



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, 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 due to the impact of climate change on the global environment as well as regional conflicts.
- The global market size for emergency and disaster management and response market is estimated to stand at USD~124bln in CY21, growing approximately by ~5.9% (CY20: USD~117bln). While many markets and industries suffered due to the COVID-19 pandemic, it provided an opportunity for the disaster response industry. There has been increased demand for protective and medical equipment as well as demand for products such as tents and tarpaulin used to construct temporary structures that can function as field hospitals, testing locations and quarantine centers.
- While COVID-19 slowed down 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 400 million nets annually, against global LLIN deliveries reaching approximately 250 million in 2019.
- UN, through its various organizations and bodies, remains one of the largest procurer of relief goods. Total UN procurement of goods and services, through 39 organizations stood at USD~22.3bln in CY20, increasing ~12.1% from USD~19.9bln in CY19. The UN High Commissioner for Refugees procured goods and services worth USD~1,383mln during CY20 (CY19: USD~1,138mln) to provide aid and relief to refugees displaced by war and conflicts.



RELIEF | LOCAL INDUSTRY

Overview

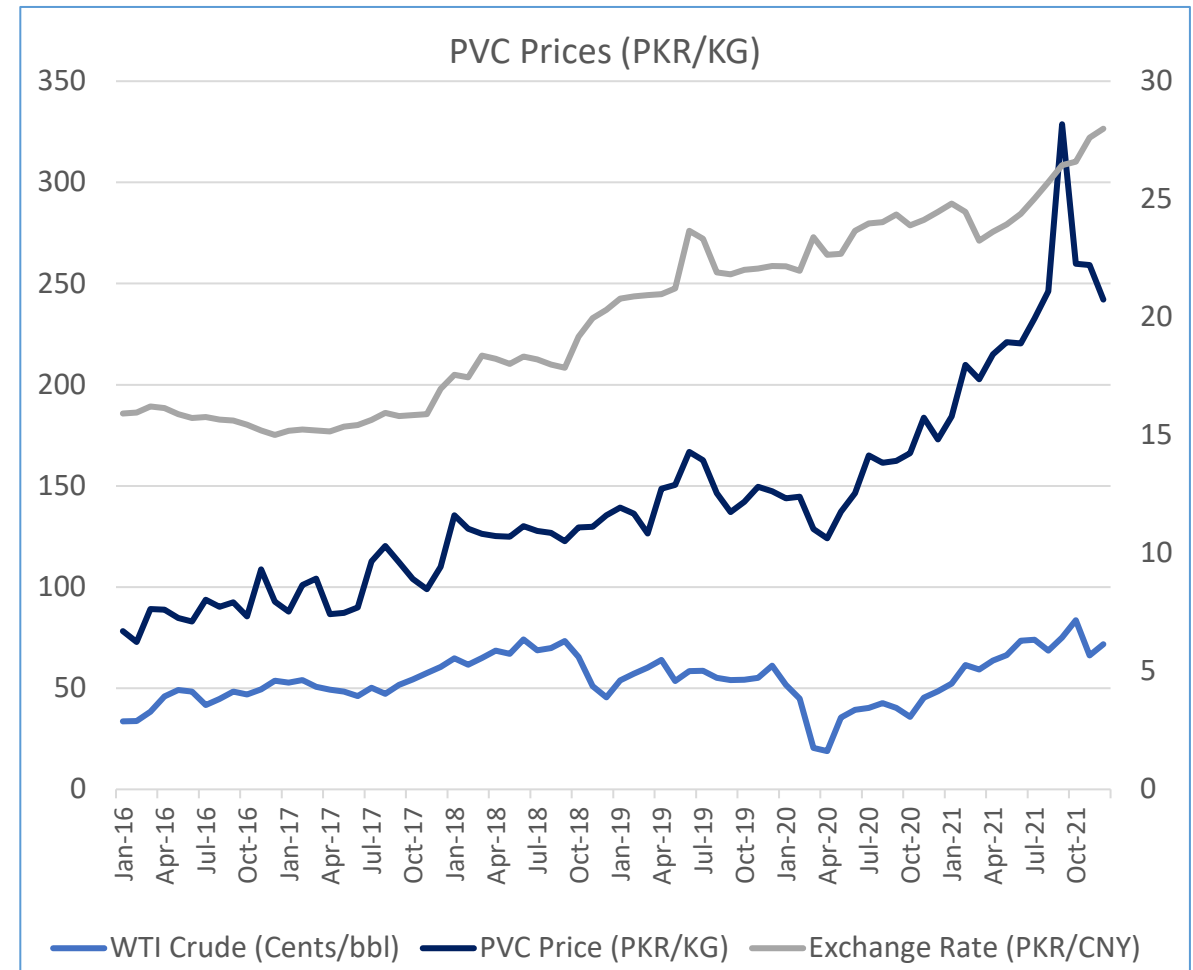
- There are approximately 88 tent manufacturers and exporters operating in Pakistan. However, only a few of these are involved in manufacturing and providing supplies for the purpose of disaster relief.
- Pakistan has capacity for production of up to 100 million square meters of canvas. Approximately ~60% of canvas produced is exported while the remaining is consumed locally.
- The relief sector is largely export based and provides relief materials to international aid and disaster management agencies such as UNHCR, UNICEF and WHO. These relief materials consist of tents, canvas and tarpaulin as well as mosquito nets, also known as Long Lasting Insecticidal Nets (LLIN).
- During FY21, Pakistan's exports of tents, canvas and tarpaulin stood at PKR~17,728mIn, increasing ~14% from PKR~15,553mIn in FY20 largely due to higher demand. Exports also increased in quantitative terms, from ~37,748MT in FY20 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. These players are H. Nizam Din & Sons (PVT) Limited, Paramount Tarpaulin Industries and Zahra Tents Industries (PVT) Limited.
- 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.



RELIEF | LOCAL INDUSTRY

Raw Material | PVC

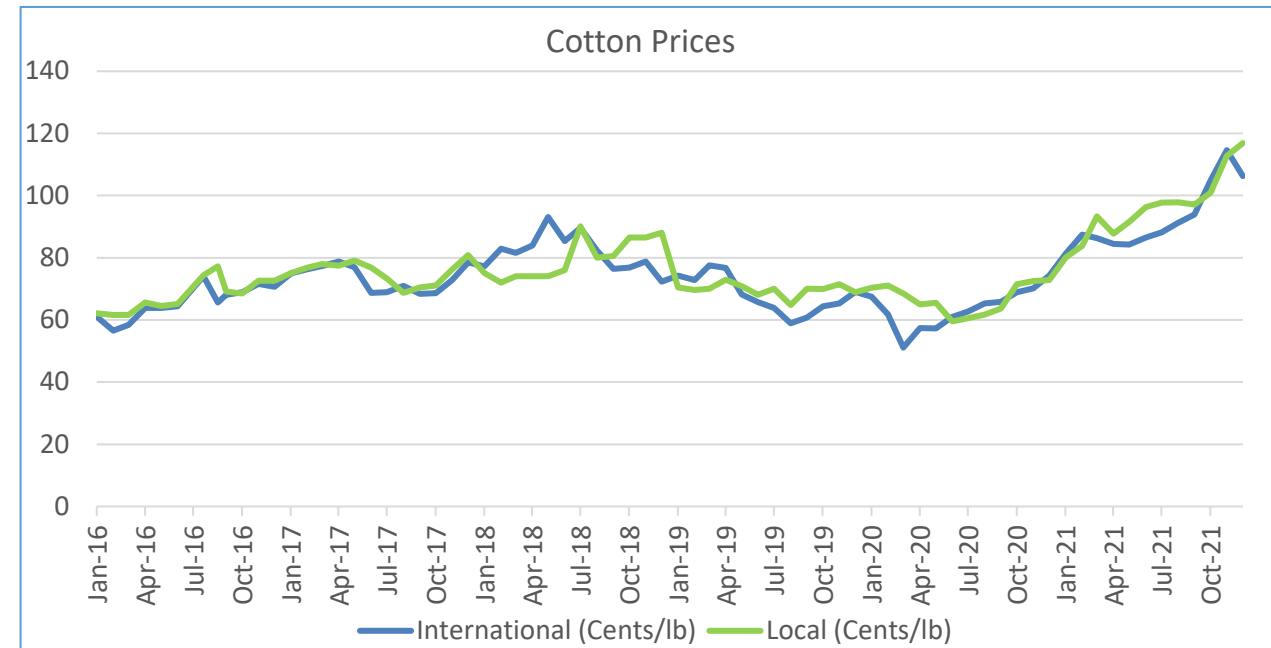
- An important raw material for the production of canvas, tents and tarpaulin is Polyvinyl Chloride (PVC).
- The price of PVC has witnessed significant increase of over ~200% since Jan-16 and recently stood at PKR~242/Kg in Dec-21. The increase is partially attributable to increase in the exchange rate by 76%.
- Oil prices also determine PVC prices as polymers are derivatives of crude oil. As seen in the adjacent graph, PVC prices follow a similar trend as that of crude oil. There was a significant decline in both prices during 1HCY20 due to the impact of the COVID-19 pandemic. Since then prices have started to recover in line with global economic activity. However, PVC prices have risen faster due to supply pressures as production activity has remained curtailed while demand has increased.
- The primary local producer of PVC is Engro Polymer & Chemical with a capacity of 195,000 tons. Engro produces both rigid and flexible types of PVC, however, flexible PVC that is suitable for manufacturing of tents is a relatively smaller component of its product portfolio. Additional demand is met through imports from countries such as China, Indonesia and United States of America.



Raw Material | Cotton

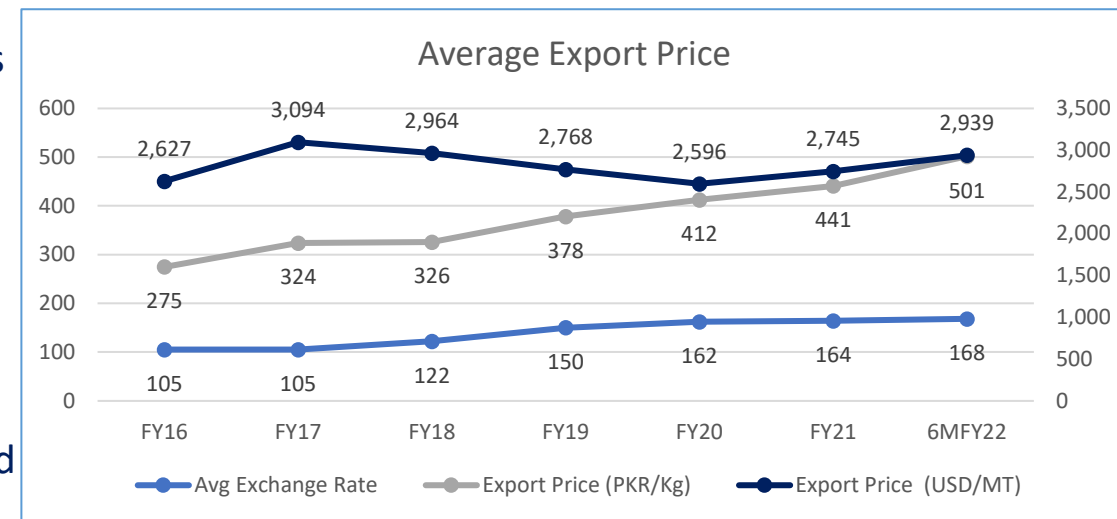
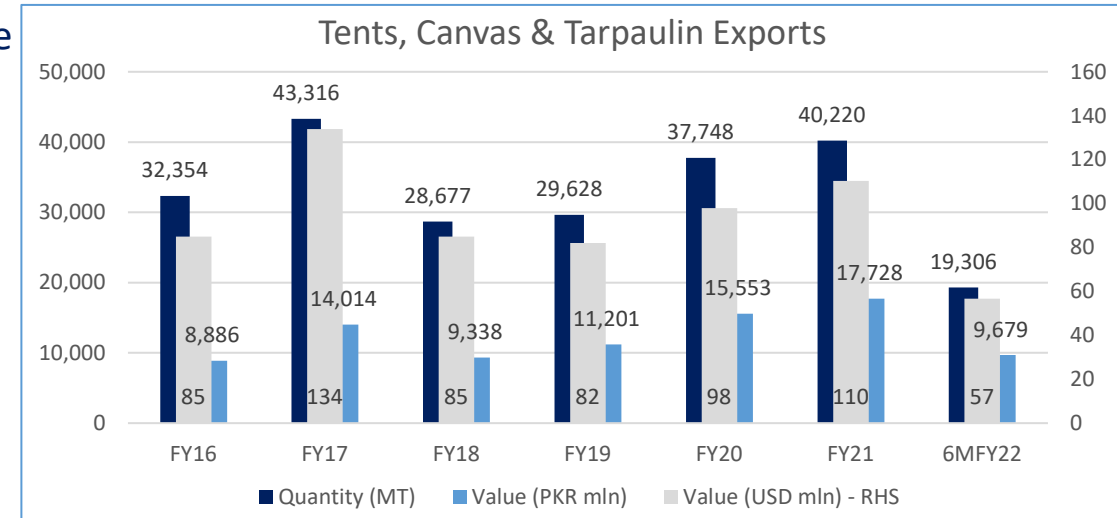
- Cotton is among the basic raw materials for the manufacturing of canvas and tents. While cotton tents are decreasing in popularity, they continue to occupy a significant share of the tents exported from Pakistan. Cotton production in Pakistan has witnessed a declining trend since FY18. However, a recovery in cotton production has been witnessed in current season due to favorable weather conditions.
- Due to lower cotton production in successive years and higher levels of demand, there has been an increase in cotton imports. During FY21, net imports stood at ~857,000 MT as compared to ~523,000 MT in FY20.
- Cotton prices have also been on an increasing trend in the local market, growing ~219% in PKR terms since 2016 with currency depreciation being a major factor since 2018. The COVID-19 pandemic also drove the price increase due to resulting supply constraints.
- Local prices recently touched a new peak of PKR~19,300/maund during Jan-22. The price increase is driven by the increase in international prices due to expected lower global production as well as greater demand in the local market.

Cotton Supply (000 MT)	FY17	FY18	FY19	FY20	FY21	1HFY22
Production	1,819	1,972	1,819	1,462	959	1,255
Net Imports	481	563	402	523	857	378
Total Cotton Supply	2,300	2,535	2,221	1,985	1,816	1,633



Exports

- Pakistan's exports of tents, canvas and tarpaulin includes exports made by the relief industry to various global organizations.
- In quantitative terms, the highest level of exports during last five years was during FY17 with ~43,316 MT. Export levels have generally fluctuated as increase in demand for the relief industry usually depends on occurrence of unpredictable natural events.
- During FY21, exports of tents and canvas stood at PKR~17,728m as compared to PKR~ 15,553m during FY19 with growth of ~14%. Meanwhile, in USD terms, exports during FY21 increased by ~13% and clocked in at USD~110m as compared to USD~98m in FY20.
- Exports in 6MFY22 were lower as compared to the same period last year, falling to PKR~9,679m as compared to PKR~10,214m during 6MFY21. This decline may be attributable to the fact that despite emergence of new variants, the COVID-19 pandemic has subsided to some extent and alongside that the demand for temporary structures for quarantine centers and testing sites has also decreased.
- The average export price in PKR terms has increased with a CAGR of ~10% since FY16 and stood at PKR~441/Kg during FY21. The increase is largely attributable to currency depreciation of ~56% in the same period.
- However, in USD terms, prices declined from FY17 to FY20 and only witnessed a slight increase from FY21 onwards due to the COVID-19 pandemic.



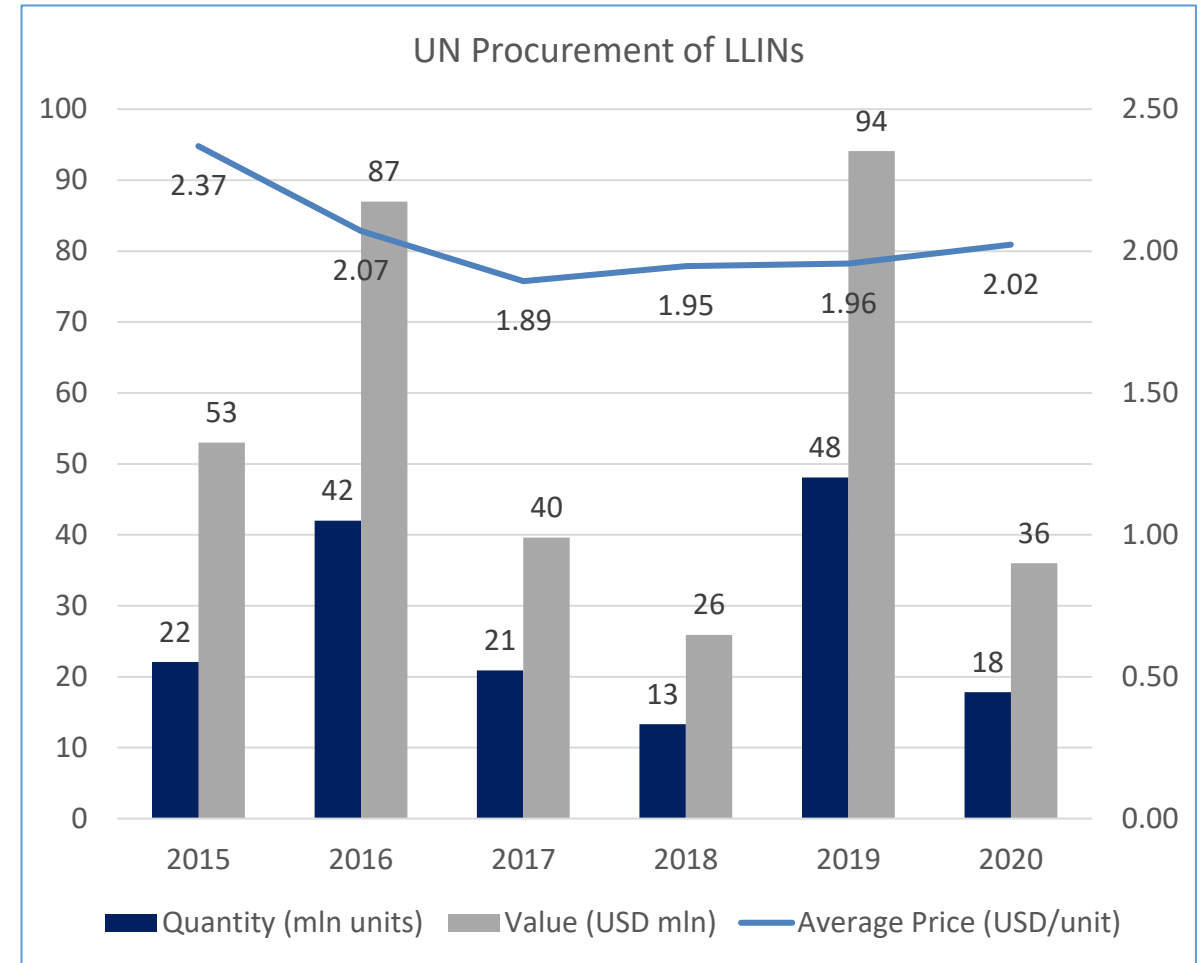
Export Destinations

- The largest destination for Pakistan’s exports of tents, canvas and tarpaulin is Saudi Arabia, that imported ~24% of the total exports in FY21. Other export destinations include Middle Eastern countries such as Turkey, U.A.E and Jordan, which contributed ~11%, ~11% and ~3%, respectively to total exports in FY21. The Middle East is a region where relief activities have been highly concentrated in recent years due to the prevalence of conflicts as well as the presence of large numbers of refugees.
- In addition, exports to the United States stood at ~4% of total exports in FY21. Meanwhile, the top 5 export destinations collectively constituted ~53% of total exports.

Export Destinations	FY18		FY19		FY20		FY21	
	USD 000	%	USD 000	%	USD 000	%	USD 000	%
Saudi Arabia	12,788	15%	16,639	20%	22,014	22%	26,493	24%
Turkey	2,824	3%	1,850	2%	14,124	14%	12,496	11%
U.A.E.	8,079	9%	8,559	10%	7,985	8%	11,690	11%
USA	5,792	7%	6,677	8%	5,104	5%	4,415	4%
Jordan	7,229	8%	1,407	2%	5,036	5%	3,312	3%
Others	48,569	57%	47,288	57%	44,209	45%	51,981	47%
Total	85,281	100%	82,420	100%	98,472	100%	110,387	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 have to be 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 using the brand name of NRS Moon Netting.
- LLINs procurement volumes vary depending on country demands. Moreover, countries normally procure on 2-3 year cycles. During CY20, procurement volumes stood at 17.8mln units.
- The average price of LLINs has been declining over the years due to increased efficiencies and currently stands at USD~2.02 per unit.

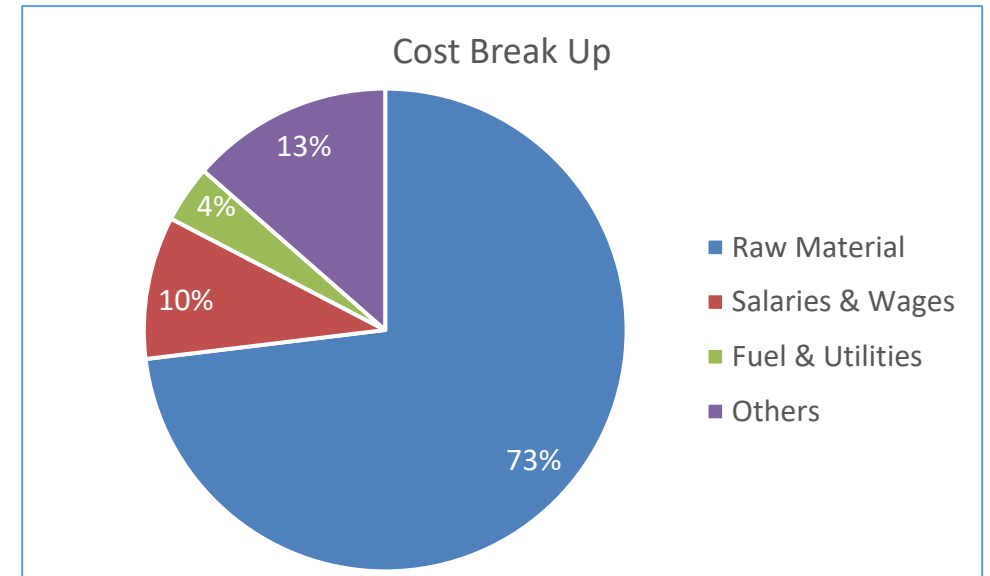
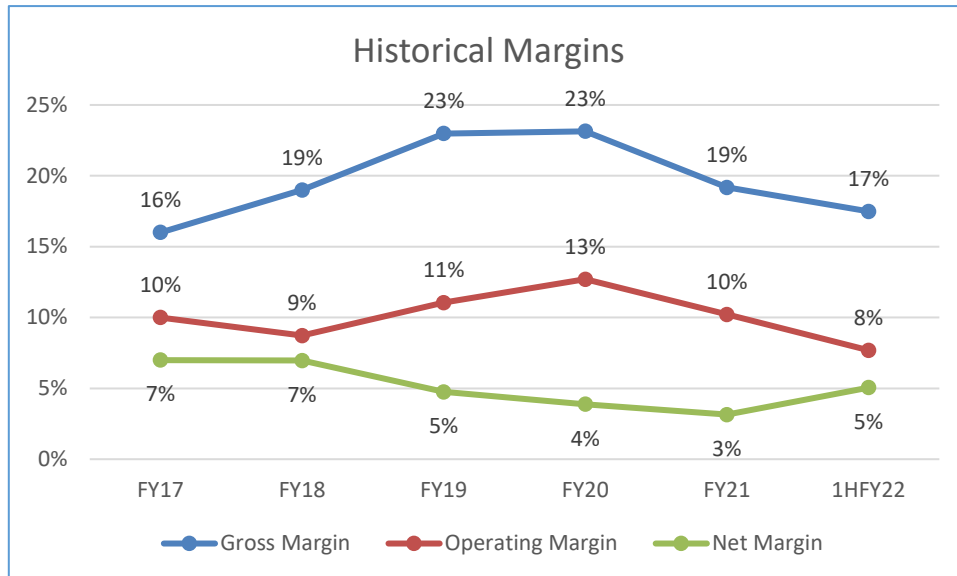


Business Risk

- The demand for relief items depends on natural disasters, regional conflicts and health crises. Demand created by natural disasters can be volatile as events such as earthquakes, hurricanes and floods can be difficult to predict.
- Meanwhile, demand created by regional conflicts has been on the rise in recent years as we have seen wars in various parts of the world. These conflicts create large number of refugees whose need are met by international aid organizations such as UNHCR and UNICEF.
- The local production of cotton has declined significantly which may lead to a shift towards or a greater reliance on imported raw material. Moreover, prices of cotton have increased significantly in recent months due to higher demand and expectations of lower global production.
- Moreover, PVC prices had been on a rising trend since the COVID-19 pandemic with the rising oil prices along with supply constraints being the main drivers. However, prices have declined in recent months, from PKR~329/kg in Sep-21 to PKR~242/kg in Dec-21.
- While the sector has benefited in terms of margins during the last two years as a result of the currency depreciation, it is also exposed to significant risk due to exchange rate volatility.
- Players need to maintain strict quality standards required by the various UN organizations and WHO, in case of Long Lasting Insecticidal Nets, in order maintain their place on qualified vendors lists.

Margins & Cost Structure

- The relief sector's margins have remained strong in recent years with gross margins averaging ~20% and net margins averaging ~5% over a five year period (FY17-FY21). The sector is largely export based and thus benefits from currency devaluation, however, rising raw material prices have squeezed margins in recent periods.
- During FY21, the gross margins declined to ~19% and further dropped to ~17% in 1HFY22 as raw material prices experienced significant increases. However, net margins exhibited slight increase, improving from ~3% in FY21 to ~5% in 1HFY22 likely due to lower finance costs on the back of lower policy rates.
- Raw materials constitute the largest component within direct costs at ~73%. Prices of raw material are on an increasing trend in recent months as global cotton production is expected to decline and oil prices have continued on a rising trend since the COVID-19 pandemic.



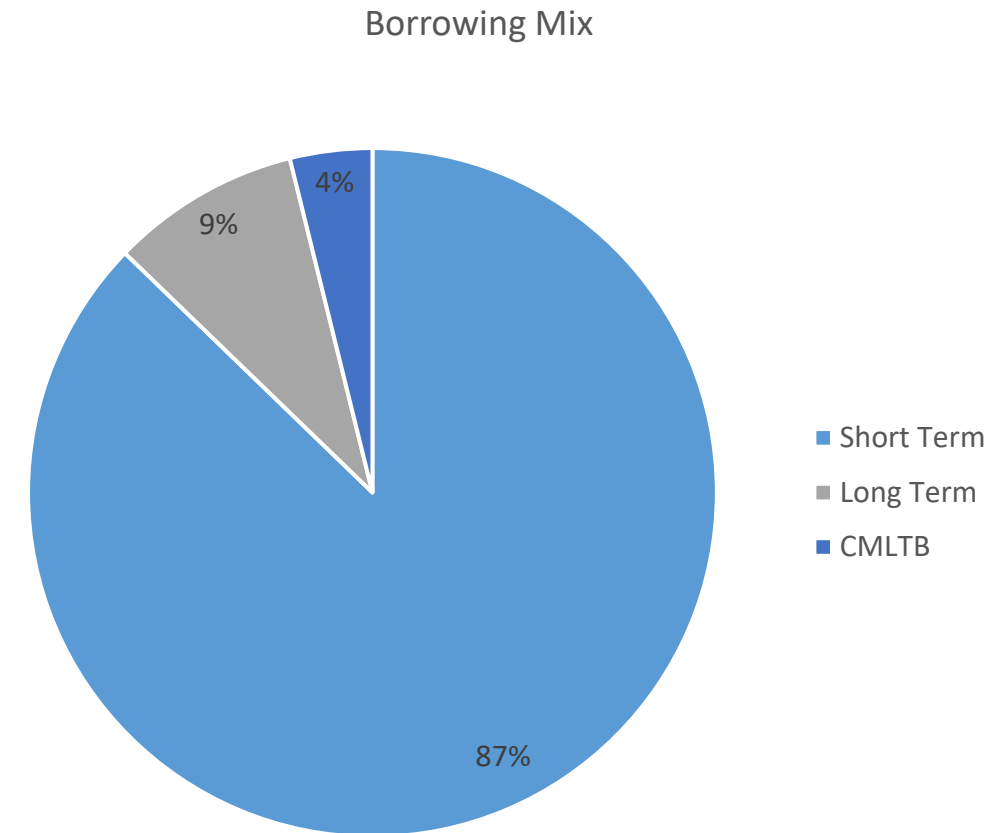
Regulatory Framework

- With respect to Income Tax, the textile industry, including relief segment, is under the Normal Tax Regime (NTR). Further, the sector is also subject to Minimum Tax @ 1.5% of turnover, if tax liability under NTR is lower than minimum tax. However, the additional tax paid under minimum tax is adjustable against future tax liabilities for the next 5 years.
- The duty structure implemented by the government provides protection to local manufacturers. In addition, sales tax of 17% is also applicable on the industry.
- The sector is represented by the Pakistan Canvas and Tents Manufacturers & Exporters Association (PCTMEA) which has ~88 members.

PCT Code	Description	Custom Duty		Additional Custom Duty		Regulatory Duty		Total	
		FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21
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%	2%	2%	0%	5%	13%	18%
52.06	Cotton yarn (other than sewing thread), containing less than 85% by weight of cotton, not put up for retail sale	11%	11%	2%	2%	0%	5%	13%	18%
52.07	Cotton Yarn (other than sewing thread) put up for retail sale	11%	11%	2%	2%	0%	5%	13%	18%
39.04	Polymers of vinyl chloride, in primary forms	3-16%	11-16%	2-4%	2-4%	0%	0%	5-20%	13-20%
63.06	Tarpaulins and tents (Of textile materials and synthetic fibres)	20%	20%	6%	7%	10%	10%	37%	37%

Financial Risk

- The relief sector’s total borrowing stood at approximately PKR~10.4bln at the end of FY21 as compared to PKR~10.7bln in FY20 (down ~2.6% YoY).
- The sector’s borrowing is largely dominated by short term borrowings which occupy ~87% of the total borrowing mix. Short term borrowing stood at PKR~9,059mln in FY21 as compared to PKR~8,950mln in FY20. Meanwhile, long term borrowing constitutes ~9% of the total borrowing and stood at PKR~925mln during FY21 (FY20: PKR~1,562mln).
- The sector’s average leveraging stands at ~40%.
- The sector’s working capital is largely a function of inventory and trade receivables. The sector’s average net working capital cycle is between 80-100 days.
- Raw material occupies the greatest share within the sector’s inventory break up at ~76%. Meanwhile, work-in-process and finished goods make up ~16% and ~8% of total inventory, respectively.





SWOT Analysis



Outlook: Stable

- While the COVID-19 pandemic resulted in an overall economic slowdown, 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, canvas 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 and may create additional demand.
- Meanwhile, demand created through wars and regional conflicts is unabated, specifically in regions such as the Middle East, which is the export destination for a significant proportion of 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.
- The rising demand has resulted in increase in Pakistan's exports, both in quantitative and value terms. During FY21, exports of tents and canvas stood at PKR~17,728mIn as compared to PKR~ 15,553mIn during FY20 with a growth of ~14%. Meanwhile, in volume terms, exports during FY21 increased by ~7% and clocked in at ~40,220 MT as compared to ~37,749 MT in FY20. In addition, the average export price in PKR terms has increased ~7% during the year and stood at PKR~441/Kg during FY21.
- The prices of PVC has also observed a rising trend in recent months due to supply constraints. Furthermore, PVC prices, like those of other polymers, are linked to oil prices due to which there can be significant volatility, increasing the risk of the relief sector.
- The latest cotton production figures for ongoing season depict an increase in local cotton production, which will in turn reduce reliance on imported raw materials and exposure to exchange rate risks. Meanwhile, the relief sector is expected to benefit from the recent currency depreciation due to its export based nature, with exchange rate rising significantly since the start of current fiscal year.
- The State Bank of Pakistan (SBP) has recently increased the policy rate to 9.75% and this is expected to remain the same for a foreseeable time. Thus, finance costs for the sector may increase and create pressure on margins.

- Pakistan Bureau of Statistics (PBS)
- State Bank of Pakistan (SBP)
- Federal Board of Revenue (FBR)
- Trade Development Authority of Pakistan (TDAP)
- 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
- <https://www.marketsandmarkets.com/Market-Reports/incident-emergency-management-market-1280.html>

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