Government of Pakistan Ministry of Water Resources Office of the Chief Engineering Advisor & Chairman Federal Flood Commission

BRIEF REGARDING UPDATION OF THE 4th NATIONAL FLOOD PROTECTION PLAN (NFPP-IV UPDATED)

I. <u>Background</u>

- The preparation of Flood Protection Plan(s) for the country including management of Plan is one of the important functions of the Federal Flood Commission (FFC).
- FFC has so far formulated and implemented three (03) 10-yearly National Flood Protection Plans i.e. NFPP-I, NFPP-II & NFPP-III respectively during the period from 1978-87, 1988-97 & 1998-2008.
- In the aftermath of super floods of 2010, fourth 4th National Flood Protection Plan (NFPP-IV) was formulated at a total investment cost of Rs 332.246 billion. The Plan was discussed in three meetings of CCI and finally approved by CCI in its 4th meeting on May 02, 2017 with the decision that <u>the</u> *financing of NFPP-IV would be made by the Federal and Provincial Governments* @ 50:50.
- NFPP-IV, the then envisaged saving of about **779,250 hectares** of land from erosion; reclamation of **154,176 hectares** of land & protection of around **2,479,555 hectares** of land from inundation. However, Umbrella PC-I subsequently prepared to implement NFPP-IV's interventions could not be approved for want of funds.
- In view of devastating floods experienced by the country during Monsoon 2022, the Prime Minister of Pakistan on 29th August 2022 directed PD&SI Division for updation of 4th National Flood Protection Plan/ NFPP-IV (2017 version) to include protection measures against flash floods and hill torrents.
- Key objectives for the NFPP-IV update were to pivot NFPP-IV from being a Flood Protection Plan for investment towards being an Integrated Flood Risk Management (IFRM) Plan, to be adopted to address the hill torrents, pluvial/ urban as well as coastal flooding, incorporate nature-based and other non-structural solutions like ecosystem adaptation, landscape restoration and social inclusion through gender-informed and community-led flood risk reduction measures.

II. Stakeholders Consultations for NFPP-IV Updation

- Preliminary virtual consultative sessions of FFC, PD&SI Division and other stakeholders with ADB's International Advisory Team (Nov 2022 Feb 2023).
 - \rightarrow Criteria developed for updated NFPP-IV' was discussed
 - \rightarrow Stakeholder's inputs were incorporated in the criteria.
- ADB's following two **Foreign Missions** also visited Pakistan (flood affected areas in Sindh also) to have in-person meetings with respective federal and provincial agencies in order to discuss the criteria prepared for NFPP-IV updation and collect Stakeholders' suggestions on how to make sub-projects more aligned with IFRM approach and to include NbS.
 - \rightarrow 1st Foreign Mission to Pakistan for the period from February 13-18, 2023
 - \rightarrow 2nd Foreign Mission to Pakistan for the period from May 26 June 14, 2023
- Subsequently, three (03) Stakeholders Consultative Workshops and two (02) Special meetings (of FFC) were held on NFPP-IV Updation; detail is as follows:
 - → 1st Stakeholders Workshop on April 11, 2023 in FFC (to discuss criteria for NFPP-IV updation)
 - → Special meeting with the **Provincial Forest and Agriculture Departments** organized by FFC on **May 03, 2023** to discuss their project proposals related to Nature based solutions (NbS).

- → Special meeting with **Departments responsible for Urban Flood Management** organized by FFC on **July 26, 2023** with a view to include proposals/ projects on Urban Flood Management
- \rightarrow 2nd Stakeholders Workshop held at Islamabad on May 29, 2023.
- → 3rd Stakeholders Workshop organized in Islamabad on August 29, 2023

III. Interventions Proposed under Updated NFPP-IV

- A well-thought-out professional and all-inclusive Plan has been prepared pivoting around **Integrated Flood Risk Management (IFRM)** approach as against the existing pre-emptive flood risk management approach, including
 - Structural measures for riverine, Hill torrents flash flooding, coastal flooding & GLOFs (e.g. spurs/dikes, dams & dispersal/drainage structures etc.),
 - Non-structural measures like Early Warning & Telemetry systems,
 - Integrated Watershed Management including Nature-based Solutions (NbS)
 - Urban/Pluvial flood control measures; &
 - Legal and Institutional arrangements.
- Apropos, NFPP-IV (2024) consists of about **375 sub-projects** with a total estimated cost of approximately **PKR 825 billion**.
 - → **Phase-I**/FPSP-III¹ with **170 sub-projects** costing around **PKR 195 billion**
 - → Phase-II with 205 sub-projects costing around PKR 630 billion
- Summary of the various structural and non-structural measures proposed under updated NFPP-IV is attached at **Appendix-I**.

Current Status & Way Forward

- NFPP-IV Updation work stands substantially finalized based on extensive consultative process led through FFC with the active participation of all relevant stakeholders at federal and provincial level.
- FFC managed this task as per PD&SI Division's requirements and as per its mandate.
- Finalized draft 'Updated NFPP-IV' (Feb 2024 version) was discussed during a Consultative Meeting held in PD&SI Division on **February 20, 2024** wherein PD&SI Division directed to include 4RF/ non FPSP-III/NFPP-IV projects in Updated NFPP-IV (without cost implications), circulate the draft Plan document among the Provinces/ respective FLAs and seek their **endorsement** of respective sub-projects **and their certificates** that these sub-projects are intended for flood protection works that emerged after Floods 2010 and 2022.
- Subsequently, FFC ensured inclusion of 4RF/ non FPSP-III/ NFPP-IV projects of provinces in Updated NFPP-IV through ADB Consultants. FFC also approached all stakeholder departments for providing the requisite endorsement letter & certificates; the same have been received from the concerned agencies.
- In line with the above, 'modified draft Updated NFPP-IV document' has been sent on **April 30, 2024** to MoWR along with **endorsement/ certificates** furnished by the Federal and Provincial stakeholder departments, for further processing with PD&SI Division for its approval by the appropriate forum.
- Subsequently, on request of MoWR dated May 02, 2024, endorsement/ certificates of the stakeholder departments have been made part of Updated NFPP-IV document and accordingly 'modified draft Updated NFPP-IV document' has been sent again to MoWR on May 07, 2024 for further processing with PD&SI Division for its approval by the appropriate forum.
- MoWR has forwarded the NFPP-IV Updated to PD&SI Division on June 12, 2024 for further processing for its approval by the relevant authority.

¹ Umbrella PC-I of FPSP-III stands approved by ECNEC on June 27, 2024

SUMMARY OF INTERVENTIONS PROPOSED UNDER UPDATED NFPP-IV

Province and Agency	Phase	No. of sub- projects	Estimated costs (Million PKR)	Type of sub- projects*
Punjab	Phase-I	12	29,708	Α
	Phase-II	75	160,180	A, C, D
Forestry Department	Phase-II	3	9,616	С
Irrigation Department	Phase-I	12	29,708	Α
	Phase-II	66	140,551	<i>A</i> , <i>D</i>
RDA, WASA Rawalpindi	Phase-II	2	1,960	<i>A</i> , <i>D</i>
WASA Multan	Phase-II	1	251	D
WASA Gujranwala	Phase-II	3	7,801	D
Sindh	Phase-I	40	50,571	Α
	Phase-II	6	32,917	B, C, D
Deputy Commissioner, Thatta	Phase-II	2	71	D
Forest and Wildlife Deptt. Sindh	Phase-II	1	15,550	С
Irrigation Department, Sindh	Phase-I	40	50,571	A
	Phase-II	1	15,000	С
PDMA-Sindh	Phase-II	2	2,296	В
Khyber Pakhtunkhwa	Phase-I	56	15,364	Α
	Phase-II	32	124,235	A, B, C, D
Forestry Department	Phase-II	1	50,434	С
Irrigation Department	Phase-I	56	15,364	A
	Phase-II	21	45,655	A
PDMA	Phase-II	1	3,931	В
TMA - Bahrain	Phase-II	3	75	D
Water & Sanitation DI Khan	Phase-II	2	1,000	D
Water & Sanitation Mingora	Phase-II	4	23,140	<i>B</i> , <i>D</i>
Balochistan	Phase-I	29	44,289	Α
	Phase-II	45	211,674	A, C, D
Irrigation Department	Phase-I	29	44,289	A
	Phase-II	44	200,814	A, C, D
Local Government & RD Deptt.	Phase-II	1	10,860	A
Gilgit-Baltistan	Phase-I	10	8,198	A A B C
Water Management & Irrigation	Phase-II Phase-I	5 10	27,067 8,198	A, B, C
mater management & triguiton	Phase-II	5	27,067	A, B, C

Province and Agency	Phase	No. of sub- projects	Estimated costs (Million PKR)	Type of sub- projects*
Azad Jammu and Kashmir	Phase-I	4	11,053	Α
	Phase-II	5	31,705	A & C
Forest Department	Phase-II	1	21,671	С
Irrigation & Dams Department	Phase-I	4	11,053	A
	Phase-II	4	10,033	Α
Federal	Phase-I	19	35,443	B , C , D , E
	Phase-II	37	42,090	A, B, E
Federal Flood Commission	Phase-I	7	7,991	<i>B</i> , <i>C</i> , <i>D</i> , <i>E</i>
	Phase-II	9	1,380	<i>A</i> , <i>E</i>
MoCC & Env'tal Coordination	Phase-I	1	6,000	Α
NDMA	Phase-II	6	16,543	<i>B</i> , <i>E</i>
NHA	Phase-II	1	154	Α
PCRWR	Phase-I	3	328	С, Е
Pakistan Meteorological Department	Phase-I	2	5,025	В
	Phase-II	4	12,485	В
Pakistan Army	Phase-I	1	780	В
Pakistan Railways	Phase-II	3	150	E
Global Change Impact Study Centre	Phase-II	1	300	E
WAPDA	Phase-I	5	15,319	<i>B</i> , <i>E</i>
	Phase-II	13	11,078	A, B, E

* A=Structural, B=Non-Structural, C=Ecosystem based/NbS, D=Urban Flood Control Measures, E=Studies/Others

Overview of Sub-projects and Costs (PKR billion) for Phase-I and Phase-II of NFPP-IV (2024)

Phase #	No. of Projects	Cost (Billion PKR)
Phase-I	170	195
Phase-II	205	630
Total Phase I+II	375	825