The Government of Sindh intends to apply for financing in the amount of US$ 209 million equivalent from the World Bank toward the cost of the Guddu Barrage Rehabilitation Project and it intends to apply part of the proceeds to payments for goods, works, related services and consulting services to be procured under this project.

The project will include the following components:

- **Component A: Rehabilitation of Guddu Barrage**
  This component will support rehabilitation of the barrage and its associated structures. The works have been determined based on (a) detailed diagnostic assessment, (b) hydrological and sediment analysis studies including physical and numerical model studies, and (c) geotechnical, structural, and safety evaluation studies. The component will finance gate replacement works to improve the regulation and the flow of the barrage. This includes replacing all 65 main barrage steel gates (the gates are 18.3 m wide and 6.6 m high and weigh 55 tons each), 25 main canal head regulator gates (the gates are 7.3m wide and 3.8m high and weigh 25 tons each) and hoist gears. It also includes providing new standby generators, electrical cabling and switch gears, replacement of barrage lighting, repairs to the barrage lifting bridge and safety barriers, as well as rehabilitation of the three main canal head regulators. In addition, this component finances the River Training Works to ensure improved flood protection and promote favourable river approach conditions. The component also includes allowance for construction of a new left pocket divide wall to widen the left pocket and improve its ability to reduce the quantities of sediment entering the Ghotki and Rainee Canals. Minor concrete repairs are needed along some of the upstream gate grooves and both fish ladders require rehabilitation.

- **Component B: Improved Barrage Operation.** This component will support modernization and improvements to the barrage operation and maintenance. This will include necessary upgrades to the instrument monitoring systems such as piezometers, gate positioning and gauging, training and capacity building for staff, technical assistance, replacement of surveillance and maintenance boats and procurement of hydrographic equipment. The project will provide new covered workshops and a stock of spare parts for maintenance activities. The instrument monitoring system for the barrage will be renovated and the operating staff will be equipped with an upgraded operation, maintenance, and surveillance manual.
Component C: Project Management Coordination and Monitoring and Evaluation, and training. This component will support the coordination of all project-related activities as well as training and technical assistance in procurement, financial, social and environmental safeguards and communication. This component will also cover the cost of consulting services including construction supervision, contract administration, quality control, preparation of any additional designs, bidding documents and monitoring and evaluation. Activities will include the establishment of an independent Panel of Experts (POEs) to review, monitor, evaluate, and help guide the rehabilitation process with regard to the safety of the barrage. The component will also support implementation of information dissemination and communication program, particularly regarding possible canal closures and implementation of the safeguard related action plans.

Procurement of contracts financed by the World Bank will be conducted through the procedures as specified in the World Bank’s Guidelines: Procurement under IBRD Loans and IDA Credits (current edition), and is open to all eligible bidders as defined in the guidelines. Consulting services will be selected in accordance with the World Bank’s Guidelines: Selection and Employment of Consultants by World Bank Borrowers (current edition).

Specific procurement notices for contracts to be bid under the World Bank’s international competitive bidding (ICB) procedures and for contracts for consultancy services will be announced, as they become available, in UN Development Business and dgMarket.

Prequalification of suppliers and contractors will be required for the following contracts

**Contract Package 1: Staff Colony**
About 33 houses and associated office, laboratory and social amenities at the Guddu Barrage Colony site, on the right bank of the River Indus at Guddu Barrage.
An office complex and a dispensary together with rehabilitation/reconstruction of two houses at the Sukkur.

**Contract Package 2: Barrage Works**
a) Replacement of the barrage gates, and the gates for three of the four head regulators at Guddu Barrage; b) Rehabilitation of the mechanical and electrical equipment for operating the barrage gates; c) Provision of equipment for the future operation and maintenance of the barrage; d) Minor repairs to the barrage and head work civil structures; e) Construction of a new left pocket divide wall.

**Contract Package 3: River Training Works**
River training works on the left and right banks of the River Indus at Guddu Barrage. Construction of a single additional spur on the left bank of the River Indus upstream of Guddu Barrage to improve the river approach conditions.
**Project Monitoring and Evaluation Consultant**

Monitoring and Evaluation Consultants would be responsible for monitoring the project impact as well as supervise the Construction activities including EA/EMP and Social Management Plan implementation.

**Feasibility Study of the Barrage**

In the mid of the project Feasibility study for any existing Barrage (Excluding Guddu) or any other proposed Barrage like Sehwan Barrage Complex will be carried out.