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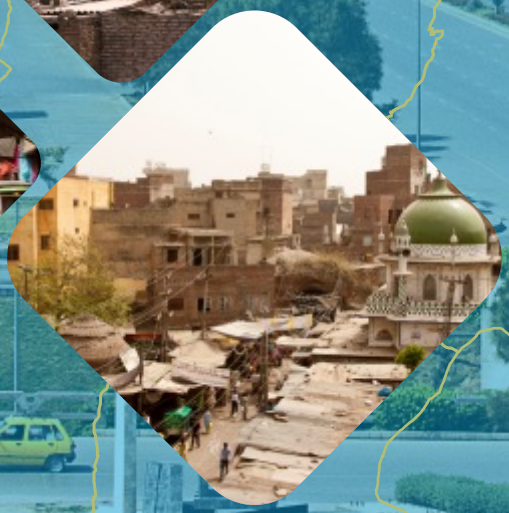

UN-HABITAT
PAKISTAN
COUNTRY REPORT 2023

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UN-Habitat Pakistan 2023

United Nations Human Settlements Programme (UN-Habitat)
Level 2, Serena Business Complex, Khayaban-e-Suhrwardy G-5/1,
Islamabad - Pakistan.
www.unhabitat.org.pk

CONTENTS

FACTSHEET

- Total population - 207.68 Million[1]
- Population growth rate 2.40%[1]
- 36.4% population living in urban areas[1]
- 48% of the total population are youth (15-49 years old)[1]
- Poverty rate - 37.2 %[2]
- Urbanization rate - 2.7[3]
- Gross Domestic Product (GDP) 22.9[4]
- Human Development Index (HDI) value - 161.1[5]
- Afghan refugee population (1.29 Million Afghan refugee card holders)[6]
- 75.4 % population has access to electricity[7]
- 65.2 % population has access to water[3]
- Access to Housing in Pakistan (13 Million in Urban , 20.01 Million in Rural)[8]
- Housing Deficit in Pakistan (9 Million Housing Units)[8]
- GHG Emission is 489.87 MtCOe[9]

1. 2017 Census
2. Global_POVEQ_PAK.pdf (worldbank.org)
3. State of Pakistani Cities Report 2018
4. State Bank of Pakistan, 2022
5. Pakistan's depressing state of human development, https://tribune.com.pk
6. 2023- HAC Afghanistan Refugees pdf
7. https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=PK
8. Inadequate Housing in Pakistan. A need for low-cost Housing Schemes. Iqbal Institute of Policy Studies 20 November 2022
9. Pakistan NDCs 2021

URBAN CONTEXT AND CHALLENGES

Pakistan, the world's fifth most populous country, has approximately 36.4% of its population residing in urban areas. Among these urban dwellers, half live in the country's ten major cities. Rapid urbanization has led to significant urban sprawl, with an estimated 40.1% of urban residents living in informal settlements known as katchi abadis. This has been driven by rural-urban migration resulting from a large working-age population, population growth, and changes in land use both within city centers and on the outskirts, which eventually become integrated into the urban fabric over time. Consequently, major cities are struggling to meet the increasing demands for essential infrastructure services and employment opportunities. The challenges associated with this rapid urbanization include unplanned growth, inadequate provision of basic services such as healthcare, water, and sanitation. Pakistan's ability to ensure its citizens' fundamental rights and meet their basic needs has been significantly compromised due to urbanization.

Additionally, urban areas are grappling with the complexities of climate change, which contribute to heightened water-related risks, increased flooding, ecological fragility, and vulnerability to heat island effects, heavy precipitation leading to floods, heat waves, drought, and sea level rise. Moreover, Pakistan is also prone to natural disasters, with devastating earthquakes occurring in the 2000s and 2010s, necessitating a strong focus on earthquake resilience in the country's development planning.

Urban Challenges in Pakistan

Climate Change Vulnerability

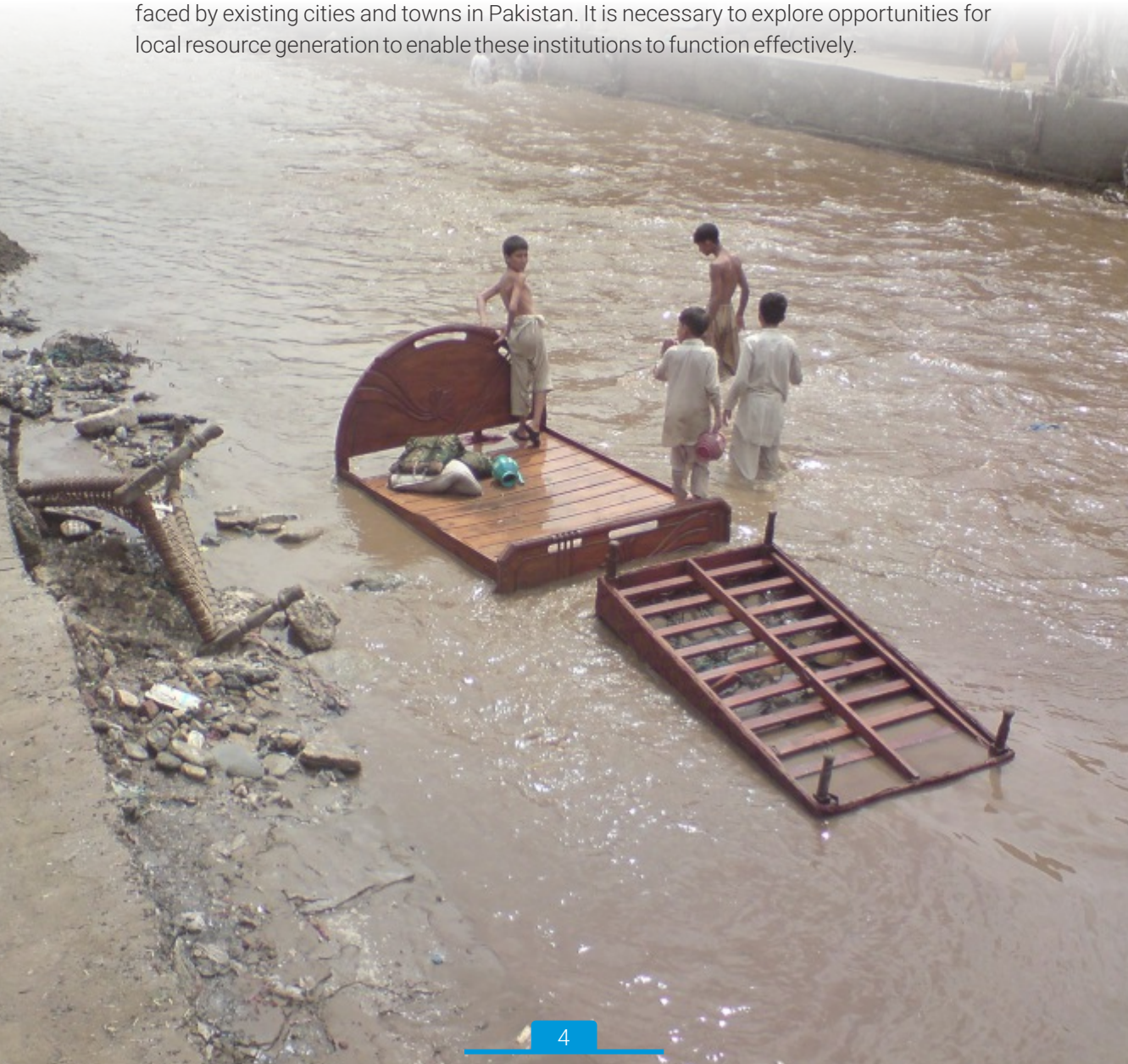
Pakistan is ranked as the 5th most vulnerable country to climate change according to the Global Climate Risk Index. This indicates that the country will experience increasingly severe extreme weather events, such as the catastrophic floods in 2022. The total damage from the floods is estimated at PKR 3.2 trillion (US$14.9 billion), with a total loss of PKR 3.3 trillion (US$15.2 billion). Floods and droughts have become regular occurrences, anticipated each year in Pakistan. Therefore, it is crucial to acknowledge the importance of climate-resilient settlement planning and to incorporate the dimension of climate change in development projects.

"33 million people have been affected with almost 8 million people displaced from their homes"

Urban Planning and Management

Pakistan has implemented decentralization policies that transfer authority to subnational governments, demonstrating efforts towards urban planning. While the provincial government plays a significant role in urban planning and management, municipal governments lack the capacity and authority to act independently and effectively in addressing urban issues. The limited capacity of municipal governments hampers their ability to keep up with the population growth and execute sustainable urban planning and design.

A major challenge in urban planning and management in Pakistan is the lack of comprehensive data. Census data alone does not provide the necessary information for city planning. Master Plans and Urban Development Plans have been prepared in most cities, but due to a lack of implementation of legal and administrative frameworks, they have not been followed. As a result, cities have expanded without proper planning, leading to incompatible use of services, environmental problems, illegal encroachments, and changes in land use. Additionally, the lack of technical capacity in local planning institutions, incompatible urban design, overlapping institutional jurisdictions, and a lack of coordination for integrated planning and development further exacerbate the issues faced by existing cities and towns in Pakistan. It is necessary to explore opportunities for local resource generation to enable these institutions to function effectively.



Urban Basic Services

Urban service systems and infrastructure in Pakistan have suffered from a lack of maintenance and are increasingly deficient, making access to essential urban basic services such as housing, transportation, energy, and water extremely challenging. Only 65.2% of households in Pakistan's ten major cities have access to piped water, highlighting the water scarcity issue. Additionally, environmental degradation is a pressing concern due to the continuous population growth without a robust urban management system in place.

"Pakistan ranked sixth globally and third in Asia among plastic waste generators with the country producing about 30 million tons of solid waste annually out of which 9% is plastic waste"

One significant issue is the lack of a comprehensive sewerage system in cities, resulting in untreated water contaminating water bodies. The generation of solid waste is also reaching unprecedented levels, exceeding the government's capacity for proper management. As a consequence, burning and dumping of garbage have become common practices, leading to an urban environment that not only poses health risks but also negatively impacts overall well-being.

Air pollution is on the rise in urban areas due to multiple factors, including environmental problems, inefficient energy use, a rapid increase in the number of vehicles, industrial activities without adequate air emission control, and the open burning of solid waste, including plastic. These factors collectively contribute to the deterioration of ambient air quality and the well-being of the population in Pakistan.

Housing, Land and Property Rights

Pakistan has established a housing policy; however, in practice, it has predominantly catered to the upper-income segment of the population, leaving the situation of land and housing unfavorable for the urban poor. The housing demand and supply gap in the country continues to widen, with an estimated backlog of around 9 million housing units in urban areas. This unmet demand has led to over 50% of the urban population residing in slums or informal settlements known as katchi abadis, while higher-income groups can afford formal housing in well-developed neighborhoods offered by private developers. These contrasting scenarios have contributed to sprawling, low-density development, making cities even more challenging to manage effectively. Efforts have been made to formalize these informal settlements through land titling and granting the right to remain, but less than 50% of katchi abadis have been formalized, and new ones continue to emerge.

CURRENT PORTFOLIO

UN-Habitat established its office in Pakistan in the aftermath 2005 earthquake and collaborates closely with the Government of Pakistan in various areas to address the country's evolving requirements. These include access to shelter and basic services, climate change adaptation and mitigation, enhancing resilience, generating urban knowledge, improving municipal finance, alleviating urban poverty, developing community-based infrastructure, managing waste, and enhancing the environment. UN-Habitat's support Government of Pakistan achieve inclusive, safe, resilient, and sustainable cities (SDG 11) in line with the New Urban Agenda. The implementation efforts prioritize the well-being of the people, particularly the vulnerable population.

United Nation Sustainable Development Cooperation Framework (UNSDCF)

UN-Habitat actively participated in the drafting of the UNSDCF 2023-2027 and highlighted and mainstreamed sustainable urban planning and management, provision of urban basic service, climate change and resilient cities, housing, land and rights as of the key areas in the joint work plans in the respective outcome areas

Strengthening Climate Action

UN-Habitat actively addresses the impacts of climate change and works towards reducing urban risks and disasters. A significant undertaking is the implementation of an Adaptation Fund Project aimed at enhancing flood and drought resilience at the national, provincial, and community levels. As part of this project, rainwater harvesting units are being installed (5,000 units at the community level and 50 at the institutional level) to demonstrate cost-effective solutions for adapting to floods and droughts.

"We have acute shortage of water in summers. After installation of Rain water harvesting units by UN Habitat, we are using this water for domestic purpose and also saving this water. We

Nasreen Bibi
Community Representative

"UN Habitat Project on Enhancing water resilience will pave the way for a sustainable flood and drought management at the city, provincial and national level, and create a model

Mr. M. Farooq

Senior Joint Secretary, Ministry of Climate Change

urban strategy is being developed, with a specific focus on climate change impacts, such as floods, water scarcity, and associated public health issues, using a spatial planning approach. Community plans and city-level spatial planning strategies will be created to protect vulnerable communities, reducing climate change risks and impacts beyond city boundaries and across various sectors. Additionally, UN-Habitat is enhancing decision-making capacities through Multi-Hazard Vulnerability Assessments and strengthens the capability of key actors in climate adaptation. Upon successful implementation, the project will be replicated in other major urban areas of Pakistan, fostering linkages and partnerships at local, national, and international levels.

UN-Habitat also assists in reducing greenhouse gas emissions and supports the implementation of the Sustainable

Development Goals (SDGs) by providing technical expertise to the Pakistan Engineering Council. This involves provision of technical support for developing Green Building Codes for Pakistan. Furthermore, UN-Habitat has aided the Government of Pakistan by preparing Green Building Guidelines for the 5 Million Housing Programme, which received approval for implementation from the Federal Cabinet.

Access to Housing, Land and Property Rights and Basic Services

UN Habitat continues to strive for achieving adequate shelter, housing, land and property rights for all and improving access to water, sanitation, hygiene, and other basic services especially for the marginalized community.

In the aftermath of 2022 floods, UN Habitat actively pursued the need for advocacy on Housing, Land and Property rights in the protection sector. Moreover UN Habitat is an active member of the Partners' Coordination Working Group of Sindh People's Housing for Flood Affectees (SPHF) and has been appointed as the Co-Lead for Land Entitlement Working Group (LEWG).UN-Habitat Pakistan is also a member of INGAD-Pakistan and provides technical feedback to the forum on different gender-based development initiatives with special focus on HLP.

UN Habitat's urban WASH initiatives focused on increasing and equitable access to urban basic services and improving the urban poor's standard of living. Initiatives included increasing access to water for urban women, slum improvement to reduce incidence of polio in Sindh, support for municipal water and sanitation.

Decade of Ecosystem Restoration-Waste Management:

Pakistan grapples with significant challenges stemming from the mismanagement of plastic and solid waste. These issues are rooted in unsustainable production and consumption practices, inadequate solid waste management infrastructure, deficient legal and policy frameworks, weak enforcement mechanisms, and limited financial resources at national and local levels.

In line with the launch of the Decade of Ecosystem Restoration, UN-Habitat has introduced the Waste Wise Cities Tool in Pakistan. This comprehensive tool enables the identification of plastic waste leakage hotspots and the evaluation of municipal solid waste management performance using the SDG indicator 11.6.1. Through the Waste Wise Cities Survey conducted in Karachi, UN-Habitat has provided vital information to municipalities and relevant stakeholders, empowering them to develop more effective waste and resource management strategies and contribute to the restoration of urban and marine ecosystems.

Furthermore, UN-Habitat has successfully piloted the "Integrated Resource Recovery Center" (IRRC) in Pakistan, a sustainable solution for solid waste management at the community level. This community-engaged initiative operates on a self-sustained and profit-oriented basis. The IRRC exemplifies the potential of community-based waste management systems in improving public health, mitigating climate change, and generating safe employment opportunities.

Improving Living Condition through Low Emission Urban Development

UN-Habitat Pakistan is actively working to create an enabling environment for low-emission development and supporting the Nationally Determined Contributions (NDC) plan under the Paris Agreement in collaboration with Korean Land and Housing Corporation, the Ministry of Climate Change, and the Government of Sindh. The project's objective is to enhance the environment and living conditions in urban slums in Karachi by introducing low-emission technologies and implementing city-wide urban planning.

The project consists of two phases. The initial and ongoing phase focuses on

"The UN Habitat project on low emission urban development is of great importance for low income and marginalized population as it will improve their living conditions. This will also help Pakistan to

Dr. Syed Saif Ur Rehman
Administrator of Karachi Metropolitan Corporation

identifying suitable sites and technologies for the project. A comprehensive survey of 93 urban slums has been conducted to assess the socioeconomic conditions and determine the needs of slum dwellers. This information will guide the implementation phase, ensuring it addresses the identified needs and improves living conditions.

Long-Term Recovery and Strategic Approach to Disasters

UN-Habitat has been actively involved in aiding disaster relief efforts in Pakistan. During the 2022 floods, UN-Habitat provided technical support for the Post-Disaster Needs Assessment (PDNA) preparation. It collaborated with provincial governments to identify the need for technical support in areas such as Housing, Land, and Property rights (HLP). Additionally, UN-Habitat is conducting research and development on affordable housing, indigenous green building materials, and baseline market assessments for resilient housing. Climate-resilient settlement planning is a key focus area for UN-Habitat in Pakistan.

UN-Habitat has been actively engaged in the rehabilitation and resettlement of populations affected by earthquakes, floods, and other disasters, including those affected by government counter-insurgency operations. The organization has undertaken projects for emergency and transitional shelter provision, as well as the construction of community infrastructure in affected areas. UN-Habitat has played a significant role in post-disaster reconstruction efforts in 2005 and 2010, employing a People's Process approach. For example, the Pakistan Settlements Flood Recovery Project (PSFRP) in 2010 provided shelter and basic services to 30,000 households.



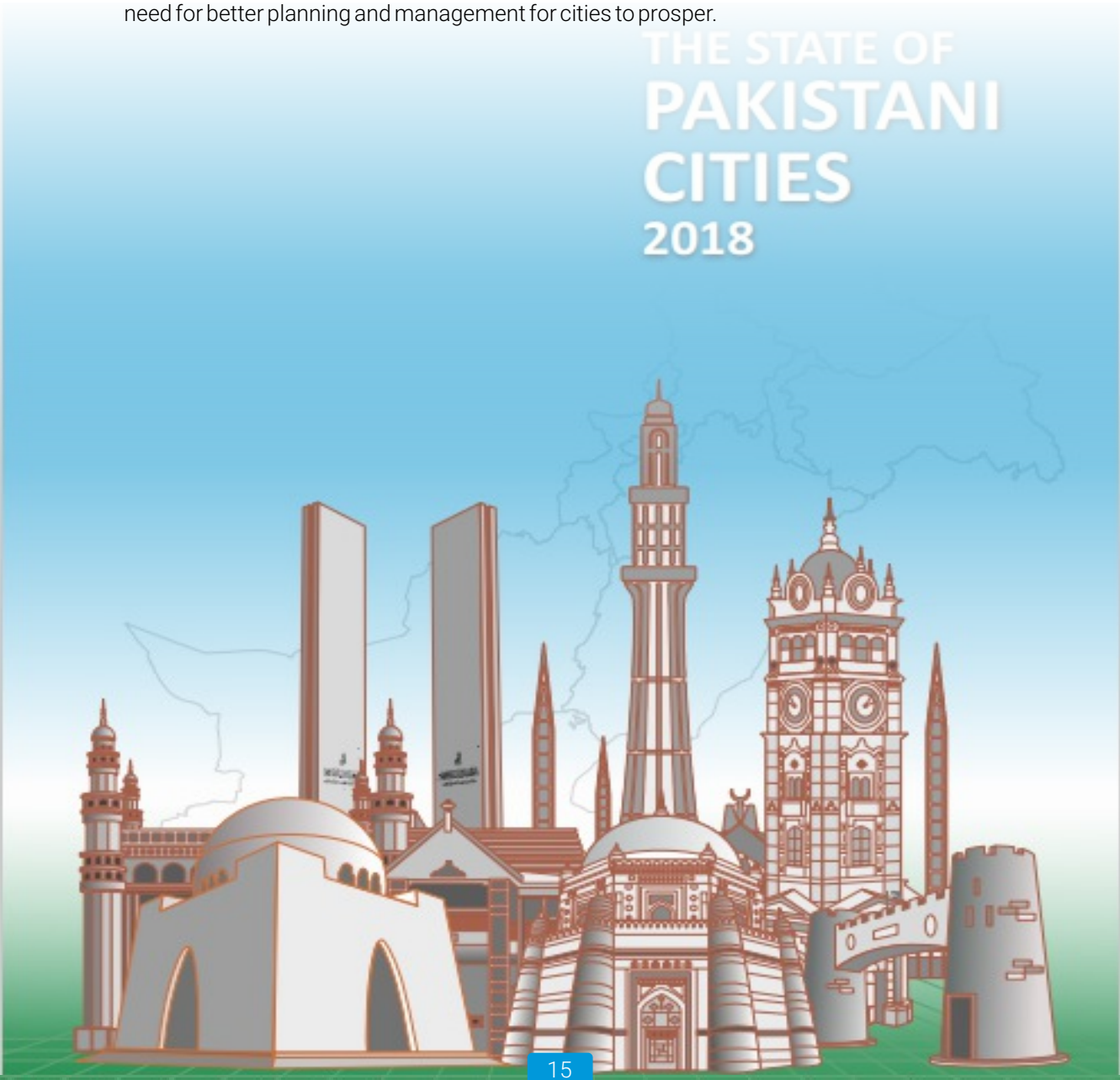
UN-Habitat supports the government's efforts to enhance the resilience of the built environment. Under the project implemented in collaboration with ECHO, UN Habitat worked for improving access to inclusive and quality education by creating resilient school infrastructure. Retrofitting guidelines were developed to ensure preventive measures were taken during the construction of school buildings.

UN-Habitat, in collaboration with the Japan International Cooperation Agency, continues to work on improving the resilience of school infrastructure in Khyber Pakhtunkhwa (KP). This project promotes resilience through structural and non-structural measures, as well as the provision of necessary service infrastructure, including WASH facilities. The project aligns with the Sendai Framework targets, which aim to reduce lives lost, the number of people affected, and economic damage from natural disasters. Given the significant human and capital losses experienced during earthquakes and other natural disasters, there is an urgent need for international collaboration to bridge the resource gap and address the vulnerability and risk faced by school children.

Strengthening Institutional Capacities for Sustainable Urbanization

UN-Habitat plays a crucial role in providing policy and operational support to governments and cities in areas such as legislation, land management, and governance. It has also been involved with developing the components of the Clean Green Cities Flagship Programme and implementing and monitoring the progress of Clean Green Cities Index. UN Habitat has facilitated strategic reforms for urban expansion while strengthening decentralization and local democracy. Initiatives included support for MIS and GIS-based digitized land records and district level Service Delivery Centres for KP Government.


UN-Habitat has been assisting the generation of guidelines, tools, and knowledge products to support the government authorities and the communities in Pakistan to make informed decisions. One of the notable publications is State of Pakistani Cities Report which is a pivotal document identifying the underlying socio-economic drivers contributing to the state of urbanization in the ten largest cities and their efficacy to respond to the urbanization challenges. This report serves as the milestone document for triggering the process of formulation of Clean Green Cities Flagship programme and Clean Green Cities Index for which UN Habitat played the role of Third Party Monitor and emphasized on the need for better planning and management for cities to prosper.



PROJECT PROPOSALS

Building Climate-resilient, Inclusive, and Sustainable Human Settlement through Nature-Based Solutions

Partners	Ministry of Climate Change, Govt. of Sindh
Time Frame	3 Years
Location	Rehri Goth, Karachi, Sindh Province, pakistan
Estimated Budget	$10,000,000
SDGs Alignment	
Alignment with UN Habitat Strategic Plan 2020-2023 and Flagship Programmes	SP3- Strengthened climate action and improved urban environment Flagship Programme-Rise Up-Resilient Settlements for Urban Poor
Target Beneficiary Group	Rehri Goth and costal communities of Karachi, Sindh Province, Pakistan

Pakistan has been suffering with the impact of climate change, with its coastal and marine ecosystem identified as one of the most vulnerable areas in the country. Within its 1,046 km coastline, the coastal communities of Rehri Goth in Karachi, Sindh Province, are severely exposed to climate change risks, especially sea-level rise, coastal erosion, flooding, saltwater intrusion, and biodiversity loss. The climate sensitivity is underpinned by rapid urbanization and population growth, underlying vulnerabilities (poverty, limited access to basic services, heatwave, environmental and ecosystem degradation) and limited adaptive capacity at household, community, and governance level. This project proposal will thus focus on tackling the lack of integrated approach to sustainable human settlement development and natural based solution for the protection of the coastal zone from the effects of climate change in Karachi Rehri Goth.

The proposed project is aligned with UN Habitat Strategic Plan 2020-2023, SP3 on Strengthened climate action and improved urban environment and will contribute to achieve objectives of the UN Habitat flagship programme on Rise Up-Resilient Settlements for Urban Poor to build urban adaptation and climate resilience in the global hotspots of vulnerability.

Purpose

The main objective of the proposed project is "To build Climate-resilient, Inclusive, and Sustainable Human Settlement through Nature-Based Solutions in the Rehri Goth, Coastal Region of Karachi, Pakistan." This project will align with the Government of Pakistan sustainable development initiative. It aims to improve the poor and vulnerable coastal communities which are most effected by the impacts of climate change.

Description

To address the challenges related to climate change impacts, resource management, and coastal erosion, the project will focus on highly vulnerable coastal settlements in Karachi Rehri Goth by implementing both hard and soft interventions.

The project consists of the following components:

Component 1: Institutional and community capacity building toward climate resilient human settlement development for inclusive and sustainable development in the coastal region
Component 2: Development of enabling environment for natural based solutions and Sustainability built through climate-resilient and basic service infrastructure
Component 3: Integrated planning with respects of natural based solutions with climate change adaptation at local level
Component 4: Knowledge management and sharing experience and practice for scale up and replication

Strategy

The project has been designed based on the outcomes of consultations at the national, provincial, district and city level relevant government agencies, engagement with the locals on community level, and other agencies that provide insights on the climate change impacts in Pakistan. To select the target communities for the project, vulnerability assessment against climate change impact and problem analysis were performed. The components of the project support the integrated approach to improving knowledge of climate-resilience and strengthening the protective infrastructure through improved institutional capacity, better local-level planning, and community-level implementation.

Soft measures include institutional and community capacity building and action plans. These are designed to target the most vulnerable settlements and to design and implement the most necessary actions to improve the adaptive capacity at the community level. Hard measures will comprise investments on the small-scale protective infrastructure and eco-friendly intervention designed to increase the resilience of the project site.

The project will also focus on specific needs of women, the elderly, people with disabilities, ethnic minorities, where they will be considered at all stages of the project. This will be achieved through engaging representatives of these vulnerable groups in community and stakeholder consultations in the planning process, through a community-based approach and through the people's process – where communities members will have greater ownership of the process of building resilience towards climate change. With a strong mix of soft and hard interventions, it is anticipated that local resilience and adaptive capacity at household, community and human settlement levels will be sustainability strengthened.

Expected Accomplishments

Outcome 1: Improved institutional and community capacity on climate change

Output 1.1: Increased Institutional capacity and awareness (provincial, city and community level)

Output 1.2: Enhanced policy and action plan guideline development for mainstreaming (provincial and city level)

Output 1.3: Improved climate resilience of community housing development

Outcome 2: Improved preventative measure to the impact of sea level rise and storm surges

Output 2.1: Improved flood-prevention via construction of Natural Based Solution (NBS) Sea wall

Outcome 3: Improved Marine ecosystem

Output 3.1: Improved shoreline via construction of NBS Elastocoast for bank

Outcome 4: Improved basic service infrastructure

Output 4.1: Water and Sanitation, Hygiene/Waste/Energy intervention

Outcome 5: Enhanced policy and action plan guideline development for mainstreaming (provincial and city level)

Output 5.1: Supplies strategy linking CCA/DRR measures to economic, social, and ecological outcomes

Output 5.2: Clear and measurable biodiversity conservation outcomes are identified, benchmarked and periodically assessed

Outcome 6: Clear and measurable biodiversity conservation outcomes are identified, benchmarked and periodically assessed

Output 6.1: This could lead to the development of Nature Based Solutions that address not only biodiversity benefits, but water policy outcomes, such as reduced flood risk.

Outcome 7: Improved knowledge and awareness on climate change adaptation of local community and local media

Output 7.1: Increased awareness on topics relating to climate risks of the communities in Rehri Goth, via multiple mediums

Output 7.2: Improved reporting, investigation, and awareness on climate risks via media trainings for local journalists

Risks and Mitigation Measures

Risk 	Mitigation Measures 
Gender equality and effectively engaging vulnerable groups such as women, youth, children, the elderly, and people with disabilities	Consultations and other participatory approaches will be tailored to the context by for example, conducting women-only / youth-specific focus group discussions or workshops. Gender empowerment and the involvement of women in decision making will be promoted by ensuring that an equal number of female and male representatives are present in the established community groups
Fulfilling the specific needs of different ethnic groups that are present in the target communities	Appropriate tools translated to the relevant languages within each context will be used to ensure that communities are aware of their rights.
Fulfilling the specific needs of different ethnic groups that are present in the target communities	Incorporating waste management and disposal into design and chemical residues must be collected and stored in safe places before transferring to hazard/chemical waste treatment facilities. Additionally, the environmental effects of chemicals used in elastocoast (bio- coast) are analyzed by private sectors, mentioning the compounds pose no threat to the aquaculture environment and the components are non-toxic and naturally degradable.

Housing, Land & Property Rights (HLP) Capacity Building of the Key Stakeholders in the 2022-floods affected areas of Pakistan

Partners	Direct Beneficiaries: District Administration, Local NGOs, Community Based Organizations, (CBOs) and Local Legal Fraternity (Young Female Lawyers)Indirect Beneficiaries: Flood-affected population of 9 districts
Time Frame	6 Months
Location	Nine (9) Flood-affected districts of Pakistan
Estimated Budget	US$ 300,000/-
SDGs Alignment	
Alignment with UN Habitat Strategic Plan 2020-2023 and Flagship Programmes	SP1- Reduced spatial inequality and poverty in communities across the urban-rural continuum Flagship Programme- Inclusive Cities: Enhancing the Positive Impacts of Urban Migration"
Target Beneficiary Group	Provincial Disaster Management Authorities (PDMAs), District, Administration, Local NGOs, Community Based Organizations (CBOs) and Local Legal Fraternity (Young Female Lawyers)

Context

In 2022 Pakistan witnessed the worst flood in its history. According to the National Disaster Management Authority (NDMA), thirty-three million people have been affected across the country with consequential loss to lives, houses, crops, livestock etc. While the floods are receding, the affected families urgently need to be rehabilitated on lands and their houses rebuilt.

Without the provision of land and housing to the flood affectees, the sustainability of recovery and reconstruction efforts will be severely undermined. Furthermore, it will adversely affect the already fragile social equilibrium in a country like Pakistan, so there is an added urgency for making an adequate intervention of providing adequate and safe housing for the flood-affected people.

The property rights system in Pakistan is complicated; a huge percentage of land belongs to the citizens while the state also has ownership of some parcels of lands and the state has a right to acquire private land in public interest after payment of compensation. Land tenure security for all segments of society including women and youth, is the greatest challenge in land and housing sector. Eviction without justification is quite widespread causing many to lose the only shelter available to them. The land registration / documentation system is also complex and varies in urban and rural areas whereas different laws deal with different situations and entitlements. Furthermore, the situation becomes more complex in the presence of centuries old customs and attitudes disentitling women from their due legal share in property / inheritance. This already inadequate land registration system has come under tremendous pressure due to growing population as well.

With floods receding and finding housing parcels is the first issue to be handled. This can lead to many conflicts and therefore will require mobilization to create awareness, understanding and harmony among communities before rehabilitation process can proceed. Secondly, effort should be to rehabilitate owners/residents on their own lands and houses by facilitating them to have access to their lost documents (Computerized National Identity Cards, property documents etc). However, this seemingly simple exercise may involve substantial problems. In the event of flood having washed away prominent landmarks and survey coordinates, difficulty will arise in the identification / delineation on the ground of a particular field of land. Disputes may arise among neighboring landlords about the boundaries of their holdings. Intervention of Land Revenue department with relevant land Record will therefore become necessary for the demarcation of individual holdings in the rural areas. Situation regarding owners getting possession of their urban housing will comparatively be simpler.

The proposed project is aligned with UN Habitat Strategic Plan 2020-2023, SP1 on reduced spatial inequality and poverty in communities across the urban-rural continuum and will contribute to achieve objectives of the UN Habitat flagship programme on Inclusive Cities: Enhancing the Positive Impacts of Urban Migration" supporting local and national authorities to create inclusive and non-discriminatory urban environments for all people.

Purpose

Provision of information and legal assistance to flood affected persons may also be expressed using one or a combination of the following: persons vulnerable to legal and human rights violations need information to be able to make informed decisions on all issues affecting their well-being and that of their families/communities to enhance their chances of survival and/or work towards a durable solution. The flood affected persons need comprehensive information to make informed decisions on which solution will best put an end to their predicament. Awareness of legal procedures for repossessing property, for example, might be useless if not complemented with information regarding the socio-economic and security conditions in a return or resettlement area. The vulnerable persons (especially women and women headed households, elders, persons with special needs, minor girl-child, ethnic/religious minorities, perenially sick and landless families) to be protected from legal and human rights violations and they need to know their rights and entitlements to seek remedies when violations occur to work towards/achieve a durable solution.

Description

Capacity building of local stakeholders and the service providing agencies (Provincial Board of Revenue) is an important component in promoting the impact of such interventions, therefore, UN-Habitat is embarking on an intervention to support the local stakeholders by conducting training sessions for them in HLP and Information,

Communication and Legal Assistance to serve the flood affected population in general and the vulnerable affected communities in particular, in the flood affected areas of Pakistan to protect their HLP rights; with the potential for the project to become a regular programme in the future; and to strengthen the institutional capacities of the Provincial Board of Revenue to efficiently and effectively address the post-disaster HLP related issues of the affected communities / individuals enabling them to protect their HLP rights and to amicably resolve their HLP related disputes / conflicts, accordingly.

Strategy

All the necessary documents/training modules will be analyzed to fully understand the ground situation and existing training material available for training the stakeholders on HLP (including the review and updating of UN-Habitat's HLP guidelines and existing UN-Habitat's HLP and NRC's ICLA training manuals); relevant national and international legislation and policies that have been signed/ratified pertaining to HLP in emergencies. Based on this task, develop a set of comprehensive training modules by a team of Experts in English and its translation in regional languages, with a special focus on the humanitarian principles. The training modules will be printed/published and will be subsequently disseminated among all the stakeholders.

After selection of the resource persons for the trainings for the ToTs, one Training of Trainers (TOT) workshop will be conducted at Islamabad for training identified resource persons on HLP and ICLA using the developed manual; which will form a Resource Pool (Master Trainers) to be used in the future for further trainings. The activities will include drafting the Schedule of two 3-DaysTraining Sessions, recommendations for selection of training sites/venues and logistical arrangements for the training sessions; followed by post-training evaluation and impact assessment. 9 training sessions will be conducted for 225 representatives of local NGOs/local CBOs/young female lawyers through 3 three-days training sessions on HLP and ICLA at the nearest located venues, in this phase.

A directory and database of all the trained master trainers will be developed and they will provide the necessary help and support to the flood affected individuals / communities at the village level. During the implementation process local NGOs/CBOs will be identified to be provided social mobilization support by strengthening their financial capacity to undertake this responsibility, in the next phase as well.

With the consultation and collaboration of the Provincial Board of Revenue (BoR), a workplan will be developed for comprehensive evaluation of the land administration system and Land Record Management Information System (LRMIS)

in the Provinces. In the next phase, this evaluation will be conducted in the Provinces to identify gaps in service delivery and technical capacity enabling the BoR to strengthen its response mechanisms in addressing the HLP needs of the citizens in general and the disaster-affected individual / communities especially the vulnerable in particular. Through advocacy campaigns the academia will be sensitized to include humanitarian studies as a regular programme at their educational institutions; law schools may include HLP in their curriculum.

Expected Accomplishments

This project will have the following outcomes and outputs:

Outcome 1: Strengthened HLP capacity of the key stakeholders in the flood-affected areas

Output 1.1: Develop a comprehensive data-base of the trained resource for future capacity building initiatives.

Outcome 2: Enhanced wellbeing of vulnerable communities through the provision of Information, Communication and Legal Assistance (ICLA) services for protection of their Housing, Land and Property Rights (HLP) in the flood-affected areas

Output 2.1: Conduct HLP Capacity Building Trainings for the key stakeholders

Output 2.2: Formation of local forums through linkages at the local level providing ICLA services to the vulnerable communities including women/girls, persons with disabilities, ethnic minorities, transgenders and refugees.

Outcome 3: Strengthened HLP institutional capacity of the key service providers in the flood-affected areas

Output 3.1: Develop a comprehensive work-plan for conducting assessment of land administration and governance systems in the Province.

Outcome 4: Advocacy for inclusion of Housing, Land and Property Rights based Humanitarian Studies in the curricula of the academic institution

Output 4.1: Develop a comprehensive strategy for advocacy campaigns for the target academic institutions

Risks and Mitigation Measures

Risk	Mitigation Measures
1. Lack of interest of the funding agencies for supporting this initiative of durable solution	The capacities of local officials will be built on mainstreaming these recommendations and their awareness on the importance of Housing, Land and Property Rights will be raised

Promoting circular economy and reduction of plastic leakage in ecosystem

Partners	Sindh Solid Waste Management Board, CBOs, Plastic Waste Recycle Associations, Research Institutions
Time Frame	2 year
Location	Karachi
Estimated Budget	1.5 Million USD
SDGs Alignment	
Alignment with UN Habitat Strategic Plan 2020-2023 and Flagship Programmes	SP3- Strengthened climate action and improved urban environment Flagship Programme-Inclusive Vibrant Neighbourhood and Communities
Target Beneficiary Group	The direct beneficiaries: Karachi city municipality, CBOs, Recycling companies, Education institutions The indirect beneficiaries: Citizens of Karachi, Plastic industry and stakeholders across the value chain

Context

Pakistan faces serious problems due to mismanagement of plastic and other solid waste. Pakistan ranked sixth globally and third in Asia among plastic waste generators with the country producing about 30 million tons of solid waste annually out of which 9% is plastic waste.

In 2019, UN-Habitat supported UN Environment in identifying 50 land-based point-source hotspots in Africa and South Asia, using available waste management data. According to the study, Karachi is identified as among the top 10 marine litter hotspots in the region, constituting an increasing risk to ecosystem health and biodiversity. This is rooted in unsustainable production and consumption patterns, poor solid waste management and lack of infrastructure, lack of adequate legal and policy frameworks and poor enforcement, and a lack of financial resources both at national and local governments.

In 2021, UN-Habitat launched the Waste Wise Cities Tool – Step by Step Guide to Assess City MSWM Performance through SDG Indicator 11.6.1 Monitoring (WaCT) in Karachi, a step by step guide to identify plastic waste leakage hotspots and assess city's municipal solid waste management performance through SDG indicator 11.6.1 monitoring.

The WaCT survey conducted in by UN Habitat in Karachi in 2021 showed that approximately 12,067 tonnes of municipal solid waste are generated daily, of which 81% is collected and 0% is managed in controlled facilities . Although WaCT results showed a relatively high collection rate, the amount of uncollected waste is not negligible and adds up to about 2,172 tonnes of MSW daily due to the large size of the population. The potential plastic leakage from Municipal solid waste in Karachi is 2.4 kg/capita/year. Improvement of existing transfer stations and construction of clean Material Recovery Facilities (MRFs) can directly

improve the city's recovery rate. The waste is daily handled in a manner that polluting air, soil, and water and leaking plastic waste into water bodies. Furthermore, there are no official or formal waste recovery facilities in place. Out of the total number of 13 stations only 3 were operational during the study. This situation is leading to increasing environmental, health and hygiene problems. Though National policies exist to address the challenges related to waste management, waste problem is worsening in Pakistan and resulting in increased GHG emissions and plastic pollution.

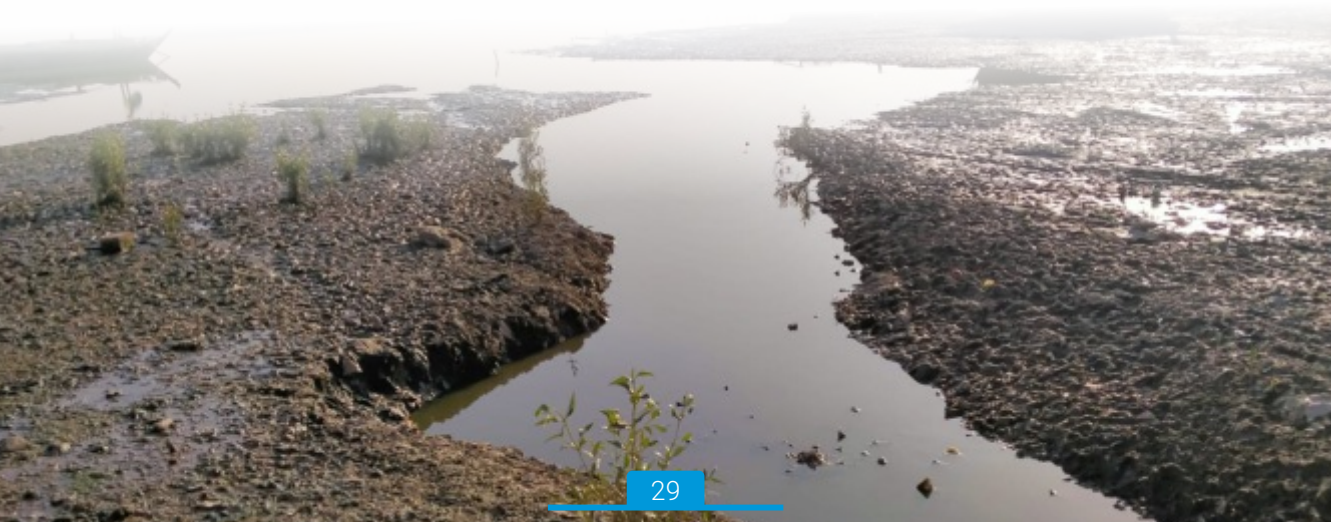
An effective and efficient plastic and other solid waste management system is critical for improving the productivity and sustainability of Pakistan's centers.

The proposed project is aligned with UN Habitat Strategic Plan 2020-2023, SP3 on Strengthened climate action and improved urban environment and will contribute to achieve objectives of the UN Habitat flagship programme on inclusive, vibrant neighborhood and communities by supporting the environmental transformation of strategic locations within a city and will result in clean, healthy, and vibrant neighborhoods.

Purpose

The overarching project objective is to promote circular economy and contribute to both the technical infrastructure of waste management and sustainable production and consumption strategies, recognizing that addressing this challenge will require a multifaceted approach. The project proposes the implementation of Integrated Resource Recovery Center (IRCC) for the treatment of solid and plastic waste and upgrade transfer stations.

Moreover, to tackle the systemic problem of plastic and solid waste effectively, the project includes key research components that offer fresh insights into the current status and market outlook of the hard-to-recycle plastic value chain, including manufacturing, production, reprocessing, recycling, and consumption trends and underlying factors and drivers.



The project will help in:

- Decreasing the generation of waste (linked to SDG 12.5 and SDG 12.3.1) and fostering sustainable consumption and community engagement;
- Improving municipal solid waste collection and controlled management (linked to SDG 11.6.1);
- Increasing the recycling of secondary materials (linked to SDG 12.5.1).
- Mitigate greenhouse gas emissions by diverting organic fraction away from disposal sites and saving energy through recycling (linked to SDG 13.2 and 13.3).

Description

The project's objective is to establish a comprehensive waste management system that addresses various aspects of the waste lifecycle. This includes improving primary waste collection efficiency in low-income areas, creating inclusive and controlled waste treatment facilities, developing a value chain for reclaimed polymers, and preventing plastic leakage throughout the waste management process. By doing so, the project aims to indirectly enhance the living conditions and environment of communities, particularly benefiting vulnerable populations. Community-based organizations and waste pickers will receive training, empowering them to actively participate in waste management and potentially generate income from the sale of recyclable materials.

One of the project's key focuses is on community-based waste management and the training of community-based organizations (CBOs), which will create employment opportunities for women and youth, especially in low-income areas. Currently, waste handling is inadequate, leading to a high risk of plastic leakage into the environment. The project will ensure that facilities and infrastructure are designed with accessibility in mind to accommodate individuals with disabilities.

The project will focus on the following components

Component 1: Organize project consultation workshops involving stakeholders including plastic producers, waste collection companies, recycling companies, informal waste recovery/collectors groups, etc. to identify opportunities for plastic and other wastes reduction based on the findings of the UN Habitat WaQT study conducted in 2021.

Component 2: Construct and operationalize Integrated Resources Recovery Center (IRRC) with material recovery and sorting functionality of plastic and other wastes.

Component 3: Research and Development to utilize hard to recycle plastic materials and products reclaimed from waste for circular economy such as production of building materials, alternate as asphalt and other materials.

Component 4: Investigate current status and market outlook of selected polymers to inform data-driven policy and investment recommendation and interventions to prevent plastic pollution

leaking to marine environment and establishing an enabling environment for circular economy for plastics in Pakistan.

Strategy

The proposed project aims to improve waste services and the value chain through a comprehensive approach. It involves provincial consultations, research, and constructing Integrated Resources Recovery Centers (IRRC) at the neighborhood level. To create an enabling environment for the circular economy, the project will conduct social mobilization and capacity building interventions. Community-based organizations and waste pickers will receive training, with an emphasis on developing construction materials from hard-to-recycle plastics. Data-driven policy reforms and investments will improve waste collection, transfer, recovery, and safe disposal, while preventing plastic leakage into the marine environment.

The project prioritizes increasing the efficiency of waste collection in low-income areas, preventing plastic leakage, and establishing controlled waste treatment facilities based on a UN-Habitat study. Existing waste management systems and municipalities will operate the IRRCs, improving health and safety conditions and enhancing the management capacity of the Sindh Solid Waste Management Board. The Karachi municipality will own the newly constructed IRRCs to ensure sustainability.

After constructing and operationalizing the facilities, and training the municipalities, a one-year pilot test of the waste recovery scheme will take place. A monitoring and evaluation system will allow regular reviews and adjustments, including the processing of reclaimed plastics into upcycled products. Study tours to cities with successful interventions will support capacity building. The project will also develop GHG calculation models for the waste sector and identify mitigation measures to reduce plastic leakage. These efforts can attract financial support for the solid and plastic waste sector.

Expected Accomplishments

Outcome 1: Introduction of technologies for safe, sound and environmentally safe disposal of waste for circular economy and reduction of plastic leakage in ecosystem.

Output 1.1. Operationalization of Integrated Resource Recovery Centers (IRRCs) with material recovery and sorting functionality of plastic and other wastes.

Outcome 2: Identification of opportunities for plastic and other wastes reduction.

Output 2.1. Consultative workshops involving stakeholders including plastic producers, waste collection companies, recycling companies, informal waste recovery/collectors groups to identify opportunities for plastic and other wastes reduction.

Outcome 3: Establishing an enabling environment for circular economy for plastics in Pakistan.

Output 3.1: Research and Development to utilize hard to recycle plastic materials and products reclaimed from waste for circular economy such as production of building materials, alternate as asphalt and other materials.

Output 3.2: Investigate current status and market outlook of selected polymers to inform data-driven policy and investment recommendation and interventions to prevent plastic pollution leaking to marine environment and establishing an enabling environment for circular economy for plastics in Pakistan.

Risks and Mitigation Measures

Risk 	Mitigation Measures 
Low priority on political agenda	Collaborate with willing local authorities and Increase public awareness
Absence of sustainable financing	Increase support in developing capacity for sustainable financing; try to establish partnerships (Public-private).
Reluctance for behavioral change	Increase public awareness and tailor messaging and strategy/communication plan undertaken by behavior change team
Limited access to data	data validation and consensus building workshop/activities
Reluctance in stakeholder corporation	Build strong relationships with stakeholders along the value chain and communicate the value and benefits of their participation

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