



RRI&A

PRELIMINARY ASSESSMENT OF IMPACT OF FLOODs ON SMEs

REPORT

Research, Regulatory Insight & Advocacy Assistance for SMEs (RRI&A)
Small and Medium Enterprises Development Authority (SMEDA)
Ministry of Industries and Production
Government of Pakistan

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CONTENTS

1. Overview	6
2. Methodology	7
3. Key Findings	8
4. District Level Analysis of Impact	9
5. Field Visits	11
6. Survey Results	15
7. Recommendations	22
8. Assumptions & Limitations	25

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OVERVIEW

Recent flood in Pakistan was one of the worst natural disasters in the country's history. More than 33 million people, or 14% of the country's total population has been affected by floods and heavy rains that have hit more than 90 of the 160 districts of the country.

In Pakistan, 90 districts have been declared "calamity-hit." Out of the total 90 districts, 32 belong to Balochistan, 24 Sindh, 17 Khyber Pakhtunkhwa, 9 Gilgit-Baltistan, 5 AJ&K and 3 Punjab.

The effects of the 2022 Flood are broadly analyzed in this study that aims to assess the impact of Floods on SMEs at the provincial and district levels. Analysis has been conducted for economic establishments across 71 districts to estimate direct and indirect losses.

Both secondary data and primary data have been gathered through site visits of Sindh, Khyber Pakhtunkhwa, Balochistan, and Punjab.

Estimates of small and medium-sized enterprises (SMEs) affected by floods across the country and their need for assistance after the disaster are highlighted in the study.

The research has its limitations due to accessibility to flood affected areas and unavailability of updated district level data of economic establishments. However, an attempt has been made, based on sound assumptions, clearly stated in the analysis, to arrive at an estimate of the impact of floods on SMEs.

METHODOLOGY

Secondary data from multiple provincial and national sources forms the basis of the district-level analysis of SMEs affected by the 2022 Floods.

According to the National Disaster Management Authority (NDMA), 90 districts across four provinces have been affected; however, due to a lack of data, only 71 districts are included in this analysis. In order to assess and estimate the number of SMEs affected by flood, inundated area in a district and flood affected population have been taken into account.

A growth rate of the number of SMEs was calculated from 1988 to 2005 and applied to 2005 statistics to estimate the number of current economic establishments in 2022 at district level (*using available data of affected districts across Pakistan and applying averages in case of unavailable data*). The number of affected SMEs has been determined using both population and geographic approaches.

In addition, a field survey in the month of October 2022 was conducted to collect primary data from affected SMEs in severely affected districts, to assess the loss that flood had caused and direct input from SMEs who had suffered due to the floods was solicited. This was augmented through field observation, discussion with Chambers of Commerce & Industry and Trade Associations. The research team travelled to the districts/cities of Dadu and Mirpurkhas (Sindh), Swat, Nowshera, Madyan & Bahrain, (Khyber Pakhtunkhwa), Quetta (Balochistan), Rajanpur and D.G. Khan (Punjab). Two hundred and forty-two (242) responses from individual economic establishments were considered to be complete and were included in the analysis. Their data has been utilized to assess and estimate losses.

The field evaluation highlights the extent of flood losses to SMEs in aforementioned districts and the support they require for rehabilitation.

KEY FINDINGS

**197,658**

Economic Establishments
Affected by Floods (As per
district level data analysis)

**US\$ 5.3 Billion**

Estimated Loss of Economic Establishments
that have been affected by Floods

Loss of Economic Establishments
is in terms of building/premises,
equipment, and inventory/stock.

1

242

Respondent Economic
Establishments

2

54%

Decrease in number of
Employees of
Respondents

3

PKR**27.6 Million**

Estimated Average Sales
Turnover of Respondent

4

25%

Respondent Eco.
Establishments
Completely
Destroyed

5

**PKR 1.4
Billion**

Estimated Damage
Reported by
Surveyed SMEs

6

PKR**1.3 Billion**

Estimated Annual Sales
Turnover Loss @20% of
Surveyed SMEs

7

86%

Surveyed SMEs
Demanded Subsidized
Provision of Specific
Products, Inputs or Services

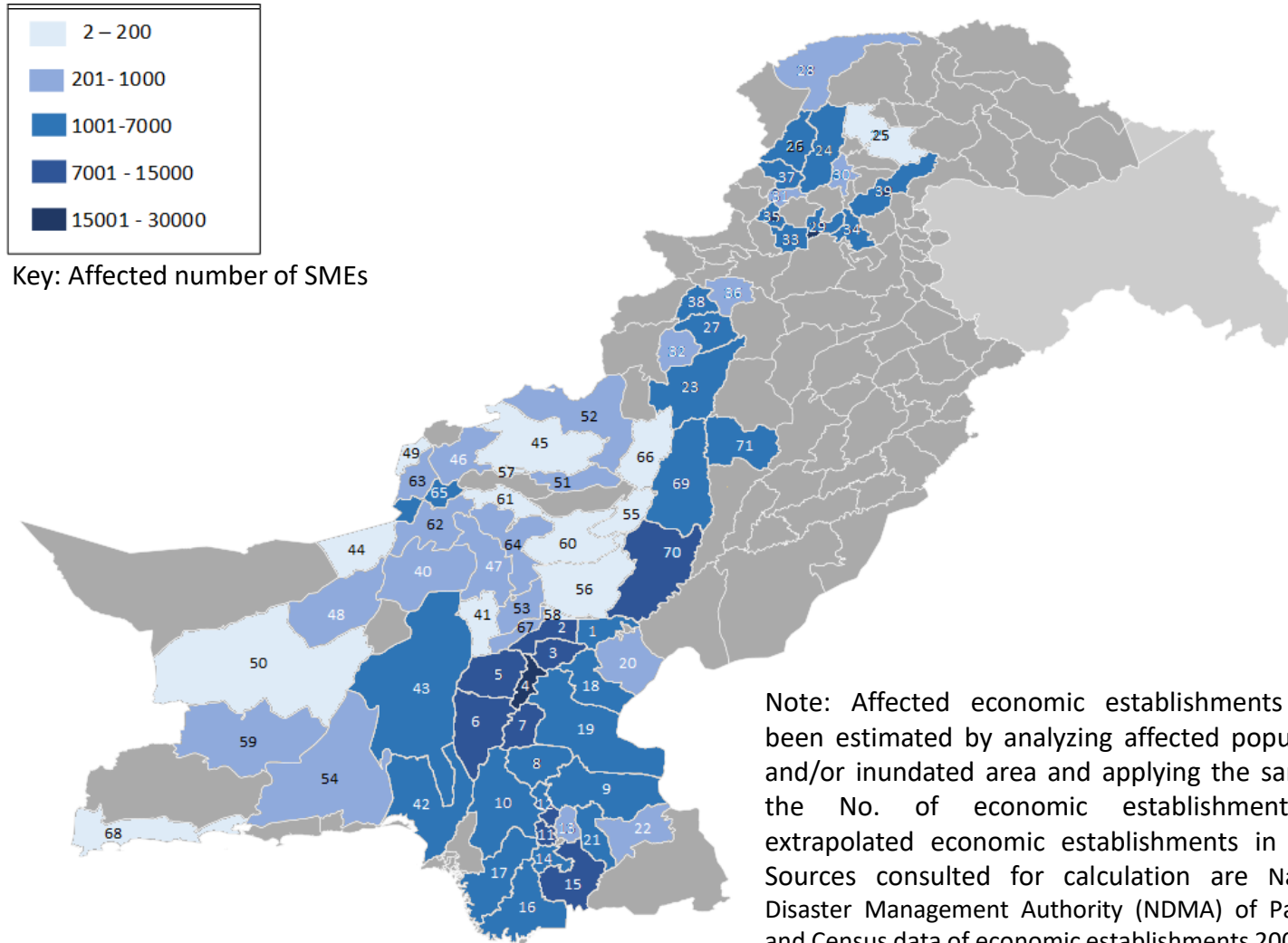
8

57%

Surveyed SMEs
Demanded Access
to New Loans

Note: Affected SMEs means the economic establishments that were directly and indirectly affected by floods. This includes disruption in supply chain, loss of customers, electricity disruption, roads, bridges and other transport network disruption

POPULATION OF SMES AFFECTED BY FLOODS AT DISTRICT LEVEL



Note: Affected economic establishments have been estimated by analyzing affected population and/or inundated area and applying the same to the No. of economic establishments of extrapolated economic establishments in 2022. Sources consulted for calculation are National Disaster Management Authority (NDMA) of Pakistan and Census data of economic establishments 2005

Source: SMEDA

Sindh	Khyber Pakhtunkhwa	Balochistan	Punjab
1 Kashmore	Dera Ismail	40 Kalat	69 Rajanpur
2 Jacobabad	23 Khan	41 Jhal Magsi	70 D.G Khan
3 Shikarpur	24 Swat	42 Las Bela	71 Layyah
4 Larkana	25 Kohistan	43 Khuzdar	
Kamber	26 Upper Dir	44 Nushki	
5 Shahdadt	Lakki	45 Qilla Saifullah	
6 Dadu	27 Marwat	46 Pishin	
Naushahro	28 Chitral	47 Kachhi	
7 Feroze	29 Swabi	48 Kharan	
Shaheed	30 Shangla	49 Chaman	
8 Benazirabad	31 Malakand	50 Washik	
9 Sanghar	32 Tank	51 Loralai	
10 Jamshoro	33 Nowshera	52 Zhob	
11 Hyderabad	34 Haripur	53 Nasirabad	
12 Matiari	35 Charsadda	54 Awaran	
Tando Allah	36 Karak	55 Barkhan	
13 Yar	37 Lower Dir	56 Dera Bugti	
Tando	38 Bannu	57 Ziarat	
Muhammad	39 Mansehra	58 Sohbatpur	
14 Khan		59 Panjgur	
15 Badin		60 Kohlu	
16 Sujawal		61 Harnai	
17 Thatta		62 Mastung	
18 Sukkur		63 Qilla Abdullah	
19 Khairpur		64 Sibi	
20 Ghotki		65 Quetta	
21 Mirpurkhas		66 Musakhel	
22 Umerkot		67 Jaffarabad	
		68 Gwadar	

ESTIMATED NUMBER OF ECONOMIC ESTABLISHMENTS, LOSS, AND GEOGRAPHICAL DISTRIBUTION

Estimated Number of SMEs Affected by Flood at District Level

Khyber Pakhtunkhwa	24,774 (Districts – 17)
Sindh	144,289 (Districts – 22)
Punjab	15,582 (Districts – 03)
Balochistan	13,013 (Districts – 29)



PKR 6 Million

Average loss per economic establishment *(Based on surveyed enterprises)*



197,658

Total economic establishments affected by Floods



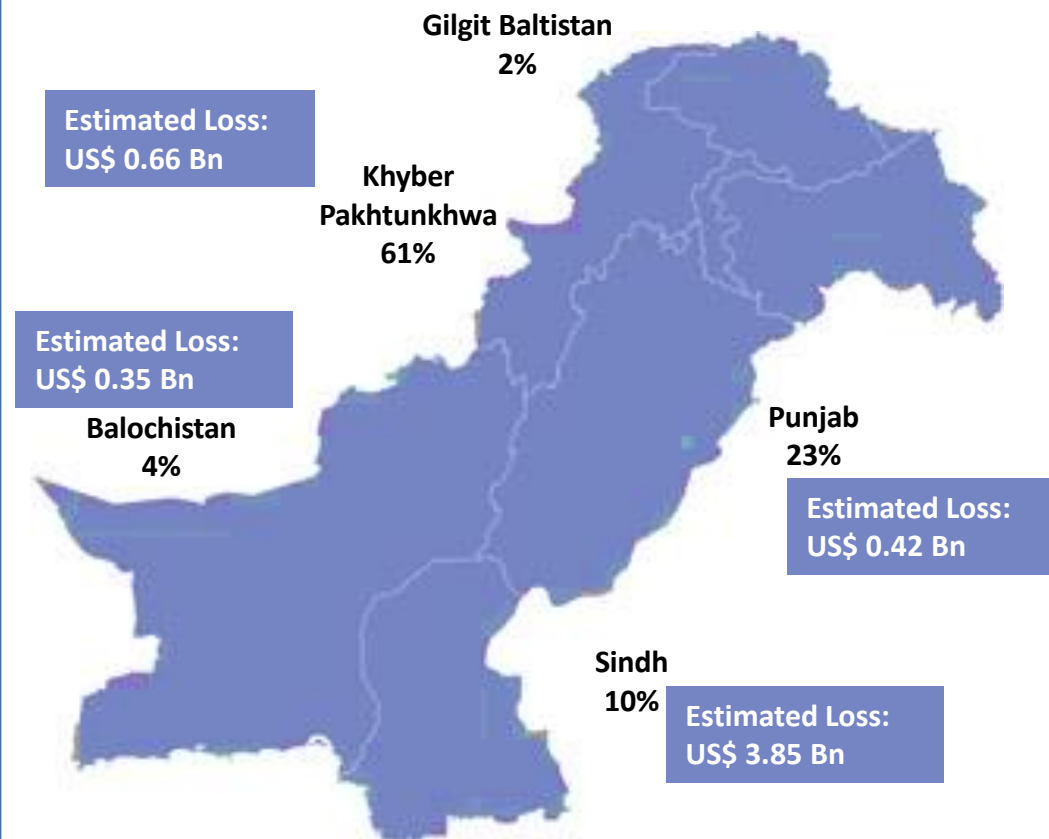
US\$ 5.3 Billion*

Estimated loss of economic establishments that have been affected by Floods

* As per SME definition, majority of economic establishments surveyed fall in the Small Enterprise category. Hence the estimate of loss pertains to small enterprises. This is further corroborated by the fact that the districts affected by floods largely constituted agriculture, livestock and services. Loss calculation is based on the stated estimate of loss by the respondent. This figure of US\$ 5.3 billion is fairly low in terms of estimated losses since other losses such as supply chain disruption or customer losses, etc. have not been taken into account

Note: The number of affected economic establishments is based on district level analysis of area inundated, population affected, and other data sources such as Census of Economic Establishments (2005). Extrapolated data of SMEs has been used to calculate the population per SME at District level.

Geographical Distribution of Surveyed SMEs & Loss



Total Respondents (Pakistan) - 242

FIELD VISIT - SINDH

The following severely affected areas of Sindh (Taluka / Tehsil of districts) were surveyed, in order to assess the impact of flood on SMEs in terms of damage and loss;

- District Dadu, Johi, Khairpur Nathan Shah and Mehar
- District Mirpurkhas, Jhudu and adjacent areas

The sectors that have been affected are cattle farming, wheat and sugar cane farming, dairy & livestock and related activities, and retail stores which are the main source of livelihood in these areas. Most of the businesses in these areas reported heavy losses.

Furthermore, established economic units have also been affected severely due to infrastructure damages and logistics problems as well as disruption in supply of inputs for the manufacturing, agriculture and services sectors. SMEs reported that they operate on credit and have suffered a lot due to floods as now they are not in a position to make their debt payments.

The economic losses are very hard to estimate since most of the businesses in these areas are a part of the informal economy. Business communities and the members of Chambers of commerce expressed their concerns about the alarming situation of food insecurity, unemployment and business rehabilitation. The businesses have demanded access to new loans on low interest rate to resume operations and subsidized provision of specific products, inputs or services.



FIELD VISIT - PUNJAB

Data of flood affected SMEs was gathered from the areas of Punjab through survey and in-person meetings with the representatives of the following's districts/towns/cities:

- DG Khan, Choti Bala, Choti Zaren, Rajanpur, Fazalpur and Taunsa Sharif

Majority of the SMEs that were surveyed in these areas reported loss of transport related livelihood, assets, irrigation infrastructure, agriculture related tools and machinery, handicraft supplies, sewing machines, grain mills, non-agricultural tools/machinery, stock and shops.

Severe damage to roads from farm-to-market as well as blockages/damages to highways is not only disrupting the access to markets for small households but also the availability of fodder/feedstock in Choti Bala and Choti Zareen.

Small and Medium sized businesses affected from the flood need assistance with utility bill payments and reduced financing costs in order to restart/rehabilitate business.



FIELD VISIT - BALOCHISTAN

Information regarding the flood affected SMEs was gathered through survey and in-person meetings with the representatives of the following in Balochistan province;

- Key sectors in the Quetta Chamber of Commerce & Industry
- Quetta Chamber of Small Industry & Trade

Agriculture, Livestock and Transportation Industries are a vital source of income and food for many communities in the region. SMEs apprised that businesses have been adversely affected in Nasirabad, Jaffaerabad, and Sohbatpur.

Members of Quetta Chamber of Commerce & Industries and small industry and trade proposed that the government may provide incentives towards the purchase of solar panels for farmers, as solar energy is the primary source of electricity in agricultural areas.

SMEs in Balochistan demanded access to new loans and rental support.



FIELD VISIT – KHYBER PAKHTUNKHWA

In Khyber Pakhtunkhwa, the following areas were covered for survey and in person meetings;

- Nowshetra, Madyan, Bahrain, Swat Districts

Information was gathered through the representatives and focus group discussion with;

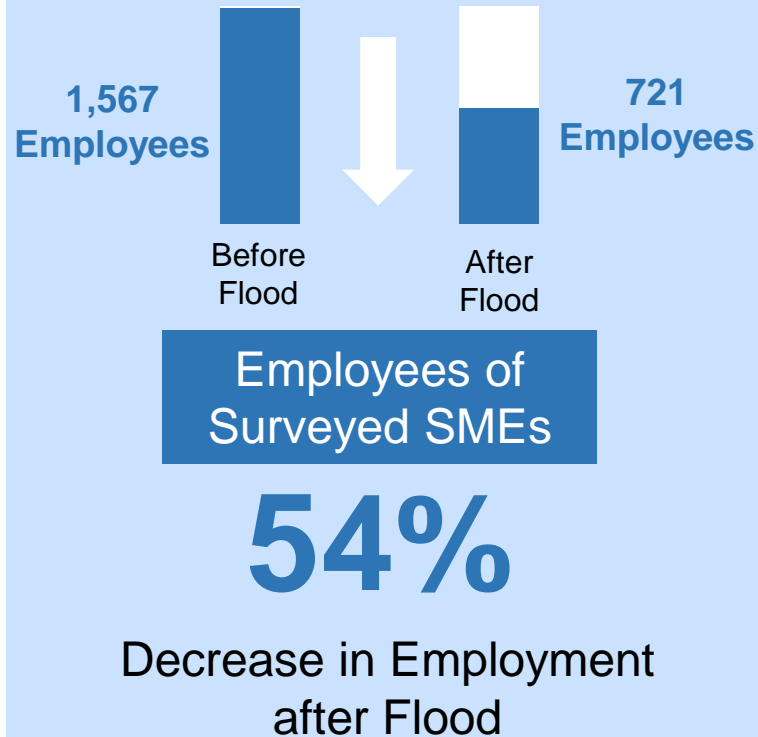
- Members of Swat Chamber
- Hotel owners, retailers, traders, fish farmers
- Trout Association members
- Leaders of Bahrain and Madyan markets

SMEs located near Kabul River especially in Dhobi Ghat area were severely affected by the floods. Small businesses that were dealing in auto parts, tile manufacturing, bird selling, and general stores have been affected severely. Majority of the SMEs in Madyan Bazar were affected that were associated with retail, restaurants, hotels, handicrafts and steel door manufacturers. In Bahrain, hotel industry has suffered a massive loss. Overall, flood in these areas destroyed businesses, telecom lines and roads infrastructure.

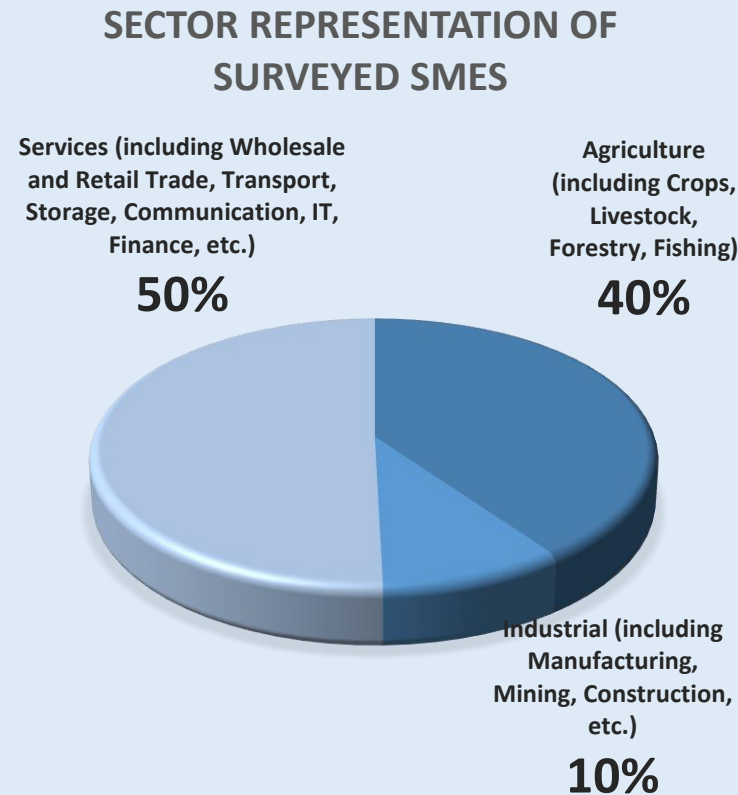
Majority of the SMEs in these areas reported that they have started business rehabilitation and revival activities by utilizing their existing resources and savings. SMEs also highlighted that in view of the recent losses, the government has imposed a ban on reconstruction activities near the riverside, to minimize future losses. The surveyed SMEs require support from the government in the form of new loans, cash transfers and subsidized provision of products, inputs or services.



SURVEY RESULTS - EMPLOYMENT, SECTOR REPRESENTATION AND SALES TURNOVER



Employees of 242 respondents have decreased from 1,567 to 721 employees after flood, which is a decrease of 54%.



50% of respondents are from the Services sector while 40% belong to the Agriculture sector and 10% from Industrial sector.

PKR 27.6 Million
Average Annual Sales Turnover per SME



The average monthly sales turnover of surveyed economic establishments is PKR 2.3 Million and the annual sales turnover is PKR 27.6 Million.

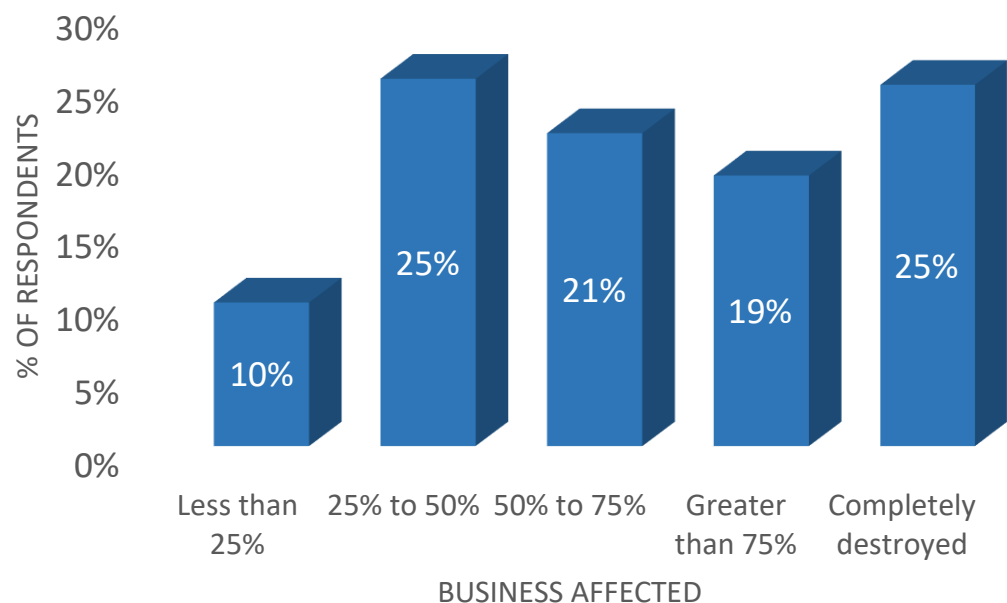
TYPE OF ECONOMIC ESTABLISHMENTS (RESPONDENTS)

Livestock	Catering Services	Auto Parts
Meat Shop	Flour Mill	Coffee & Tea Shop
Construction	Concrete Production	Cotton Ginning
Wood Work	Fishing	Hotels & Restaurants
Cotton, Rice & Wheat Grower	Marble Cutting	Dairy



BUSINESSES AFFECTED AND LOSS REPORTED BY SURVEYED SMEs

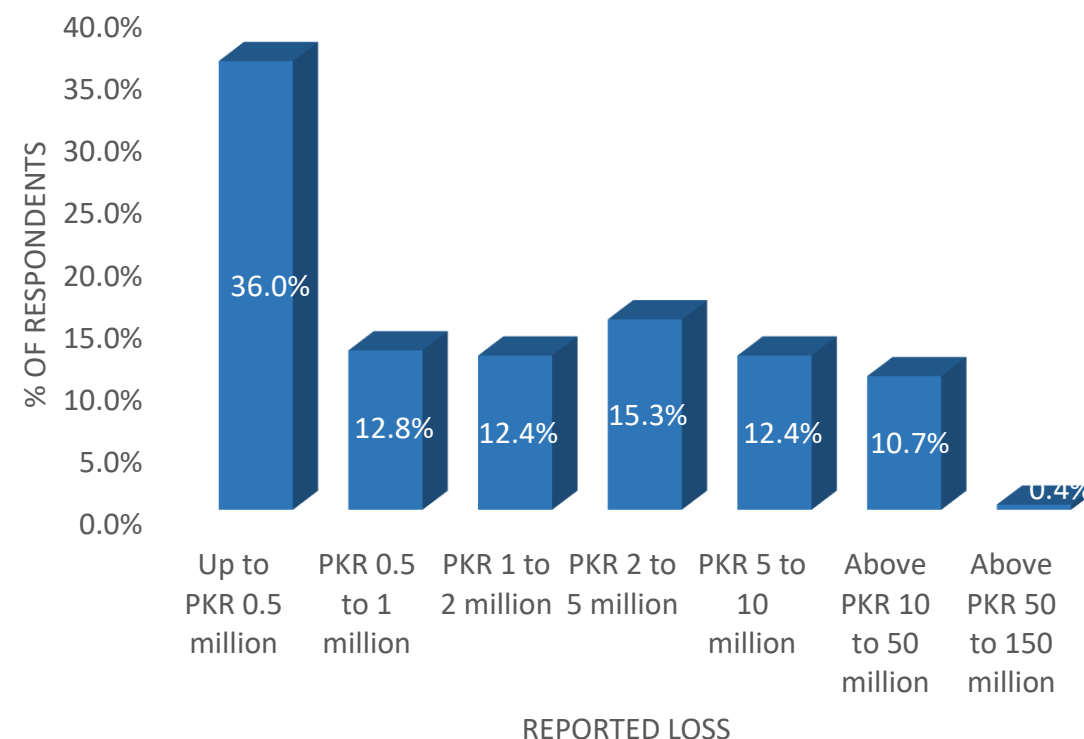
Business Affected



25% of the respondents reported that their business was completely destroyed by the flood.

Note: Affected does not only mean direct impact. It means that an economic establishments may be affected indirectly due to infrastructure damage, supply chain disruption, loss of customers, etc.

Loss (Reported by Surveyed SMEs)



Estimated total loss reported by the respondents amounts to PKR 1.4 billion while the average loss per enterprise is PKR 6 million. 36% have reported a damage of up to PKR 0.5 Million.



SURVEYED SMEs LOSS

Overall Loss (Estimate based
on Reported Loss)

PKR 1.4 Billion



Annual Sales Turnover

Loss @20% (Estimate based on
Loss of records, supply chain disruption,
impact due destruction of roads, bridges, and
other infrastructure)

PKR 1.3 Billion

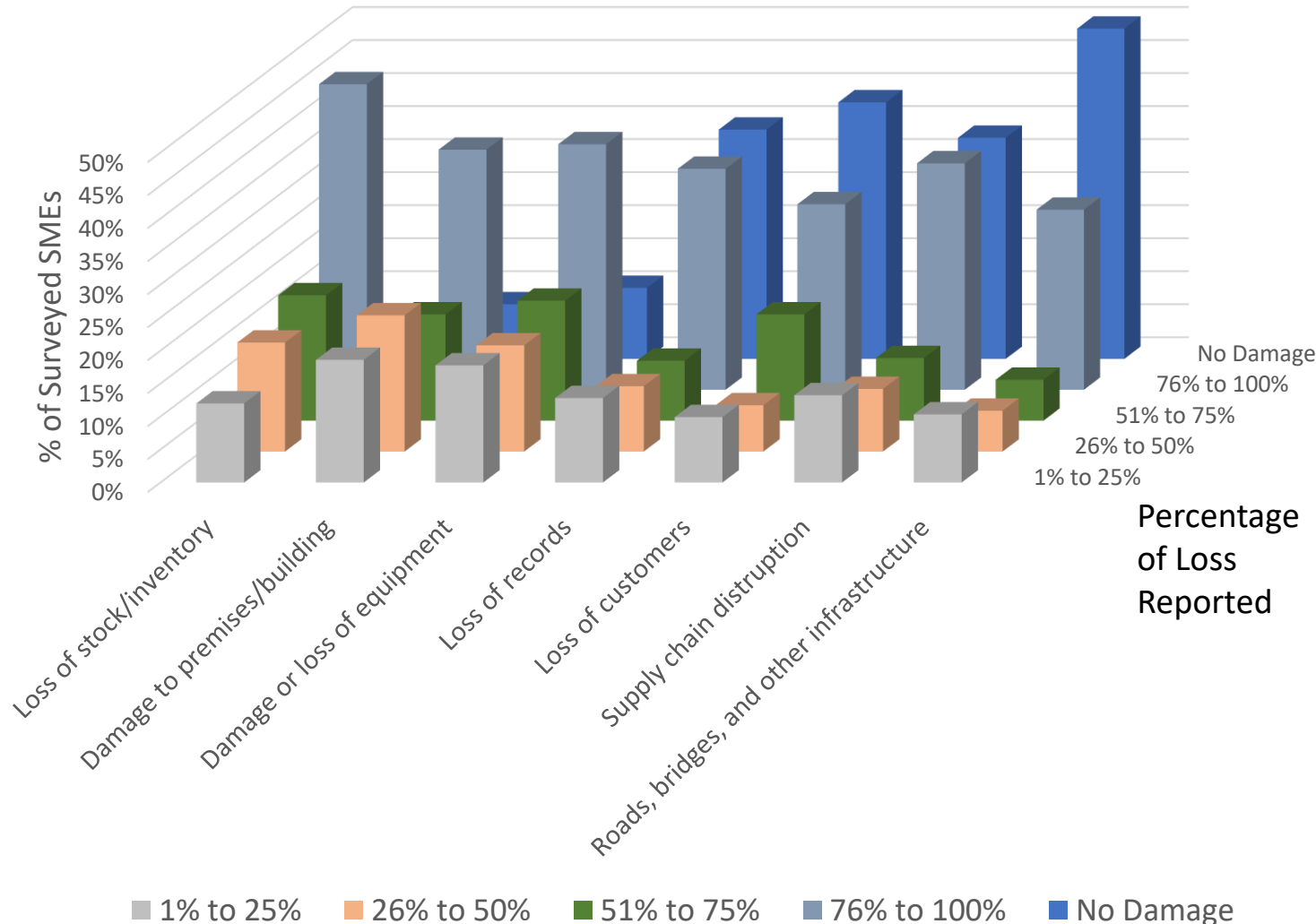


Customer Loss

Customers may shift loyalty



LOSS OF SMEs IN TERMS OF STOCK, BUILDING, EQUIPMENT, RECORDS, etc.



Respondents have suffered loss in terms of stock/inventory, premises/building, equipment, records, customers, supply chain disruption and due to destruction of roads, bridges and other infrastructure. Multiple responses were recorded.

- 46% reported more than 75% loss of stock/inventory
- 36% reported a damage of more than 75% to their premises/building
- 37% reported equipment loss of greater than 75%
- 33% reported a loss of more than 75% to their records, while 35% have reported no damage
- 28% of surveyed SMEs reported a loss of more than 75% of their customers while 39% have reported no loss.
- 34% reported disruption in supply chain of more than 75%
- 27% of the surveyed SMEs reported a damage of more than 75% to roads, bridges, and other infrastructure in their area

SUPPORT DEMANDED BY RESPONDENTS

Financial Support Demanded

1



57%

Respondents
Demanded

**Access to New
Loans**

2

43%

Demanded
Reduced
Financing Costs



3

40%

Respondents
Demanded



**Cash
Transfers,
etc.**

Other Support Demanded

1

86%

Demanded Subsidized
Provision of Specific
Products, Inputs or Services

2



48%

Demanded

Infrastructure Support

3

41%

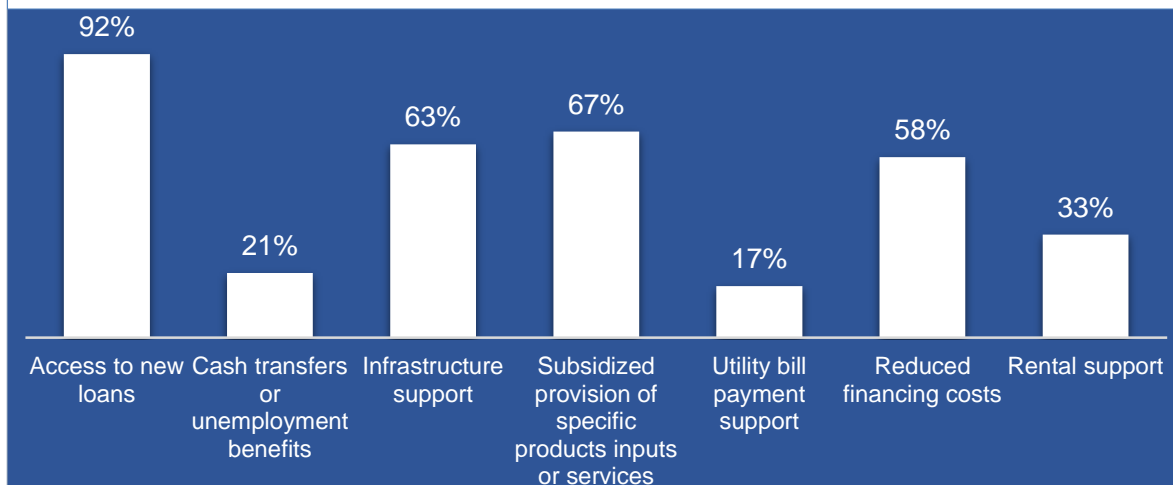
Demanded
Utility Bill
Payment Support



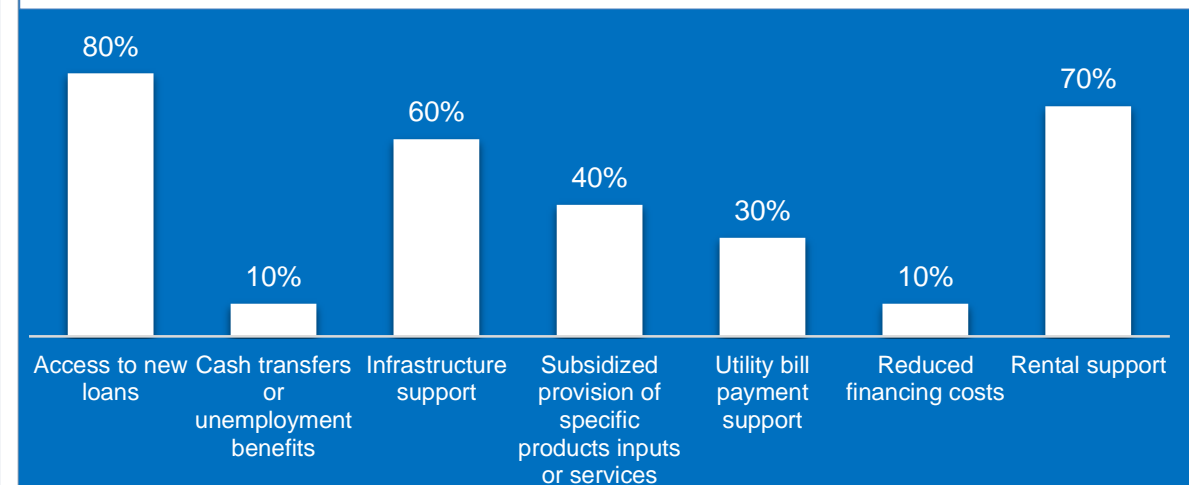


SUPPORT DEMANDED BY RESPONDENTS (BY PROVINCE)

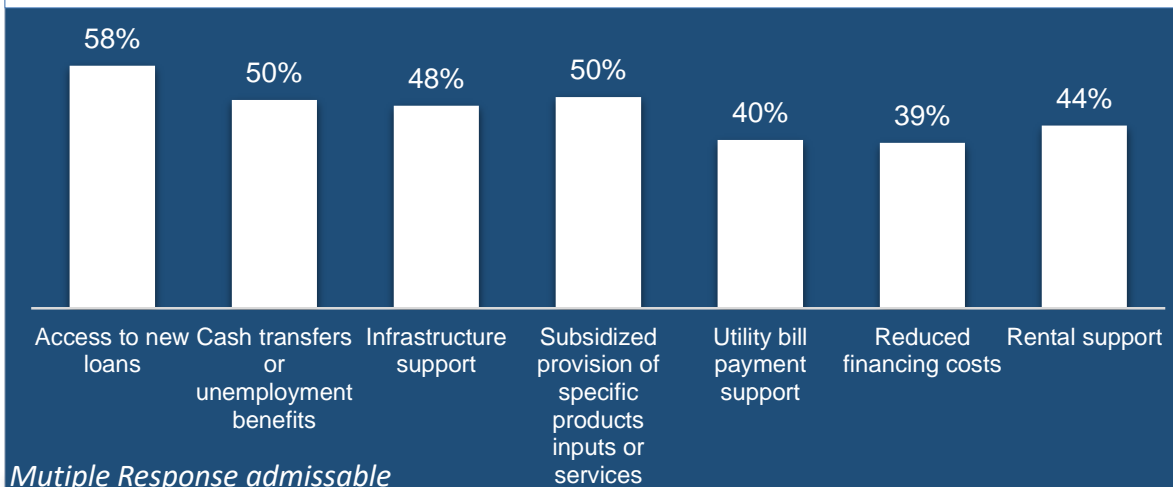
Sindh



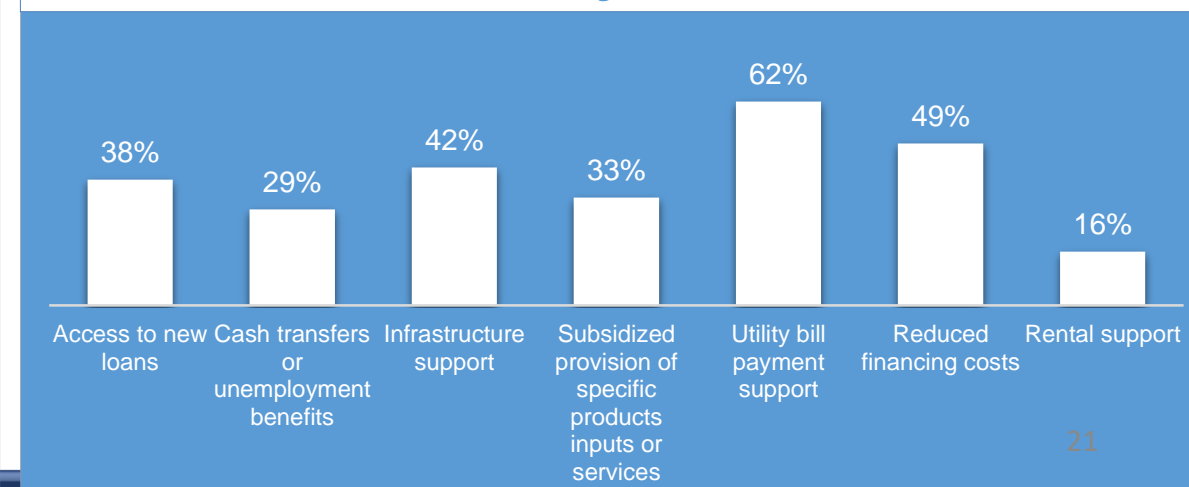
Balochistan



Khyber Pakhtunkhwa



Punjab



Mutiple Response admissable

AGRICULTURE SECTOR RECOMMENDATIONS (BASED ON SURVEY RESULTS)

KEY AREAS	PRIORITY OF SMEs	ACTION REQUIRED
FINANCIAL SUPPORT	1 st	<ul style="list-style-type: none">• Provision of financial support to farmers through creation of a new loan category (a markup subsidy to affected SMEs for obtaining loans).
INFRASTRUCTURE SUPPORT	2 nd	<ul style="list-style-type: none">• Development of a plan to engage local workforce on market wages for rehabilitation activities, construction of infrastructure, cleanup of contaminated sites, removal of silt and operationalization of canals for timely water supply for the coming season.• E-market platform support for agriculture sector.
SUBSIDIZED PROVISION OF SPECIFIC PRODUCTS, INPUTS OR SERVICES	3 rd	<ul style="list-style-type: none">• Subsidy for provision of inputs including fertilizers, seeds, pesticides and for different seasons to farmers that are operating at a small and medium level• Subsidy of livestock related support and facilitation in farm rehabilitation and replantation.

SERVICES SECTOR RECOMMENDATIONS (BASED ON SURVEY RESULTS)

KEY AREAS	PRIORITY OF SMEs	ACTION REQUIRED
FINANCIAL SUPPORT	1 st	<ul style="list-style-type: none">• Provision of financing on low interest rate to resume/ restart operations, wherever there has been damage to the building.• Financing scheme on a risk-sharing model for provision of loans to the affected SMEs.• Provision of direct cash transfers to small businesses in order to enable them to resume their business operations.
UTILITY BILL PAYMENT SUPPORT	2 nd	<ul style="list-style-type: none">• Launch of a Utility bill / electricity support payment package similar to the one during COVID-19.
RENTAL SUPPORT	3 rd	<ul style="list-style-type: none">• Development of a plan to identify businesses that have suffered due to damage to their buildings and provision of direct rental support package.• Provision of support for reconstruction of damaged buildings/ premises.

INDUSTRIAL SECTOR RECOMMENDATIONS (BASED ON SURVEY RESULTS)

KEY AREAS	PRIORITY OF SMEs	ACTION REQUIRED
UTILITY BILL PAYMENT SUPPORT	1 st	<ul style="list-style-type: none">• Launch of a Utility bill payment / electricity support payment package like the one during COVID-19.
FINANCIAL SUPPORT	2 nd	<ul style="list-style-type: none">• Increase public and concessional finance and remove regulatory barriers to private sector finance for flood affected SMEs.• A separate loan category for flood affected SMEs may be launched with low interest rates.
INFRASTRUCTURE SUPPORT	3 rd	<ul style="list-style-type: none">• A survey may be conducted to assess the damage to key routes that connect SMEs to markets and those route should be re-built on priority.

ASSUMPTIONS AND LIMITATIONS OF THE STUDY

Definitions:

- Loss of Economic Establishments is in terms of building/premises, equipment, and inventory/stock.
- Affected SMEs means the economic establishments that were directly and indirectly affected by floods. This includes disruption in supply chain, loss of customers, electricity disruption, roads, bridges and other transport network disruption.

Assumptions:

- In order to calculate the number of SMEs at district level, a growth rate was calculated from 1988 to 2005 of economic establishments and applied to 2005 statistics to estimate the number of current economic establishments in 2022 at district level (*using available data of affected districts across Pakistan and applying averages in case of unavailable data*).
- The total number of affected SMEs at district level has been calculated by applying the ratio of area inundated to total area in case of Sindh and per capita SME ratio to the total number of SMEs in case of Balochistan, Punjab and Khyber Pakhtunkhwa.
- For total loss calculation, the average loss of surveyed SMEs has been applied on the total number of SMEs that have been affected by the recent Floods.
- Overall loss estimate is based on the reported loss, and it is a conservative figure since it does not include loss of future revenue, and loss due to other issues such as supply chain disruption and loss of customers, etc.

Limitations of the Study:

- Sampling: The economic establishments that were surveyed were randomly selected in collaboration with chambers of commerce, trade associations and SMEDA's regional offices in severely affected districts across Pakistan.
- The research has its limitations due to accessibility to flood affected areas and unavailability of updated district level data of economic establishments.

Research, Regulatory Insight and Advocacy Assistance for SMEs (RRI&A)
Policy & Planning Division
SMEDA



Turn Potential into Profit!

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