

TERMS OF REFERENCE (TORS)

A) Position Title: Resource Person - Resilient Design

B) No of Position(s): One (01)

C) Duration: Three (03) months – starting with the date of signing of the contract

D) Location: Islamabad

E) Work Methodology: Remote (attend the meetings or discussions on site when needed).

F) Remuneration: Lumpsum remuneration, paid over three (03) months

G) BACKGROUND:

NDRMF (National Disaster Risk Management Fund) is a government-owned non-banking financial intermediary that works to reduce the socio-economic and fiscal vulnerability of Pakistan and its population to natural hazards, by prioritizing and financing investments in disaster risk reduction and preparedness. A substantial share of the subprojects financed through its Fund Implementation Partners (FIPs) involves community-level structures, including schools, community centres, shelters, health facilities and housing in flood-affected and hazard-prone areas.

The resilience features incorporated at the design stage determine how these structures perform when a hazard occurs. NDRMF does not presently have a consolidated technical reference against which proposed designs can be appraised, nor a set of low-cost design options that partners can draw upon in reconstruction and recovery programming.

The purpose of this assignment is to engage a Resource Person with an architectural design background to develop desk-based technical products that strengthen the resilience of structures, covering (i) a design review instrument for appraisal of disaster risk reduction and climate resilience features, (ii) low-cost resilient housing design options for early recovery and reconstruction, and (iii) an assessment of nature-based and passive design measures for NDRMF-financed sites. The assignment is Remote-based.

H) Duties / Responsibilities:

- a) Review NDRMF's Business Strategy, operational guidelines, safeguard requirements to establish the range of structures financed and the design information available.
- b) Develop hazard-specific design criteria for these structures, covering flood exposure (plinth elevation, foundation protection, material selection, drainage and site grading), seismic performance, wind loading and thermal stress, drawing on national building codes, international good practice and post-disaster damage evidence from Pakistan.
- c) Translate the criteria into a design review instrument for use by NDRMF appraisal and quality assurance staff, incorporating accessibility and gender-responsive provisions.
- d) Develop low-cost resilient rural housing design options for early recovery and reconstruction, using locally available and climate-sensitive materials, differentiated by regional context and hazard exposure. Adopting province wise strategy.
- e) Assess nature-based and passive design measures at site and settlement scale, including water retention and drainage, permeable surfaces, vegetative stabilisation, green roofs and shading, against documented cost and performance evidence

I) Key Deliverables:

- a) Disaster Risk Reduction and Climate Resilience Design Review Checklist for setting out hazard-specific criteria for schools, community centres, shelters and health facilities, structured as reviewable criteria with pass conditions and evidence requirements, and incorporating accessibility and gender-responsive provisions.
- b) Review of Low-Cost Resilient Rural Housing Approaches, examining documented housing designs and construction practices used in flood-affected and hazard-prone areas of Pakistan and comparable

contexts, assessing their performance, cost and material requirements, and identifying approaches suited to early recovery and reconstruction programming, supported by illustrative drawings.

- c) Nature-Based Solutions in the Built Environment; A Guideline Note, reviewing the evidence on nature-based and passive design measures for reconstruction and community infrastructure sites, with cost and performance evidence and an assessment of applicability in Pakistan.

J) Qualifications/Experience/Skills/:

Qualification:

- a) Bachelor's degree in architecture, Designing, Urban and Regional Planning or an equivalent professional qualification in architectural or urban design;

Experience:

- a) Minimum two (2) years of professional experience in architectural design and technical documentation.
- b) Demonstrated experience in preparing complete architectural drawing sets and technical specifications.
- c) Experience with a development partner, donor-funded programme or public sector institution will be considered an asset.
- d) Prior work in climate-sensitive, low-cost or vernacular construction, or in applied research and case study preparation, will be considered an asset

Skills:

- a) Architectural design, drafting and construction documentation (AutoCAD, Revit, SketchUp).
- b) Three-dimensional modelling, rendering and visual communication.
- c) Applied research, technical writing and structured presentation of findings.
- d) Ability to work independently and deliver to agreed timelines in a remote arrangement.

K) Duration:

Three (3) months from the date of signing of the Contract.