THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

FOR OFFICIAL USE ONLY

Report No: PAD5204

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A

PROPOSED CREDIT
IN THE AMOUNT OF SDR 116.9 MILLION
(US$150 MILLION EQUIVALENT)

AND A

PROPOSED CREDIT
IN THE AMOUNT OF SDR 272.8 MILLION
(US$350 MILLION EQUIVALENT)
IN CRISIS RESPONSE WINDOW RESOURCES

TO THE

ISLAMIC REPUBLIC OF PAKISTAN

FOR A

SINDH FLOOD EMERGENCY HOUSING RECONSTRUCTION PROJECT

December 5, 2022

Urban, Resilience And Land Global Practice
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective Oct 31, 2022)

Currency Unit =	Pakistan Rupee (PKR)
PKR 220.7500 =	US$1
US$1 =	SDR 0.77924709

FISCAL YEAR
July 1 - June 30

Regional Vice President:	Martin Raiser
Country Director:	Najy Benhassine
Regional Director:	John A. Roome
Practice Manager:	Abhas Kumar Jha
Task Team Leader(s):	Kamran Akbar, Shahnaz Arshad, Syed Muhammad Bilal Khalid

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AM	Accountability Mechanism
BISP	Benazir Income Support Programme
CCDR	Country Climate and Development Report
CE	Citizen Engagement
CFO	Chief Financial Officer
CPS	Country Partnership Strategy
CRW	Crisis Response Window
CSEB	Compressed Stabilized Earth Bricks
DA	Designated Account
DFSP	Digital Financial Services Providers
DRM	Disaster Risk Management
E&S	Environmental and Social
ESCP	Environment and Social Commitment Plan
ESF	Environment and Social Framework
FAO	Food and Agriculture Organization
FM	Financial Management
FY	Fiscal Year
GDP	Gross Domestic Product
GM	Grievance Mechanism
GoP	Government of Pakistan
GoS	Government of Sindh
GRM	Grievance Redressal Mechanism
IDA	International Development Association
IPF	Investment Project Financing
ISP	Implementation Support Plan
IP	Implementation Partners
IUFR	Interim Unaudited Financial Report
LMP	Labor Management Procedure
M&E	Monitoring and Evaluation
MIS	Management Information System
NADRA	National Database Registration Authority
NDMA	National Disaster Management Authority
NGO	Non-governmental Organization
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PDO	Project Development Objective
PDNA	Post-Disaster Needs Assessment
PISC	Project Implementation Support Consultant
PIU	Project Implementation Unit
PPSD	Project Procurement Strategy for Development
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan

SFERP	Sindh Flood Emergency Rehabilitation Project
SFEHRP	Sindh Flood Emergency Housing Reconstruction Project
SPHF	Sindh Peoples Housing for Flood Affectees
SSEP	Sindh Solar Energy Project
SWAT	Sindh Water and Agriculture Transformation Project
UN	United Nations
VSI	Value of Statistical Injuries
VSL	Value of Statistical Lives
WASH	Water, Sanitation and Hygiene
WB	World Bank
WBG	World Bank Group

TABLE OF CONTENTS

DATASHEET

BASIC INFORMATION

Country(ies)	Project Name		
Pakistan	Sindh Flood Emergency Housing Reconstruction Project		
Project ID	Financing Instrument	Environmental and Social Risk Classification	Process
P180008	Investment Project Financing	Substantial	Urgent Need or Capacity Constraints (FCC)

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[✓] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	[✓] Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
19-Dec-2022	30-Jun-2027

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To deliver beneficiary-driven, multi-hazard resilient reconstruction of core housing units affected by the 2022 floods in selected districts of Sindh.

Components

Component Name	Cost (US$, millions)
Housing Reconstruction Grants	470.00
Institutional Strengthening and Technical Assistance	20.00
Project Management and Implementation Support	10.00

Organizations

Borrower:	Islamic Republic of Pakistan
Implementing Agency:	Province of Sindh, Sindh Peoples Housing for Flood Affectees

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	500.00
Total Financing	500.00
of which IBRD/IDA	500.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	500.00
IDA Credit	500.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Pakistan	500.00	0.00	0.00	0.00	500.00
National Performance-Based Allocations (PBA)	150.00	0.00	0.00	0.00	150.00

Crisis Response Window (CRW)	350.00	0.00	0.00	0.00	350.00
Total	**500.00**	**0.00**	**0.00**	**0.00**	**500.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2023	2024	2025	2026	2027
Annual	100.00	250.00	100.00	25.00	25.00
Cumulative	100.00	350.00	450.00	475.00	500.00

INSTITUTIONAL DATA

Practice Area (Lead)

Urban, Resilience and Land

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	High
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	High
9. Other	Substantial
10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Section I.A.1 of the Schedule to the PA: The Project Implementing Entity shall establish, by not later than one (1)

month after the Effective Date, and thereafter maintain, at all times during the implementation of the Project, a Project Implementing Unit, to be housed under the Sindh Peoples Housing for Flood Affectees, with a mandate, composition, and resources satisfactory to the Association, including qualified staff to support the management of fiduciary and environmental, social, and health risks, consisting of at least one procurement specialist, one financial management specialist, one environmental specialist, one social development specialist, and one gender/gender-based violence specialist, each with terms of reference acceptable to the Association; to be responsible for overall Project management and implementation.

Sections and Description
Section I.A.2 of the Schedule to the PA: The Project Implementing Entity shall, by not later than one (1) month after the Effective Date: (a) select and engage Implementation Partners in accordance with the selection criteria and procedures set forth in the Program Guidelines, and thereafter maintain at all times during the implementation of the Project, with a mandate, composition, and resources satisfactory to the Association, to be responsible for facilitating community level outreach and engagement under the Project; and (b) enable the Implementation Partners to initiate the damage assessment and eligibility verification survey under Part 2.1 of the Project.

Sections and Description
Section I.A.3 of the Schedule to the PA: The Project Implementing Entity shall, by not later than one (1) months after the Effective Date, engage, and thereafter maintain at all times during the implementation of the Project, a third party monitoring agent, with terms of reference acceptable to the Association, to carry out oversight and monitoring of disbursement of funds to Beneficiaries and ensure the completion of works.

Sections and Description
Section I.C.2 of the Schedule to the PA: The Project Implementing Entity shall select and engage digital financial services providers prior to carrying out the activities under Part 1 of the Project to assist the Project Implementing Entity in disbursement of the Housing Reconstruction Grants.

Sections and Description
Section I.E of the Schedule to the PA: The Project Implementing Entity shall establish and make operational, by not later than sixty (60) days after the Effective Date, and thereafter maintain at all times during the implementation of the Project, a grievance redressal mechanism, acceptable to the Association.

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	The Recipient has performed an environmental and social audit with relevant and appropriate E&S documentation and implemented any necessary corrective actions, in form and substance satisfactory to the Association, for any activities subject to retroactive financing.
Type	Financing source	Description
Effectiveness	IBRD/IDA	The Project Implementing Entity has adopted the Project Guidelines document.

I. STRATEGIC CONTEXT

A. Country Context

1. **Over the past two decades, Pakistan has achieved significant poverty reduction, but human development outcomes have lagged, and economic growth has remained volatile and slow.** Expansion of off-farm economic opportunities and the increase in migration and associated remittances allowed over 47 million Pakistanis to escape poverty between 2001 and 2018. Despite rapid poverty reduction, human capital outcomes have remained poor and stagnant, with high levels of stunting at 38 percent and learning poverty at 75 percent.[1] Pakistan has also experienced frequent macroeconomic crises due to a growth model based on private and government consumption, with productivity-enhancing investment and exports contributing relatively little to growth. Growth of per capita gross domestic product (GDP) has been low and volatile, averaging under 2 percent in the last two decades.[2] Recent unprecedented floods are likely to have serious impacts on poverty, human development outcomes, and economic growth.

2. **In early fiscal year (FY) 2023, Pakistan's economy was undergoing an overdue adjustment as it recovered from the impacts of COVID-19.** Supported by accommodative macroeconomic policies, the economy expanded by 6.0 percent in FY22. Strong domestic demand, low productivity growth, high world commodity prices, and the global economic slowdown contributed to severe external imbalances. Since Spring 2022, the Government of Pakistan (GoP) took measures to constrain aggregate demand, including implementation of a contractionary budget and increases in administered energy prices.

3. **The recent floods have had enormous human and economic impacts.** Pakistan experienced heavy monsoon rains between June and September 2022, which has severely affected millions of households, mainly in Sindh and Balochistan. Around 33 million people have been displaced and more than 13,000 kilometers of roads destroyed. The flooding has damaged 2.2 million houses, flooded around 9.4 million acres of crops, and killed an estimated 1.2 million livestock, adversely affecting rural livelihoods. Limited access to input and output markets and temporary disruptions to supply chains have driven up food prices and added to existing price pressures resulting from reduced agricultural yields and the global rise of food prices. Food shortages are expected to intensify in the fall and winter due to significant crop and livestock losses. Preliminary estimates suggest that as a direct consequence of the floods, the national poverty rate may increase by up to 4.0 percentage points, potentially pushing around 9 million people into poverty. The recently completed Post-Disaster Needs Assessment (PDNA) estimates total damages to be US$14.9 billion, while total economic losses reached about US$15.2 billion. About 70 percent of the total damages and losses happened in the Sindh province. Estimated needs for rehabilitation and reconstruction is at US$16.3 billion, not including new investments beyond the affected areas to strengthen Pakistan's resilience to future shocks.[3]

[1] World Bank. 2019. "Pakistan: Leaning Poverty Brief." EduAnalytics. https://thedocs.worldbank.org/en/doc/214101571223451727-0090022019/original/SASSACPKPAKLPBRIEF.pdf
[2] World Bank Group. 2022. From Swimming in Sand to High and Sustainable Growth : A Roadmap to Reduce Distortions in the Allocation of Resources and Talent in the Pakistani Economy. Pakistan Economic Memorandum, World Bank, Washington, DC. p.1. https://openknowledge.worldbank.org/handle/10986/38133.
[3] Government of Pakistan. 2022. "Pakistan Floods 2022: Post-Disaster Needs Assessment. Main Report" Ministry of Planning Development & Special Initiatives.

4. **The economic impacts of flooding and associated reconstruction needs will make it much harder for the government to implement much-needed economic adjustment required to address structural imbalances.** Growth is expected to reach only around 2 percent in FY23. Due to higher energy prices, a weaker Rupee, and flood-related disruptions to agricultural production, inflation is projected to rise to around 23 percent[4] in FY23. With disruptions to exports and higher import needs, the current account deficit is expected to narrow only slightly to around 4.3 percent of GDP in FY23 (from 4.6 percent in FY22). The fiscal deficit is projected to narrow only modestly from FY22 levels to around 6.9 percent of GDP in FY23 (against a budgeted deficit of 4.7 percent), reflecting both negative revenue impacts from flooding and increased expenditure needs.

5. **The GoP thus faces a difficult policy challenge in supporting relief and recovery while maintaining progress towards macroeconomic stabilization.** Significant downside risks include: (i) additional natural disasters that could further harm output and worsen fiscal and external imbalances; (ii) a slowdown in policy response in the months prior to elections; (iii) worsening external conditions; and (iv) risks associated with large domestic and external financing needs. To manage these risks, it will be critical to adhere to sound overall economic management and buttress market sentiment, including through: (a) articulating and effectively implementing a clear strategy for economic recovery; (b) maintaining overall fiscal constraint, sustaining the roll-back of energy subsidies, and targeting fiscal expenditures towards the most vulnerable, including through enhanced social protection measures; (c) maintaining a tight monetary stance and flexible exchange rate; and (d) progressing critical structural reforms, including reducing collection losses in the energy sector, improving the efficiency of revenue mobilization, and closing tax exemptions. Even with such efforts, post-flood reconstruction needs exceed available fiscal space. Significant private investment will be required, including through efforts to improve the business environment and access to finance, alongside additional international assistance.

6. **As the recently published Country Climate and Development Report (CCDR) shows, Pakistan's high vulnerability to climate change is a risk multiplier, compounding its human and economic development challenges.** Pakistan consistently ranks among the top 10 countries worldwide most affected by climate change[5] despite being a relatively minor contributor to climate change at under 1 percent of global greenhouse gas emissions in 2018.[6] More frequent and extreme weather events are adversely impacting ecosystems, people, and their settlements and infrastructure. Heatwaves, heavy precipitation events, droughts, and cyclones are prevalent risks. The country experiences some of the highest temperatures in the world, with several areas recording temperatures of over 38 degrees Celsius annually. In 2015, a heatwave resulted in over 65,000 people hospitalized and 1,200 deaths, mostly in the Sindh province. Projected temperature increases in Pakistan are higher than the global average—as high as 5.3 degrees Celsius by 2081–2100 under the highest emissions Representative Concentration Pathway

[4] World Bank. 2022. "Pakistan Development Update October 2022: Inflation and the Poor.". https://thedocs.worldbank.org/en/doc/51427702c05371f59848a74a2d66ba87-0310062022/pakistan-development-update-october-2022-inflation-and-the-poor.
[5] Eckstein, David, Vera Künzel, and Laura Schäfer. 2021. "Global Climate Risk Index 2021." Germanwatch Briefing Paper. https://www.germanwatch.org/en/19777.
[6] World Bank Group. 2022. "Pakistan Country Climate and Development Report." CCDR Series. World Bank, Washington, DC. p.6 World Bank Group. https://openknowledge.worldbank.org/handle/10986/38277

(RCP8.5), compared to a global average increase of 3.7 degrees Celsius in the same scenario.[7] There is also significant uncertainty surrounding future precipitation rates in Pakistan, underscoring the need for better preparedness for unforeseen extreme precipitation events. Research highlights the risk of increased frequency and intensity of flood and drought events, brought on by changes in the seasonality, regularity, and extremes of precipitation.[8] The probability of meteorological drought, usually brought on by below-normal precipitation, is set to sharply increase under all emission pathways—from the current probability of 3 percent to a 25–65 percent probability, which can cause significant damage to crops and livelihoods. Climate change and extreme events disproportionately affect the most disadvantaged groups, including low-income businesses, those engaged in manual labor jobs, poorer farmers, women, and children.

7. **Pakistan is especially vulnerable to flooding—including riverine, flash, glacial lake outbursts, and coastal flooding—and the country regularly experiences large-scale flooding, most notably in 2010 and more recently in June 2022.** Pakistan faces some of the highest disaster risk levels in the world, ranking 18 out of 191 countries according to the 2020 Inform Risk Index and eighth at risk of flooding. Despite a history of other disasters such as earthquakes, heatwaves, and droughts, floods remain the dominant hazard. The majority of the country's population lives along the Indus River, which is prone to severe flooding during the monsoon season. The catastrophic 2010 rains flooded one-fifth of the country, affecting 20 million people and claiming 2,000 lives. It is estimated that Pakistan's average annual losses to flooding are above US$1 billion.[9] These figures are set to rise due to climate change, and the unprecedented losses experienced during the 2022 floods, which have exceeded the scale of the 2010 monsoon flooding (previously the worst flooding in the country's history). Pakistan's climate vulnerability, coupled with the uncertainty surrounding annual glacial melt, average precipitation, and extreme temperature changes, highlights the need for ex-ante disaster preparedness and resilience building.

B. Situation of Urgent Need of Assistance or Capacity Constraints

8. **The 2022 monsoon rains triggered the most devastating flooding in Pakistan's history, affecting all four provinces and impacting 15 percent of the population.[10]** Millions of people remain in need of assistance, hundreds of thousands of homes have been destroyed, critical infrastructure such as road networks, bridges, and water systems has been damaged, and livelihoods lost. Significant damages to houses, transport, agriculture, irrigation, and communication infrastructure have also been reported in Sindh province. Given the scale of the current disaster, the government requires support related to immediate relief, recovery, reconstruction, and increasing resilience in the aftermath of the floods.

9. **Since the onset of the flooding, the GoP has been engaged in emergency response and relief.** Of the PKR 70 billion (US$319 million) earmarked to assist flood-affected people, the Benazir Income Support Programme (BISP) has disbursed approximately PKR 65 billion (US$296 million) to over 2.6 million flood-affected households as of October 15, 2022. Beyond financial support, the National Disaster Management

[7] World Bank and Asian Development Bank. 2021. "Climate Risk Country Profile: Pakistan." Economic and Sector Work (ESW) Studies Report.
[8] World Bank and Asian Development Bank. 2021. "Climate Risk Country Profile: Pakistan." Economic and Sector Work (ESW) Studies Report.
[9] World Bank Climate Change Knowledge Portal (dataset). Pakistan.
[10] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 2022. "Pakistan: 2022 Monsoon Floods, Situation Report No. 9, As of 14 October 2022."

Authority (NDMA) and the Provincial Disaster Management Authority have been providing in-kind support such as tents, rations, mosquito nets, dewatering pumps, medicines, and drinking water; they have also established evacuation camps for displaced persons. Damage assessment teams have been deployed on the ground; and the country's armed forces have been supporting the government's rescue and relief efforts. The government has established a National Flood Response and Coordination Centre, which includes representatives from the federal and provincial governments as well as the armed forces, to coordinate flood response, relief, and rehabilitation across the country. In collaboration with the United Nations (UN), the government issued a flash appeal (based on the 2022 Pakistan Floods Response Plan) which seeks US$816 million to respond to the needs of the people. Pledges from donors have reached US$180 million, with only US$90 million (11 percent) currently committed.[11] National and international organizations, as well as bilateral development partners, are assisting affected populations through distribution of food and non-food items as well as provision of water and sanitation, hygiene, and health services.

10. **Research has linked the rainfall and flooding to climate change, making this a major climate induced calamity.** According to a report compiled by the World Weather Attribution group,[12] extreme rainfall in the region has increased by 50–75 percent, with climate models suggesting that this is entirely due to human-induced climate change. The exact extent of the climate-induced nature of the floods has not been fully quantified at present as the region experiences considerably variable weather from year to year, making it difficult to identify long-term changes. However, historical records show that heavy rainfall and greenhouse gas emissions had both dramatically increased in the region, hence climate projections had long predicted such a disaster. The evidence therefore suggests that climate change played a critical role in the floods.

11. **The PDNA undertaken by the GoP, the World Bank (WB), the Asian Development Bank (ADB), the UN, and the European Union suggests that the housing, agriculture, transport, water supply and sanitation, and irrigation sectors bear the brunt of the damage.** For Sindh, the overall needs assessment for post-flood recovery and reconstruction stands at US$7.9 billion, which is highest of all the provinces. In particular, damage to housing or settlements (US$4.3 billion), water resources and irrigation infrastructure (US$442 million), transport and communications (US$311 million), and water supply, municipal services, and community infrastructure (US$421 million) is substantial.

12. **Due to the magnitude and impact of the flooding as well as the urgent need of funds and technical assistance as described above, the project is being processed under Condensed Procedures as per the Bank Procedure on Preparation of Investment Project Financing for Projects in Situations of Urgent Need of Assistance or Capacity Constraints.** The project is being prepared and implemented according to OP/BP 10.00 Paragraph 12, IPF Policy, which allows for certain exceptions to the IPF policy requirements, including deferral of safeguards requirements, if the Bank deems the recipient to be in urgent need of assistance because of a disaster or experiences capacity constraints because of fragility or specific vulnerabilities.

[11] Pakistan Floods Response Plan 2022. https://fts.unocha.org/appeals/1108/summary
[12] American Red Cross. September 16, 2022. "New Report Links Pakistan Flooding to Climate Change." https://www.redcross.org/about-us/news-and-events/news/2022/red-cross-and-red-crescent-respond-to-flooding-in-pakistan.html.

C. Sectoral and Institutional Context

13. **Sindh has a population of 50.4 million people (23 percent of the country's population) and generates 27 percent of Pakistan's GDP.** Nearly half (48 percent) of Sindh's population lives in rural areas and about 37 percent of the rural population lives below the poverty line—higher than the Pakistan average. Poverty rates are much higher in some flood-impacted districts, reaching 53.4 percent in Badin district. Satellite and survey data suggest that even within tehsils, poorer areas were more likely to be affected by the floods. Beyond monetary and non-monetary poverty, areas in Sindh affected by the floods showed some of the highest stunting rates in the country, reflecting limited access to sanitation facilities and clean water. Agriculture accounts for about 24 percent and 70 percent of provincial GDP and employment in Sindh, respectively, and poor households derive 56 percent of their income from agriculture.[13] Poverty levels in rural Sindh are closely correlated with farm size or tenure relationships as small farmers tend to have less access to technologies, credit, water, and government support programs.[14]

14. **The province is particularly vulnerable to natural disaster events due to its geographical location, socioeconomic vulnerability, and climatic conditions.** Sindh is estimated to have received rainfall in excess of 400 percent over the 30-year average. Agricultural land in the low-lying areas of the province, downstream of the Indus, is highly exposed to flooding, threatening food security in the province and across the country. The floods in 2010, which were primarily riverine, caused damages of US$4.3 billion in the province, with almost 900,000 houses completely or partially destroyed along with major impacts on agriculture and infrastructure.[15] Rain-induced floods in 2011 had a major impact on agriculture, livestock, and fisheries, as well as housing. Sindh possesses around 300 kilometers of the country's coastline, which are threatened by a projected 40 centimeters rise in sea levels by the end of the 21st century.[16] The high prevalence of poverty, as much as 40–60 percent in certain districts, further exacerbates vulnerability.[17] These areas also face inadequate health services, water and sanitation, schooling, and limited access to electricity.

15. **Sindh has been disproportionately affected by the 2022 floods.** The province is estimated to have received rainfall in excess of six times of its average monthly total. According to the NDMA, as of November 3, 2022, 799 of the 1,739 nationwide casualties were in Sindh, including 338 children, with 8,422 people injured. Almost 1.9 million houses in Sindh were damaged or destroyed, nearly 83 percent of the nationwide total.[18] Reports estimate that more than 4.4 million acres of agricultural land has been damaged and 0.8 million livestock perished in the country, with the damages and losses in Sindh contributing to 72 percent of the total value of the damage and losses registered in the sector, which

[13] Government of Pakistan. 2017. "Household Income and Expenditure Survey 2015–16." Pakistan Bureau of Statistics, Islamabad.
[14] Approximately 83 percent of farms are smaller than 5 hectares but account for only 37 percent of all farmland; and approximately 20 percent of farmland, mainly on the larger farms, is cultivated based on sharecropping or leases. See: Abdul Wajid Rana and Heman Lohano. (forthcoming). "Sindh Water and Agriculture Sector Public Expenditure Review." World Bank, Washington, DC.
[15] Asian Development Bank, Government of Pakistan, and World Bank. November 2010. "Pakistan Floods 2010: Preliminary Damage and Needs Assessment."
[16] World Bank and Asian Development Bank. 2021. "Climate Risk Country Profile: Pakistan.
[17] World Bank Group. 2022. "Pakistan Country Climate and Development Report." World Bank, Washington, DC.
[18] NDMA. 2022. "NDMA Floods (2022) SITREP – 2022 (Daily SITREP No 143 Dated 3rd November, 2022)." http://cms.ndma.gov.pk/storage/app/public/situation-reports/November2022/EeLWSh0im27IsX7us81x.pdf.

could contribute to food shortages in the near future.[19] Vast areas in Sindh witnessed prolonged inundation lasting several weeks with floodwater accumulating from other parts of the country following glacial melt in the mountainous north and record monsoon rains nationwide. Stagnant water in several districts gave rise to skin, gastric, and mosquito-borne diseases. Emergency rehabilitation is essential to facilitate those impacted by the floods.

16. **Sindh's housing sector has been severely affected by the 2022 flooding.** According to the last pre-floods housing census from 2017, there were 2,756,499 katcha[20] and 5,600,885 pakka[21] housing units in Sindh, with the former concentrated mainly in rural areas and the latter more prevalent in urban areas. While house ownership is higher in rural areas, housing with unclear ownership status is proportionately higher due to the relative informality of the housing sector in rural areas. Assuming linear growth between 1998 and 2017, the number of katcha houses in Sindh has grown at a rate of about 1.6 percent annually, while pakka houses have an annual growth rate of about 4 percent per year. According to PDNA estimates, at least 1.7 million houses in Sindh were partially or fully damaged during the 2022 floods, the highest out of all the provinces – accounting for over 20 percent of the documented provincial housing stock. Figure 1 illustrates some major characteristics of Sindh's housing sector.

Figure 1. Sindh Housing Sector Characteristics

Source: 2017 Census data.

17. **The majority of Sindh's rural population is settled across a large area, making efficient delivery of quality services challenging and constraining access to opportunity.** An analysis of the latest population census shows while there are 5,428 villages (revenue units/mauzas) in Sindh, the population is scattered in 30,055 settlements; 40 percent of these settlements are in villages with over 10 settlements, and another 30 percent are in villages with 6-9 settlements. The average population per settlement is 766 persons, with 9 of the 24 districts of Sindh having an average population of over 1,000 per settlement, and the remaining 15 averaging between 373 (Badin district) and 892 (Shaheed Benazirabad district) persons per settlement.

[19] Government of Pakistan. 2022. "Pakistan Floods 2022: Post-Disaster Needs Assessment. Main Report." Ministry of Planning Development & Special Initiatives.
[20] A house with walls made up of bamboo, mud, grass, reed, stones, straw, leaves, and unburnt bricks. Katcha are not permanent structures.
[21] A house with walls and roof made of burnt bricks, stones (packed with lime or cement), cement concrete, timber, etc., and the roof material may be tiles, iron sheets, asbestos cement sheets, reinforced concrete, etc.)

18. **There are several critical challenges to efficiently enabling households to reconstruct housing in a sustainable manner, including the introduction of elements to improve resilience:**

- **Appropriate Institutional Arrangements:** Given the unprecedented scale and geographical spread of the damage, the reconstruction of at least 1.7 million affected units would require an exponential increase in housing construction activity, and at significantly higher engineering standards to ensure multi-hazard resilience. Credible, empowered, and efficient institutional arrangements that support households will be critical for the execution and monitoring of the reconstruction effort.
- **Beneficiary Identification:** A credible and transparent targeting mechanism, supported by a responsive grievance redressal system, will be key, given the informal nature of the housing sector. A detailed household-level damage assessment and eligibility verification process are planned to inform the targeting under the project.
- **Identification of Sites to Minimize Impacts of Substantial Risks to Recurrent Hazards:** While in-situ reconstruction is traditionally a preferred choice of households, a mainstream element to improving resilience is to support households in identifying sites with substantial recurrent hazard risks, such as in flood plains. The project will prioritize in-situ reconstruction, and will support prompt, transparent and technically based identification of areas with recurrent hazard risks, especially floods and heatwaves. In those cases, a process of identification of suitable alternative sites for relocation of potentially affected households will also be necessary. This process should consider availability of land as well as access to infrastructure, sources of livelihood, and social services.
- **Multi-hazard Resilient Reconstruction Practices:** Since rebuilding activity will commence as the flood waters recede, there is an urgent need to provide guidance on multi-hazard resilient designs and construction practices to the communities to support more resilient assets.
- **Over-exploitation of Building Materials:** Given the unprecedented scale of reconstruction activity that households will undertake upon the recession of the floods, there is a significant risk of overexploitation of natural building materials, which can create economic and environmental risks. The project will support the government's efforts to promote sustainable use of building materials, with a principal focus on the use of local materials as a key mitigation measure. This includes provision of resources to help the government address a major challenge of reaching eligible households across a large geographical area to share knowledge and good practices.
- **Settlement and Documentation of Land Claims:** Absence of formal land ownership records heightens the social risks associated with housing recovery. Where records have been lost or there is high degree of informality, other community-based evidence mechanisms could be deployed for the settlement and documentation of claims to land, including: re-mapping of parcel boundaries; certification of redefined boundaries; landlord/tenant claims; previously unregistered land; allocation of community land; identification of rightful heirs; and claims of informal settlers. The project will include the development of this approach for eligible beneficiaries.
- **Transparency and Accountability in Reconstruction:** Grant eligibility, reconstruction plans, and implementation modes and procedures will have to be widely publicized and disseminated. Lack of transparency around the listing of beneficiaries, disbursement of reconstruction assistance, and monitoring of progress and quality in reconstruction may

adversely impact the success of the reconstruction effort. The project incorporates these considerations to support eligible beneficiaries.

- **Inclusion of Vulnerable Groups:** A concerted effort will need to be made to ensure that affectees from socially disadvantaged groups benefit from the government's reconstruction efforts. The project will provide resources to ensure an inclusive approach among eligible beneficiaries.

19. **The Government of Sindh (GoS) has launched a comprehensive housing reconstruction program to support all the households damaged by the 2022 floods with a financing envelope of US$1.5 billion.** A dedicated Section 42 company – the "Sindh Peoples Housing for Flood Affectees (SPHF)" has been established for the design and execution of this housing reconstruction program. The SPHF will also serve as the Project Implementation Unit (PIU) for the project. This WB project will provide US$500 million financing for this program, which will include reconstruction and restoration of approximately 350,000 houses and technical assistance to inform the design and implementation of the overall reconstruction program. The GoS has committed to provide bridge financing of US$1 billion in association with other potential donor agencies and financing partners to meet the needs of the overall housing reconstruction program. The GoS has agreed to apply uniform principles for reconstruction, including for activities outside the scope of the Bank project.

20. **Women in Pakistan have limited ability to access reconstruction grants or manage construction activities in a post-disaster context.** The country has one of the largest gender gaps in economic participation in the world, and this gap is even higher in Sindh, where female labor force participation is lower than the national average. Women in Sindh are largely employed in agriculture, where they primarily work on family farms or enterprises without pay.[22] Despite their importance to the rural economy, less than half of women in Sindh control their own earnings and almost 98 percent are excluded from inheritance - the primary source of wealth for most Pakistanis - due to prevailing social norms and poor enforcement of women's legal rights. Almost half the home-owning women in Sindh do not have a title or deed, and under 40 percent lack the autonomy to sell.[23] Many women also lack access to identity cards: only 76 percent of women have access to identity cards across Pakistan, with significant disparities in rural areas.[24] Furthermore, 95 percent of women also lack access to a bank account, and only three or four out of 10 have access to microfinance and agricultural loans. Women lag behind men in terms of mobility, skills, and social capital.[25] Evidence from post-disaster contexts, including the 2005 earthquake and 2010 floods in Pakistan, indicates that such issues often prevent women from accessing reconstruction grants and other forms of financial assistance, while poor enforcement of legal rights can expose them to land-grabbing as well as instances of coercion, violence, and abuse.[26] Owner-driven reconstruction programs are particularly prone to the exclusion of female-headed households, as women

[22] FAO. 2015. "Women in Agriculture in Pakistan." FAO, Islamabad. https://www.fao.org/3/i4330e/i4330e.pdf; Government of Pakistan. 2022. Key Findings of Labour Force Survey 2020–21." Pakistan Bureau of Statistics, Islamabad.
[23] Government of Pakistan. 2019. "Pakistan Demographic and Health Survey, 2017–18." National Institute of Population Studies, Islamabad.
[24] Government of Pakistan. 2019. "Pakistan Demographic and Health Survey, 2017–18." National Institute of Population Studies, Islamabad.
[25] Government of Pakistan. 2022. "National Gender Policy Framework." Ministry of Planning, Development and Special Initiatives; UN Women and Government of Canada. 2018. "Rural Women in Pakistan: Status Report 2018."
[26] World Bank. 2020. "Gender Equality and Women's Empowerment in Disaster Recovery." Disaster Recovery Guidance Series, World Bank, Washington, DC.; IRIN. 2006. "When Disaster Strikes: The Response to the South Asian Earthquake."

are labor- and mobility-constrained and may therefore be unable to manage finances, mobilize labor, or supervise construction activities to required standards.[27]

21. **Post-disaster reconstruction activities present critical opportunities to address these gender gaps.[28]** The project will support women's inclusion in the disbursement of reconstruction grants and ensuing construction activities through targeted actions that address constraints on women's eligibility for and access to financial assistance, as well as their ability to manage the construction of core units.

D. Relevance to Higher Level Objectives

22. **The project is consistent with the World Bank Group's (WBG) Country Partnership Strategy (CPS) FY15–19 for the Islamic Republic of Pakistan (Report No. 84645-PK) discussed by the Board of Executive Directors on May 1, 2014.** The CPS was extended to FY20 under the corresponding May 2017 Performance and Learning Review (Report No. 113574). The preparation of the new CPF was deferred in FY21 due to the COVID-19 crisis and paused due to the recent unprecedented and catastrophic monsoon floods. A new CPF is expected to be delivered for the consideration of the Board of Executive Directors in the second half of FY24. The focus areas and objectives of the CPS remain relevant and are reflected in the ongoing engagement in the country.

23. **To respond to the unprecedented flooding disaster, the Bank is mobilizing over US$2 billion in financing under three pillars: (I) Respond immediately; (II) Reconstruction and rehabilitation; and (III) Resilience.** Under Pillar I, at least US$350 million has been repurposed and allocated through the existing portfolio to support the country's emergency response. For Sindh, under Pillars I and II, US$82 million is available through the ongoing Sindh Resilience Project (P155350), Competitive and Livable City of Karachi Project (P161402), Karachi Water and Sewerage Services Improvement Project (P164704), and the Sindh Irrigated Agricultural Productivity Enhancement Project (P145813). Sindh is also benefitting from cash transfers to poor households in the affected districts through the BISP, which has been allocated US$150 million through the portfolio repurposing. Under Pillar II, an estimated US$1.5 billion has been identified primarily for new operations to support reconstruction, all subject to the Board's consideration and approval, including the Sindh Flood Emergency Rehabilitation Project (SFERP, P179981) and this project – the Sindh Flood Emergency Housing Reconstruction Project (SFEHRP, P180008). The SFERP will help rehabilitate critical infrastructure and support livelihoods, while also supporting improved capacity to respond to disasters. The SFEHRP will support the GoS in the reconstruction of multi-hazard resilient housing. The Sindh Water and Agriculture Transformation Project (SWAT, P167596) will also support Pillar II by helping restore agriculture production by small farmers affected by the floods. Two projects, the Sindh Integrated Health and Population Project (P178530) and the Strengthening Social Protection

[27] Thurairajah, Nirooj, Dilathi Amaratung, and Richard Haigh. 2010. "Gender Inequality in Post Disaster Reconstruction: Does it Prevail?"., United Nations Development Programme. 2021. "Handbook on Owner-driven Housing Reconstruction." UNDP, New York; World Bank. 2011. "Study on Gender Impacts of Land Titling in Post-tsunami Aceh, Indonesia."; World Bank. 2011. "Integrating Gender Issues in Recovery and Reconstruction Planning." Gender and Disaster Risk Management, Guidance Note 5, World Bank, Washington, DC.

[28] Bhatta, Gopal Datt, P.K. Aggarwal, Santosh Poudel, and Debbie Ann Belgrave. 2015. "Climate-induced Migration in South Asia: Migration Decisions and the Gender Dimensions of Adverse Climatic Events." *Journal of Rural and Community Development* 10 (4); Akter, Sonia. 2021. "Do Catastrophic Floods Change the Gender Division of Labor? Panel Data Evidence from Pakistan." *International Journal of Disaster Risk Reduction* 60; Moreno, Jenny, and Duncan Shaw. 2018. "Women's Empowerment Following Disaster: A Longitudinal Study of Social Change." *Natural Hazards* 92: 205–224.

Delivery Systems in Sindh Project (P178532) that were under preparation in the existing pipeline were revisited to help address the needs emerging from the public health emergencies in the flood-stricken districts in Sindh while maintaining a balance with sector development objectives. Pillar III anticipates further financing of US$500 million to support rehabilitation and longer-term resilience to potentially support Balochistan, the second most flood-affected province. This includes the proposed Balochistan Water Security and Productivity Improvement Project (P179227) and the Integrated Flood Resilience and Adaptation Program (P180323).

24. **The project will contribute to CPS results area 3 on "inclusion",** The SFEHRP will contribute to CPS Outcome 3.2—"reduced vulnerability for groups at risk"—and Outcome 3.3—"increased resilience to disasters in targeted regions"—by supporting multi-hazard resilient housing reconstruction, with an aim to improve the climate change and disaster resilience of communities and build back better.

25. **The project is aligned with the recently published Pakistan Country Climate and Development Report as it contributes to the policy area of strengthening human capital, through the improvement of livelihoods and improving shock-responsiveness.** Strengthening disaster resilience and rehabilitating affected population with resilient housing will help achieve sustainable and equitable growth by ensuring that Pakistan can better withstand climate related risks under different projected climate scenarios. The project is also aligned with the National Climate Change Policy, which aims to improve resilient infrastructure with respect to disaster risk management (DRM). It is also relevant to Pakistan's Nationally Determined Contribution, which details the strengthening of climate change adaptation, including building resilience through nature-based solutions, improving preparedness, strengthening capacities, and adopting solutions to reduce the loss of life, infrastructure, and livelihoods from disasters.

26. **The project is consistent with the WBG Global Crisis Response Framework as it combines short-term support for crisis response with long-term development objectives specifically Pillar 2: Protecting People and Preserving Jobs; Pillar 3: Strengthening Resilience; and Pillar 4: Strengthening Policies, Institutions, and Investments for Rebuilding Better.** Under Pillar 3, Component 1 (US$470 million) will support multi-hazard resilient housing reconstruction to strengthen long-term resilience of communities. Under Pillar 2, Component 2 (US$20 million) will support a policy framework for overall housing reconstruction program in Sindh and interventions for preserving jobs and rebuilding better through skills training of local communities on resilient construction practices. Component 3 (US$10 million) is aligned with Pillar 4, supporting project implementation, monitoring, fiduciary and safeguards compliance.

27. **The project is aligned with Pakistan's policy frameworks and plans on DRM and climate resilience.** These include the National Disaster Management Act (2010), the National Disaster Risk Reduction Policy (2013), Climate Change Policy (2012), and Climate Change Act (2017). It also aligns with the lessons learned of the 10-year National Flood Protection Plan IV (2017), prepared by the Federal Flood Commission, which highlights the need for structural and non-structural measures, as well as technical studies, monitoring, and supervision. In response to growing national and international attention to climate risks and vulnerabilities, the Planning Commission has developed a draft Handbook on Climate Risk Screening for Policy Planning, which includes revised templates of key planning documents with co-benefits methodology/guidelines to mainstream climate change in development planning processes. Although several policies and plans were developed following the 2010 floods, operationalization remains a significant challenge due to limited institutional capacity and governance challenges. The project is

aligned with the aforementioned policies and frameworks and will accelerate flood risk management in a climate resilient manner.

28. **The project will be partially financed from the International Development Association (IDA) Crisis Response Window (CRW) in the amount of approximately US$350 million.** These funds will be deployed to finance housing reconstruction grants under Component 1 of this project. As the floods are a natural disaster with significant impact and an urgent need for assistance, the proposed use of funds is in line with the CRW's mandate to respond to severe crises and help countries return to a sustainable, long-term development path. CRW funds are needed to ensure an effective WB response to the disaster which meets the criteria to access CRW funds.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

29. **The Project Development Objective (PDO) is to:** deliver beneficiary-driven, multi-hazard resilient reconstruction of core housing units affected by the 2022 floods in selected districts of Sindh.

PDO Level Indicators

30. **The project will measure progress towards the PDO with the following indicators:**

- Core housing units reconstructed/restored to multi-hazard resilient standards (of which at least 25 percent are female headed households and households with vulnerable women) (Number).
- Beneficiaries that have received project trainings for multi-hazard resilient reconstruction practices (of which 15 percent are female) (Number).
- Households reporting satisfaction with project interventions (Percentage).

B. Project Components

31. **This project aims to support beneficiary-driven reconstruction of affected (both partially damaged and completely destroyed) houses from the 2022 floods.** The project will adopt the following guiding principles which reflect sectoral and local challenges, as well as the Bank's experience in post-disaster housing reconstruction, and will be included in a Program Guidelines document that will also serve as the Project Operations Manual:

- **Beneficiary-driven reconstruction through the provision of housing subsidy cash grants to households.** This will empower households to choose materials, methods and other inputs that suit their current circumstances within limited budget constraints. This approach is superior to supply-driven models especially when considering large-scale and dispersed reconstruction.

- **Reconstruction or restoration[29] of a core unit based on pre-defined standards for multi-hazard resilience.** Under the 'build-back-better' approach, the project will ensure that reconstructed core units enhance resilience of communities through adoption of appropriate construction materials and techniques.
- **Siting prioritizes in-situ reconstruction** as far as possible to minimize relocation.
- **Siting avoids reconstruction in high-risk areas, particularly for floods.** While multi-hazard risks are considered, Sindh's high-risk seismic zones fall outside of the flood-affected areas. High heat zones are widespread and will be mitigated through construction design and materials. Other potential contributory factors to hazard risks could include topography and soil conditions.
- **Relocation follows acceptable Environmental and Social Framework (ESF) standards**. In case of high flood risk zones, eligible beneficiaries will be informed that their sites would not be eligible for immediate cash grant support. For such cases, a process of identification of suitable alternative sites for relocation of affected households will also be necessary. This process should consider availability of land, as well as access to infrastructure, sources of livelihood, and social services.
- **Provide technical assistance and training** for rebuilding to multi-hazard resilient standards.
- **Rebuild with easily accessible materials and familiar methods** that reflect cultural preferences. The multi-hazard resilient standards and designs must relate to use of economical and readily available materials, familiar modes of construction, and cultural preferences in design for sustainability.

Component 1 – Housing Reconstruction Grants (US$470 million)

32. **This component will support the provision of Housing Reconstruction Grants to Beneficiaries** for reconstruction and/or restoration of a core housing unit, which comprises: (a) a core unit of fixed covered area built or restored to prescribed multi-hazard resilient standards; and (b) a basic rainwater harvesting system and twin pit latrine to improve water, sanitation and hygiene access.

33. **There is an option for incorporation of solar home systems.** The GoS is working to optimize its WBG supported portfolio to support the flood response effort. As part of this, it has identified an ongoing WBG supported Sindh Solar Energy Project (SSEP, P159712), which includes a component supporting solar home systems. Procedures are under development to offer solar home systems to eligible beneficiaries under the SFEHRP in a coordinated manner with the SSEP.[30]

34. **The housing grants under this component will include reconstruction grants (for completely destroyed units) and restoration grants (for partially damaged units) for approximately 350,000 core units, which represent about 20 percent of total housing needs for Sindh**. Cash grants will be provided for houses with structural damage to partially finance reconstruction or restoration of a multi-hazard resilient core unit. Housing units with non-structural damage will not be eligible for grants under this component. Key criteria, procedures and implementation arrangements for the project shall be included in the Program Guidelines document, acceptable to the Bank and adopted by the SPHF.

35. **The grants will be geographically targeted to selected talukas in the affected districts.** The

[29] In case of partially damaged houses, the project will support restoration of a multi-hazard resilient core unit.
[30] All procurements related to solar home solution will be done, including enhanced mitigation measures against potential forced labor risk, under the Sindh Solar Energy project (P159712).

selection, to be undertaken in consultation with the GoS, will be based on talukas that contain relatively poorer segments of the population and have high flood impacts. To avoid social tensions arising due to selectivity, efforts will be made to provide universal coverage for all eligible housing units in a selected district, including provision of community support to vulnerable households that lag behind in reconstructing their units.

36. **The housing reconstruction will be beneficiary-driven.** The grants would be released directly to the beneficiary's bank account[31] in tranches, linked to verified stages of construction and adoption of prescribed multi-hazard resilient standards. Efforts will be made to facilitate eligible beneficiaries to open bank accounts through simplified processing requirements with support from Implementation Partners (IP) as described in Component 2 below.

37. **The housing grant for reconstruction of completely destroyed homes will be disbursed in successive tranches following on-site inspection and validation at key construction milestones (plinth level, lintel level, roof level, etc.) by IPs.** Households will be able to utilize their own labor, hire trained craftsmen, and receive technical assistance from Implementation Partners to reconstruct or restore their houses. PO selection criteria are provided in Component 2 below.

38. **The selection of partially damaged houses eligible for restoration grants will focus on transparency and minimal human discretion by using robust engineering principles and documentation.** For these selected partially damaged houses, located outside of high-risk zones and fulfilling prescribed engineering criteria for resilient restoration, a one-time restoration grant will be provided. Partially damaged homes located in high-risk zones will not be eligible for grants while those not fulfilling engineering criteria for resilient restoration will be eligible for reconstruction grant.

39. **While homeowners will have flexibility in spatial design aspects of the core unit, minimum standards for structural resilience will be mandatory under a positive-list approach to be verified at payment milestones**[32]. Some preliminary multi-hazard resilience considerations to be adopted under the project are listed in Table 1 and will be finalized in the Program Guidelines and informed by studies conducted under Component 2.

Table 1. Multi-Hazard Resilience Standards and Siting

Hazard	Technology	Siting
Floods	- Stone, burnt brick, or concrete block foundations with cement mortar to prevent breaching. - Construction on raised platform to mitigate exposure to inundation.	No reconstruction to be supported in high flood risk areas.
Earthquakes	Structural integrity through use of columns and ring beams at	Most of the flood affected areas in Sindh are in low risk (2A,2B)

[31] Both mobile and branch banking options will be made available depending on beneficiary preference and ease of access.
[32] For partially damaged houses, the engineering criteria for resilient restoration will incorporate these minimum standards, the absence of which will trigger eligibility for reconstruction grant.

	plinth and lintel levels.	seismic zones.
Heatwaves	Construction materials with thermal comfort properties for the super structure. Options will include hollow concrete blocks and compressed stabilized earth bricks (CSEB).	No screening proposed. Most parts of Sindh are vulnerable to heatwaves. Housing designs and materials will incorporate elements to mitigate this exposure.

40. **Choice of construction material will be an important design consideration.** The project is cognizant of expected price escalation and shortage of construction materials in view of the expansive reconstruction activity to be rolled out across the province. Options of utilizing local resources and in-situ production of construction materials is under consideration. A sizable number of brick kilns are inundated and are not likely to go into operation soon, providing an opportunity to look for climate friendly construction materials such as CSEB and hollow concrete blocks in lieu of coal-fired bricks. The final choice of the materials will depend on tested performance for local conditions, environmental footprint, and climate resilience.

41. **While no relocation or land acquisition will be financed under this project, houses located in high-risk zones with recurrent hazards will not be eligible for either type of grant.** A transparent mechanism with scientific thresholds and remote sensing tools will be established as part of the Program Guidelines to identify such zones, particularly flood plains and stream beds.

42. **To address the complex nature of land tenures in Sindh, the project will ensure that all beneficiaries of housing grants have some form of ownership or lease for the land on which their housing unit will be reconstructed or restored.** The GoS is considering sustainable solutions for people residing on state-owned lands. The issue is more complex for tenants on private land, which might require innovative solutions such as tenant-owner agreements or occupancy certificates to mitigate the risk of eviction soon after reconstruction.

43. **Households that lack access to necessary documents to prove their identity or property ownership, including members of female-headed households, vulnerable individuals, and those who have lost documents during the floods, will be supported by IPs to prove their ownership and eligibility for both reconstruction and restoration grants.** This will be undertaken with support of relevant authorities such as the National Database Registration Authority (NADRA) or district land administration entities, as well as through partnerships with private enrollment agents. Community-aided land adjudication and verification processes, free legal aid and referral to protection services upon request, will be available to support women and other vulnerable individuals in asserting their property rights without being exposed to violence or coercion.

44. **Given the beneficiary-driven reconstruction approach, safeguards shall be put in place to ensure that houses of vulnerable groups, especially women-headed households, single women, the elderly, persons with disabilities, and the ultra-poor are reconstructed or restored as a priority.** This will also ensure that these households are not left behind on account of their limited networks and skills to manage construction activities. A two-pronged approach will be adopted for this purpose:

- Communities will be mobilized to take collective action to reconstruct/restore houses of the vulnerable groups;
- Reconstruction and restoration of units of the vulnerable will be undertaken as demonstration units while training the artisans and craftsmen.

Component 2 – Institutional Strengthening and Technical Assistance (US$20 million)

45. **Subcomponent 2.1: Detailed Damage Assessment and Eligibility Verification Survey (US$5 million).** The assessment and survey will be conducted to: (i) categorize the level of damage to each housing unit; (ii) establish status of land ownership; and (iii) establish lists of eligible beneficiaries and vulnerable individuals/households that are unable to prove their identity/property ownership, including those with disabled persons and those headed by women. Survey teams will be gender-balanced and trained to collect data from vulnerable individuals and households and connect them to different forms of legal and construction support provided under the project. Further, the damage assessment will classify a site's level of hazard risk and include an engineering assessment, via a standardized checklist, to assess housing damage. This subcomponent will cover the costs of administering the survey in the affected districts, as well as training the survey teams in assessment techniques and criteria so they are applied uniformly. Based on WBG Commitment-3 on Disability-Inclusive Development,[33] disability desegregated data will be collected during damage assessment.

46. **The survey teams will comprise a minimum of three persons - a government representative, a social organizer, and an engineer.** [34] Between 800–1,000 teams will be hired (assuming each team covers an average of 12 units per day) and trained over the course of one month. This subcomponent will cover the costs of developing the survey instrument, as well as its subsequent administering. The instrument will be designed and initial training of trainers and the teams will be undertaken, by specialized consultants, with overall administration and oversight by the SPHF.

47. **This survey is a critical prerequisite for this project and the GoS is fully cognizant of the need to commence work on an urgent basis.** The SPHF is in advanced discussions with potential Implementation Partners and plans to take them on board at the earliest possible date to roll-out the survey in areas where water has started receding. It is expected that survey results will start coming in prior to project effectiveness and associated eligible expenditures will be considered for retroactive financing.

48. **Subcomponent 2.2: Provision of Technical Assistance for the Project Implementing Entity's Reconstruction Program (US$7 million)**. This subcomponent will provide technical assistance for the GoS's housing reconstruction program. This will include support for: (a) formulation of the housing reconstruction strategy – to provide the policy framework for the GoS's overall housing reconstruction program, including eligibility criteria, compensation policies and technical standards; (b) development of multi-hazard resilient housing solutions. These solutions must be efficient, economical, and suited to local norms with locally available materials. They will be standardized across the reconstruction program to ensure transparency and efficiency. Minimum standards for multi-hazard resilience will be identified on

[33] World Bank. July 24, 2018. "World Bank Group Commitments on Disability-Inclusive Development." World Bank Brief. https://www.worldbank.org/en/topic/socialsustainability/brief/world-bank-group-commitments-on-disability-inclusion-development

[34] The survey work is a part of IP's scope of work and this section discusses methodology and workplan.

the basis of technical feasibility and in consultation with key stakeholders including academia, civil society and community organizations with relevant expertise; (c) skills training program for communities and artisans. This includes including resilient construction practices for artisans and orientation of beneficiaries on eligibility criteria for program participation. Specialized training programs will also be introduced to train masons in responding to the needs of persons with disabilities, as well as to benefit persons with disabilities beyond the life of the project. In order to accelerate the roll-out of project activities and provide institutional support, the services of project implementation support consultant (PISC) will be procured for initial phase of the project. Given the upstream nature of the activities proposed under this subcomponent, the SPHF has already mobilized resources for execution and the associated costs will be considered for retroactive financing under the project.

49. **Women, female-headed households and other vulnerable groups eligible for reconstruction grants will be trained in financial management (FM) and supervision to streamline the reconstruction process to ensure their houses are completed on time, within budget and to the required standards of quality and resilience.** Such trainings will also open up avenues for participation of women and other vulnerable groups in reconstruction activities within the community, providing them with a much-needed source of additional income. For example, women and other vulnerable persons can be trained in installation and/or maintenance of emerging household technologies such as water harvesting and solar solutions.[35] Labor-constrained individuals and households (such as pregnant and new mothers, female-headed households with high dependency ratios, and women with disabled spouses) will also receive construction support directly from communities if they are unable to manage and supervise these activities themselves.

50. **Subcomponent 2.3: Provision of Implementation Support through Implementation Partners (US$8 million).** In view of the extensive outreach needed for the credible administration and monitoring of housing reconstruction and restoration, existing public sector institutional capacity will require considerable reinforcement. Whereas building capacity requires a longer timeline, the housing reconstruction and restoration activity cannot be delayed. This subcomponent will assist in enhancing the public sector's delivery capacity through IPs comprised of non-governmental organizations (NGOs) with strong, existing outreach at the community level and a proven track record of delivering disaster reconstruction programs.

51. **There are many potential IPs already operating across Sindh that have successfully delivered substantial physical infrastructure and services.** The project will utilize screening criteria to ensure requisite capacity and experience to support the project implementation. Selected IPs may be asked to augment their technical capacity to appropriate levels by hiring additional technical and social mobilization staff to effectively support to the housing assistance program. Only one IP will be designated to work on housing reconstruction and restoration in an affected taluka or district. The IPs will be charged with: (i) conducting household-level reverification surveys (subcomponent 2.1) to confirm eligible beneficiaries for housing subsidy grants; (ii) providing technical assistance to beneficiaries, engineers, and craftsmen on multi-hazard resilient construction techniques, including program orientation; (iii)

[35] Solar Bibis, a program piloted by the Ministry of Science and Technology and Pakistan Council for Renewable Energy Technologies, can be adapted and expanded for this purpose. See: *The Express Tribune*. September 7, 2016. "'Solar Bibis': *Rural Areas to Benefit from Solar Energy Project."* https://tribune.com.pk/story/1177663/solar-bibis-rural-areas-benefit-solar-energy-project.

overseeing reconstruction and restoration activities to ensure quality, including site inspections to conduct engineering assessments and verify milestones for release of payment tranches to beneficiaries; and (iv) ensuring compliance with on-site social and environmental risk mitigation measures.

52. **Specific IPs will also be engaged to:** (i) support women and other vulnerable groups in demonstrating property ownership and eligibility for grants, managing construction activities and dealing with any instances of coercion, violence or abuse; (ii) coordinate participatory land adjudication and verification processes, as well as community-driven reconstruction services for women and other vulnerable groups; and (iii) undertake outreach to women, vulnerable groups and the wider community. Female-headed and other vulnerable households will be informed about different forms of assistance available to them under the project through awareness and information sessions that will be held at appropriate times and locations and include support for women traveling from far-off areas. Wider engagement activities may also be required to obtain support for women's inclusion in the project among men and other 'gatekeepers' within the community.

Component 3 – Project Management and Implementation Support (US$10 million)

53. **This component entails provision of support for the management and implementation of the Project, including the establishment and operationalization of an empowered Implementation Agency and a grievance redressal mechanism.** It will also support setting up a robust, digital monitoring and evaluation (M&E) system to oversee implementation progress, ensure periodic reporting, and assist in course corrections based on implementation experience. Moreover, it will support: incremental operating costs, including recruitment of incremental operating staff and individual consultants as required; consultancy firm costs; and expenditures on fiduciary systems, environmental and social (E&S) management requirements, communications, and setting up of a grievance redressal mechanism (GRM).

C. Project Beneficiaries

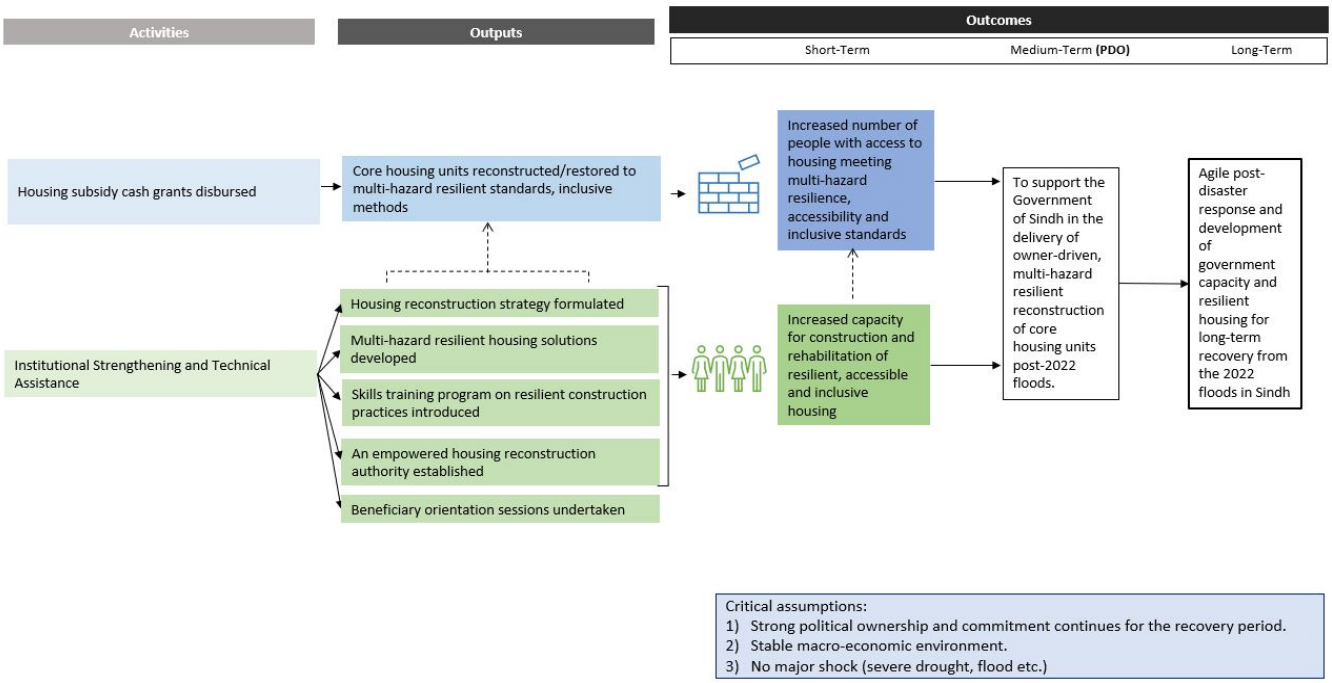
54. **The project will support rehabilitation and increased resilience of the flood affected communities in Sindh.** While the housing grants would be targeted to a subset of the affected population, the project's technical assistance component will benefit the entire province by supporting the design of the overall housing reconstruction program of the GoS. Any additional funding channeled for housing reconstruction in Sindh will be aligned with the housing reconstruction policy, standards, and principles established under this project.

55. **The project will have specific benefits for people living in the geographical locations served through the housing subsidy grants for reconstruction of damaged houses.** Through a beneficiary-driven approach, approximately 350,000 multi-hazard resilient core housing units will be supported with an estimated 1.4 million beneficiaries. Roughly half of these beneficiaries are estimated to be female, based on demographic information available for these areas. Moreover, an estimated 400,000 beneficiaries will be trained in multi-hazard resilient construction techniques through capacity building activities supported by the project. This will improve the long-term resilience of communities in Sindh by improving the structural designs and construction practices of the housing sector in view of the challenges posed by climate change.

56. **Where possible, the project will consider an area-based approach and focus on the most severely affected districts. These districts** would be verified during implementation. Efforts would be made to align Project interventions with other Bank-funded projects to ensure maximum development impact and cumulative benefits to flood-affected populations.

D. Results Chain

Figure 2. SFEHRP Results Chain



E. Rationale for Bank Involvement and Role of Partners

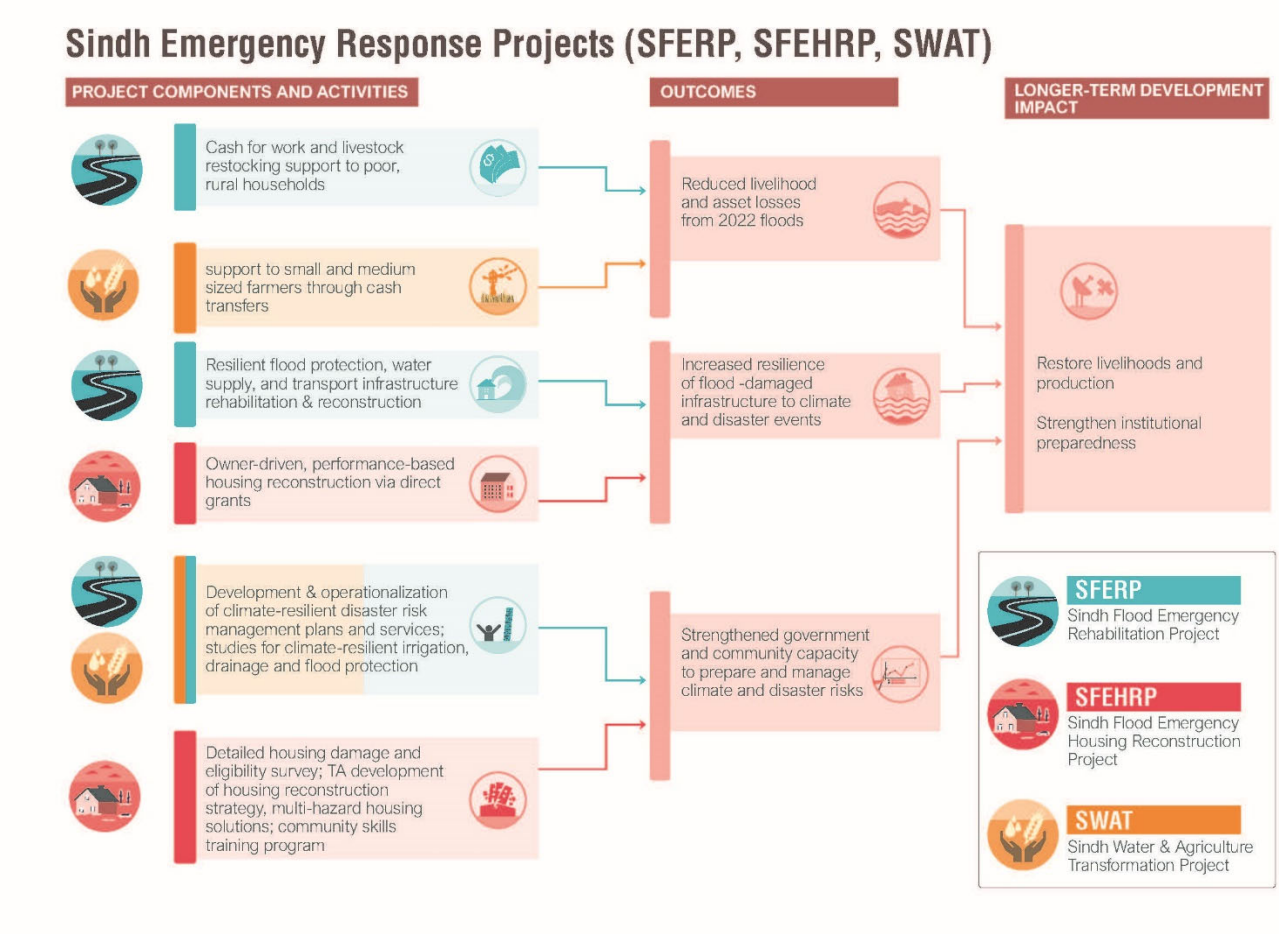
57. **The Bank has accumulated substantial regional and global experience in the design and implementation of post-disaster recovery and reconstruction programs, making it well-placed to support this emergency.** The Bank has experience of developing the policy, strategy, design and implementation of post-earthquake housing reconstruction programs (Pakistan Earthquake Emergency Reconstruction Credit, P099110; Nepal Earthquake Housing Reconstruction Project, P155969). As part of its response package, the Bank is also preparing the SFERP, which would be approved in parallel to the SFEHRP and SWAT.

58. **The SFEHRP is part of a package of three emergency response operations including the SFERP and SWAT.** The SFERP and SFEHRP complement each other in terms of a coherent Bank approach and by incentivizing necessary policy reforms on the government's side, which are critical for the projects' preparedness in the short term and for addressing underlying issues on land, water, and agriculture in the longer term. The SFEHRP will be critical to support housing needs in a resilient manner. As most poor farmers are landless and often rely on a few heads of livestock as their store of wealth, the Flood Emergency Rehabilitation Component of the SWAT will help small and medium-sized farmers reestablish

their crop production through cash transfers. In addition, the SFERP will finance the emergency repairs to critical irrigation and flood protection infrastructure needed to restore production in irrigated farmlands. At the same time, SWAT will contribute to building Sindh's longer-term resilience through enhanced management of its water resources and increased agricultural water productivity through synergetic investments in agriculture and improved performance of the irrigation canal network in selected areas. The Bank has a separate dialogue on addressing the livestock sector's medium- to long-term needs.

59. **The three emergency operations are a part of the overall Bank flood response effort in FY23.** The FY23 program focuses across provinces and sectors through repurposing existing operations, activation of CERCs, through new emergency operations or through pre-flood, planned operations that have been rebalanced to support both the flood response and medium-term development objectives.

Figure 3. The Three Sindh Emergency Response Projects



60. **The project also complements several ongoing WBG-supported activities aimed at improving service delivery and climate adaptation in Sindh.** Current operations include the Solid Waste Emergency

and Efficiency Project (P173021), the Sindh Irrigated Agriculture Productivity Enhancement Project (P145813), and the Karachi Water and Sewerage Services Improvement Project (P164704) designed to improve water services, solid waste management, and irrigation water management. The Sindh Barrages Improvement Project (P131324) is renovating the barrages that divert water into the canal network and have an important role in flood management. These ongoing operations place the Bank in a position to leverage this implementation experience in the design of the operations to promote resilience and respond to emergencies.

61. **The project also complements efforts by development partners to support the country's flood response.** The European Union is providing emergency support in agriculture, livestock and food security in Sindh. The ADB is helping provide emergency food supplies and preparing operations for the rehabilitation and reconstruction of provincial and district roads, as well as sections of a national highway in Sindh. The ADB is also preparing interventions for livelihood restoration in Balochistan, and irrigation investments in Khyber Pakhtunkhwa and Balochistan. The Japan International Cooperation Agency is supporting livelihood improvement activities for farmers affected by the floods in Balochistan. The Food and Agriculture Organization (FAO) is working on agriculture recovery through fertilizer distribution. The International Fund for Agricultural Development is conducting rural development and livelihood support activities in Khyber Pakhtunkhwa. The FAO and ADB may also be work on livestock protection through access to vaccines and animal feed.

F. Lessons Learned and Reflected in the Project Design

62. **The project incorporates lessons learned from the Bank's extensive global experience in post-disaster housing reconstruction**, in particular the Pakistan and Nepal Earthquake Emergency Recovery Credits , as well as post-disaster projects in India, Sri Lanka, and Madagascar. Lessons learned include:

a) **A homeowner-driven approach, coupled with necessary technical assistance, fosters ownership of the program among participants and leads to strong results.** This strategy needs to include special assistance to more vulnerable groups – such as female-headed households and seniors to prevent the risk of disparities during the construction process.

b) **The design of emergency recovery operations should be relatively simple and flexible, while also reflecting the priorities of the affected areas and communities, and the specific needs of women, the elderly, and other vulnerable groups.** Emergency operations have higher chances of success if they remain focused and avoid over-ambitious development objectives and targets.

c) **Ensure common standards and procedures for implementation in disaster recovery projects.** Allowing varying approaches in implementation by different players in the same reconstruction program can contribute to unequal distribution of benefits among those affected by the disaster, as well as varying quality of results.

d) **Design of emergency operations can benefit from being informed by a PDNA** which provides a sound technical basis for priorities focusing on supporting medium- and longer-term recovery needs.

e) **Institutional arrangements, such as an empowered and technically capable reconstruction agency, are key**. Experience from other emergency housing reconstruction operations has shown that a credible and empowered institutional arrangement for execution and monitoring of the reconstruction effort is essential for success.

f) **Use of technology to support implementation is critical for transparency and efficiency, particularly for large scale interventions.** Housing reconstruction projects have benefited greatly from integrated solutions, such as a management information system (MIS), for efficient information collection, dissemination and decision making. Such well-designed systems can also minimize discretion in the process flow which is critical for transparency.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

63. **Based on global best practice for post-disaster reconstruction, the GoS has established an empowered and independent company, the SPHF, to lead the housing reconstruction program and serve as the PIU for this project.** The company has been set up under Section 42 of the Companies Act 2017 and is responsible for managing all technical, fiduciary, and safeguard management aspects of the overall housing reconstruction program of the GoS, in collaboration with IPs. The GoS has fulfilled all administrative and legal requirements for establishment of the company on a fast-track basis, including budgetary allocation to initiate operations.

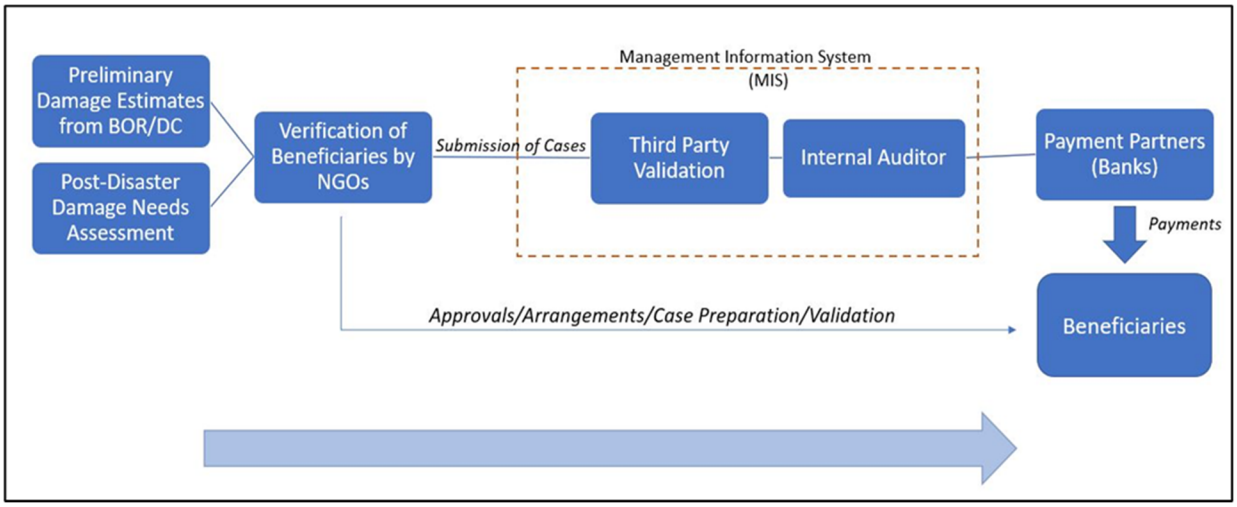
64. **A secretary-level government officer has already been appointed as full-time Chief Executive Officer, while hiring for remaining positions has also been initiated on a competitive basis.** The company's Board of Directors includes high-level representation of key government departments, as well as private sector experts. There is also ongoing discussion for potential inclusion of a representative from the federal government on the company's Board of Directors.

65. **Hiring of IPs has been initiated by the SPHF, which is a critical component of the implementation arrangement for this project.** Given a highly dispersed beneficiary-driven reconstruction and restoration program, the company will partner with credible NGOs in target areas to facilitate all community-level outreach and engagements. These IPs will be selected based on a comprehensive eligibility criterion focusing on robust operational and financial track record of community-level service delivery, implementation of reconstruction programs and field presence in target areas. Capacity building support will also be extended to ensure timely and quality implementation.

66. **Management Information System:** A comprehensive geo-enabled MIS will be established on a priority-basis to serve as the backbone of project implementation. The MIS will include a data management system that will process all information related to beneficiaries, disbursements, verification, and monitoring. Under a cascade information flow approach, the field staff from IPs will be able to directly upload geo-tagged information to the MIS through their smartphones which will then be consolidated and verified centrally by relevant staff at the SPHF. Additional reviews will be undertaken prior to the

release of payments (see Figure 4 below). The procurement process for this has been initiated in parallel and included under retroactive financing.

Figure 4. Project Implementation MIS



67. **Use of Technology Solutions:** The project will make a best effort to utilize modern technology solutions such as satellite and drone imagery, including artificial intelligence, to cross verify and speed up the damage and quality assessments of the targeted housing stock. Given the wide geographical scope and extensive nature for reconstruction activity envisioned under the project, such solutions will be critical for efficient implementation and transparency.

68. **Program Guidelines:** The project will be implemented according to the guidelines and procedures outlined in the Program Guidelines document, which will be finalized and adopted by the SPHF before project effectiveness. The document will lay out the roles and responsibilities of different stakeholders and provide details of implementation policies, processes, and procedures. The document will also cover technical, fiduciary, environment and social standards to be adopted by the SPHF. It will be reviewed periodically, with changes to be made with the WB's concurrence.

69. **Communications:** The widespread and timely dissemination of information on the available range of assistance options, their eligibility criteria, and the means of accessing them will be crucial to the efficient implementation of the project. Effective information dissemination will also be needed regarding multi-hazard resilient construction solutions, alternative materials, methods of construction, materials supply chain and availability, and pricing variations. The project will support the SPHF in developing an effective communications strategy during project implementation which would ensure adequate and timely information dissemination.

B. Results Monitoring and Evaluation Arrangements

70. **The SPHF, with support from the IPs, will be responsible for the overall project M&E, and regular reporting to the World Bank.** Accordingly, the SPHF will: (i) collect, consolidate, and report on project performance data, including physical and financial progress; and (ii) provide periodic information on

intermediate results achieved and progress toward higher level outcomes. Relevant line departments will assist the SPHF by providing relevant information, and the SPHF will prepare bi-annual progress reports throughout the implementation period. The project will finance the gathering of baseline data to assess social, environmental, and economic impacts of key activities. The project outcomes and impact will be evaluated through outcomes and intermediate level indicators defined in the project's results framework.

71. **A combined impact assessment for all three emergency operations — SFERP, SFEHRP and SWAT emergency flood response components—will also be undertaken to analyze the effect of proposed interventions on female beneficiaries, including female-headed households, over the course of the projects' lifetimes.** Using both quantitative and qualitative methods, the study will assess how lives of female beneficiaries have changed post-2022 floods and track their recovery. It will pay particular attention to improvements in: (i) women's socioeconomic conditions such as increase in their household income, disaster-related debt, and improvement in housing quality; (ii) changes in social relations such as participation in village activities and level of influence (access to decision making); and (iii) the extent to which women were able to make a resilient recovery (which also includes increase in knowledge of gender-based violence services in their areas). The findings will help evaluate if the projects were successful in considering the gendered impacts of floods and post-disaster needs of women when achieving medium- and longer-term objectives. The results from the assessment can also be useful for the design of future Bank operations as well as potential government policies around DRM, gender, and social protection.

C. Sustainability

72. **The sustainability of the project interventions will be ensured by adopting a "build-back-better" approach for the reconstruction of damaged housing units.** The following aspects of project design will directly contribute towards sustainability: (i) promoting the use of local construction materials for cost effective reconstruction and lower maintenance costs; (ii) ensuring beneficiaries have some form of ownership or lease of land on which the housing units will be reconstructed or restored; and (iii) adopting durable construction practices by consistently applying project criteria for multi-hazard resilience and climate-risk informed siting that are included in the Program Guidelines.

73. **The project will also enhance the technical capacity of targeted communities.** This will facilitate long-term maintenance and promote community participation (and thus ownership) during planning, design, and implementation. Finally, the project will also upgrade and strengthen traditional building systems for ensuring multi-hazard resilience for future events.

74. **Political commitment is needed for successful implementation of the project.** The SFEHRP has strong institutional buy-in from the GoS given the scale and impact of this disaster. Experience from previous Bank projects reinforces the well-recognized principle that integration with existing government institutions and processes can increase political commitment and help leverage the project's influence. The implementation arrangements for the SFEHRP follow government mandates and institutional responsibilities.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

75. **The SFEHRP supports beneficiary-driven, multi-hazard resilient reconstruction of about 350,000 damaged houses with a focus on vulnerable populations.** The project will address the issue of shelter and will create beneficial distributional effects as benefits of the project will go, disproportionately, to the poor. Housing reconstruction includes the provision of housing grants to verified beneficiaries in targeted areas. Core housing units will be planned and built as per the technical guidelines on multi-hazard resilient construction that will be developed under the project, to ensure resilience to account for local weather patterns, especially rainfall and extreme temperatures, as well as site safety against floods and other hazards. These technical guidelines will also aim to utilize easily accessible materials and familiar construction methods, reflecting local cultural preferences to ensure that the beneficiaries are not burdened and have access to critical inputs.

76. **Readiness.** Given the urgency of rehabilitation needs, particularly for housing, the Bank is supporting the GoS in achieving readiness through mobilization of critical upstream activities prior to project effectiveness. A dedicated housing reconstruction company (the SPHF) has already been established and is mobilizing partners and resources to undertake upstream activities, including eligibility surveys, establishment of an MIS, and onboarding of Implementation Partners. For staffing of the SPFH, a secretary-level government officer has already been appointed as full-time Chief Executive Officer while hiring for remaining positions has also been initiated on a competitive basis. The first draft of Program Guidelines has been submitted by the SPHF for concurrence. The eligible activities will be considered for retroactive financing under the operation.

77. **Retroactive financing.** The project may support retroactive financing of up to 40 percent of the loan amount. The retroactive financing would be allowed under the following conditions: (i) the activities financed are included in the project description; (ii) the payments are for items procured in a manner consistent with Sections I, II and III of the Procurement Regulations for Borrowers, applicable under streamlined procurement processes; and (iii) the payments (provided they relate to emergency response) were made by the Borrower not more than 12 months before the expected date of the signing of the project legal agreement for the Bank loan. Efforts will be made to review the procurement process to determine whether previous contracts are consistent with the Bank's Core Procurement Principles and the Bank's Anti-Corruption Guidelines. At a minimum, authorization consistent with the government's documented procedures shall be reviewed, and it will be ensured that the supplier/contractor had a legally registered business prior to contracts being awarded. As an additional due diligence, beneficial ownership details can be obtained. For each contract, the Bank's technical team members will confirm the relevance of the activity to flood response.

78. **The project is also expected to deliver externality benefits through trained artisans and by establishing a trend for resilient houses.** The reconstruction activity will also boost local economies as reconstruction is planned through available local material and labor. There are four types of expected benefits, outlined below:

79. **First, the project aims at reconstruction of damaged houses, which will provide shelter to a**

significant proportion of affected population. The benefits of this can be estimated through increased utility of families owning reconstructed houses. This will also add to their lifetime labor productivity associated with reduced exposure to health risks. Due to data limitations, these benefits are difficult to estimate. The current value of assets and multiplier effects shown in Table 2 are considered a conservative estimate of benefits.[36]

80. **Second, the project plans to provide technical assistance and training for rebuilding to multi-hazard resilient standards.** This has two benefits: saving of human lives and housing assets in future disasters and the externality benefits that will accrue to the society due to promotion of disaster resilient housing. The benefits of this can be estimated through lives, injuries and assets saved in the future. Value of statistical lives (VSL) and value of statistical injuries (VSI) can be used for lives and injuries saved while saving of housing assets can be evaluated on the basis of cost of reconstruction. The present value of benefits for the next 10 years has been found using discount rate (5 percent) which is then adjusted for population growth rate. The benefits are also adjusted for the probability of facing such disasters in future. The saving in VSL is estimated in the range US$14.97–US$53.39 with an average value of US$34.18.

81. **Third, the reconstruction activity will have an immediate effect on economic activity as local materials and labor will be used.** This will have a multiplier effect on local economies and will support the livelihoods of a significant number of people. Assuming a conservative multiplier for the country's economy, the benefits of expanded economic activity are estimated at US$1,175 million.

82. **Fourth, the project aims to support institutional strengthening and providing technical assistance to concerned departments of Sindh province.** This will provide much needed information required to appropriately run reconstruction plans. The benefits of this can be estimated on the basis of value of information required to make the plan effective and targeting affected populations. The expected benefits of improved capacity of personnel in concerned departments as well as better skills of workers involved in the housing sector are estimated at US$162 million. Together, these four types of benefits are expected to generate a value in the range of US$1,353 – US$1,393 million with an average value of US$1,373 million. The benefit-cost ratio has been estimated in the range 2.71 – 2.79 with an average value of 2.75.

Table 2. Benefit–Cost Ratio of SFEHRP (US$ Millions)

Benefit Description	Lower Limit	Upper Limit	Average
VSL Saving	14.97	53.39	34.18
VSI Saving	0.58	2.29	1.43
Multiplier Effect	1175	1175	1175
Project Management	25	25	25
Institutional Strengthening	73.09	73.09	73.09

[36] The economic gains of SFEHRP are difficult to directly estimate as they in large part relate to the improved productivity impacts (not least health-related) on working household members who are currently displaced, live out of their destroyed homes living in precarious conditions, who would benefit from reconstructed decent shelter—in terms of health and living conditions. These credit-constrained households would otherwise remain for a long time in the current precarious conditions, and naturally be less productive. What is estimated here is the multipliers effect generated by the construction activities. Based on experience from similar reconstruction operations in Nepal, this can be substantial: the reconstruction of half a million houses generated 160 to 176 million person-days of employment and an estimated net economic value of over USD 3.8 billion between 2018 and 2020 (staff estimates).

Human Capital Improvement	64.06	64.06	64.06
Projected Value of Benefits	**1352.69**	**1392.82**	**1372.76**
Cost of the Project	**500**	**500**	**500**
Benefit Cost Ratio	**2.71**	**2.79**	**2.75**

B. Fiduciary

(i) Financial Management (FM)

83. **The FM assessment for the project, undertaken in accordance with the WB Guidance for FM dated February 28, 2017,** concluded that the country systems and FM arrangements are adequate for the project, and can provide reasonable assurance and accurate and timely information on the status of the funds, as required by the WB.

84. **The project will be implemented by the SPHF.** A Chief Financial Officer (CFO) will be engaged/hired by the SPHF in accordance with the terms of references acceptable to the Bank prior to effectiveness. The CFO will be responsible for implementing the FM arrangements for the SFEHRP. The CFO will be supported by a team consisting of a Manager of Finance, Disbursement Officer, Accountant and an Assistant. For the project, government budgeting processes will apply, and the SFEHRP's budget will be a part of the GoS's Annual Development Plan. The SPHF will maintain separate books of accounts on cash basis of accounting to record SFEHRP-related receipts and payments. SFEHRP transactions will be subject to compliance with the government's internal control environment, i.e., General Financial Rules and Accounting Policies and Procedures Manual, and Company's Standard Operating Procedures, Policies, Manuals, including Program Guidelines, as agreed and approved with the Bank from time to time, as needed. For disbursement of grants, Program Guidelines will include overall grant cycle covering eligibility criteria, categorization of beneficiaries and grant size, share of project and beneficiary in the reconstruction cost, grant tranches and milestones, and grants review and processing protocols. The Program Guidelines will include delineated roles and responsibilities for each step of grants processing. To reinforce internal controls, an Internal Audit function headed by a Chief Internal Auditor will be set up in-house. Quarterly Interim Unaudited Financial Reports (IUFR) will be submitted to the Bank within 45 days of the close of each quarter. The project's financial statements will be prepared in accordance with the Cash Basis International Public Sector Accounting Standards and audited by the Auditor General of Pakistan. A segregated Designated Account (DA) will be opened for receipt and utilization of loan/credit proceeds. Disbursements will be report-based where advances equivalent to six months forecast will be provided to the DA and subsequent quarterly IUFRs will be the basis of documentation of the expenditures.

85. **For disbursement of grants to the eligible beneficiaries, funds will be transferred to Digital Financial Services Providers (DFSPs), with whom the SPHF will enter into a Memorandum of Understanding, from the DA as follows:**

a) Upon validation of milestones agreed with the respective beneficiary, the SPHF (i) will share the list of beneficiaries' bank account details, and the amount to be transferred, to respective DFSPs; and (ii) transfer the respective funds (along with transaction charges) from DA to the

DFSP. In case the beneficiary does not have a bank account, the SPHF will provide options from DFSPs with coverage in the target area so the beneficiary may open a bank account or mobile/virtual wallet, as suited. The SPHF will record expenditures in its books of accounts upon release of tranches to beneficiaries through DFSPs. Tranches will be released upon achievement of milestones.

b) DFSPs will transfer funds into eligible beneficiaries' bank accounts/virtual wallets/mobile accounts (based on the list sent by the SPHF) within two business days of receipt of funds from the SPHF. DFSPs will also be obliged to share real-time transaction SMS alerts with the beneficiary homeowners and the SPHF authorized officials. At the end of each month (within five business days), DFSPs will share a progress report with the SPHF, which will include, the funds disbursed by the DFSP, and the situation of funds withdrawn by individual homeowners. Detailed procedures will be outlined in the Program Guidelines.

c) As part of the technical assistance, the SPHF will also run a digital financial literacy program for beneficiary homeowners to educate on the risks of fraud/scams associated with digital payments.

86. **Monitoring:** A third-party monitoring agent will be engaged by the SPHF to ensure oversight and monitoring of disbursement of funds to eligible beneficiaries and completion of works within one month of project effectiveness.

87. **External Audit**: The Auditor General of Pakistan will conduct an annual audit of the project's financial statements. For each financial year closing on June 30, audited financial statements for the project will be submitted to the Bank within six months or by December 31 of the next FY.

(II) Procurement

88. **Procurement activities will be carried out following the WB's Procurement Regulations for IPF Borrowers.** All the procurement activities under this project will follow the WB Procurement Regulations for IPF Borrowers (Procurement in Investment Project Financing, Goods, Works, Non-Consulting and Consulting Services - Fourth Edition, November 2020). Some of the procurement activities may follow the provincial procurement procedures (national market approach), subject to conditions specified in the procurement plan approved by the Bank. The project will be subject to the WB's Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants (revised as of July 1, 2016, Anti-Corruption Guidelines).

89. **Component 1 will consist mainly of housing grants and will not involve any procurement activity as the project uses the beneficiary-driven model of reconstruction with individuals receiving a grant.** There is no stipulation of specific design or input material besides an overarching requirement to follow pre-defined minimum standards for multi-hazard resilience. However, there will be risks of over-exploitation of building materials and possible disruptions to the supply chain due to the scale of construction envisaged under the project. Some these risks will be mitigated by the technical assistance planned under Subcomponent 2.2.

90. **Component 2 will consist of several procurement packages to support technical assistance activities.** These will comprise technical assistance for the reconstruction program, establishment of an MIS system, and selection of Implementation Partners for implementation support. In order to accelerate institutional support to the project, the SPHF will procure the services of PISC. Some of these procurements will involve direct contracting where eligibility and adequate justification are established.

91. **A simplified Framework Project Procurement Strategy for Development (PPSD) will be developed by the SPHF, with the Bank's support, within three months after project effectiveness.** The PPSD would be centered on detailing fit-for-purpose procurement arrangements that most efficiently achieve the PDO. Specifically, procurement under the SFEHRP will use streamlined procurement methods and arrangements, including direct selection; unlimited thresholds for request for quotation for goods, works, and non-consulting services; using consultants' qualification selection for consulting services; reduced bid preparation period; use of Bid Securing Declaration rather than bid security; up to 40 percent advance payment against unconditional bank guarantee; waiver for performance security in the case of small contracts for works or supply of goods. Although most of the packages have been already identified, appropriate procurement arrangements will be designed for subsequent contracts as required.

92. **The WB has carried out a procurement risk assessment.** Procurement of this project will be conducted by the SPHF, which was registered under Section 42 of the Companies Act 2017. The Bank assessment found: (i) as a new established entity the procurement capacity will have to be developed; (ii) the project team, including procurement specialist/staff, will have to be selected or hired.

93. **Procurement Risk and Mitigation:** The key procurement related risks include: (i) frequent turnover of procurement staff; (ii) prospective consultants/suppliers/contractors/service providers lack skill in managing relevant environmental, social, health, and safety risks; (iii) inadequate capacity of various audit entities to understand the procurement requirements and often identify deviations and violations that are not referenced to correct legal requirements; and (iv) public procurement in the province is prone to fraud and corruption risk as duly documented by the National Accountability Bureau and Transparency International. To mitigate these risks, the following measures have been agreed with the project implementation agency: (i) notice period of resignation of project staff can be increased to three months; (ii) inclusion of qualification requirements for necessary experience with environmental, social, health and safety management into procurement documents, and familiarization of prospective consultants and bidders in pre-proposal conference and pre-bid meetings about environmental, social, health and safety risks; (iii) all key procurement documents will clearly refer to procurement arrangements stated in legal agreements and there will be Joint Procurement Clinics with the decision-making staff of the project implementation agency to contextualize the legal application of procurement regulations, and the procurement staff of project implementation agency will lead discussions in audit processes related to procurement; and (iv) for the fraud and corruption risks, the following measures will be instituted: (a) Procurement Clinics with a focus on detecting red flags; (b) mandatory training of relevant fiduciary staff on Bank's Procurement and Contract administration; (c) selection of Procurement Specialist, FM Specialist and Contract Management Specialist (if required) will be subject to prior review; (d) for enhanced transparency, the pre-bid/pre-proposal conferences, technical proposal submission meetings, financial proposals, and bid opening meetings shall be video recorded and proceedings uploaded on the project's website within 60 minutes of the conclusion of such meetings; (e) minutes of bid openings, technical proposal submissions and financial proposal openings shall be uploaded on

website on a real-time basis; (f) detailed guidance will be provided in the Program Guidelines regarding conflicts of interest, transparency measures etc.; (g) conflict of interest undertaking by all staff of the SPHF; and (h) Internal Audit will be independent of the SPHF.

94. **Oversight and Monitoring.** The Bank team will conduct annual (or ad hoc as needed) procurement post review in addition to prior review as required in the procurement plan and regular implementation support missions. External oversight is performed by Auditor General of Pakistan, the Competition Commission, the Federal Investigation Agency, the National Accountability Bureau, and the Public Accounts Committee. These entities have a national and subnational mandate and are directly and indirectly associated with various stages of procurement and contract management. Internally, the SPHF is required to follow delegation of financial powers whereby procurement transaction from planning, bidding, award and payments follow a defined hierarchy culminating at principal accounting officer. The MIS will also have features that facilitate oversight. These mechanisms ensure an adequate internal and external oversight of procurement and provide timely and regular feedback, such as through procurement audits and reviews.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

95. **Environmental:** SFEHRP is envisaged to have positive E&S impacts by reconstructing or restoring climate-resilient, multi-hazard and improved housing structures. These would include, but are not limited, to the provision of pit latrines, re-use of salvaged timber and other materials, and recycling of water by the installation of water harvesting structures. The project will also further promote the utilization of environmental and climate-friendly construction techniques through the introduction and use of alternative methods of residential unit construction, such as CSEB. In terms of environmental risks and impacts, the large-scale devastation has produced a significant amount of waste in the form of rubble and debris from damaged buildings and infrastructure, dead animal carcasses, hazardous materials and sludge, along with secondary waste generated during relief activities, all of which requires safe disposal. There is also the potential for over-exploitation and over-extraction of construction and building materials to supply the materials needed to reconstruct and rebuild the houses.

96. **Social:** While no relocation or land acquisition will be financed under the Bank's project, houses located in high-risk zones with recurrent hazards will not be eligible for subsidy grants. A transparent mechanism with scientific thresholds and remote sensing tools will be established to identify such zones, particularly flood plains or stream beds. Sexual exploitation and abuse/sexual harassment (SEA/SH) risks associated with housing reconstruction activities may be significant as women (receiving cash grants especially in places where they have generally been left out of these financial and management decisions), and children (especially of minorities) are residing in the damaged houses that will be reconstructed in insecure living environment, with limited access to privacy or safe toilet facilities etc. Although measures

are being taken to ensure sufficient supervision in beneficiary selection, SEA/SH risk remains substantial. The project's interaction with an anti-encroachment drive is unlikely. As a precautionary principle, as per the Environment and Social Commitment Plan (ESCP) commitment, any areas that are affected by the anti-encroachment drive will be excluded from the project. Another potential issue pertains to land not owned by families dwelling in the houses, but by a landlord who allows sharecroppers, or other farm laborers, to build houses on it**.** For such cases the project will propose innovative solutions such as tenant-owner agreements or occupancy certificates to mitigate the risk of eviction soon after reconstruction.

97. **The project may finance retroactive financing of the release of first tranche of payment to the beneficiaries for construction.** The project will assess the E&S risks that need to be accounted retroactively through an E&S audit. Relevant and appropriate E&S documentation (E&S checklists, Environment and Social Management Plan, etc.) will be prepared by the SPHF for each of these retroactively financed activities, commensurate to the risk magnitude. The E&S audit will be conducted against the same and accordingly corrective actions (if required) will be suggested.

98. **This project will prepare the requisite E&S documents.** These will include the Environmental and Social Management Framework which will include a comprehensive Waste Management Plan, Resettlement Policy Framework, and Labor Management Procedures (LMP), post-project approval. The ESCP and a preliminary Stakeholder Engagement Plan (SEP[37]) have been disclosed. The preliminary SEP, which will include a strong Grievance Mechanism (GM), will be updated before project implementation. Interim arrangements will be made for LMP and GM until the project-specific GM is set up and functional (i.e., using the existing ministry, local government GRM). Further, specific E&S measures will be integrated into the specifications of minimum structural safety requirements of the houses through the technical assistance (development of standards/strategy and delivery of training) and in the reconstruction activities by the beneficiaries. The SPHF will have appropriate E&S staffing (Environment, Social Development and Gender Specialists) and will be reflected in the ESCP.

99. **Citizen Engagement (CE):** CE will be mainstreamed throughout the project implementation by establishing bi-annual consultations, focus group discussions, satisfaction surveys and participatory planning. The feedback from the communities will inform the project interventions. The strategy for sustainability and social mobilization will also be designed and implemented. The SEP will guide all such interactions as it identifies major affected parties and vulnerable groups, along with the needs and issues for communication and the methods to be used for engagement with each type of group. A project-level GRM will be established as part of the CE approach. A Beneficiary Feedback Indicator has been added to the Results Framework.

100. **Gender and Disability.** The project responds to the gap in access to post-disaster reconstruction assistance faced by women, disabled persons and other vulnerable households/individuals, as observed in the recent Social Impact Assessment conducted in the aftermath of the 2022 floods, as well as in the context of earlier flood events. Several underlying constraints to this gap are addressed through project

[37] Preliminary SEP disclosed on GoS website as follows:
https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpnd.sindh.gov.pk%2Freports&data=05%7C01%7Cnasif%40worldbank.org%7C7f4102c9690842c89abe08dac94e2e4c%7C31a2fec0266b4c67b56e2796d8f59c36%7C0%7C0%7C638043634878641324%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=a7moKqrBxaVLb9gW7rRdkbtiBOKsDlEiuhLqQp3zIis%3D&reserved=0.

activities. Firstly, in response to a lack of legal documents held by women and other vulnerable individuals to prove their identity and/or housing ownership, the project will mobilize gender-balanced damage survey teams that, among other things, will connect vulnerable individuals/households (including women) to relevant authorities (NADRA, district land administration) and private enrolment agents to ensure streamlined issuance/reissuance of their identity/property documents. Community-aided land adjudication and verification processes, as well as provision of free legal aid and referral to protection services upon request, will support women and other vulnerable individuals in asserting their property rights without being exposed to violence or coercion. Secondly, in response to women and other vulnerable individuals' lack of time and/or skills to manage beneficiary-driven reconstruction activities, the project will provide training sessions on FM and supervision of construction activities. Such training sessions will also provide avenues for participation of women and other vulnerable groups in reconstruction activities within the community, providing them with a much-needed source of additional income. Additionally, labor-constrained women will also receive construction support directly from communities to ensure their houses are completed on time, within budget and to the required standards of quality and resilience. Finally, IPs will be engaged to coordinate several of the measures mentioned above, in addition to publicizing different forms of assistance available to women and other vulnerable individuals/households under the project, while also engaging 'gatekeepers' within the wider community to support women's inclusion in the project. The impact of these actions will be tracked through the following indicators: (i) percentage of housing subsidy cash grant recipients who are female; and (ii) percentage of beneficiaries receiving project trainings who are female.

101. **Climate Change.** The SFEHRP responds to a climate induced calamity by enhancing the climate resilience of affected populations. The project will integrate climate resilience through a build back better approach in the following ways: Component 1 will directly finances the multi-hazard resilient reconstruction of houses damaged by the flooding, through engineering solutions and climate risk sensitive siting; Component 2 will strengthen the disaster preparedness and response capacity of the government and communities by conducting a detailed damage assessment survey; providing technical assistance to formulate a housing reconstruction strategy, multi-hazard resilient housing solutions, and skills training for communities on resilient construction; and provide support to IPs with existing housing reconstruction capacity and strong outreach in the flood affected areas.

102. **The project is eligible for adaptation co-benefits as it directly addresses the climate vulnerability of the population through post-disaster, multi-hazard resilient housing reconstruction.** Since climate change is the major driving force behind the investment, the project itself is an adaptation measure and therefore lends itself well to a proportional approach to attributing adaptation finance. On the mitigation front, the project will promote the adoption of construction materials and techniques with a low carbon footprint. This will include the use of CSEB and concrete blocks as an alternative to burnt bricks, which in Sindh are typically fired using coal.

103. **It is important to note that a major segment of damaged houses in Sindh from the 2022 floods were traditionally built katcha houses.** Due to the onset of climate impacts including floods and heatwaves, such houses are extremely vulnerable to future shocks. Resultantly, the project is financing reconstruction to multi-hazard resilient standards that will involve water resistant construction materials, thermal comfort and construction on raised platforms. While all these elements will enhance future resilience, they also significantly increase the construction costs compared to the traditional houses.

Hence the marginal adaptation financing is a large portion (approximately 80 percent for katcha houses) of the housing reconstruction costs under this project.

V. GRIEVANCE REDRESS SERVICES

104. Communities and individuals who believe that they are adversely affected by a project supported by the WB may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank's non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's GRS, please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the Bank's AM, please visit https://accountability.worldbank.org

VI. KEY RISKS

105. **The overall risk of the project is rated Substantial.** The main risks and mitigation measures are described below.

106. **Political and Governance risk is Substantial.** The GoS demonstrates strong interest in the project, particularly in the context of the flood emergency in many parts of the country. While the interventions supported by this project are expected to remain a priority, the impetus for broader and deeper policy reforms and decision making may slow down particularly in the run up to the next general elections. Regular meetings to support delivery and implementation are chaired by the Chief Minister, Sindh, with representation by relevant departments, and the WB. Furthermore, the risk of political capture will be mitigated by the use of a detailed household-level damage assessment and eligibility verification process to inform the targeting under the project.

107. **Macroeconomic risk is High.** The recent floods have adversely impacted Pakistan's economic outlook and may delay implementation of overdue policy adjustment. Significant risks include potential worsening of external conditions, further natural disasters, and a slowdown or reversals in policy adjustment in the lead-up to elections. Realization of these risks may lead to macroeconomic instability, with major impacts on economic activities, prices, and household incomes, impeding achievement of project results. Risks are partly mitigated by the ongoing World Bank support to structural policy reforms in the fiscal and power sector areas, as well as the International Monetary Fund Extended Fund Facility program which supports sound economic and fiscal management and other critical structural reforms. At the project level, it is expected that the GoS will prioritize the SFEHRP in allocating government financing given its potential to generate labor-intensive employment and rehabilitate flood affected communities.

108. **Sector Strategies and Policies risk is Substantial.** Post-disaster housing reconstruction is a

complex engagement requiring strong coordination among stakeholders which can be challenging. To mitigate this risk, a Program Guidelines document covering key policy aspects of the program will be developed to guide all project activities. The establishment of SPFH by the GoS will also help in early resolution of the policy decisions required from the government. The strategic importance of investing in multi-hazard resilient infrastructure will be highlighted to Government counterparts through routine engagement and has also been underscored in the PDNA.

109. **Technical Design risk is Substantial.** Limited institutional understanding and experience of managing hazard risks, the unreliability of the database on hydro-meteorological conditions in the project areas, as well as the overall complexity of the project's design encompassing vast geographical scope and new implementation entity make the technical risk substantial. The project will seek to proactively address institutional constraints to effectively plan and roll out reconstruction support through technical assistance activities. Given the large number of individual housing units to be targeted, there is significant risk of exclusion/inclusion errors. The risk will be mitigated by developing objective selection criteria and a transparent MIS with technology-driven validation protocols. Based on the vast scale of reconstruction activity, there is a risk of access/availability of construction material and potential price gouging. The Project will mitigate this risk by promoting the use of innovative and locally available construction materials. In addition to the above, sustainability of infrastructure is also a risk, which would be addressed by training local communities in resilient construction practices and adopting appropriate designs. Lastly, restoration of partially damaged houses will also create risks associated with structural damage estimations and restoring not just original structure but ensuring retrofits for multi-hazard resilience. Transparent and scientific protocols with minimum human discretion and robust documentation will be employed to mitigate these risks.

110. **Institutional Capacity for Implementation and Sustainability risk is Substantial.** The newly established SPHF will require intensive support and capacity building to undertake this complex program. The Bank team is providing close technical support to the GoS in operationalizing and staffing the company in an effective manner including hiring the services of the PISC. The wide coverage of the program and capacity building needs of the community will require support of Implementation Partners (NGOs). While inclusion of these Implementation Partners presents risks related to capacity, consistency and transparency, strong selection criteria, standardized protocols, and capacity-building activities will be utilized as mitigation measures. Furthermore, the project will consider NGOs with credible and strong track records of working with governments on disaster reconstruction.

111. **Fiduciary risk is Substantial.** The SPHF is newly established and FM staff are yet to be hired. There is a risk of use of funds for unintended purposes, as the government has very limited experience of managing and disbursing grants to individuals for reconstruction. These risks will be mitigated through (i) hiring/engaging a responsible FM specialist in accordance with the terms of reference acceptable to the Bank; (ii) adherence to internal control environment, and (iii) use of a third-party monitoring agent to ensure use of funds for intended purposes and strengthening capacity of the SPHF.

112. **Environment and Social risk is Substantial.** Key E&S risks pertain to lack of precise knowledge of project locations. The SPHF is a newly established company and E&S staff are in the process of getting hired. Additionally, the beneficiary-driven approach could pose additional challenges for the implementation of E&S related aspects. These risks will be mitigated by: (i) streamlining E&S requirements

as part of the project design and preparation of relevant E&S instruments; (ii) hiring of qualified E&S staff in the SPHF as well as the IPs; (iii) strong community engagement and awareness building; and (iv) preparation, implementation and monitoring of a strong GRM.

113. **Stakeholders risk is High.** The project will need to strongly engage with local communities and require effective interfaces for institutional coordination and community engagement. Stakeholders, including households, communities, and local institutions are weakened due to the widespread disaster, rendering a beneficiary-driven reconstruction approach more taxing, and the community institutions required to coordinate grievance and reconstruction more fragile. This risk is mitigated by the establishment of the dedicated SPHF working in collaboration with local IPs to ensure effective institutional coordination and stakeholder outreach.

114. **Other risks (disaster risks) are Substantial.** Sindh is highly exposed to a range of natural hazards including floods, cyclones, droughts, earthquakes, landslides, and tsunamis. The location of project areas and the unprecedented nature of the 2022 floods suggest a substantial risk from natural hazards. Occurrence of new natural disasters can undermine recovery progress and have direct effects on sustainability of certain activities. To mitigate these risks, the GoS, with support from the Bank and other development partners, will continue undertaking efforts to strengthen DRM related agencies. It is also expected that beneficiaries will receive training to prepare and respond better to future adverse natural events. Further, risk-sensitive technical design and implementation will mitigate disaster and climate risks.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Pakistan

Sindh Flood Emergency Housing Reconstruction Project

Project Development Objectives(s)

To deliver beneficiary-driven, multi-hazard resilient reconstruction of core housing units affected by the 2022 floods in selected districts of Sindh.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Housing Reconstruction Grants				
Core housing units reconstructed/restored to multi-hazard resilient standards. (Number)		0.00	100,000.00	350,000.00
Of which at least are for female headed households and households with vulnerable women (Percentage)		0.00		25.00
Institutional Strengthening and Technical Assistance				
Beneficiaries that have received project trainings for multi-hazard resilient reconstruction practices. (Number)		0.00		400,000.00
Participants in project trainings who are female. (Percentage)		0.00		15.00
Citizen Engagement				

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Households reporting satisfaction with project interventions (Percentage)		0.00		80.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
Housing Reconstruction Grants			
Beneficiaries from housing subsidy cash grants with improved WASH outcomes. (Number)		0.00	1,400,000.00
Of which are female beneficiaries. (Percentage)		0.00	50.00
Housing subsidy cash grants disbursed. (Amount(USD))		0.00	470,000,000.00
Housing subsidy cash grant recipients who are female. (Percentage)		0.00	20.00
Institutional Strengthening and Technical Assistance			
Housing reconstruction strategy is formulated and adopted. (Yes/No)		No	Yes
Multi-hazard resilient housing solution(s) developed and adopted. (Yes/No)		No	Yes
Intended beneficiaries aware of project information and project investments. (Percentage)		0.00	100.00

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Core housing units reconstructed/restored to multi-hazard resilient standards.	Number of core housing units reconstructed/restored to multi-hazard resilient standards through housing subsidy grants and technical assistance provided by the project.	Semi-annual	Project MIS	Primary Data Collection	SPHF (PIU)
Of which at least are for female headed households and households with vulnerable women	Percentage of core housing units that are reconstructed/restored to multi-hazard resilient standards for women headed households and households with vulnerable women (including widows, divorced, women home-based workers, female on- and off- farm workers, female spouses of people with disabilities).	Semi-annual	Project MIS	Primary Data Collection	SPHF (PIU)
Beneficiaries that have received project trainings for multi-hazard resilient reconstruction practices.	Number of participants for training sessions organized under the project	Semi-annual	Project MIS / Project Progress Reports	Primary Data Collection	SPHF (PIU)
Participants in project trainings who are female.	This indicator will measure percentage of participants	Semi-annual	Project MIS / Project	Primary Data Collection	SPHF (PIU)

	in project trainings who are female.		Progress Reports		
Households reporting satisfaction with project interventions	The indicator measures the percentage of beneficiaries expressing satisfaction with interventions financed by this Project.	Year 3 and End of Project	Beneficiary Surveys	Primary data collection	SPHF (PIU)

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Beneficiaries from housing subsidy cash grants with improved WASH outcomes.	Beneficiaries are people or groups who directly derive benefits from the reconstructed core housing units including improved WASH outcomes with access to water collection systems and twin pit latrines.	Semi-annual	Project MIS / Project Progress Report	Primary data collection	SPHF (PIU)
Of which are female beneficiaries.	Percentage of females beneficiaries who directly derive benefits from the reconstructed core housing units including improved WASH outcomes with access to water collection systems and twin pit latrines.	Semi-annual	Project MIS / Project Progress Reports	Primary Data Collection	SPHF (PIU)
Housing subsidy cash grants disbursed.	This indicator will measure the disbursement of housing	Semi-annual	Project MIS	Primary Data Collection	SPHF (PIU)

	subsidy cash grants to beneficiaries.				
Housing subsidy cash grant recipients who are female.	This indicator will assess the percentage of housing subsidy cash grant recipients who are female.	Semi-annual	Project MIS	Primary Data Collection	SPHF (PIU)
Housing reconstruction strategy is formulated and adopted.	This strategy will provide the policy framework for the overall housing reconstruction program of Government of Sindh including eligibility criteria, compensation policies and technical standards	Annual	Project Progress Reports	Primary Data Collection	SPHF (PIU)
Multi-hazard resilient housing solution(s) developed and adopted.	The Government of Sindh has developed and approved the design standards for core housing units to be supported under the reconstruction program. The approved design will be multi-hazard resilient, efficient, economical, and suited to local norms and locally available materials.	Annual	Project Progress Reports	Primary Data Collection	SPHF (PIU)
Intended beneficiaries aware of project information and project investments.	This indicator will measure the effectiveness of consultation and communication mechanisms in terms of ensuring that information about the project and project	Annual	Project Progress Reports	Primary Data Collection	SPHF (PIU)

	supported investments have been communicated effectively.				

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Pakistan
Sindh Flood Emergency Housing Reconstruction Project

Implementation Arrangements

1. **The GoS has established a dedicated Section 42 company under Companies Act 2017 - SPHF which will be responsible for the planning, implementation, and monitoring of this project as well as the overall post-flood housing reconstruction program of the province.** All project implementation arrangements will be detailed in the Program Guidelines, which will be prepared and adopted as a project effectiveness condition. The management of the SPHF will be responsible for overall coordination and oversight, and the Board of Directors will provide strategic guidance and regulatory oversight during project implementation.

2. **An internal review (2020) of 26 WB emergency response and recovery projects concluded that they take longer to implement than regular investment lending and the time required to complete them is consistently underestimated at the design stage.**[38] The main challenges identified by the review were (i) low government capacity due to emergency situation; (ii) lack of base data for planning; and (iii) compressed project preparation period. As these three challenges also apply to the project, the proposed implementation support strategy seeks to mitigate these risks by setting up a dedication housing reconstruction company in line with global best practice, mobilizing at the earliest opportunity a surge in planning and implementation capacity, and the early collection of data to inform the targeting of housing reconstruction and restoration grants.

Strategy and Approach for Implementation Support

3. **The Implementation Support Plan (ISP) for the SFEHRP has been developed based on the specific nature of project activities, the planned implementation schedule, lessons learned from similar emergency operations, and the risk profile as identified in the Systematic Operations Risk-Rating Tool (SORT), as well as the fact that the project was prepared based on emergency procedures.** The ISP envisages frequent implementation support missions by the Bank's task team. The task team will monitor implementation progress through: (i) reporting against key performance indicators as outlined in the results framework; (ii) implementing entity level project reports and MIS; (iii) independent verification of progress through field visits; (iv) fiduciary oversight of the SPHF's activities; and (v) regular communication with relevant departments and the SPHF.

Implementation Support Plan

4. **The following ISP reflects preliminary estimates of the skill, timing, and resource requirements over the implementation period of the project.** The ISP will be reviewed from time to time to ensure that it continues to meet implementation support needs of the project.

[38] Li, Jie, Edouard Ereño Blanchet, Qiyang Xu, Fen Wei, and Yaprak Servi. 2020. "Recovery Speed for Emergency Response and Disaster Management, a Review on Selected IDA/IBRD Projects."

5. **Technical:** In addition to regular implementation support missions, the Bank will mobilize technical specialists to support implementation, particularly in terms of adding value through knowledge sharing and cross-fertilizing experience from similar projects in other countries. The task team has included international experts during preparation that will continue to assist during supervision. The Bank's institutional expertise on risk identification, engineering, and strengthening of fiduciary and operational systems will also contribute to adequate implementation of interventions and achievement of development objectives.

6. **The services of a PISC will be hired to provide institutional support for SPHF during initial phase of the project.** It is assumed that within 12 months of their onboarding, project staff and IPs will be fully functional with teething problems minimized, enabling a transition period with an overlap of 3 to 6 six months for exit of PISC.

7. **Procurement, FM, and E&S Safeguards:** The Bank's procurement, FM, and E&S safeguards specialists will provide regular implementation support and technical assistance to the counterpart teams during project implementation. These team members will also identify capacity-building needs to strengthen procurement, FM, and safeguard capacity of the SPHF.

8. **Tables A1.1 and A1.2 indicate the level of inputs and staffing that will be needed from the WB and the SPHF to provide implementation support for the project.** This will be reviewed and adjusted on a regular basis based on project needs.

Table A1.1. Implementation Support Plan

Time	Focus	Partner Role
First 6 months	Provide support for: • Successful start of project across all components. • Identification and prioritization of activities to roll out grants disbursement. • Technical designs and specifications of resilient infrastructure. • FM systems functioning. • Procurement (PPSD and Plan early in place). • ESF early in place as per ESCP. • Establishment of M&E system. • Establishment of MIS.	• Task team to support smooth start-up. • Ensure safeguards, procurement, and FM on track. • Support SPHF.
6–54 months	• Ensure adequate implementation support of all aspects of project. • Monitor implementation of project activities, including site visits. • Support final evaluation and Implementation Completion and Results Report.	• Ensure safeguards are kept on track. • Support SPHF. • Provide technical assistance.

Table A1.2. Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader	60	15	
Technical Specialist (DRM)	20	10	International or field-based staff
Technical Specialist (Housing Reconstruction)	40	15	International or field-based staff
Environmental Specialist	30	10	Field-based staff
Social Specialist	30	10	Field-based staff
FMS	30	10	International or field-based staff
Procurement Specialist	40	Local travel as needed	Field-based staff
Country Office Operational Support	60	Local travel as needed	Field-based staff
Consultants for Housing Reconstruction	75	Local travel as needed	Short-term consultant
Consultant for Safeguards and Inclusion	75	Local travel as needed	Short-term consultant
Consultant for Communications	10	Local travel as needed	Short-term consultant