



# Relief Sector

## An Overview

# TABLE OF CONTENTS



| Contents                       | Page No. |
|--------------------------------|----------|
| Introduction                   | 1        |
| Global Industry   Overview     | 2        |
| Local Industry   Overview      | 3        |
| Raw Material   Cotton          | 4        |
| Raw Material   PVC             | 5        |
| Exports                        | 6        |
| Long Lasting Insecticidal Nets | 8        |
| Business Risk                  | 9        |
| Margins & Cost Structure       | 10       |

| Contents                   | Page No. |
|----------------------------|----------|
| Regulatory Environment     | 11       |
| Financial Risk             | 12       |
| SWOT Analysis              | 13       |
| Outlook & Future Prospects | 14       |
| Bibliography               | 15       |

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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~117bln in 2020, growing approximately by ~9.5% (2019: USD~107bln). 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~19.9bln, increasing ~5.9% from USD~18.8bln in 2018. The UN High Commissioner for Refugees procured goods and services worth USD~1,138mln (2018: USD~1,105mln) to provide aid and relief to refugees displaced by war and conflicts during 2019.



# RELIEF | LOCAL INDUSTRY

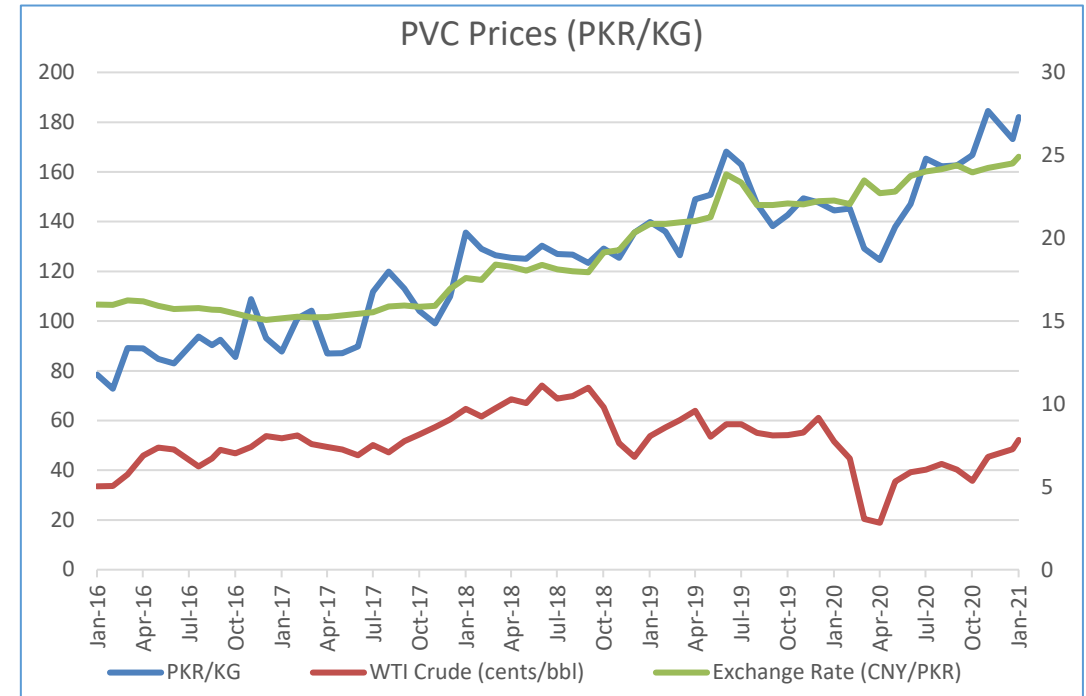
## Overview

- 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 FY20, Pakistan's exports of tents, canvas and tarpaulin stood at PKR~15,553mIn, increasing ~39% from PKR~11,201mIn in FY19 largely due to higher demand. Exports increased in quantitative terms, from ~29,628MT in FY19 to ~38,537MT in FY20.
- 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.



## Raw Material | PVC

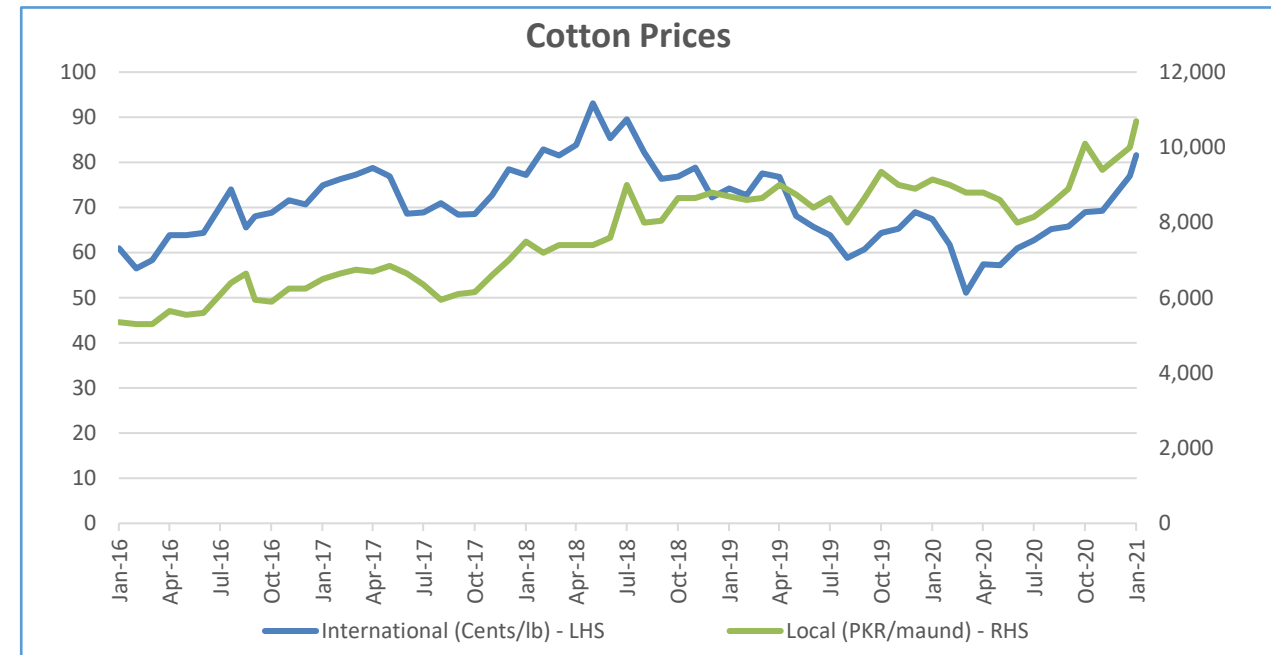
- An important raw material for the production of canvas, tents and tarpaulin is Polyvinyl Chloride (PVC).
- The price of PVC has witnessed significant increase of ~121% in the last five years and currently stands at PKR~182/Kg. The increase is partially attributable to increase in the exchange rate by 53%.
- 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

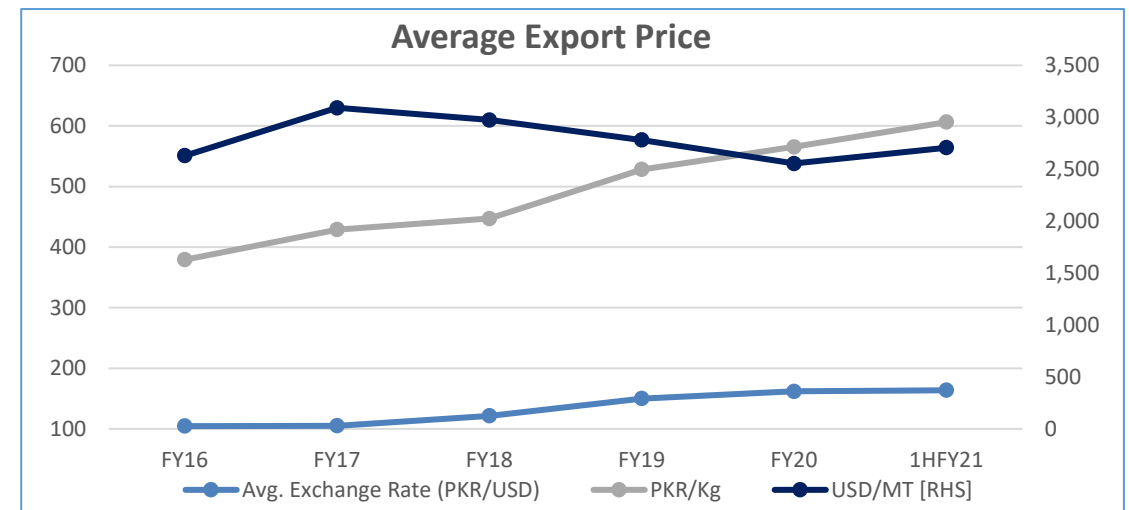
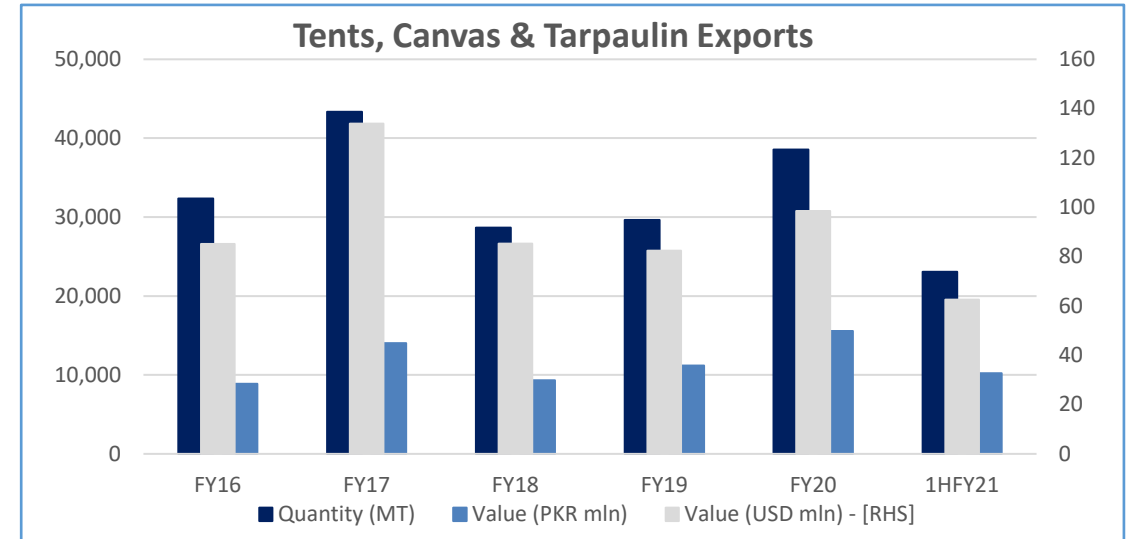
- Cotton is among the basic raw materials for the manufacturing of canvas and tents. Cotton production in Pakistan has witnessed a declining trend since FY18. There was a significant decline of ~34% in production during the 1HFY20. Production during 1HFY21 stands at 5.3mln bales as compared to 8.1mln bales during 1HFY20.
- As a result, there has been an increase in imports during the period. Import of cotton during 1HFY21 stood at 1.95mln bales, increasing 5 times from 1HFY20 where import of cotton stood at 0.29mln bales.
- Local cotton prices have been on an increasing trend largely due to currency depreciation and have doubled since 2016. Prices are currently at their peak at PKR 10,700 per maund. This is due to the significant shortfall in cotton production in the current season.
- The local prices are positively correlated to international prices as can be seen from the similar price trends from 2016 to 2018. After 2018, there were changing dynamics in the international market due to the US-China trade war and international prices fell as a result. However, the local cotton prices continued to increase in FY19, due to the significant decline in local production levels and currency depreciation. The current difference or premium between local and international price is ~0.95 cents/lb.

| Cotton Supply (000 Bales)  | FY16          | FY17          | FY18          | FY19          | FY20          | 1HFY21       |
|----------------------------|---------------|---------------|---------------|---------------|---------------|--------------|
| Cotton Production          | 9,917         | 10671         | 11,946        | 9,861         | 9,178         | 5,371        |
| Cotton Imports             | 2,454         | 2,978         | 3,589         | 2,441         | 3,154         | 1,950        |
| Cotton Exports             | 291           | 147           | 208           | 75            | 75            | 3            |
| <b>Total Cotton Supply</b> | <b>12,080</b> | <b>13,502</b> | <b>15,327</b> | <b>12,228</b> | <b>12,257</b> | <b>7,318</b> |



## 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 FY20, exports of tents and canvas stood at PKR~15,553mln as compared to PKR~11,201mln during FY19 with growth of ~39%. Meanwhile, in USD terms, exports during FY20 increased by ~19% and clocked in at USD~98mln as compared to USD~82mln in FY19.
- Exports in 1HFY21 also increased significantly by ~65% to stand at PKR~10,214mln as compared to PKR~6,190mln during 1HFY20. This is likely an impact of the COVID-19 pandemic as tents, canvas and tarpaulin are used for temporary structure to operate as testing sites and quarantine centers.
- The average export price in PKR terms has increased ~61% in previous five years and stood at PKR~443/Kg. 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 in 1HFY21 on the back of the COVID-19 pandemic.







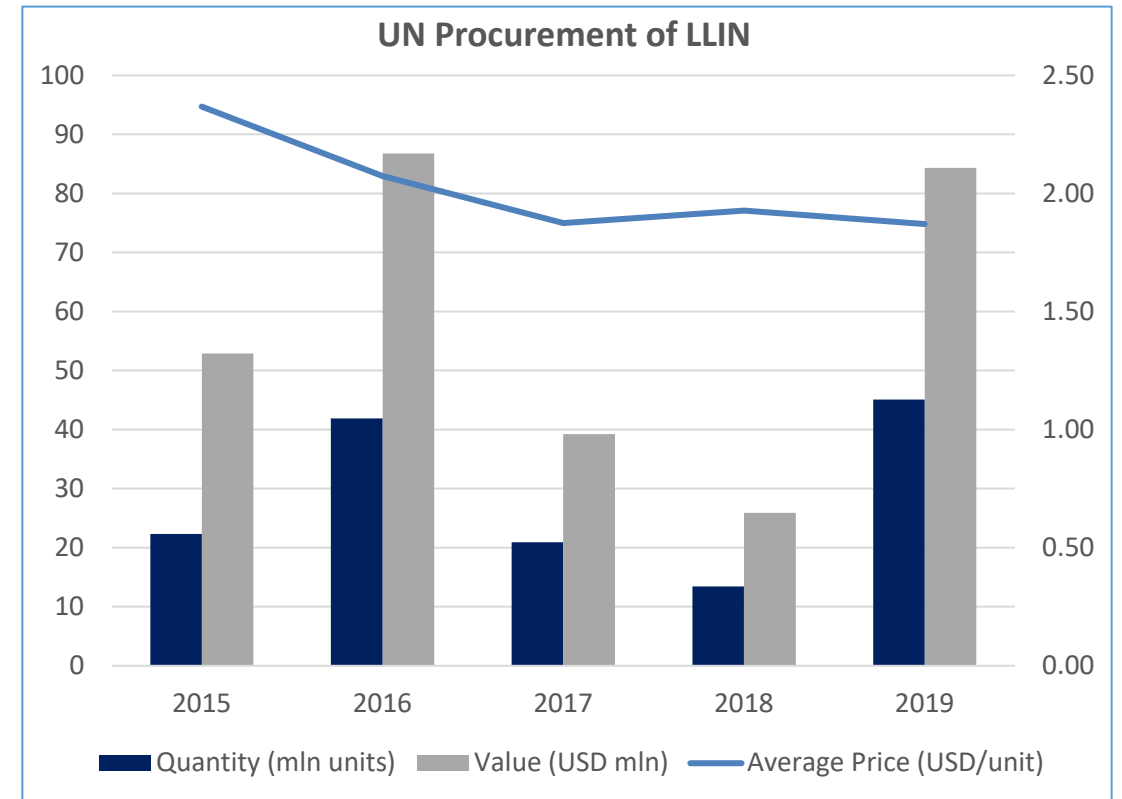
## Export Destinations

- The largest destination for Pakistan’s exports of tents, canvas and tarpaulin is Saudi Arabia, that imported ~22% of the total exports in FY20. Other export destinations include Middle Eastern countries such as Turkey, U.A.E and Jordan, which contributed ~14%, ~8% and ~5%, respectively to total exports in FY20. 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 ~5% of total exports in FY20. Meanwhile, the top 5 export destinations collectively constituted ~55% of total exports.

| Export Destinations | FY18          |             | FY19          |             | FY20          |             |
|---------------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                     | USD 000       | %           | USD 000       | %           | USD 000       | %           |
| Saudi Arabia        | 12,788        | 15%         | 16,639        | 20%         | 22,014        | 22%         |
| Turkey              | 2,824         | 3%          | 1,850         | 2%          | 14,124        | 14%         |
| U.A.E.              | 8,079         | 9%          | 8,559         | 10%         | 7,985         | 8%          |
| USA                 | 5,792         | 7%          | 6,677         | 8%          | 5,104         | 5%          |
| Jordan              | 7,229         | 8%          | 1,407         | 2%          | 5,036         | 5%          |
| Others              | 48,569        | 57%         | 47,288        | 57%         | 44,209        | 45%         |
| <b>Total</b>        | <b>85,281</b> | <b>100%</b> | <b>82,420</b> | <b>100%</b> | <b>98,472</b> | <b>100%</b> |

## 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 2019, procurement volumes stood at 45.1mln units. Meanwhile, procurement for 2020 is estimated to be ~25mln units.
- The average price of LLINs has been declining over the years due to increased efficiencies and currently stands at USD~1.87 per unit.

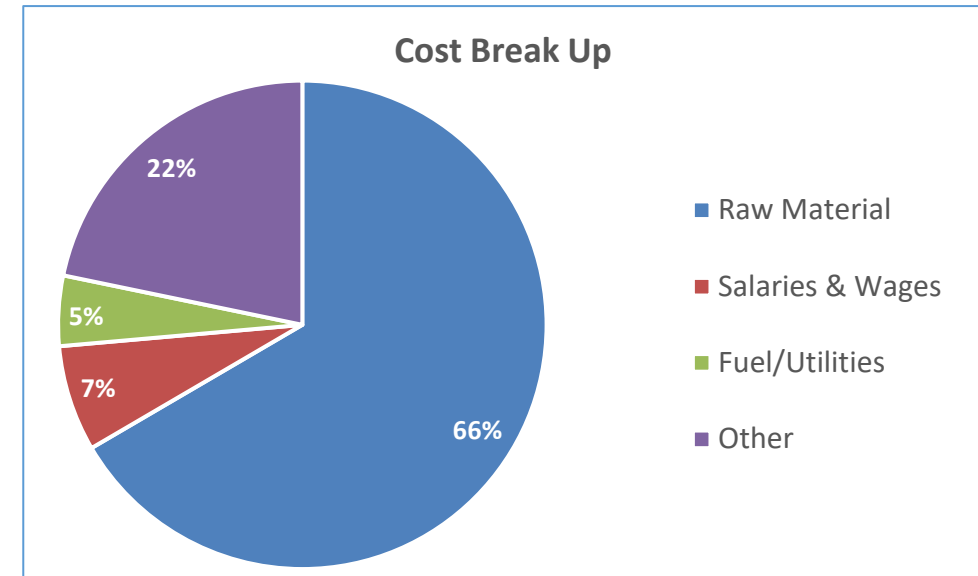
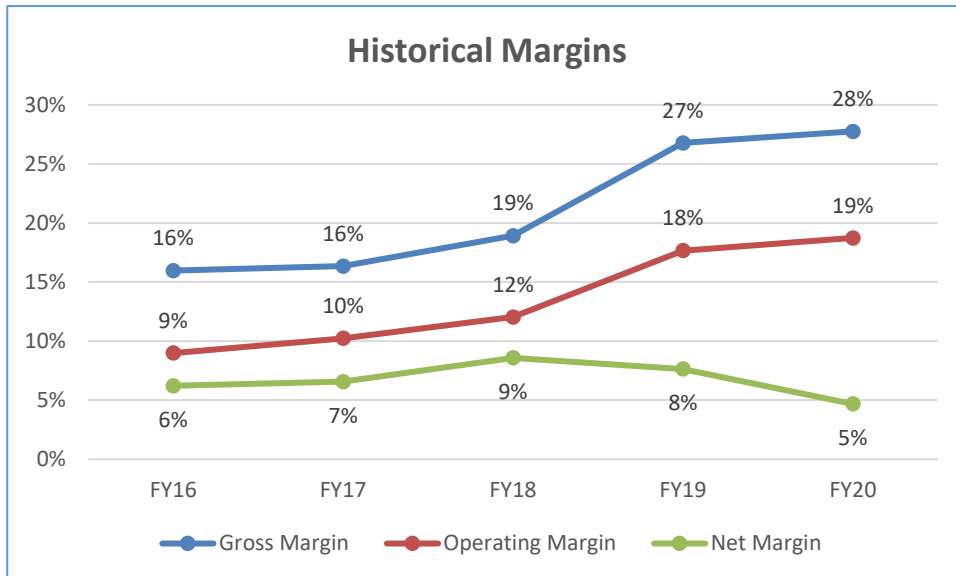


## Business Risk

- 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.
- Meanwhile, the prices of major raw materials, cotton and PVC, that used to manufacture canvas, tents and tarpaulin have been on the rise in recent months due to supply constraints.
- PVC price fell as low as PKR~124/kg in April'20 due to a crash in oil prices amid Covid-19 outbreak. The price has, since then, increased by ~47% till Jan'21 and was recorded at PKR~182/kg. Increase in input prices may negatively impact the margins of the sector players.
- 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 last five years with an overall increasing trend. The most significant increase took place from ~19% in FY18 to ~27% in FY19 due to currency devaluation, which benefits the sector as it is largely export based.
- During FY20, the gross margins remained intact at ~28% as oil prices remained low. However, net margins witnessed a decline, falling from ~8% in FY19 to ~5% in FY20 due to higher finance costs on the back of increase in benchmark rates during the first three quarters.
- Raw materials constitute the largest component within direct costs at ~66%. Prices of raw material are on an increasing trend in recent months due to supply pressures.



## Regulatory Framework

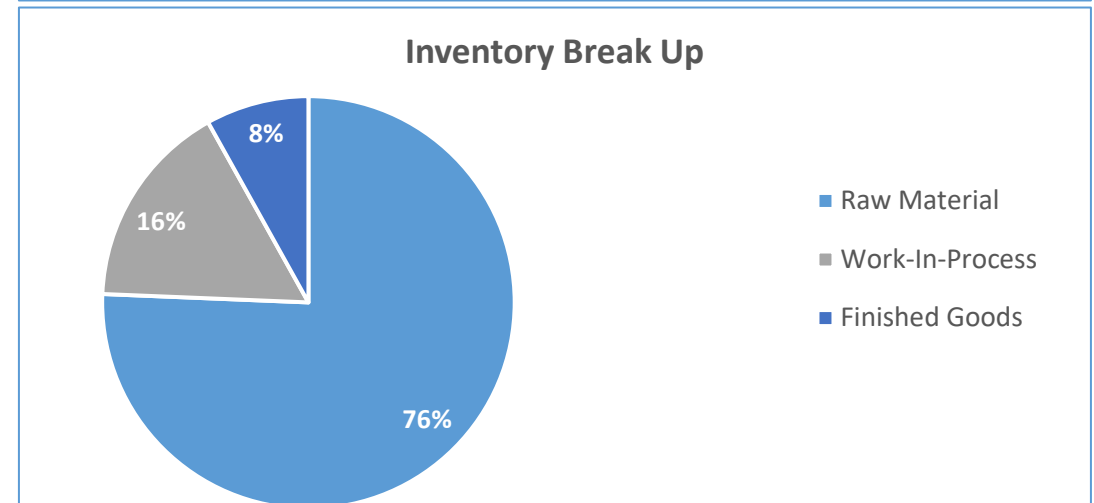
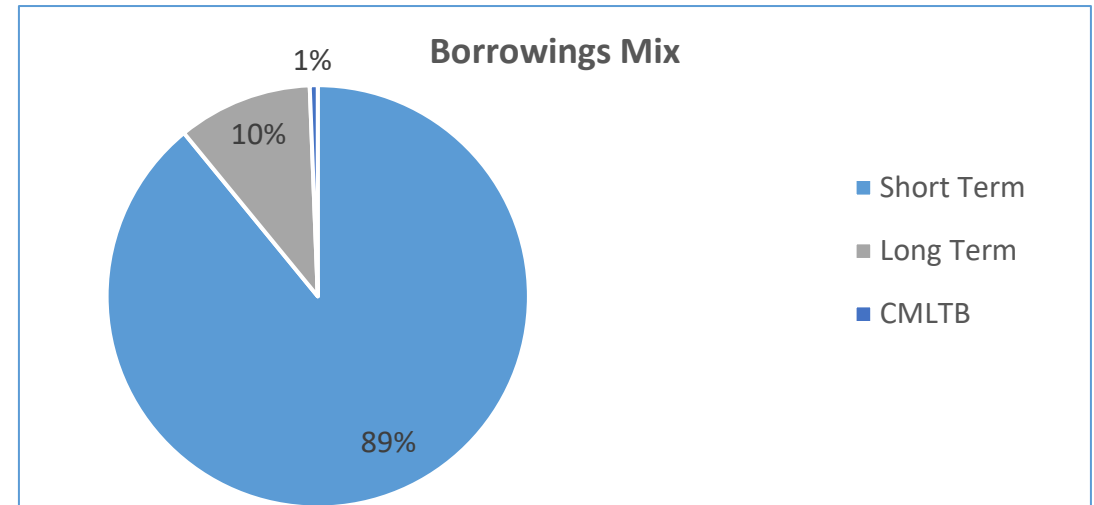
- With respect to Income Tax, the textile industry, including relief segment, is under the Normal Tax Regime (NTR). Further, the sector is also subject to Minimum Tax @ 1.5% of turnover, if tax liability under NTR is lower than minimum tax. However, the additional tax paid under minimum tax is adjustable 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 government recently removed regulatory duty of 5% on the import of yarn till 30th June 2021 through SRO 1352(I)/2020 issued by the Federal Board of Revenue.
- The sector is represented by the Pakistan Canvas and Tents Manufacturers & Exporters Association.

| PCT Code | Description  | Additional Custom Duty |      | Custom Duty |      | Regulatory Duty |      | Total |      |
|----------|--|------------------------|------|-------------|------|-----------------|------|-------|------|
|          |  | FY21                   | FY20 | FY21        | FY20 | FY21            | FY20 | FY21  | FY20 |
| 52.01    | Cotton, not carded or combed   | 0%                     | 0%   | 0%          | 0%   | 3%              | 3%   | 3%    | 3%   |
| 52.03    | Cotton, carded or combed   | 0%                     | 0%   | 0%          | 0%   | 3%              | 3%   | 3%    | 3%   |
| 52.05    | Cotton yarn (other than sewing thread), containing 85% or more by weight of cotton, not put up for retail sale   | 2%                     | 2%   | 11%         | 11%  | 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 | 2%                     | 2%   | 11%         | 11%  | 0%              | 5%   | 13%   | 18%  |
| 52.07    | Cotton Yarn (other than sewing thread) put up for retail sale  | 2%                     | 2%   | 11%         | 11%  | 0%              | 5%   | 13%   | 18%  |
| 39.04    | Polymers of vinyl chloride, in primary forms   | 2%                     | 2%   | 11%         | 11%  | 0%              | 0%   | 13%   | 13%  |
| 63.06    | Tarpaulins and tents (Of textile materials and synthetic fibres)   | 7%                     | 7%   | 20%         | 20%  | 10%             | 10%  | 37%   | 37%  |

## Financial Risk

- The relief sector’s total borrowing stood at approximately PKR~9bln at the end of FY20 as compared to PKR~8.8bln in FY19 (up ~5% YoY).
- The sector’s borrowing is largely dominated by short term borrowings which occupy ~89% of the total borrowing mix. Short term borrowing stood at PKR~20,465mln in FY20 as compared to PKR~20,744mln in FY19. Meanwhile, long term borrowing constitutes ~10% of the total borrowing and stood at PKR~2,510mln during FY20 (FY19: PKR~496mln).
- The sector’s average leveraging stands at ~43%.
- The reduction in policy rate by 625bps is expected to reduce the sector’s finance costs by ~PKR1,436mln.
- The sector’s working capital is largely a function of inventory and trade receivables. The sector’s average net working capital cycle is between 100-110 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.

*Borrowings mix and Inventory breakup are reflective of ~40% of the market.*



## 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 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.
- 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. Exports in 1HFY21 increased significantly by ~65% to stand at PKR~10,214mln as compared to PKR~6,190mln during 1HFY20. In addition, the average export price also increased and during 1HFY21 stood at PKR~443/Kg (USD~2,708/MT) as compared to PKR~404/kg (USD~2,555/MT) in FY20.
- 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.
- However, the industry faces some challenges as the prices of cotton, a major raw material, are rising due to significant decline in local cotton production. The current local price stands at PKR10,800 per maund, an increase of ~18% from the same time last year.
- The State Bank of Pakistan's decision to reduce the policy rate by 625bps is expected to reduce the sector's finance costs by ~PKR1,436mln and negate the pressure on margins due to rising raw material prices.



- Pakistan Bureau of Statistics (PBS)
- State Bank of Pakistan (SBP)
- Federal Board of Revenue (FBR)
- Trade Development Authority of Pakistan (TDAP)
- Pakistan Economic Survey 2019-20
- 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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