







Acknowledgements

The Government of Pakistan and the United Nations Development Programme (UNDP) have jointly developed Pakistan's first ever SDG Investor Map. The report's production and publication has been undertaken by GoP-UNDP SDG Investments and Climate Financing Facility. Additionally, UNDP's Regional Bureau of Asia and the Pacific and Sustainable Finance Hub have provided technical assistance and advice for developing this report. The process has been guided by feedback of the federal and provincial government agencies and private sector during consultative sessions. The process also entailed an extensive consultation with more than 300 participants spread across the country and hailing from all provincial governments, private sector, and internal development organisations.

Copyright © 2023

United Nations Development Programme, Pakistan 4th Floor, Serena Business Complex, Khayaban-e-Suharwardy, Sector G-5/1, Islamabad, Pakistan All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by means, electronic, mechanical, photocopying, recording or otherwise, without prior permission.

Disclaimer: The views expressed in this publication are those of the authors and do not necessarily represent those of the United Nations, including the UNDP or the UN Member States. The UNDP has the copyrights to all images and visuals used in the report.

©UNDP Pakistan/Shuja Hakim

For contributions and feedback, please email us at: pak.communications@undp.org

Designed by Human Design Studios



Message from Honourable Foreign Minister of Pakistan

Pakistan's Foreign office remains committed to enhancing cooperation and strategic partnerships to promote economic prosperity in Pakistan. For this pursuit, this first ever SDG Investor Map showcases Pakistan's SDG-aligned investment potential and propositions to its partners to invest, co-invest and contribute towards the economic development of the country. This unique proposition not only demonstrates Pakistan's commitment to Agenda 2030 but also highlights bankable investment opportunity areas which, if prioritized, can lead to a reduced trade deficit; gradual transition to alternate and renewable energy; sustainable production and consumption patterns; robust infrastructure; and enhanced food security.

To this end, the Government of Pakistan is working towards attracting foreign direct investment, and technology transfer through international partners for high-quality development and improvements in peoples' well-being and delivering greater benefits to local communities. I encourage our international partners to further strengthen their economic and development investments in Pakistan leveraging the insights presented in this report.

I am pleased that UNDP has provided technical assistance in developing this SDG Investor Map Report 2023 on the request of the Foreign Office. This is an outcome of Pakistan's first ever SDG Investment Report 2021 launched at the Foreign Office in January 2022 and subsequent SDG Investment portfolio presentations of US\$ 2 billion at UNDESA's SDG Investment Fairs in April and September 2021.

Once again, this April, from the platform of UNDESA under ECOSOC, the Government of Pakistan presented a blended financing value propositions worth US\$ 2.84 billion portfolio and launched Pakistan's SDG Investor Map 2023 which highlights investment opportunities aligned with the country's policy priorities for economic and social dividends in the sectors of food and beverages, transport, renewable and alternate energy, healthcare, infrastructure, consumer goods, and services. I applaud UNDP in adopting a 'whole of government' approach in developing this SDG-aligned Investor Map. I am also grateful to ECOSOC for giving Pakistan an opportunity to present its investment portfolio on the global stage.

The multifaceted economic challenges and climate-induced disasters like floods of 2022 have regressed the momentum in reducing poverty and enhancing human development. I am certain that the findings of the report can contribute to uplifting Pakistan's economy from the recent crisis to achieve progress towards Agenda 2030 while leaving no one behind, which remains a top national priority. I look forward to seeing conversion of the report findings into multibillion transactions to position the country on global and regional platforms for partnerships and economic diplomacy.

99

H.E. Bilawal Bhutto Zardari



Message from Resident Representative, UNDP Pakistan

akistan, today, is at a crossroads, vying to expand engagements and opportunities in global markets while addressing the woes of economic vulnerability, climate change, and structural inequalities and disparities. This has been especially evident in light of the catastrophic impact of the 2022 floods, which inundated more than a third of the country, have costed billions of dollars in loss and damage, and plunged even more people into poverty. Progress toward achieving the Sustainable Development Goals (SDGs) is at serious risk with seven years to go.

-66-

The IMF estimates that Pakistan's annual financing gap for the SDGs is at \$3.72 billion for 2020-2030. At the same time, financing climate action -- including mitigation and adaptation measures -- requires large investments. The Government of Pakistan, in its updated Nationally Determined Contributions, estimates that \$7 billion to \$14 billion must be raised for climate adaptation in the country.

In this context of competing pressures and uncertainties, it is critical to continue bridging the gap between Pakistan's development needs, government policy priorities, and market opportunities. The Pakistan SDG Investor Map aims to do exactly that. It follows 32 countries that have successfully launched their own Maps to attract foreign and domestic investment. It is the second in South Asia after Sri Lanka and India. It lays out viable pipelines and market intelligence for investment opportunities that preserve and accelerate sustainable growth and SDG achievement in Pakistan.

This report was made possible through the joint vision and support of the Ministry of Foreign Affairs; the Permanent Mission of Pakistan to the United Nations in New York; the Economic Affairs Division; the Finance Division; the Planning, Development & Special Initiatives Ministry; and the Board of Investment, along with other federal and provincial/regional public and private sector entities. I would like to acknowledge the efforts made for this report by the Government of Pakistan and UNDP Pakistan's jointly established SDG Investments and Climate Financing Facility, an innovative effort also guided and supported by UNDP's Regional Bureau of Asia and the Pacific, and the Sustainable Finance Hub.

With this report, we aim to position Pakistan as a market ready for investment, with the means to make better decisions, increase financing towards the SDGs through meaningful innovative partnerships. This will help us fulfil the promise of Agenda 2030 in Pakistan and ensure we Leave No One Behind.

99

Dr. Samuel Rizk



Message from Pakistan Permanent Representative to the United Nations in New York

-66----

he Ministry of Foreign Affairs, the Board of Investment and other stakeholders with the support of UNDP, undertook an initiative for a Project Preparation facility and we launched the Pakistan SDG Investment Report titled 'Leveraging Private Investment for Pakistan's Sustainable Development'. The report identified the investment ready sectors such as climate change, energy, health, education, infrastructure, information technology and mapped out flexible investment opportunities for investors. The continuation of these efforts announces that with the core support of UNDP, we have developed Pakistan's first ever SDG Investor Map. I would express appreciation to Pakistan SDG Investments and Climate Finance Facility set up jointly by Finance Ministry and UNDP, and I hope this close collaboration will continue to leverage high impact SDG-aligned and climate financing value propositions to attract investments.

99

Ambassador Munir Akram



Message from Secretary, Finance Division, Ministry of Finance

akistan's first ever SDG Investor Map presents a unique case to encourage private sector participation in SDG-aligned clean, green, and bankable investment opportunities in priority sectors. If tapped correctly, Pakistan can address its socio-economic challenges including recovering from COVID-19, floods 2022, and external shocks. The Map can make significant contributions to spur private sector investment, mobilise global private capital towards SDG-aligned investments, and contribute towards the financial ecosystem of the country.

99

Imdad Ullah Bosal



Message from Secretary, Economic Affairs Division, Ministry of Economic Affairs

he SDG Investor's Map is a comprehensive compilation of investment opportunities, within priority sectors, to attract investment in the SDG related sectors in Pakistan. In current scenario, with internal challenges of meeting the Resilient Recovery, Rehabilitation, and Reconstruction Framework 4RF (prepared in wake of Floods 2022) requirements and other climate change related challenges, it is very important for Pakistan to avail innovative financial tools, that can generate long-term socio - economic returns, for sustainable development. Using Innovative Climate Financing techniques is the way forward for Pakistan, being amongst the most highly vulnerable countries in the world. Although meeting SDGs targets, with a growing population, presents many challenges, yet, it is imperative to meet these goals for a resilient future for the benefit of the people of Pakistan, through coordinated efforts.

-66-

99

Dr. Kazim Niaz



Message from Secretary, Ministry of Planning, Development & Special Initiatives

he catastrophic floods of 2022 in Pakistan resulted in damage and loss amounting to USD 30.1 Billion and total recovery and reconstruction needs of USD 16,261 Million. Recovering from such disasters is a huge challenge, but with the right direction it can be an opportunity as well, driven by the principles of sustainable development. These principles include sustainable production and consumption; food security; water conservation; and a net zero economy. I believe that the SDG Investor Map is directing us towards those sectoral opportunities that can lead to a strong positive footprint of sustainable development with the help of the private sector. If we encourage the private sector, we can lead Pakistan on a progressive road to achieving Agenda 2030 and Leaving No One Behind. Ministry of Planning, Development and Special Initiatives, in partnership with the Federal Divisions and Provincial Governments and its Development partners is leading efforts to take the development agenda of SDG framework forward.

99

Syed Zafar Ali Shah



Message from Secretary, Board of Investment

____66____

t the Board of Investment, we have identified priority sectors that have the potential to attract foreign direct investment. These sectors are food processing, renewable energy, textiles, logistics, automobiles, information technology, housing and construction, and tourism and hospitality. It is a great advantage for the Board of Investment as well as for the investor community that not only the Investment Opportunity Areas (IOAs) identified in Pakistan's first ever SDG Investor Map are in line with Government's prioritized sectors, but also the IOAs give investors an opportunity to look at Pakistan's potential as an investment destination. The SDG Investor Map fills the information gap and provides an updated catalogue of information on return on investment as well as on impact on the economy, people, and planet. It will help investors in making informed investment decisions

99

Asad Rehman Gilani

Table of Contents

14		20		61	
Executive Summary		Sector II: Alternate and Renewable Energy Solar Panel Manufacturing and Distribution Network Wind Energy Farms		Sector VI: Services (Tourism) Hotel and Water Resort	62
16		39		65	
Introduction to SDG Investor Map Methodology	16	Sector III: Transportation Electric Vehicles Manufacturing Freight Forwarding	40 42	Sector VII: Infrastructure Sustainable and Affordable Housing	60
18 Key Findings of Pakistan's		45 Sector IV: Healthcare		67 Mobilizing stakeholders for	or.
SDG Investor Map Investment Opportunity Area Deep Dive	22	Health care Networks Medical Device Manufacturing Precision Surgical Instruments	46 48 50	SDG Investments	71
24 Sector I:		53 Sector V:			
Frozen Fruits and Vegetable Processing	25	Consumer Goods Denim Garment and Product Manufacturing	54		
Dates Processing and Packaging	27	Leather Garments and Products	56		
Production of Edible Olive Oil	29	Footwear	58		

Abbreviations

ARE Alternate and Renewable Energy

B2B Business to BusinessB2C Business to Customer

CAGR Compound Annual Growth Rate

EPI Expanded Programme for Immunization

FDI Foreign Direct Investment

GDP Gross Domestic Product

GFCF Gross Fixed Capital Formation

GHG Green House GasGPM Gross Profit Margin

IMPs Impact Management ProjectsIOAs Investment Opportunity Areas

IRR Internal Rate of Return

MW MegaWatts

NAPHDA Naya Pakistan Housing Development Authority

ROI Return on Investment

SDGs Sustainable Development Goals
 SMEs Small and Medium Enterprises
 STPF Strategic Trade Policy Framework

TWh Terawatt hour

UHCs Universal Health Cards

UN United Nations

UNDP United Nations Development Program

VRE Variable Renewable Energy

Executive Summary

Pakistan is an emerging transitional economy with promising investment opportunities. However, during the past few years, the country has been experiencing complex challenges such as socio-economic vulnerability to crises, and recurrent climate disasters including massive floods marring the already fragile economy and the progress towards achievement of Agenda 2030.

The Government of Pakistan fared well in tackling the COVID-19 pandemic by introducing targeted stimulus packages for the vulnerable people as well as industry and policy reforms to stabilise the economy. In the aftermath of the floods of 2022, there is still a massive need for recovery and reconstruction. The UNDP-World Bank-ADB-EU Post Disaster Needs Assessment (PDNA) released in October 2022 in partnership with the Ministry of Planning, Development, and Special Initiative (MoPDSI), has estimated that the total requirement for recovery and reconstruction is \$16.3 billion. While the socio-economic recovery takes place, another key challenge for Pakistan is the financing to achieve Agenda 2030 and the Sustainable Development Goals (SDGs).

Today, access to adequate financing for development has become one of the most critical development challenges for most countries. The UN estimates that there is a \$2.5 trillion annual gap in the \$5-7 trillion investment required to achieve the SDGs. Meanwhile, Pakistan requires an additional 16.1 percent of the GDP from the public and private sector to achieve the SDGs by 2030.¹

Recognizing this need, the UNDP has been advocating for various mechanisms of Financing for Development to strengthen the continued commitments of the countries to achieve the SDGs and to work on the realisation of the Paris Agreement 2015. The Government of Pakistan and UNDP have partnered to mobilise and leverage financial resources from the private sector for climate financing and SDGs investments. Subsequently, a SDG Investments and Climate Financing Facility has been established by UNDP in partnership with the Government of Pakistan to identify, develop, and leverage partnerships for SDGs-aligned priority projects of high development impact with the potential to attract investment from a variety of local and global sources, including financial markets.

In this context, the private sector has a fundamental role to play if the world is to achieve the Sustainable Development Goals. To mobilize global private capital towards SDGs-aligned investments, the United Nations Development Programme (UNDP) has created the SDGs Impact as a flagship initiative to empower investors with clarity, insights, and tools to contribute towards achievement of the SDGs. India, China, and Indonesia have already successfully leveraged their own SDG Investor Maps to attract private sector investments at global and regional platforms. Pakistan's business and impact case identified in the SDG Investor Map is a welcome development.

Pakistan's first-ever SDG Investor Map provides market intelligence backed by evidence-based data sets in 15 investment opportunity areas in the priority sectors of food and beverages, transportation, renewable energy, healthcare, consumer goods, infrastructure, and services. Leveraging from the insights of the Map, the UNDP though its Facility intends to identify various pipelines of innovative financial tools and projects both in public and the private sector and mobilise investments towards the achievement of the SDGs.

¹ IMF, "Pakistan spending needs for reaching the sustainable development goals (SDGs)." 2021. Available: Pakistan: Spending Needs for Reaching Sustainable Development Goals (SDGs) (imf.org)



Introduction to SDG Investor Map

The 2030 Agenda and Sustainable Development Goals (SDGs) provide a global framework for private sectors to benefit from the trade-offs of sustainable development. To spur private sector investment and mobilise global private capital inflows towards the SDGs aligned investments, the United Nations Development Programme (UNDP) Pakistan in partnership with the Ministry of Foreign Affairs, the Government of Pakistan, has prepared Pakistan's first-ever Sustainable Development Goals (SDGs) Investor Map. The SDG Investor Map is a dynamic impact intelligence tool that identifies a range of market-specific investment opportunities for SDG-aligned capital deployment backed up by Pakistan-specific data and evidence, translating national SDG needs, government policy priorities, and commitments into actionable investment opportunity areas.

The SDG Investor Map can make significant contribution towards bridging the gap in development financing, contributing to national financing framework, mobilising private capital for post-pandemic and natural disasters development needs and recovery, and accelerating the SDGs achievements. In 2021, as part of the process, the UNDP Pakistan in partnership with the Ministry of Foreign Affairs, the Board of Investment, and other stakeholders launched the Pakistan SDGs Investment Report 2021. The report illustrated a joint Government/UNDP policy vision to mobilise and to leverage Pakistan's development financing for the COVID-19 recovery aligned with the SDGs. It identified priority and investment-ready development sectors, such as climate change, energy, basic services of health and education, infrastructure, information technology, as well as a mapping of flexible investment options to global investors.

Who is the SDG Investor Map for?

Investors

Providing market intelligence on high return and high impact policy; development needs are backed by data, evidence, and investment opportunities.



Private Sector

Accessing new opportunities, business models, incentives' regimes combined with impact mapping for different sectors.



Government

Presenting innovative development financing options in various sectors and creating an enabling environment to attract private investments.

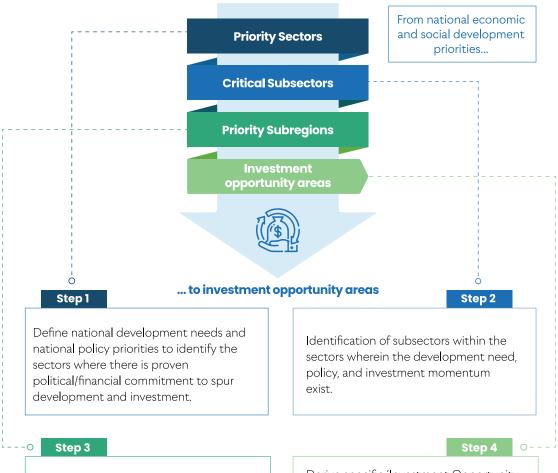


Methodology

The SDG Investor Map has been developed using a standardised 8-step methodology which combines secondary data research (on the existing development needs, policy priorities, and market opportunities) with over 300 interviews and discussions with public and private sector stakeholders to validate the findings and to contribute new insights. The data sets are analysed to distil Investment Opportunity Areas (IOAs) and data-backed business models that show significant financial and impact potential in their specific contexts.²

² E. Mwaniki, "Methodology - SDG Investor Platform," (Online). Available: https://sdginvestorplatform.undp.org/methodology. (Accessed 14 March 2023)

The process entailed an extensive consultative exercise with more than 300 participants spread across the country including representatives of all provincial governments, private sector, and internal development organisations.



Identification of priority sub-regions in Pakistan where there is high development need with each subsector and strong political and financial potential to spur potential subsector growth. Derive specific 'Investment Opportunity Areas' and impactful business models for priority subsectors and subregions where new private capital can facilitate scale and identify 'white spaces' spaces where new business models are the most needed.

Box: About SDG Investor Maps

Piloted in 2019 in Brazil, the SDG Investor Maps have been completed to date in 32 countries, and a further 20 are in the pipeline. In addition to Pakistan, 2 SDG Investor Maps have been completed in South Asia namely Sri Lanka and India, and 5 in East Asia and the Pacific namely Cambodia, China, Indonesia, Thailand, and Vietnam. The findings of the country-specific investment information are uploaded on the global SDGs Investor Platform to enable investors make informed decisions on where to allocate capital.

Key Findings of Pakistan's SDG Investor Map

After following through the standard process of investor map, seven sectors, ten subsectors, and fifteen investment opportunity areas have been identified which are listed below:

Food and Beverages Subsector: Food and Agriculture

- 1. Olive oil and products for olives
- 2. Processed fruit and agriculture industry innovation for dates production and preservation for retaining nutrition and longer shelf life
- 3. Frozen fruit and vegetables processing



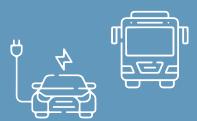


Transport Subsector: Automobiles

4. Electric vehicles

Subsector: Road Transportation

5. Freight forwarding and logistics networks



Renewable and Alternative Energy Subsector: Alternate Energy

- 6. Solar panel manufacturing and distribution networks
- 7. Wind power generation



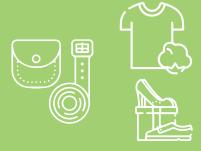


Healthcare Subsector: Healthcare Provision

8. Hospitals and medical centers

Subsector: Medical Technology

- 9. Medical device development
- 10. Surgical instrument for medical technology



Consumer Goods Subsector: Apparel and Textiles

- 11. Denim manufacturing
- 12. Footwear
- Leather garments and products



Infrastructure Subsector: Real Estate

4. Affordable low-cost housing





Services

Subsector: Hospitality and

Recreation

15. Hotels, lodging and water resort

While mapping the above investment opportunity areas (IOAs), other opportunities emerged as 'white spaces' needing policy and regulatory attention from the public and private stakeholders. These white spaces in sub-sectors are the wastes of energy conversion, solid waste management, forest management and conservation, technical skill education and meat processing.

Classification of IOAs by Ticket size

The investment opportunity areas have been categorized in four ranges of USDs for their ticket size (investment required). These are: less than \$500,000; \$500,000 to \$1 million; \$1 million to \$10 million and more than \$10 million. Figure 1 shows the number of IOAs by their ticket size and this maximum number of IOA are between the range of \$500,000 and \$1 million and \$1 million to \$10 million.

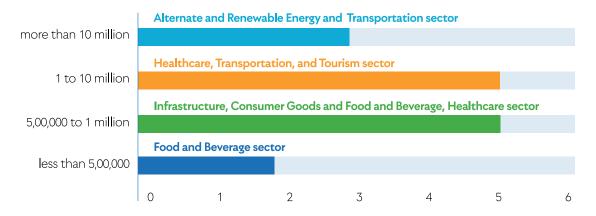


Figure 1: IOAs by ticket size in USD

In the \$500,000 to \$1 million range, the IOAs are in infrastructure, consumer goods, food and beverages, and healthcare sectors. In the \$1 million to \$10 million range, the IOAs are in healthcare, transportation, and tourism sectors. The IOAs in more than \$10 million range include alternate and renewable energy and transportation. The IOAs in less than \$500,000 category include Food and Beverages sector.

Classification of IOAs by Investment Time Frame

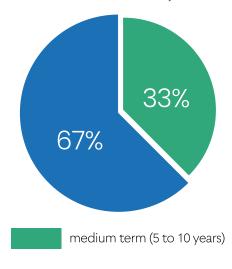


Figure 2: IOAs classified by time frame

The IOAs have been categorised in three timelines: short (less than five years to generate returns), medium (five to ten years to generate returns) and long term (more than 10 years to generate returns). For Pakistan's mix of IOAs, 67% are in the short-term category and 33% are in the medium-term category.

67% of the IOAs in the short-term time frame (to generate returns) are in the sectors of healthcare, consumer goods, food and beverages, alternate and renewable energy, and transport sector. The other 33% of IOAs that are in the medium-term time frame are in infrastructure, food and beverages, services (tourism), alternate and renewable energy and transport.

Impact Management Projects (IMP) Classification of IOAs

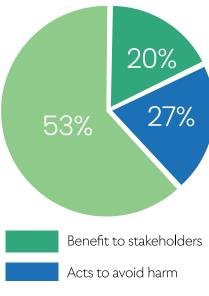


Figure 3: IOAs by IMP Classification

The IOAs have been categorised into three classes along the impacts: benefit to stakeholders, act to avoid harm, and contributes to solutions. The highest percentage (53%) of the IOAs has an IMP classification of 'Contribute to Solution'. These IOAs generate a new positive outcome because of their business model for stakeholders and are from renewable and alternate energy, food and beverages, healthcare, and infrastructure.

The second highest percentage (27%) of the IOAs has been under "Act to Avoid Harm" IMP Classification, meaning by the IOAs' business model having reduced or mitigated harm from the previous model. The sectors are consumer goods and transport sector. The 20% of the IOAs are under "Benefits Stakeholder" IMP Classification, meaning by the IOAs' business model maintains or improves positive outcomes by its business model. The IOAs are in transport, services (tourism), and food and beverages sector.

Classification of IOAs by Indicative Rate of Return

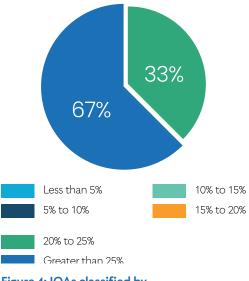


Figure 4: IOAs classified by Internal Rate of Return

The IOAs, based on the rate of returns, have been categorised into five ranges. These ranges, for internal rate of return, are less than 5%, 5% to 10%, 10% to15%, 15% to 20%, 20% to 25% and more than 25%.

In Pakistan's case, 67% of the IOAs have a projected Internal Rate of Return (IRR) of more than 25%. These include all IOAs from renewable and alternative energy, transportation, infrastructure, and consumer goods sector in addition to healthcare and food and beverages.

The remaining 33% of the IOAs have the IRR range between 20%- 25%. These include the IOAs in food and beverages, healthcare, and services-tourism and hospitality sectors.

Deep Dive into Investment Opportunities





Sector I: Food and Beverages

According to the Economic Survey 2021-22, agriculture contributes to 22.7 percent of Pakistan's GDP and employs 37.4 percent of population. Almost 65 percent population depend on agriculture for livelihood.³ The climate change has hit Pakistan hard with severe consequences for the agriculture sector due to temperature variance, unprecedented rainfall, water shortage and disaster risks. The need for development is as economic as it is social and climate impact reflective. This sector requires investments in establishing or scaling up business models.

Pakistan's consumer price inflation jumped to 36.4 percent in April 2023, the highest since June 1974, following a sharp depreciation in the value of Pak Rupee and a marked hike in energy prices and taxes. The floods 2022 further aggravated the economic difficulties. Prices of food and non-alcoholic beverages increased by 45.1 percent in February 2023 as compared to 15 percent in February 2022. On a monthly basis, consumer prices accelerated to 4.3 percent in February 2023, the highest in four months, from a 2.9 percent hike in January 2023.⁴

The Government of Pakistan has introduced National Agricultural Transformational Plan, National Food Security Policy, Processed Food and Beverage Export Strategy and Strategic Trade Policy Framework to support growth in the sector. The investment opportunity areas under this sector are as below:

Subsector: Processed foods

Investment Opportunity Area: Invest in business to customer (B2C) or business to business (B2B) models engaged in sustainable production of frozen fruits and vegetable products to ensure easy storage and longer shelf life of products, specifically frozen fruits, and vegetables.



Subsector: Processed foods

Investment Opportunity Area: Production of edible olive oil and products following sustainable practices.



Subsector: Agriculture Products

Investment Opportunity Area: Providing safe and nutritious fruit options in particular dates that are sourced locally and processed, packaged, and distributed locally as well as exported in the foreign markets.



³ Ministry of Finance, Government of Pakistan, "Economic Survey of Pakistan". (2022). Available: https://www.finance.gov.pk/survey_2022.html (Accessed: 29 March 2023).

⁴ Statista, "Food - Pakistan," Statista, March 2023. (Online). Available: https://www.statista.com/outlook/cmo/food/pakistan. (Accessed 12 March 202).

Frozen Fruits and Vegetable Processing

Invest in sustainable production by processing of fruits and vegetables as frozen food products.

Business Model

Invest in business to customer (B2C) or business to business (B2B) models engaged in sustainable production of frozen fruits and vegetable products to ensure easy storage and longer shelf life of products, specifically frozen fruits and vegetables.

Business Case

Metric	Value	Deep Dive
Market Size	> \$1 billion	In 2016 the Market size of food processing industry was \$289 billion and Market size
Compound Annual Growth Rate (CAGR)	5% - 10%	in terms of CAGR it is estimated to grow at a CAGR of 7.47 percent for 2023 to 2028.
Internal Rate of Return (IRR)	> 25 %	The pre-feasibility study suggests that Internal Rate of Return on the business of the Frozen
Return on Investment (ROI)	> 25 %	Fruit and Vegetable is estimated to be 39% . Return of Investment is 17%-27% and Gross
Gross Profit Margin (GPM)	> 25 %	Profit Margin is 40%-43% over ten years of the business operations.
Investment Time Frame	Short term (Less than 5 years)	Six to twelve months are needed for initial setup, and in the post first year, the business continues with its regular flow in generating returns.
Ticket Size	\$1-\$10 million	Equipped with freezing store, processing hall and a fruit storage, the facility will require Almost \$1 million to \$2 million.5

Impact Case

In 2018, 36.9% of Pakistan's population was facing food insecurity and 20.5 percent of the population was undernourished which highlights that food security and nourishment is a significant challenge for the country.⁶ Despite being a surplus food producer country, recently Sindh and Balochistan have been classified as food insecure provinces due to high food prices, locust infestations, flash floods, drought, and reduced income levels due to the COVID-19 restrictions.⁷ Furthermore, due to the 2022 floods, after housing, the agriculture sector has been the second most affected with a damage amounting to \$3.7 billion. Most of the damage under crop sub-sector was registered in Sindh (76 percent) followed by Balochistan (22 percent).⁸ The business model is expected to have an impact by;

⁵ SMEDA, "Pre-Feasibility Studies," Small and Medium Enterprises Development Authority, 2022. (Online). Available: https://smeda.org/index.php?option=com_phocadownload&view=category&id=124:agriculturefood-processing&Itemid=308. (Accessed 12 March 202)

⁶ WFP, "WFP Pakistan Country Brief," February 2023. (Online). Available: https://www.wfp.org/countries/pakistan

⁷ R. A. Jahangeer, "Sindh, Pakistan: IPC Acute Food Insecurity Analysis March," IPC, Sindh, Pakistan, 2021

⁸ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023).

- Reducing the food wastage by freezing it as there are postharvest losses in fruits and vegetables
 due to mishandling of the perishable products, poor transportation, and inadequate storage
 facilities and market infrastructure accounting for about 30–40 percent of total production.⁹
- Creating jobs for people after along value chain; from farmers who cultivate to pickers of fruits and vegetables to the processing facility workers (including women who hold various types of positions and roles such as in managerial positions as well as paid and unpaid workers). In 2019, the sector employed 65 percent of women out of the total women workforce in the country making the sector the largest employment provider to women in Pakistan, Overall the sector employs 37.4 percent for the country's total workforce.⁷
- Increase in female labour force participation in industry which employs 17 percent of total female workforce as of 2019 (increased from 15 percent in 2015).8
- Improving the farm to market access of products along with offering the appropriate price to the farmers of their inputs to this industry.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:











Impact Classification

IMP Classification: Contributes to solution

Increased employment opportunities for men and women as small farm owners, farm workers, and fruit pickers as the fruits and vegetables which are supplied will be processed locally. Additionally, the IOA positively impacts food safety, security, and nutrition for consumers.

⁹ M. H. a. A. Y. Moeen Ijaz, "Post-harvest losses in fruits and vegetables in Pakistan," Agri Hunt, 13 January 2018. (Online). Available: https://agrihunt.com/articles/pak-agri-outlook/post-harvest-losses-in-fruits-and-vegetables-in-pakistan/. (Accessed 16 March 2023).

Dates Processing and Packaging

Providing safe and nutritious fruit options in particular the dates which are sourced locally and processed, packaged, and distributed locally as well as exported in the foreign markets.

Business Model

Investment to establish or scale up a business for dates processing or other processed fruits which have low water intake. The models encourage the fruit processing as a core business activity with its integrated activities of supply to other businesses or customers directly.

Business Case

Metric	Value	Deep Dive		
Market Size	> \$1 billion	\$8.7 billion revenue was earned by fruit and nut items in food sector in		
Compound Annual Growth Rate (CAGR)	5% - 10%	2022. The revenue is estimated to increase to \$12.06 billion in 2027.10		
Internal Rate of Return (IRR)	20% - 25%	As per the pre-feasibility for the business model, the Internal Rate of Return and		
Return on Investment (ROI)	20% - 25%	Return on Investment are estimated at 21% ¹¹ whereas.		
Gross Profit Margin (GPM)	15% - 20%	Gross Profit Margins of the sector are estimated to hover around 16% to 18% from 2017 to 2022. ¹²		
Investment Time Frame	Medium Term (5-10 years to generate return)	It has been estimated that it will take 5.2 years for the business to start generating the projected revenues.		
Ticket Size	< \$500,000	Equipped with fruit cleaning, processing hall, and storage facilities, it is estimated that an investment up to \$500,000 will be required. The ticket size will increase with the increase in number of units to be established or scaled up.		

¹⁰ Statista, "Food - Pakistan," Statista, March 2023. (Online). Available: https://www.statista.com/outlook/cmo/food/pakistan. (Accessed 12 March 2023).

¹¹ SMEDA, "Pre-Feasibility Studies," Small and Medium Enterprises Development Authority, 2022. (Online). Available: https://sme-da.org/index.php?option=com_phocadownload&view=category&id=124:agriculture-food-processing&Itemid=308. (Accessed 12 March 2023)

¹² A. M. R. Saniya Tauseef, "Food Products Sector Study," PACRA Research, Islamabad, 2021.

Impact Case

Despite being a surplus food producer country in the past, 36.9 percent of the population in 2018 has been food insecure due to high food price inflation, locust infestations, flash floods, droughts, and reduced income amid the COVID-19 restrictions.¹³ The 2022 floods damaged almost 4 billion acres of agriculture land, largely in Sindh and Balochistan with 72 percent and 21 percent of damage to agriculture respectively.¹⁴ There is a need to create a positive impact with support of small scale farmers in Pakistan with a focus on high yielding crops which will increase their productivity and income. This business model is expected to have an impact on reducing postharvest losses, employment generation, increase female labour force participation and improving market access.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:











Impact Classification

IMP Classification: Benefits Stakeholders

Increased employment opportunities for men and women as small farm owners, farm workers, fruit pickers as the fruits and vegetables which are supplied will be processed locally. Additionally, the IOA positively impacts food safety, security, and nutrition for consumers while reducing water stress on Pakistan's irrigation systems.

¹³ WFP, "WFP Pakistan Country Brief," February 2023. (Online). Available: https://www.wfp.org/countries/pakistan.

¹⁴ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023)..

Production of Edible Olive Oil

Production of edible olive oil and olive products following the sustainable practices.

Business Model

Investment in a business to customer (B2C) model for olive cultivation and oil extraction. Products can include variety of oil, olive chunks, and pickles etc.

Business Case

Metric	Value	Deep Dive
Market Size	> \$1 billion	In 2020 import bill, edible oils contributed to \$2.2 billion of which, \$1.1 million
Compound Annual Growth Rate (CAGR)	5% - 10%	went to olive oil import. Olive cultivation and oil extraction can substitute for imported edible oil, due to local production being cheaper and high quality. The CAGR is estimated at 7.47% from 2023-2028.
Internal Rate of Return (IRR)	20% - 25%	Internal Rate of Return for extraction unit is and for cultivation it is 25% with a payback period of 4.5 years.
Investment Time Frame	Short terms (less than 5 years to generate returns)	Olive cultivation takes about 4 years and with a side-by-side completion of extraction facility in the first year, the business model starts generating revenues in 4th to fifth year.
Ticket Size	< \$500,000	Almost \$300,000 to \$500,000 for cultivation as well as for extraction unit. ¹⁶

Impact Case

The business model presents a plausible impact case in two ways. The first impact is the utilisation of agriculture produce (olives) which consumes less water and does not add much to the country's water stress that otherwise comes from the agriculture sector, 90 percent of which depends on Indus River. A high demand for irrigation, and poor water storage capacity plunged the country into water stress".¹⁷

¹⁵ PBC, "Potential of Olives and Olive Oil in Pakistan," The Pakistan Business Council (PBC), 2022. (Online). Available: https://www.pbc.org.pk/research/potential-of-olives-and-olive-oil-in-pakistan/. (Accessed 14 March 2023).

¹⁶ SMEDA, "Pre-Feasibility Studies," Small and Medium Enterprises Development Authority, 2022 (Online). Available at: https://smeda.org/index.php/business-facilitation/smeda-downloads/pre-feasibility-studies/file/1374-olive-oil-extraction-unit-rs-12-77-million-jun-2017?tmpl=component (Accessed: 30 March 2023).

¹⁷ WFP, "WFP Pakistan Country Brief," February 2023. (Online). Available: https://www.wfp.org/countries/pakistan.

The second impact is required to reduce the country's trade deficit and utilise resources in the industry in Pakistan. This business model is proposing a 'Made in Pakistan' approach as in 2020, the edible oil import bill contributed to \$2.2 billion. 18

Production of olive oil in Pakistan can be a substitute for imported edible oil. The business model is expected to have an impact on reducing postharvest losses, employment generation, increase female labour force participation, and improving market access.

SDGs Addressed

Primary SDGs Addressed:









Secondary SDGs Addressed:









Impact Classification

IMP Classification: Contributes to Solutions

Increased support to already water stressed country by providing a sustainable business model (lower water intake), farming of olives and extraction of oil which serve as import substitution for edible oil, and providing value addition to traditional crop farming which promotes farm to table concept and climate smart agriculture.



¹⁸ PBC, "Potential of Olives and Olive Oil in Pakistan," The Pakistan Business Council (PBC), 2022. (Online). Available: https://www.pbc.org.pk/research/potential-of-olives-and-olive-oil-in-pakistan/. (Accessed 14 March 2023).



Sector II: Alternate and Renewable Energy

From 2015 to 2020, proportion of population in Pakistan with electricity connections increased from 93 to 96 percent while the demand by the growing population for affordable and clean energy is also likely to increase.¹⁹

As per Pakistan Economic Survey 2021-2022, the country's energy mix is dominated by fossil fuels (61 percent), followed by hydropower (24 percent), nuclear (12 percent) and variable renewable energy (VRE), comprising of wind and solar, accounting for nearly 3 percent. Though the energy mix is being dominated by fossil fuels, the demand for energy is on the rise. The energy sector suffered a damage of \$88 million in 2022 floods and requires \$117 million for reconstruction.²⁰

In 2022, the installed capacity of solar and wind energy in Pakistan stands at 1500 Megawatts which is 4 to 5 percent of total capacity. Therefore, capacity of solar and wind power generation should be expanded to at least 30 percent of Pakistan's total electricity generation capacity by 2030, equivalent to around 24,000 Megawatts.²¹

Pakistan's consumer price inflation jumped to 31.5% in February of 2023, the highest since June 1974, following a sharp depreciation in the value of Pakistan rupee and a rise in energy prices and taxes. For an average household consumer, the housing utility points increased from 152.1 in February 2022 points to 176.8 points in February 2023.²²

The government has introduced an Alternate and Renewable Energy (ARE) Policy 2020 which aims to achieve sustainable development in power sector. The Policy aims to increase the contribution of Renewable Energy (RE) to power generation and energy mix from 5 to 20-30 percent by 2030. The policy envisages development of large-scale renewable energy projects in Pakistan. Furthermore, as per the ARE Policy, the projects of biomass, geothermal, ocean/tidal wave energy, solar and wind energy, storage technologies, biogas, and energy from waste are being given priority. In addition to the ARE policy 2020, the Board of Investment has also included "energy" in its priority sector list for investments. Pakistan, over the last five years, has established 19 wind power projects of 980MW, 06 solar power projects of 418MW and 08 bagasse projects of total 258MW. These projects have achieved commercial operations.²³

¹⁹ SDG, "VOLUNTARY NATIONAL REVIEW: Implementing best Practics to Build Forward Better in the decade of Action," Sustainability Development Global, Pakistan, 2022.

²⁰ ADB, "The Islamic Republic of Pakistan: Renewable Energy Development Sector Investment Program," Asian Development Bank, 2021.

²¹ The World Bank, "Expanding Renewable Energy in Pakistan's Electricity Mix," The World Bank, 10 November 2020. (Online).

Available: https://www.worldbank.org/en/news/feature/2020/11/09/a-renewable-energy-future-for-pakistans-power-system.

(Accessed 16 March 2023).

^{22 &}quot;Pakistan CPI Housing Utilities," Trading Economies, February 2023. (Online). Available: https://tradingeconomics.com/pakistan/cpi-housing-utilities. (Accessed 1 March 2023).

²³ SDG, "VOLUNTARY NATIONAL REVIEW: Implementing best Practies to Build Forward Better in the decade of Action," Sustainability Development Global, Pakistan, 2022.



The investment opportunity areas under this sector are as under:

Subsector: Alternative Energy

Investment Opportunity Area: Alternate sources of energy as Solar Panel Manufacturing and Distribution network for household, commercial and industrial consumption.



Subsector: Alternative Energy

Investment Opportunity Area: Sustainable production and sourcing of renewable energy through wind energy farms.



Solar Panel Manufacturing and Distribution Network

Alternate sources of energy as Solar Panel Manufacturing and Distribution network for household, commercial, and industrial consumption.

Business Model

Investment in business to customer (B2C) and business to business (B2B) models engaged in manufacturing of solar panels and distributing the systems to households or businesses in urban and rural areas. Investment can be made through private equity funds.

Business Case

Metric	Value	Deep Dive	
Market Size	\$100 million - \$1 billion	Pakistan Solar Energy Market is expected to record a CAGR of 2.5% from 2022 to 2027. A sum of \$144 million has been invested in the solar power sector (2020).	
Compound Annual Growth Rate (CAGR)	< 5%	Up to now, the average utilisation rate of operational solar PV plants is merely 19% , far from the utilisation rate of over 95% in China. This represents a huge untapped opportunity in this sector in Pakistan. ²⁴	
Internal Rate of Return (IRR)	> 25 %	Based on pre-feasibility study on the business model, the expected Internal Rate of Return	
Return on Investment (ROI)	15% - 20%	is 59% . ²⁵ The Return on Investment has been estimated in the ADB's Renewable Energy Development Sector	
Gross Profit Margin (GPM)	> 25 %	Investment Program 2021. ²⁶ The Gross Profit Margin hovers around 40-45% in the industry. ²⁷	
Investment Time Frame	Short Term (less than 5 years to generate return)	Based on pre-feasibility study on the business model, investment timeframe is 3 years for a distribution company network and one to two years to establish manufacturing unit.	
Ticket Size	> \$10 million	As per discussion with leading company needing investment for expansion as manufacturer with focus on research and development (already distributers and installers) approximately \$50-70 million. The size would vary if installation were also added.	

²⁴ Chinese investment in solar PV plants in Pakistan accounts for nearly 87pc (2022). The Nation. Available at: https://nation.com.pk/2022/07/17/chinese-investment-in-solar-pv-plants-in-pakistan-accounts-for-nearly-87pc/(Accessed: 3 April 2023).

²⁵ Pre-Feasibility Studies (English) (no date). Available at: https://smeda.org/index.php?option=com_phocadownload&view=cate-gory&id=131:energy&Itemid=308 (Accessed: 30 March 2023).

²⁶ ADB, "The Islamic Republic of Pakistan: Renewable Energy Development Sector Investment Program," Asian Development Bank, 2021.

²⁷ PCRAL, "Power Generation: Sector Study," Pakistan Credit Rating Agency Limited, Pakistan, 2022.

Impact Case

The business model will impact in many ways ranging from household level to macroeconomic level. With availability of affordable energy in the form of solar panels-based solutions, women and girls would not have to spend hours fetching water; clinics would be able to store vaccines for children; reliable electricity will allow students and workers to perform better and allow business to run on competitively.²⁸ On the macroeconomic level provision of affordable energy options is expected to steadily reduce the import bill of the country, along with reduced households' bills. This will allow the government and households to save financial resources which can be spent on other essential needs.

- The Alternate and Renewable Energy Policy suggests increasing the share of renewable energy to 30 percent by 2030 from 4 percent of 2020. It is expected that Pakistan will achieve the targeted level by the deadline.
- It is expected that 140,295 jobs will be created by this industry by 2030.²⁹
- With the availability of clean and green energy, women in the households will have alternate to carbon-based fuel for cooking and other activities, saving the spending for other essential needs of households.
- The sector is expected to impact women not only as energy consumers but also as employees and employers in the sector. In 2018, women made 4% of the workforce in 9 power utilities while the average share of women working in technical positions as engineers is only 4%. To enhance women's workforce participation, more investments in the business model will play a role in taking more women on board in diverse roles and enhancing their capabilities. Private solar businesses can provide more job opportunities to women, thereby increasing the proportion of women employed in the power sector (i.e., 4% of total employed women).³⁰
- Expanding renewable energy can make electricity cheaper, achieve greater energy security, reduce carbon emissions, and help Pakistan save up to \$5 billion over the next 20 years.³¹

SDGs Addressed

Primary SDGs Addressed:









Secondary SDGs Addressed:













²⁸ Climate Transparency, "Climate Transparency Report Pakistan's Climate Action And Responses To The Covid-19 Crisis," Climate Transparency, Lahore, 2020.

^{29 &}quot;World Bank. 2022. Renewable Energy Jobs and Sector Skills Mapping for Pakistan. Pakistan Sustainable Energy Series.

³⁰ SDPI, "Role of Women in Energy and Climate Talks of Pakistan," SDPI, February 2022. (Online). Available: https://sdpi.org/role-of-women-in-energy-and-climate-talks-of-pakistan/event_detail. (Accessed 17 March 2023).

³¹ The World Bank, "Expanding Renewable Energy in Pakistan's Electricity Mix," The World Bank, 10 November 2020. (Online). Available: https://www.worldbank.org/en/news/feature/2020/11/09/a-renewable-energy-future-for-pakistans-power-system. (Accessed 16 March 2023).

Impact Classification

IMP Classification: Contribute to Solutions

Provision of solar energy-based electricity to serve the energy needs of remote and underserved areas. Renewable energy-based electricity generation will serve household and commercial needs, ensuring sustainable energy generation and consumption practices through increased proportion of alternative sources of energy in the total energy mix.

Wind Energy Farms

Sustainable production and sourcing of renewable energy through wind energy farms.

Business Model

Investment in establishing or scaling up a wind energy farm with a business to customer (B2C) model or business to government (B2G) model or business to business model (B2B).

Business Case

Metric	Value	Deep Dive
Market Size	\$100 million - \$1 billion	The government aims to increase the renewable energy to 30% in the total energy mix.
		The CARG is likely to be more than 5% during 2022-to-2027
Compound Annual Growth Rate (CAGR)	5% - 10%	time frame. In terms of market growth, factors such as supportive government policies and efforts to meet power demand using renewables to decrease dependency on fossil fuels are likely to drive the market.
Internal Rate of Return (IRR)	> 25 %	Expected Internal Rate of Return for 32% Karachi Zone 22% Ormara
Return on Investment (ROI)	15% - 20%	for the case of a 50MW Wind Farm, considering the factors of energy output, economic feasibility, environmental impact, and fuel-saving analysis for multiple locations and turbine designs; these three factors present the best return. ³² The Return on Investment is calculated as per Asian Development Bank's
Gross Profit Margin (GPM)	> 25 %	Renewable Energy Sector Investment Program 2021. ³³ The Gross Profit Margin hovers around 40-45% in the industry. ³⁴
Investment Time Frame	Medium Term (5-10 years to generate return)	4.5 to 7.2 years of payback period. ³⁵
Ticket Size	> \$10 million	\$65 million total investment as reported for a 50MW with the solution wind farm by Din Energy Pvt Ltd.

³² A. A. R. S. A. R. S. Z. K. Syed Sulman Ahmad, "Feasibility analysis of wind energy potential along the coastline of Pakistan," Ain Shams Engineering Journal, vol. 13, no. 1, pp. 1-4, 2022.

³³ ADB, "The Islamic Republic of Pakistan: Renewable Energy Development Sector Investment Program," Asian Development Bank, 2021.

³⁴ PCRAL, "Power Generation: Sector Study," Pakistan Credit Rating Agency Limited, Pakistan, 2022.

³⁵ A. A. R. S. A. R. S. Z. K. Syed Sulman Ahmad, "Feasibility analysis of wind energy potential along the coastline of Pakistan," Ain Shams Engineering Journal, vol. 13, no. 1, pp. 1-4, 2022.

In 2015, the total renewable electricity capacity in Pakistan was 8,088.8 Megawatts which has been increased to 12,896 Megawatts in 2019³¹. Wind energy offers a great potential to attain energy security, environmental stability, and sustainable development in Pakistan at a lower cost of energy generation (40% lower as compared to other sources in Pakistan). The expected impact is as under:

- By availability of wind energy which is sustainable and affordable as compared to energy
 produced from imported fuel; the wind energy can also be a solution to reduce country's circular
 debt which refers to as the cash flow shortfall incurred in power sector from nonpayment of
 obligations that continue to grow over the years; the circular debt has been increased from 1.6
 percent of GDP in 2008 to 5.2 percent of GDP in June 2020.³⁶
- The business model is expected to support the recovery of damages and losses from the 2022 floods in the energy sector which has suffered a damage of \$88 million and a loss of \$2.5 million.³⁷
- In Pakistan, women overall constitute 4% of workforce in the energy sector while 2% of them work at technical positions. Wind energy makes a vital entry point for improving the position of women as employees and employers in the sector.³⁸
- In terms of women as beneficiaries of the investment in the business model, women will benefit from supply of clean energy for household chores which would save them from adverse health impacts of burning fuel, as well as saving their time for collecting burning wood.
- The wind energy projects have been producing low-cost energy and their outreach has been widespread, and they are able to generate enough wind energy to power 450,000 homes.³⁹

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:













Impact Classification

IMP Classification: Contributes to solutions

Provision of wind energy-based electricity to serve the energy needs of remote, underserved areas, and reduced stress on the national grid. Renewable energy-based electricity to serve Pakistan's rising energy needs which will be 240,000 Megawatts by 2030 and to ensure sustainable generation practices through increased proportion of renewable energy in energy mix.

³⁶ E. Survey:, "Chapter 14 Energy," 2021. (Online). Available: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.finance.gov.pk/survey/chapters_21/14-Energy.pdf. (Accessed 20 February 2023).

³⁷ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023)...

³⁸ SDPI, "Role of Women in Energy and Climate Talks of Pakistan," SDPI, February 2022. (Online). Available: https://sdpi.org/role-of-women-in-energy-and-climate-talks-of-pakistan/event_detail. (Accessed 17 March 2023).

³⁹ roparco, "Gul Ahmed Wind Power Limited: Developing Wind Energies In Pakistan," 23 February 2015. (Online). Available: https://www.proparco.fr/en/carte-des-projets/gul-ahmed-wind-power#:-:text=Gul%20Ahmed%20Wind%20Power%20Limited%3A%20Developing%20wind%20energies%20in%20Pakistan&text=Gul%20Ahmed%20Wind%20Power%20Limited%20is%20 building%20a%20wind%20farm,country's%20depend. (Accessed 21 March 2023).



Sector III: Transportation

The transport sector emissions in Pakistan are increasing; per capita emissions in this sector are showing a 44% increase over the period 2013-2018. The transport sector has accounted for 76 percent of the 19 million tonnes of oil consumed in Pakistan in 2018-2019, and 28 percent of the 199 MtCO2 emissions from fuel combustion in 2019. This highlights an immediate need to decarbonise the sector to stay within the 1.5°C limit.⁴⁰

Due to the 2022 floods, the transport and communication sector faced a damage of \$3,264 million and a loss of \$281 million and has recovery and reconstruction needs of \$4,994 million. These major damages and losses to the sector necessitate an appropriate reconstruction and recovery process that ensures clean and green recovery.⁴¹

While there is a need to decarbonise and ensure a clean and green recovery of the sector, it is pertinent to mention the role the sub-sectors can play in achieving these ambitions. Introduction of electric vehicles and generating an ecosystem that supports the uptake of electric vehicles can be a way to achieve the ambitions. Similarly, affordable, electric vehicle based logistic solutions can reduce the cost of transport inputs, produce, farm to market access, and distribution which, if not addressed, can decrease the profit margins of businesses by 4%.⁴²

To support this sector, the government of Pakistan has introduced an Electric Vehicle Policy which aims to electrify passenger vehicles and heavy-duty trucks to reach the target of 30 percent by 2030 and 90 percent by 2040.⁴³ Transport sector, therefore, is a national policy priority due to mega project such as China Pakistan Economic Corridor (CPEC). It is not only a national level priority but inter and intra provinces transport is also a priority for all provinces. Punjab, KP, and Sindh have launched public projects for urban transportation aiming to ease intracity movement of public. In addition to these, the government has also introduced a National Freight and Logistics Policy in 2020. The policy aims to enable the sector to meet the demand for goods transport (and associated supply chains) at competitive prices and to provide adequate service levels in terms of both quality and reliability.⁴⁴

The investment opportunity areas in this sector are as under:

Subsector: Automobiles

Investment Opportunity Area: Establishing Electric vehicle manufacturing plant or scaling up an existing investment.



Subsector: Land Transportation

Investment Opportunity Area: Sustainable methods of transportation of freight by using electric vehicles in freight forwarding and logistic solutions.



- 40 Climate Transparency, "Climate Transparency Report Pakistan's Climate Action And Responses To The Covid-19 Crisis," Climate Transparency, Lahore, 2020.
- 41 UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023).
- 42 A. M. R. Saniya Tauseef, "Food Products Sector Study," PACRA Research, Islamabad, 2021.
- 43 Engineering Development Board, "Electric Vehicle Policy," (Online). Available: http://engineeringpakistan.com/electric-vehicle-policy/. (Accessed 12 February 2023).
- 44 Ministry of Communications, "National Freight and Logistics Policy", 2020. Available: https://communication.gov.pk/NewsDetail/Mzc2NmQ5NmEtMjg2ZS00NTkzLWFkODQtNjg5Mjk5NTljZTgy (Accessed: 30 March 2023).

Electric Vehicles Manufacturing

Establishing Electric vehicle manufacturing plant or scaling up an existing investment.

Business Model

Establishing an Electric Vehicle manufacturing plant for domestic and international sales (with a variation as per the needs and market demands for passenger cars, 2-3 wheelers and heavy transport vehicles) using a business to business (B2B) to a direct business to consumer model (B2C).

Metric	Value	Deep Dive	
Market Size	> \$1 billion	The CAGR for 2022-2027 is estimated at Batteries 3% Cars 8% Buses 3%	
Compound Annual Growth Rate (CAGR)	5% - 10%	Only a small fraction of vehicles is electric, while the policy intends to increase the uptake of electric vehicles to 30% by 2030. This will create a new market in Pakistan.	
Internal Rate of Return (IRR)	> 25%	The financial modeling of Yes Electromotive shows Internal Rate of Return around 31% with a payback	
Gross Profit Margin (GPM)	10% - 15%	period of 5.14 years. ⁴⁵ The Gross Profit Margin for the sector hovers around 13–15% from 2017-2021. ⁴⁶	
Investment Time Frame	Medium Term (5-10 years to generate return)	The financial models of existing businesses express an investment timeframe of 5.1 years.	
Ticket Size	\$1 million - \$10 million	The ticket size is suggested from an existing investment of \$\frac{3}{3}\$\$ \$7-9 million (Local investment-MG JW SEZ.)	

⁴⁵ Yes Electronotive, "Recent News," Yes Electronotive, (Online). Available: https://yeselectromotive.com/. (Accessed 20 March 2023).

⁴⁶ Pacra, "Trucks & Buses Sector Study," PACRA, Lahore, 2021.

The impact needed from the transport sector in Pakistan can be in multiple dimensions ranging from reduction in carbon emissions to provision of safe, affordable, and accessible modes of communication. The Global Climate Risk Index 2021 ranks Pakistan as the 8th most vulnerable country due to climate change⁴⁷ and in Pakistan GHG emissions are increasing every day with emissions from transport sector. Furthermore, Pakistan's import bill is the highest for fuel for electricity and other forms of fuels such as petrol and diesel. The constant devaluation of currency and the need for energy have put an immense burden on the economy, and the situation is making fuel run cars cost-ineffective. Therefore, below are a few expected impacts leading to outcomes of the business model:

- Decreased carbon footprint of transport sector as electric vehicles typically have a smaller carbon footprint than gasoline cars, even when accounting for the electricity used for charging. As the transport sector emits 28% of Pakistan's total Green House Gas (GHG) making it the second sector after power sector having the highest emission.
- Decreased the fuel-based import bill which will reduce by \$2 million annually.
- Increased access to women to travel as most globally find it harder to travel than men. As a result, women will have better opportunities, ease in transit to schools, workplaces and generally reduced mobility barriers in accessing and using transport. In Pakistan, women's work force participation is just 10% over the 20 years.

SDGs Addressed

Primary SDGs Addressed:







Secondary SDGs Addressed:











Impact Classification

IMP Classification: Act to avoid harm

Provision of more employment opportunities facilitated by the presence of a safe, accessible, and affordable transport system. Introduction to locally manufactured electric vehicles will transform Pakistan's automobile industry which has been dominated by carbon-based fuel and traditionally has a price point power.

⁴⁷ APP, "Pakistan ranked 8th most vulnerable country due to climate change: NA told", 2022, (Online). Available: https://www.app.com.pk/national/pakistan-ranked-8th-most-vulnerable-country-due-to-climate-change-na-told/.

Freight Forwarding

Sustainable methods of transportation of freight by using electric vehicles in freight forwarding and logistic solutions.

Business Model

Investment in setting up a new nationwide sustainable freight forwarding company or scaling up an existing network using emission free transport vehicles or scaling up of an existing freight forwarding company using B2B model transferring goods from farm to factory or in B2C model transferring goods from retailers to customers. Companies can also develop freight forwarding channels that offer services to connect different modes of transportation and operators for both passengers and freight logistics (e.g., ride sharing services, mobility as a service, logistics management platform, etc.), and generate revenue from the service fees.

Metric	Value Deep Dive	
Market Size	> \$1 billion	The annual growth rate from 2023-2027 is expected to be 11.93% , resulting in
Compound Annual Growth Rate (CAGR)	10% - 15%	a projected market volume of USD 4.52 billion by 2027.48
Internal Rate of Return (IRR)	> 25%	Pre-feasibility study estimates that Internal Rate of Return for a freight forwarding company is 50% . The payback period is 3.4 years. ⁴⁹ The highest number of Small and Medium Enterprise (SMEs) are based in Punjab 65% . The business model provides an opportunity to connect these SMEs with other enterprises and customers across the country at an affordable rate and environment friendly option of logistics.
Investment Time Frame	Short Term (less than 5 years to generate return)	Pre-feasibility study estimates that Internal Rate of Return for a freight forwarding company is 50%. The payback period is 3.4 years. ⁵⁰
Ticket Size	> \$10 million	\$5,00,000 to \$7,00,000 for company operations in seven locations for a national freight forwarding network. When a new fleet of electric vehicle is added, the ticket size rises to \$50 to \$60 million for a startup needing electric vehicles.

⁴⁸ Statista, "Third Party Logistics (3PL) – Pakistan Market Forecast", (Online). Available: https://fr.statista.com/outlook/mmo/third-party-logistics-3pl/pakistan#:-:text=Revenue%20in%20the%20Third%2DParty,€4.52bn%20by%202027.

⁴⁹ SMEDA, "Small and Medium Enterprises Development Authority Ministry of Industries & Production Government of Pakistan," SMEDA, Lahore, 2021

⁵⁰ Ibid.

The following are a few likely impacts leading to outcomes of the business model:

- Since the transport is a priority sector for investment, there is a need to ensure the investments are made in sustainable logistics to curb the GHG emissions.⁵¹
- Another consideration in logistics sector is a relative need for affordable freight solutions to support farm to market transfer of goods in cost effective and efficient manner for farmer to get optimal market access and for the customer to get their product within a competitive turnaround time.
- There is a dire need of a competitive, affordable, and accessible freight forwarding market. Women farmers, manufactures and entrepreneurs already face financing and accessibility challenges. Affordable rates of logistics agencies can at least reduce some cost of doing business.
- With foreign or local investment for a national network of an efficient freight logistics fleet, it is
 expected that the cost of transporting goods will be reduced thereby benefitting businesses
 and consumers.
- Reduced emissions due to a transition from fuel based to electric logistic vehicles will allow the country to meet its target of reducing reliance on carbon heavy energy sources.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:











Impact Classification

IMP Classification: benefits stakeholders

The business models provide cost saving to the women owned small medium sized business owned by women as the freight forwarding vehicle will be electric and its operation cost will be less than others. The model strengthens other sectorial businesses in Pakistan and provides a backbone support to them in distribution and logistics which can increase market access for different actors in value chain.

⁵¹ Climate Transparency, "Climate Transparency Report Pakistan's Climate Action And Responses To The Covid-19 Crisis," Climate Transparency, Lahore, 2020..



Sector IV: Healthcare

In Pakistan, the public health activities have persistently increased in terms of physical infrastructure and workforce. Despite this increase, it is the private sector that has bridged the gap of rising demand and missing health care facilities by serving 70% of population.⁵² The 2022 floods displaced almost 8 million people who face a serious health crisis leading to an increased demand for health care providers and hospitals.⁵³

The Government of Pakistan has initiated numerous programmes that prioritise health including Universal Health Care by cards such as Sehat Sahulat Card, Ehsaas Programme, Expanded Programme for Immunization (EPI), Polio Eradication Initiative and the COVID-19 relief and vaccination. These plans present the health sector as a policy priority.⁵⁴

The investment opportunity areas under this sector are as under:

Subsector: Health Care Providers

Investment Opportunity Area: Scaling up the healthcare networks to establish facilities across the semi-urban areas to improve access to health care.



Subsector: Medical Technology

Investment Opportunity Area: Investment in medical device manufacturing business models for local consumption and export.







⁵² WHO, "Health service delivery," WHO, 2023. (Online). Available: https://www.emro.who.int/pak/programmes/service-delivery.html#:~:text=Public%20sector&text=The%20national%20health%20infrastructure%20comprises,facilities%20is%20estimated%20at%20123394. (Accessed 23 March 2023).

⁵³ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023).

⁵⁴ SDG, "Voluntary National Review: Implementing best Practies to Build Forward Better in the decade of Action," Sustainability Development Global, Pakistan, 2022.

Healthcare Networks

Scaling up the health care networks to establish facilities across the semi-urban areas to improve access to health care.

Business Model

Investment in equity or setting up a new chain of hospitals using B2C business model.

Metric	Value	Deep Dive
Market Size	\$100 million - \$1 billion	In 2022, Health Care sector revenue is projected to reach \$126.40 million.
Compound Annual Growth Rate (CAGR)	< 5%	Revenue is expected to show an annual growth rate (CAGR 2022-2025) of 3.88% , resulting in a projected market volume of \$141 million by 2025. 55 Pakistan's health sector demand keeps on growing with the increased population as well as loss of 1500 health facilities by the floods. 56
Internal Rate of Return (IRR)	> 25 %	Currently, revenue generated by healthcare sector in Pakistan is **126 million** and it is projected to increased up to **141 million** by 2025.
Gross Profit Margin (GPM)	> 25 %	The Investment is expected to increase as currently the financing gap of just one province i.e., Sindh, is PKR 896 billion
Investment Time Frame	Short Term (less than 5 years)	The Ministry of Commerce and SMEDA's Pre-feasibility studies for local and foreign investors indicated that the first year is for establishing the setup in multiple locations and hiring human resources. For 100% operations, a period of almost 3-4 years is required. ⁵⁷
Ticket Size	\$500,000 - \$1 million	\$6,00,000 to \$8,00,000 of investment is needed for a small-scale health facility. The number of facilities to be set up can be discussed between investor and investee as per their requirements or needs in the post-floods' scenario.

⁵⁵ Statista, "Health Care - Pakistan," February 2023. (Online). Available: https://www.statista.com/outlook/dmo/ecommerce/beauty-health-personal-household-care/health-care/pakistan. (Accessed 23 March 2023).

⁵⁶ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023).

⁵⁷ SMEDA, "Pre-Feasibility Study PRIVATE HOSPITAL," SMEDA, Lahore, 2016.

Pakistan has 1.1 physician per 1000 persons. The WHO estimates that at least 2.5 medical staff per 1,000 people are required to provide adequate coverage with primary healthcare interventions; it provides a baseline for increased investment in the health sector.⁵⁸ The 2022 floods have damaged 13% of health facilities rendering 650,000 pregnant women and 4 million children under a healthcare crisis.⁵⁹ Pakistan has registered a substantial increase in demand for health service providers owing to the increasing population coupled with the damages (human capital and infrastructure) caused by the 2022 disastrous floods.

The business model creates an impact by:

- Reducing the supply-demand gap between provision of health services to the poorest of the poor (targeted communities are remote & marginalised) and improved access to basic health services.
- Improving access to basic health facilities as well as care for cardiac diseases and dialysis by complementing the UHC offered through the Sehat Sahulat Card on which 37 million families have been enrolled.
- Creating dual impact on gender equality and women empowerment through better job opportunities for women and an increased access to medical facilities. In 2022, the maternal mortality rate was 140/100,000 decreased from 276 in 2006.⁶⁰
- Providing multi-sectoral support through employment and opportunity creation in associated sectors such as medical profession, medical stores, pharmaceutical industry, and manufacturing industry.

SDGs Addressed

Primary SDGs Addressed:





Secondary SDGs Addressed:













Impact Classification

IMP Classification: Contribute to Solutions

Restoration of the damaged health facilities have created a positive impact in term of increased access to healthcare service by all genders and marginalised communities. Furthermore, the business model proposed will provide basic as well specialised healthcare facilities to the people in remote areas.

⁵⁸ WHO, "Health service delivery," WHO, 2023. (Online). Available: https://www.emro.who.int/pak/programmes/service-delivery.html#:~:text=Public%20sector&text=The%20national%20health%20infrastructure%20comprises,facilities%20is%20estimated%20at%20123394. (Accessed 23 March 2023).

⁵⁹ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023)

⁶⁰ SDG, "VOLUNTARY NATIONAL REVIEW: Implementing best Practies to Build Forward Better in the decade of Action," Sustainability Development Global, Pakistan, 2022.

Medical Device Manufacturing

Investment in medical device manufacturing business models for local consumption and export.

Business Model

Investing in Medical Device Production Centre or for scaling up an existing facility for a business-to-business (B2B) model or a business to customer model (B2C).

Business Case

Metric	Value	Deep Dive
Market Size	\$100 million - \$1 billion	A feasibility study indicated that Pakistan has a \$500 million market size for medical devices with a CAGR 15% .
Compound Annual Growth Rate (CAGR)	15% - 20%	
Internal Rate of Return (IRR)	20% - 25%	The estimated IRR is based on feasibility study for medical device development centre. The stakeholders in Punjab Consultative Session stated that Punjab's Sialkot-Gujranwala cluster had the skilled labour and basic technical capabilities for adding value to their businesses with greater return up to 25% IRR.
Investment Time Frame	Short Term (less than 5 years)	Healthcare Device Association of Pakistan (HDAP) indicated a two-year time frame for investment, of which year one is for construction while operations start in year two.
Ticket Size	\$1 million - \$10 million	\$2.3 million is the investment required as per the feasibility study for Medical Device Development Centre, but the ticket size will increase as per different locations. ⁶¹

Impact Case

There is a high demand for investment in surgical instrument industry's products and services, as health care distribution includes sale/purchase of pharmaceutical products and medical equipment to hospitals, pharmacies, and physicians. This need is driven largely by rates of insurance, pharmaceutical spending, illnesses, and demographics.

⁶¹ Government Projects SDG Investor Platform. Available at: http://sdginvestorplatform.undp.org/government-projects (Accessed: 30 March 2023).

The Pakistan Strategic Trade Policy Framework (STPF) 2020-2025 is a comprehensive document that narrows down sectors for trade; manufacturing of Pakistan's medical devices and surgical instruments is one of the priority areas for intervention. The STPF also highlights "increase in labour and enterprise productivity" as a policy intervention. The policy proposes interventions as well as incentives to improve the sector and to increase its export potential.⁶²

The business model therefore creates an impact by;

- Creating decent work/jobs for skilled and unskilled workers through better employment opportunities.
- Capacity building of existing and new labour force through trainings in new technologies for improved employment opportunities.
- Enabling multidimensional opportunities in associated sectors such as ease of access to basic health services and improved medical procedures through procurement of affordable locally manufactured valued-added medical instruments and devices.
- Generate revenues through manufacturing of medical goods and value chain and increased exports, FDI, and % share in GDP.
- · Reduction in import bill due to import of medical devices, leading to the reduced trade deficit.
- Providing better employment and training opportunities to women in the whole value chain and promoting safe and secure work environment for women at all levels.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:













Impact Classification

IMP Classification: Contribute to Solutions

Provision of better employment and training opportunities to women as well as expected affordable and accessible medical procedures due to cheaper locally produced instruments and devices. Additionally, the IOA provides jobs, increases value addition to the traditional cluster and encourages knowledge economy.

⁶² STPF, "Strategic T rade Policy Framework," Ministry of Commerce, Islamabad, 2021.

Precision Surgical Instruments

Investment in sustainable production of high-end and value-added precision surgical instruments in Pakistan.

Business Model

Investment in scaling up or establishing a surgical instruments manufacturing unit on a business to client (B2C) or business to business (B2B) model.

Business Case

Metric	Value	Deep Dive
Market Size	\$100 million - \$1 billion	16% annual growth in the export market of surgical instruments.
Compound Annual Growth Rate (CAGR)	10% - 15%	There is a room for value addition by including precision equipment. ⁶³ With \$420 million worth export in 2021, the sector is estimated to have an export potential of \$564 million to \$795 million by 2025. ⁶⁴
Internal Rate of Return (IRR)	> 25 %	As per SMEDA's pre-feasibility study (2022), the Internal Rate of Return (IRR) of 57% .65
Investment Time Frame	Short Term (less than 5 years)	A year is required to set up a manufacturing unit, and to build linkages with suppliers and distributors' markets for export. After that operations set in and the business starts to generate returns.
Ticket Size	\$1 million - \$10 million	

Impact Case

Realising the need to reduce poverty by providing Universal Health Cards (UHC), the Government of Pakistan has increased spending on health sector in 2020 and 2021. Demand for more hospitals, medical devices and allied sector products also increases with passage of time and especially in the post-COVID19. Surgical Instruments also contribute to Pakistan's exports helping reduce the current account deficit with an annual export share of \$307 million. As health care distribution include sale/purchase of pharmaceutical products and medical equipment supplies to hospitals, pharmacies, and physicians, the need for surgical instrument industry's services and products goes high. This need is driven largely by rates of insurance, pharmaceutical spending, illnesses, and demographics.

⁶³ P. B. Council, "Enhancing the Competitiveness of Pakistan's Surgical Instruments Industry," Pakistan Business Council, 2021. (Online). Available: https://www.pbc.org.pk/research/enhancing-the-competitiveness-of-pakistans-surgical-instruments-industry/. (Accessed 26 March 2023).

⁶⁴ STPF, "Strategic Trade Policy Framework," Ministry of Commerce, Islamabad, 2021.

⁶⁵ SMEDA, "Pre-Feasibility Study Surgical Instruments Manufacturing Unit,", Lahore, 2022.

⁶⁶ ibio

Pakistan's Strategic Trade Policy Framework (STPF) 2020-2025 is the country's comprehensive document that narrows down sectors for trade and manufacturing. Medical devices and surgical instruments are among the priority area within the health sector. The framework suggests a technology upgradation in surgical instruments as an intervention to enhance exports.

The business model, therefore, creates an impact by:

- Creating marketability for Pakistan's state-of-the-art surgical goods in the international market to generate revenue stream through increased exports, increased contribution to GDP, and FDI.
- Increased employment for skilled and unskilled labour force within the surgical instrument value chain.
- Encouraging universally acceptable environmental and labour standards, for workers, particularly women; and the companies operating in the business positively as increase in labour and enterprise productivity (planned) is part of the STPF 2020-25.
- Support to industry in technology upgradation and its relevant capacity building, reduction in cost of doing business, enhanced market access, innovation driven exports, product diversification and value addition.
- Increase in the sustainable production/manufacturing of value added/precision surgical instruments to have a positive impact on the environment for mitigating the hazardous impacts of the manufacturing sector.
- Creating diverse, non-traditional roles for women in the health sector across the surgical instrument's manufacturing value chain along with the inclusion of women in managerial and leadership positions.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:











Impact Classification

IMP Classification: Contribute to Solutions

Provision of better employment and training opportunities to women as well as expected affordable and accessible medical procedures due to cheaper locally produced instruments. The IOA will also create jobs, increases value addition to the traditional cluster and encourages knowledge economy with sustainable production and consumption.



Sector V: Consumer Goods

Pakistan with \$152 billion retail market, is the fastest growing market in the world. The expanding middle class, particularly millennials with rising disposable incomes, is demanding branded and packaged consumer goods ranging from personal and baby care items to food and beverage products at affordable price but there is a need for value addition.⁶⁷

In Pakistan, in the context of consumer goods sector, there is not only domestic but also international demand of textiles, apparels, leather goods, and footwear. The government of Pakistan has introduced Pakistan Textile Policy for 2020-25 with four-tier strategy and 21 recommendations aimed at increasing the country's textile exports target by 2025 to \$25.3 billion and \$50 billion by 2030.⁶⁸ Pakistan's current account deficit has reached to \$17.4 billion due to trade imbalances. Textile and apparels being the highest export sector needs value addition.⁶⁹

The investment opportunity areas under this sector are as under:

Subsector: Denim Manufacturing

Investment Opportunity Area: Sustainable production of textile with value addition and product diversification, particularly denim products manufacturing for local and export market.





Subsector: Apparel, Accessories & Footwear

Investment Opportunity Area: Sustainable production of leather garment and products for the purpose of export.



Subsector: Apparel, Accessories & Footwear

Investment Opportunity Area: Opportunity for footwear outlet store for domestic and export market through local footwear material sourcing.





^{67 &#}x27;Fast Moving Consumer Goods (FMCG) Boom in Pakistan's \$152 Billion Retail Market' (2018), 27 March. Available at: https://www.southasiainvestor.com/2018/03/fast-moving-consumer-goods-fmcg-boom-in.html. (Accessed: 30 March 2023).

⁶⁸ Ministry of Commerce, "Textiles and Apparel Policy 2020-25," 2021. (Online). Available: https://www.commerce.gov.pk/wp-content/uploads/2022/02/Textiles-and-Apparel-Policy-2020-25.pdf. (Accessed 23 March 2023).

⁶⁹ Current account deficit soars (Online). Available at: https://tribune.com.pk/story/2368217/current-account-deficit-soars (Accessed: 30 March 2023).

Denim Garment and Product Manufacturing

Investment to scale up or establish manufacturing units of denim products under business to business (B2B) or business to customer (B2C) models. The range of products may include all denim products popular in the export market.

Business Model

Investment to scale up or establish manufacturing units of denim products under business to business or business to customer models. The range of products may include all denim products popular in the export market.

Business Case

Metric	Value	Deep Dive
Market Size	> \$1 billion	In 2020, there are 423 textile industries were working in the country. In 2018, sales of large integrated denim players in Pakistan have grown at a CAGR
Compound Annual Growth Rate (CAGR)	5% - 10%	of 7% (despite declining prices) over the last three years, with margins hovering around 20% (3-year average), which are higher in comparison to integrated non-denim textile units (2018). ⁷⁰
Internal Rate of Return (IRR)	> 25%	As per the estimates of pre-feasibility study, Internal Rate of Return is 32% with a payback period of 4.4 years. Additionally, according to Pakistan Textile Council, the business model shows promising returns with increased demand for denim and products from the U.S., with Pakistan being the leading exporter of denim to U.S., as compared to Bangladesh and India in 2020 and 2021.
Gross Profit Margin (GPM)	15-20%	
Investment Time Frame	Short Term (less than 5 years)	It takes 4.4 years for the whole unit to start generating revenues.
Ticket Size	\$500,000 - \$1 million	Approximately, \$100,000 is needed for a full functional unit. ⁷¹

Impact Case

Large investment in machinery, quality raw material, enhanced skill set, and product development are essential to realise the textile sector's export potential. The sector needs consistent and predictable policies, and continuous power supply to create socio economic impact. This is particularly true due to fierce competition in textile products that our region observes; therefore, the Pakistan Textile Policy

⁷⁰ SMEDA, "Pre-Feasibility Study Denim Jeans Stitching Unit," September 2015. (Online). Available: https://www.commerce.gov.pk/wp-content/uploads/pdf/Denim-Jeans-Stitching-Unit.pdf. (Accessed 26 March 2023).

⁷¹ ibid

(2020-2025) aims to leverage competitive advantage of complete textile and apparel supply chain by encouraging value-addition at all stages of the processes, especially in the finished products. The sector is also geared towards restoring profitability of cotton farmers by increasing yield, improving quality, and decreasing cost of production and more.⁷²

The textile and garment industry employ around 40% of the total workforce, according to the Pakistan Institute of Labour Education and Research (PILER), approximately 30% of the workers in this industry are women.⁷³

The business model, therefore, creates an impact by;

- Increase in participation of women in the industry's labour force in diverse roles in addition to the traditional roles.
- Increase in income, better career progression, better contracts, and better working and supportive environment for women.
- Enhanced economic activity through increased proportion of small-scale industries in total industry value added products from 8.4 percent in 2015 to 10.5 percent in 2019.
- Increased employment opportunities, and better and equal pay for all. Additionally, both skilled
 and unskilled workers will be positively impacted by better opportunities and safe working
 environment.
- Sustainable sourcing of cotton and other inputs will place less pressure on environment & ecosystem. Postproduction of garments, treated water, treated solid waste, and filtered air will decrease harm caused to the environment.⁶⁵
- Assist in building capacities of domestic workforce for integrated value-added products and services in apparel sector/textile units leading to increased opportunities for sustainable employment.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:













⁷² Ministry of Commerce, "Textiles and Apparel Policy 2020-25," 2021. (Online). Available: https://www.commerce.gov.pk/wp-content/uploads/2022/02/Textiles-and-Apparel-Policy-2020-25.pdf. (Accessed 23 March 2023)

⁷³ GIZ, "Pakistan: Inspiring Change – Women in Action in the Textile & Garment Industry of Punjab," 2023. (Online). Available: https://gender-works.giz.de/competitions2020/pakistan-inspiring-change-women-in-action-in-the-textile-garment-industry-of-punjab/. (Accessed 20 March 2023).

Impact Classification

IMP Classification: Act to Avoid Harm

Availability of better working conditions, equal pay, and contractual terms with diversified job opportunities. Furthermore, investments in this IOA will help build domestic capacities to the integrated value-added products and services in apparel sector leading to enhanced employment opportunities and sustainable practices.

Leather Garments and Products

Investment in sustainable production of leather garment and products for exports.

Business Model

Investment in setting up or scaling up a business to customer (B2C) directly or business to business (B2B) model with 50 percent equity and 50 percent debt model.

Metric	Value	Deep Dive
Market Size	\$100 million - \$1 billion	Pakistan is among the top-three exporters in leather garment sector, along with Italy and India, with exports of \$237.5 million in 2020.
Compound Annual Growth Rate (CAGR)	< 5%	However, global supply of such commodities has been steadily declined over the years, reaching a total export value of \$2.3 billion in 2020. ⁷⁴
Internal Rate of Return (IRR)	> 25%	A pre-feasibility for local and foreign investors indicated that IRR is 33% for the business model.
Investment Time Frame	Short Term (less than 5 years)	Pay Back Period is for a fully functional unit is 3.8 years. In year one, the focus will be on establishing units or surveying markets in Pakistan in case of joint ventures and contracting, and in year two the unit opts for sustainable supply chain development.
Ticket Size	\$500,000 - \$1 million	Investment needed for one unit is \$0.10-0.50 million. In case of three units that offer optimum value (Sialkot, Lahore and Karachi), an estimated total of \$0.35 to \$1.5 million and the range can vary as per the business model selected. ⁷⁵

⁷⁴ Business Recorder Research, "Leather exports need skills for value addition," Business Recorder, 28 September 2021. (Online). Available: https://www.brecorder.com/news/40123119. (Accessed 17 March 2023).

⁷⁵ SMEDA, "Prefeasibility", (Online). Available: https://smeda.org/index.php?option=com_phocadownload&view=category&id= 33:leather. (Accessed: 30 March 2023).

In 2019-20, the exports of leather apparel and products was \$700 million. Considering potential of leather sector in line with the strategic trade policy framework till 2025, the exports are projected to reach \$795 million to \$1122 million. To actualise this target, investments are required in the 'finished' leather products. Pakistan textile policy 2020-2025 is aimed at leveraging from the advantage of being linked to a complete textiles and apparel supply chain by encouraging value-addition at each stage of processes, especially in the finished products, and by restoring profitability of input providers by increasing product, improving quality, and decreasing cost of production.

The business model, therefore, creates an impact by;

- Creating more employment opportunities for domestic labour force across the value chain, along with increase in incomes, better career progression, better contracts and better working environment.
- Engaging women and promoting female labour force participation in all stages of the processing/ textile unit, particularly by reducing wage and income disparity, provision of safe and secure working environment, and taking women on board for diverse roles and posts.
- Increased economic activity through increase in exports, foreign exchange, and employment generation through investment in value added products and production units.
- Increase in sustainable and environment friendly practices in the industry to achieve zero emissions in the sector.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:





Impact Classification

IMP Classification: Act to Avoid Harm

Availability of better working conditions, equal pay, and contractual terms and diversified job opportunities with macroeconomic impact of increased exports. Furthermore, the IOA will contribute to jobs creation, providing better incomes and lifestyle with positive impact on the environment, and increase in exports and a reduction in trade imbalance.

⁷⁶ Strategic Trade Policy Framework - Ministry of Commerce, Government of Pakistan (Online). Available at: https://www.commerce.gov.pk/strategic-trade-policy-framework/. (Accessed: 30 March 2023).

⁷⁷ Ministry of Commerce, "Textiles and Apparel Policy 2020-25," 2021. (Online). Available: https://www.commerce.gov.pk/wp-content/uploads/2022/02/Textiles-and-Apparel-Policy-2020-25.pdf. (Accessed 23 March 2023)

Footwear

Investment opportunity for footwear outlet store for domestic and export market through local footwear material sourcing.

Business Model

Investment in a business to customer (B2C) models for setting up of a footwear store and outlet or units for domestic and export market using local sourcing.

Metric	Value	Deep Dive
Market Size	> USD 1 billion	There is a huge potential in the footwear industry of Pakistan; at present, there are 175 footwear companies (both manufacturers as well as sellers).
Compound Annual Growth Rate (CAGR)	< 5% - 10%	Exports between Jul 2021-March 2022 as 17.9% compared to the same period in the preceding year; a total export of \$116.686 million in 2022 was recorded as compared to \$98.950 million in 2021.78
Internal Rate of Return (IRR)	> 25 %	As per the prefeasibility study conducted by Small and Medium Enterprise Development Authority (SMEDA), an IRR of 64% for outlet store 85% for a sole and insole unit for shoe making
Investment Time Frame	Short Term (less than 5 years)	The prefeasibility estimates suggest that a period of 2.8 years is sufficient as payback period. The first year will be required for completing infrastructure development for the unit, stores; and from second year, the unit will start generating returns.
Ticket Size	\$500,000 - \$1 million	An investment of \$65,000 for sole and insole unit and up to \$500,000 for complete entity is needed, however, depending on number of outlets the range can vary. ⁷⁹

⁷⁸ PFMA, "Footware Statistics," PFMA, 2021. (Online). Available: https://pakfootwear.org/footwear-statistics/.)Accessed 21 March 2023).

⁷⁹ SMEDA, "Pre-Feasibility Study FOOTWEAR RETAIL OUTLET (Ladies and Children)," SMEDA, Lahore, 2016...



Owing to Pakistan's current account deficit, large investment in machinery, availability of quality raw material, enhanced skills set, and product development are essential to realise the sector's export potential. The footwear sector needs consistent and predictable policies and continuous power supply due to the fierce competition in apparels and footwear products in addition to textiles. The business model would, therefore, enhance benefits from exports and generate employment opportunities.

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:













Impact Classification

IMP Classification: Act to Avoid Harm

Availability of better working conditions, equal pay and contractual terms and diversified job opportunities. Additionally, the model proposed focuses on producing footwear in an environment safe manner, and protects the worker and the environment, meeting the objectives of Just Transition.



Sector VI: Services (Tourism)

Pakistan is a country rich in tourism potential. From eco to medical tourism, the country has many opportunities across its territory and some of most exquisite opportunities lie in underdeveloped region. In 2021, travel and tourism sector contributed a 6.1% to global GDP, and 3.7% to Pakistan's GDP. However, the 2022 floods have caused a loss of \$93 million and a damage of USD 10 Million, impacting almost 4,170 direct jobs in private sector.⁸⁰ Tourism is a priority sector for federal as well as provincial governments. The Government of Punjab and the Government of KP have introduced their own policies to cater to the tourists. The Board of Investment and Strategic Trade Policy Framework have also included tourism in their priority sectors' list.⁸¹

The investment opportunity areas under this sector are as under:

Subsector: Hospitality and Recreation (Hotels and Lodging)

Investment Opportunity Area: Invest in business to customer (B2C) models engaged in sustainable tourism in the form of provision of lodging with water resort.





⁸⁰ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023).

⁸¹ Ministry of Commerce, "Strategic Trade Policy Framework (STPF) 2020-25," Government of Pakistan, Islamabad, 2020.

Hotel and Water Resort

Invest in business to customer (B2C) models engaged in sustainable tourism in the form of provision of lodging with water resort.

Business Model

Invest in setting up a beach resort and hotel with a business to customer model. The resort may include an average size lodging of 50-52 bedrooms and set up for water sports. The business model may also focus on scaling up existing facilities.

Metric	Value	Deep Dive
Market Size	> \$1 billion	The Pakistan tourism and hotel market was valued nearly at \$20 billion in 2020 with a CAGR of 3% from 2018-2028.82 There are more than 50 million domestic tourists each year and the number will likely to increase due to decrease in post-COVID global travel restrictions.83
Compound Annual Growth Rate (CAGR)	5%	
Internal Rate of Return (IRR)	20% - 25%	As per the pre-feasibility study conducted by SMEDA for local and foreign investors, the Internal Rate of Return is between 20%-25%. The GPM also lies between 37-42% from 2017-2021 for the industry.
Gross Profit Margin (GPM)	> 25 %	
Investment Time Frame	Medium Term (5-10 years)	Payback Period of 5.48 years is estimated for generating returns. The capacity utilisation during year one is worked out at 65% .
Ticket Size	\$1 million - \$10 million	For an average size of resort of 50 beds, approximately \$2 million investment is needed.

⁸² Mordor Intelligence, "Tourism And Hotel Industry In Pakistan - Growth, Trends, Covid 19 Impact, And Forecasts (2023 - 2028)," Mordor Intelligence, 2021. (Online). Available: https://www.mordorintelligence.com/industry-reports/market-entry-tour-ism-and-hotel-industry-in-pakistan. (Accessed 23 March 2023)

⁸³ Hotel management start-up Roomy raises \$1 million in Pre-Series A round led by Lakson VC - Profit by Pakistan Today (Online).

Available at: https://profit.pakistantoday.com.pk/2020/12/04/hotel-management-startup-roomy-raises-1-million-in-pre-series-a-round-led-by-lakson-vc/ (Accessed: 30 March 2023).

⁸⁴ SMEDA (Online). Available: https://smeda.org/index.php?option=com_phocadownload&view=category&id=125:tour-ism-and-travel (Accessed: 30 March 2023).

There are more than 50 million domestic tourists each year and the numbers are likely to increase due to decrease in global travel restrictions. Already, the tourism sector has created 3.34 million jobs in Pakistan with \$138.8 million international visitors' spending and PKR 1,396.2 billion domestic spending, of which 94% has been classified as a leisure expenditure.⁸⁵

The business model, therefore, creates an impact by;

- Increased spending on tourism sector and fostering the sector to generate more revenues, not as a specific quantifiable target. The contribution of tourism sector to GDP was 5.7 percent in 2019 which has decreased to 4.4 percent due to the COVID-19 pandemic.
- Strengthening local economy in the form of providing jobs and strengthening a local economic cycle with the tourist influx and contributing to the GDP.
- Benefiting the locals from the area by development of tourist sites as economic activity would start generating revenues in the locality.
- Increasing in female labour force participation in all aspects of tourism industry: from attendants to management and to ownership positions for sustainable tourism.⁸⁶

SDGs Addressed

Primary SDGs Addressed:













Secondary SDGs Addressed:











CO

Impact Classification

IMP Classification: Benefit Stakeholders

Providing employment opportunities to women not only at minimum scales but also on management positions, including areas such as entrepreneurs and as service providers up and downstream in the industry. Additionally, the business model will improve the living standards of the local community providing them employment opportunities and create an ecosystem along the coastal belt.

⁸⁵ World Travel and Torism. Council, "Economic Impact Reports," World Travel & Toursim Council, 2022. (Online). Available: https://wttc.org/research/economic-impact. (Accessed 23 March 2023).

⁸⁶ S. B. A. L. J. L. a. Z. U. B. Asif Khan, "Tourism and Development in Developing Economies: A Policy Implication Perspective," Sustainability, vol. 12, pp. 2-19, 2020.



Sector VII: Infrastructure

Pakistan's population explosion has left people without access to affordable housing. According to the census in 2017, Pakistan's housing stock stands at 32.2 million, of which 39% is urban. The urban population is expected to grow by 2.3 million people per year over the next 20 years. As of 2018, there is a need for additional ten million housing units in Pakistan. Furthermore, the housing gap in Punjab - Pakistan's largest province - was estimated at 2.3 million units in 2017 and is likely to rise to 11.3 million units by 2047.87

From among the total population of the country, 47% of urban population lives in 9 major cities and 50% of the population lives in slums and squatter settlements due to housing backlog.⁸⁸ Furthermore, housing faced losses worth \$.6 Billion due to the 2022 floods.⁸⁹ In a nutshell, population growth, migration from rural areas, and the deterioration of existing homes is driving the shortage in urban areas.

In terms of construction, the country's construction industry accounts for 2.53% of Gross Domestic Product (GDP). The sector employs 7.61 percent of the employed labour. Gross Fixed Capital Formation (GFCF) in private sector grew by 20.6 percent between 2019-2020. Private sector GFCF amounted to more than 95% of the total. Investment opportunities exist in public private partnership with National Highway, CPEC infrastructure development, housing construction with Naya Pakistan Housing Development Authority (NAPHDA). The NAPHDA aims to add 40% housing units in urban areas, 40% in rural areas, and 20% in semi-urban areas (amounting to 5 million new housing units).

To support the sector, the government has introduced a package of \$485 million for construction industry. This included tax relief, deregulation policies, reduction in capital gains tax, reduction of sales tax on construction materials, and investor amnesty policies. The Board of Investment, after provincial and nation-wide consultation with the private sector, has identified ten sectors as "Priority for Investment", out of which "Housing and Construction" is one of the priority sectors. 90

The investment opportunity areas under this sector are as under:

Subsector: Home Builders

Investment Opportunity Area: Sustainable and Affordable Housing Infrastructure.



⁸⁷ Managing supply and demand: The key to getting 'housing' right in Pakistan (2022). Available: https://blogs.worldbank.org/endpovertyinsouthasia/managing-supply-and-demand-key-getting-housing-right-pakistan. (Accessed: 30 March 2023).

⁸⁸ SDG, "Voluntary National Review: Implementing best Practies to Build Forward Better in the decade of Action," Sustainability Development Global, Pakistan, 2022.

⁸⁹ UNDP, "Pakistan Floods 2022: Post-Disaster Needs Assessment (PDNA)," United Nations Development Programme, 28 October 2022. (Online). Available: https://www.undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna. (Accessed 15 March 2023).

⁹⁰ Board of Investment, Pakistan, "Housing and Construction – Sector Profile," 2022. (Online). Available: https://invest.gov.pk/sites/default/files/boi/Housing%20and%20Construction.pdf. (Accessed 27 March 2023).

Sustainable and Affordable Housing

Sustainable and Affordable Housing Infrastructure.

Business Model

Invest in construction of affordable housing units across Pakistan, under a public-private partnership model, with a cross subsidy to cater to the shortfall of housing units. The investment ecosystem is functioning in collaboration with Naya Pakistan Housing Development Authority (NAPHDA).

Metric	Value	Deep Dive
Market Size	> \$1 billion	The government, in collaboration with private sector, aims to add 5 million housing units. Till 2021 June, as many as 1,083 projects worth
Compound Annual Growth Rate (CAGR)	5% - 10%	PKR 340 billion have been registered with the Federal Board of Revenue (FBR) along with another 292 tentative projects with an indicative investment of PKR 43 billion under the prime minister's package for the construction industry. ⁹¹
Internal Rate of Return (IRR)	> 25 %	41%
Return on Investment (ROI)	15% - 20%	30% from estimates by the NAPHDA for private sector's return based on the package incentives and the market trends.
Gross Profit Margin (GPM)	> 25 %	30%
Investment Time Frame	Medium Term (5-10 years to generate return)	From estimates by the NAPHDA for land acquisition, build, sale and ownership steps.
Ticket Size	\$500,000 - \$1 million	Reall and AMC Pakistan have contributed to low-cost housing market by a funding of almost \$13 million since 2014 with an average cost of unit household of \$13,484 .92

⁹¹ Affordable Housing Project in Pakistan (Online) Reall. Available at: https://reall.net/blog/innovative-finance-model-opens-access-to-affordable-housing-in-pakistan/. (Accessed: 30 March 2023).

⁹² Rs340bn projects registered under construction package - Business - DAWN.COM (Online). Available at: https://www.dawn.com/news/1623399. (Accessed: 30 March 2023).

The influx of people to cities, coupled with rising land prices, cost of construction material, impact of climate change, and the lack of adequate public-sector resources and capacity have resulted in growing rates of informality, inequality, and substandard housing. Due to 2022 floods, 780,000 houses have been destroyed and 1.27 billion partially damaged. This translates into an immediate need for housing options. More than 50% of urban women and girls in developing countries live without access to clean water, adequate sanitation, durable housing or sufficient living area. The business model is expected to have impact as under:

- Adding 5 million affordable housing units amid investment in business model under public private partnership arrangement in rural, urban, and semi-urban areas.
- With 5 million units, the same number of households would have the choice to spend on education and health
- Since women account for 50% of the population in Pakistan, and the gap in ownership and inheritance of property and land has been an issue, the business model through selection of applicants and women as beneficiaries can facilitate and prioritise women as owners.
- Reduction in the housing backlog and reconstruction in the post-floods' scenario to ensure that 0.1 million houses are made available to families every year in collaboration with NAPHDA.

SDGs Addressed

Primary SDGs Addressed:





Secondary SDGs Addressed:













Impact Classification

IMP Classification: Contribute to solutions

By investing in the affordable housing under the PPP mode, women will have better access to house and land ownership and possession as compared to the past. The business model will add employment opportunities to existing 9% employment rate of the construction sector. The business model has the potential to provide affordable housing to 0.1 million families every year, spread over rural, peri-urban and urban areas.



Mobilising stakeholders for SDG Investments

Pakistan's SDG Investor Map, with its evidence-based business and impact cases of investment opportunity areas, provides market intelligence to the private sector on the sectors as well as opportunities that are aligned with policies which can enhance the SDG investments. It provides an opportunity to create a strong socioeconomic impact in Pakistan.

- Build a pipeline of investment projects in the identified opportunities with private sector and utilise the platform of the SDG and Global Investment for Sustainable Development (GISD) Alliance to attract investors.
- Advocate the SDG Investment and create awareness about the sustainable business models in the identified investment opportunities in collaboration with investor chambers and business councils.
- Initiate a dialogue with government and private sector on the needs of policy, incentives, regulatory review of the white spaces to ensure that more investment opportunities stand mature.

To deliver transparency and support accountability for the SDG investments, based on the above outlined opportunities for change, Pakistan's SDG Investor Map can provide an entry point to support the private sector to manage, measure, and authenticate their contributions to sustainability.

