~49% of total exports of tents, canvases and tarpaulins.

Export Destinations	FY18		FY19		FY20		FY21		FY22	
	USD '000	%	USD '000	%	USD '000	%	USD '000	%	USD '000	%
Saudi Arabia	12,788	15%	16,639	20%	22,014	22%	26,493	24%	17,926	16%
Turkey	2,824	3%	1,850	2%	14,124	14%	12,496	11%	10,761	10%
U.A.E.	8,079	9%	8,559	10%	7,985	8%	11,690	11%	15,848	14%
USA	5,792	7%	6,677	8%	5,104	5%	4,415	4%	3,163	3%
Jordan	7,229	8%	1,407	2%	5,036	5%	3,312	3%	6,541	6%
Others	48,569	57%	47,288	57%	44,209	45%	51,981	47%	56,174	51%
Total	85,281	100%	82,420	100%	98,472	100%	110,387	100%	110,413	100%

Long Lasting Insecticidal Nets

- Long-Lasting Insecticidal Nets (LLINs), more commonly known as mosquito nets, are used as a prevention measure for diseases spread through insect bites, the most prevalent of which is malaria.
- LLIN vendors are required to maintain strict standards and are verified by the World Health Organization. Currently, there are 12 global prequalified LLIN manufacturers, one of which is a Pakistani firm under the brand name of NRS Moon Netting.
- LLINs procurement volumes vary depending on country demands. Moreover, countries normally procure on ~2-3 year cycle. During CY22, procurement volumes stood at ~27mln units.
- The average price of LLINs had remained relatively stable during CY20-21 due to increased efficiencies, however, they are on a rising trend recently and have increased to USD~2.25/unit in CY22 from USD~2.03/unit in CY21. The increase in prices most likely is driven by increase in raw material prices (polyethylene in this case), which, in turn, reflect an uptick in global crude prices.

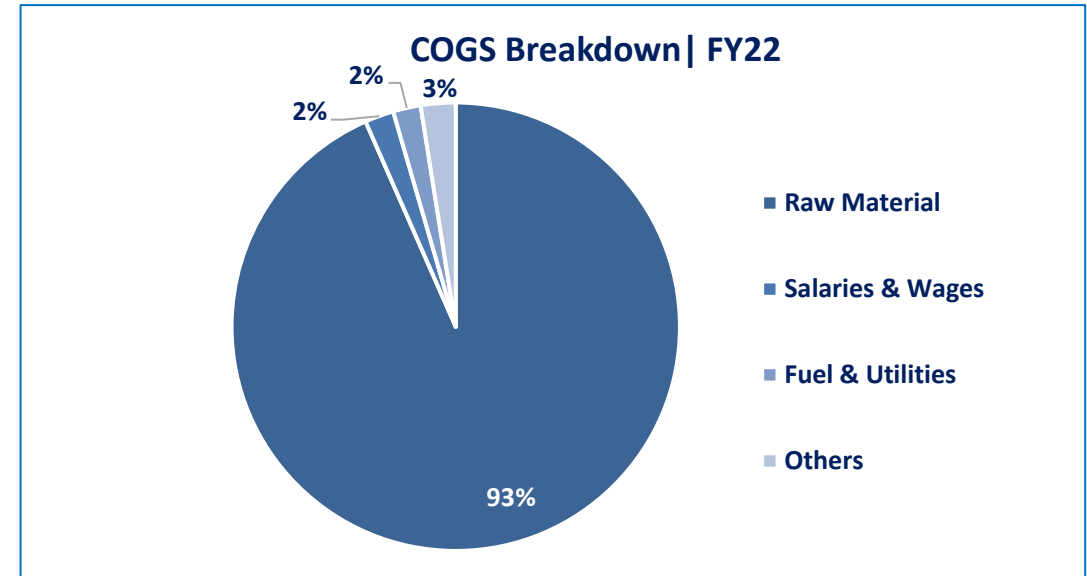
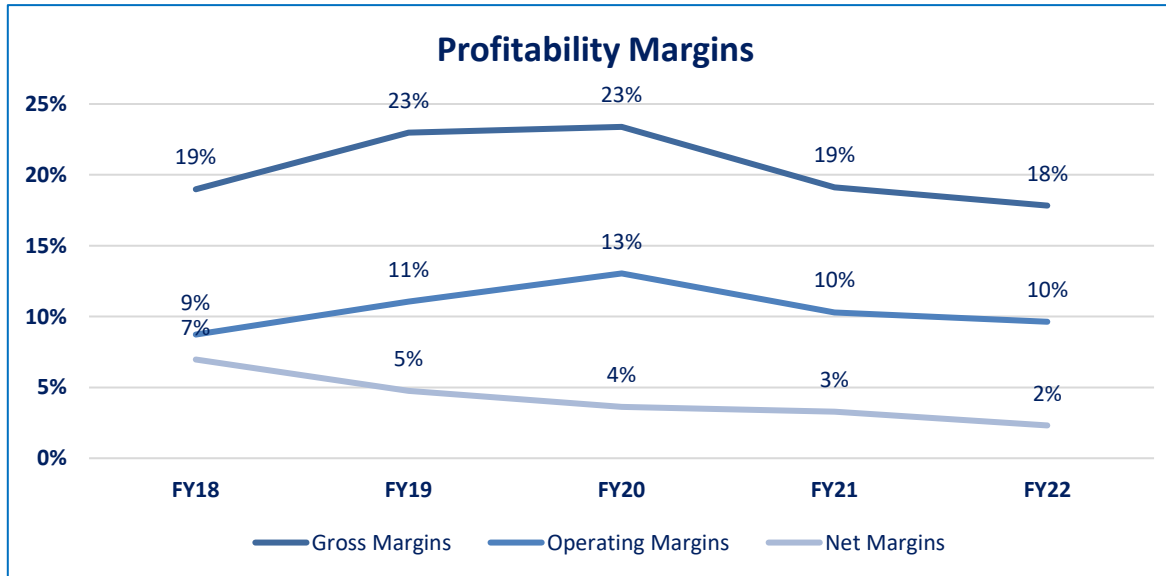


Business Risk

- The demand for relief items largely originates from exogenous factors like natural disasters, regional conflicts and health crises. Demand created by natural disasters exhibits marked volatility since events such as earthquakes, hurricanes and floods can get challenging to predict.
- Meanwhile, demand created by regional conflicts has been on the rise in recent years as we have seen regional disputes in various parts of the world. These conflicts create a large number of refugees whose needs are met by international aid organizations such as the UNHCR and UNICEF.
- Local production of cotton has declined significantly in the previous years which may lead to a shift towards or a greater reliance on imported raw material. However, the production in FY22 increased by ~17.9% whereas imports reduced by ~9.4%. Moreover, prices of cotton increased significantly in recent months due to higher demand, before falling in 1QCY22. This will mean cheaper import prices for the sector, especially since raw material costs make up for ~90% of the total cost of goods sold.
- PVC prices had also been on a rising trend since the COVID-19 pandemic, supplemented by rising oil prices along with supply constraints. However, prices have declined in previous months, reaching a low of PKR~186/Kg in Oct'22 from a previous high of PKR~283/Kg in Mar'22. More recently, prices have again been picking up pace, clocking in at PKR~213/kg in Dec'22, and are forecast to remain on the higher end, since demand in the construction sector is expected to pick pace in the face of cooling inflation and reduced probability of policy rate hikes by the U.S. Fed.
- With the sector exhibiting declining margins during the previous two years (covered in the following section) as a result of the currency depreciation and rising finance costs, it remains exposed to significant exchange rate risk.
- Moreover, players need to maintain strict quality standards required by the various UN organizations and WHO, in so far as Long Lasting Insecticidal Nets are concerned, in order maintain their position on UN's qualified vendors' list.

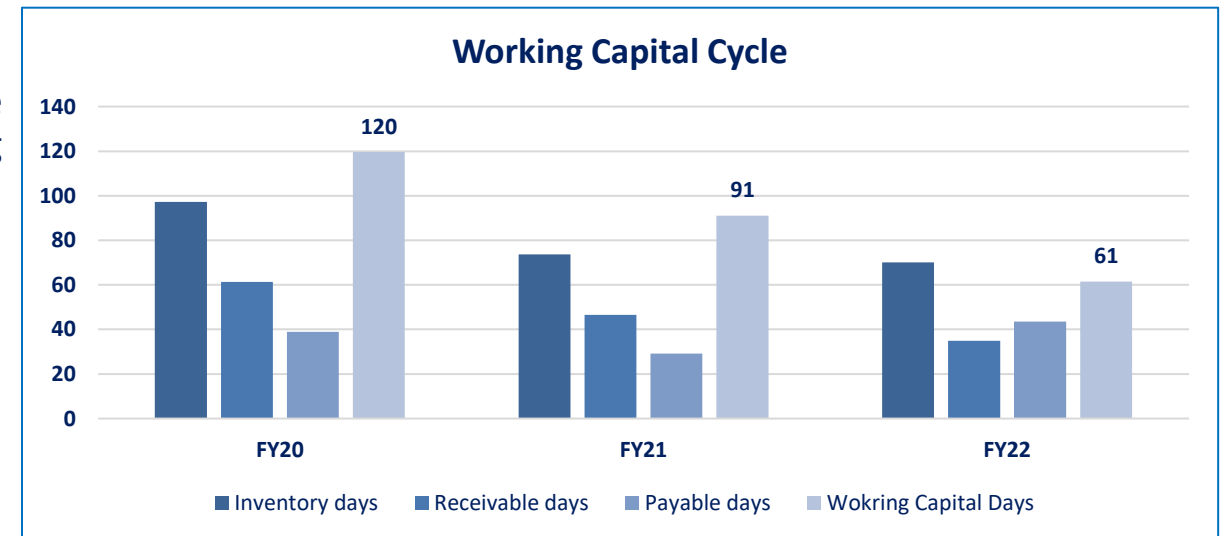
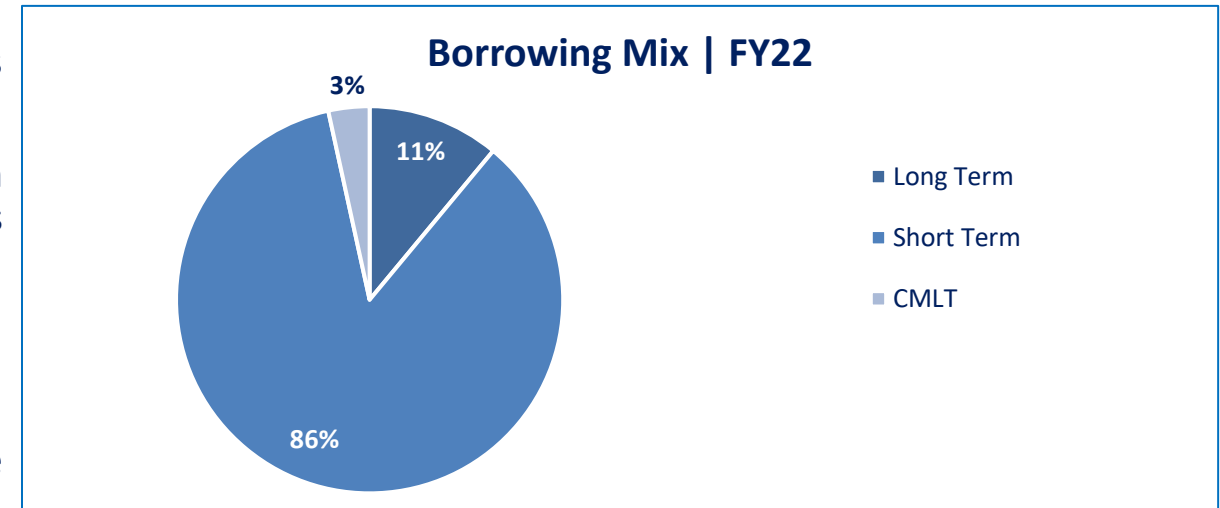
Margins & Cost Structure

- The relief sector's margins have remained robust in recent years (FY18-FY22) with gross margins averaging ~20%. However, gross margins dropped to ~18% in FY22, owing to increased cost of good sold for the sector, the rise being ~27% YoY.
- Net margins have also recorded a declining trend since FY18, averaging at ~4.2% and further dipping at ~2% in FY22. This was likely due to rising finance costs resulting from policy rate hikes. The sector is largely export-oriented, hence it benefits from currency devaluation. However, rising raw material prices have squeezed margins in recent periods.
- Raw materials constitute the largest component within direct costs at ~93%. Prices of raw material are expected to fall as the demand for cotton worldwide is experiencing a fall which likely outweighs the increase in supply at the moment.



Financial Risk

- Relief sector’s total borrowings stood at PKR~9.1bln as at End-FY22 as compared to PKR~10.4bln in FY21 (down ~12.6% YoY).
- The sector’s borrowings are largely dominated by Short-Term Borrowings (STBs) which form ~86% of the total borrowings mix. STBs stood at PKR~7,749mln in FY22 as compared to PKR~9,059mln in FY21. Meanwhile, Long-Term Borrowings (LTBs) constituted ~11% of total borrowings, recording at PKR~999mln during FY22 (FY21: PKR~925mln).
- The sector’s working capital is largely a function of inventory and trade receivables. The sector’s average net working capital cycle is ~91 days.
- Inventory days reduced from ~74 days in FY21 to ~70 days in FY22, receivable days decreased to ~35 in FY22 from ~46 in FY21 and the payable days increased by ~15 days, resulting in a drop in the working capital days from ~91 days in FY21 to ~61 days in FY22.



Borrowings mix is reflective of 2 rated players.

Regulatory Framework

Due to the massive floods that hit the country in FY23, the government, on August 30, 2022, exempted customs duty on imported goods needed for flood relief activities, with the exemption lasting over a period of next 90 days.

PCT Code	Description	Custom Duty		Additional Custom Duty		Regulatory Duty		Total	
		FY23	FY22	FY23	FY22	FY23	FY22	FY23	FY22
52.01	Cotton, not carded or combed	0%	0%	0%	0%	0%	0%	0%	0%
52.03	Cotton, carded or combed	0%	0%	0%	0%	0%	0%	0%	0%
52.05	Cotton yarn (other than sewing thread), containing 85% or more by weight of cotton, not put up for retail sale	11%	11%	0%	2%	0%	0%	11%	13%
52.06	Cotton yarn (other than sewing thread), containing less than 85% by weight of cotton, not put up for retail sale	11%	11%	0%	2%	0%	0%	11%	13%
52.07	Cotton Yarn (other than sewing thread) put up for retail sale	11%	11%	0%	2%	0%	0%	11%	13%
39.04	Polymers of vinyl chloride, in primary forms	3-20%	3-16%	2-6%	2-4%	0%	0%	5-26%	13-20%
63.06	Tarpaulins and tents (Of textile materials and synthetic fibres)	20%	20%	6%	6%	10%	10%	36%	36%

SWOT Analysis

- Government support in the form of favorable duty structure.
- Strong reputation with status as verified vendors for the United Nations.
- Currency depreciation has increased competitiveness.

Strengths

Weaknesses

- Volatility in demand as natural disasters cannot be predicted.
- Inefficient production.

- Raw material supply constraints.
- Fluctuations in raw material prices.
- Dependent on UN agencies as they are major buyers.

Threats

Opportunities

- Increase efficiency and improve quality through technological upgrades.
- Frequent occurrence of natural disasters due to climate change and failure to resolve conflicts leads to greater demand of relief items.

Outlook: Stable

- While the COVID-19 pandemic resulted in an overall economic distress, it had the opposite impact on the disaster relief sector. As traditional hospitals and emergency services exceeded their capacities, there was greater demand for tents, canvases and tarpaulin for the purpose of creating temporary shelters and structures which could operate as field hospitals, testing sites and quarantine centers. As the pandemic has subsided, the demand has tapered off, however, new variants are still emerging especially in China and may create additional demand. More recently, though, heavy floods of Aug'22 in Pakistan are estimated to have displaced ~1.7mln people, while ~89,000 people in Sindh still remain deprived of their homes.
- Meanwhile, demand created through regional conflicts remains persistent, specifically in regions such as the Middle East, which is a major destination for Pakistan's exports of tents, canvas and tarpaulin. In addition, natural disasters and extreme weather events are expected to continue to increase as a result of climate change and global warming.
- As demand emanating from COVID-19 has subsided, it has resulted reduction in Pakistan's exports of tents, canvases and tarpaulins in quantitative terms (~35,000 MT in FY22, compared to ~40,000Mt in FY21). However, these have remained stable in value terms at USD~110mln, due to depreciation of the rupee against the greenback. Similar trend has been observed in the recent time period, where exports have declined by ~8% YoY during 5MFY23, while their value have increased from USD~43mln in 5MFY22 to USD~52mln in 5MFY23.
- The prices of PVC have started tracing an upward trend in recent months after going as low as at PKR~186/kg in October'22. This may be likely due to recovery in demand amid slowdown in Fed's monetary tightening. However, PVC prices, like those of other polymers, are also linked to oil prices due to which there can be significant volatility, increasing the risk of the relief sector.
- Local cotton production for FY22 was seen to have increased by ~18%, resulting from improved yield (increase of ~25% YoY in FY22). However, due to the flash floods which Pakistan experience in Aug'22, the estimated production figure for cotton has now been revised downwards to ~4.8mln bales (shortage of ~7.0mln bales, or ~60% loss). This will translate into increased imports (projected ~12bln bales), exposing the sector to exchange rate fluctuations. This risk may be mitigated due to declining cotton prices in the international prices, which have come about due to muted demand.
- The State Bank of Pakistan (SBP) has recently increased the policy rate by to 17%, and this is expected to undergo at least one more cycle of tightening, if not more. Thus, finance costs for the sector may increase and create pressure on margins, seeing its reliance on short-term borrowings (~86% of the total borrowing mix).

- Pakistan Bureau of Statistics (PBS)
- State Bank of Pakistan (SBP)
- Federal Board of Revenue (FBR)
- Pakistan Economic Survey 2020-21
- Pakistan Canvas and Tents Manufacturers & Exporters Association (PCTMEA)
- UNICEF
- UN Global Marketplace
- Pakistan Central Cotton Committee (PCCC)
- Karachi Cotton Association (KCA)
- Investing.com
- PR Newswire
- PACRA Database

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