INDIA: Proposed Maharashtra Resilience Development Project Pre-identification Mission

February 12–15, 2024

Aide Memoire

I. INTRODUCTION

1. A World Bank team¹ carried out the pre-identification mission for the Maharashtra Resilience Development Project (MRDP) on February 12–15, 2024. The mission's objectives were to: (i) discuss the project development objective, scope, and types of activities to be financed; (ii) choose a financing instrument; (iii) explore lessons learned from other operations; (iv) agree on the institutional arrangements for project preparation and implementation; and (v) agree on the project preparation schedule.

2. We would like to thank the Government of Maharashtra (GoM), in particular the Maharashtra Institution for Transformation (MITRA) for the cooperation extended to the World Bank team during the pre-identification mission. We would also like to acknowledge the support and collaboration extended by both the Water Resources Department (WRD) and the State Relief and Rehabilitation Department (R&R). This Aide Memoire summarizes the findings and observations of the World Bank team and agreements reached, as discussed at the wrap-up meeting on February 15, 2024, chaired by Mr. Devendra Fadnavis, Maharashtra State Deputy Chief Minister, Dr. Nitin Kareer, Chief Secretary, and by Mr. Praveen Pardeshi, CEO, MITRA.

II. PROJECT DATA AND MILESTONES

Table 1: Key Project Data

Government Request	Proposed Financing	Implementation Period	
GoM submitted the Preliminary Project Proposal (PPR) to the Department of Economic Affairs (DEA) in May 2023 Screening Committee of DEA approved the project proposal on December 19, 2023	IBRD: US\$280 million Counterparts: US\$120 million	2025-2029	
Proposed Project Development Objective (PDO)			
To enhance resilient development in Maharashtra through climate-informed and integrated flood, drought, and landslide risk management.			

¹ The mission was led by Jolanta Kryspin-Watson (TTL, Lead Disaster Risk Management [DRM] Specialist) and Satya Priya (Co-TTL, Senior Water Resources Management [WRM] Specialist), and included Abhas Jha (Practice Manager), Anup Karanth (Senior DRM Specialist), Deepak Singh (Lead DRM Specialist), Savinay Grover (Senior FM Specialist), Swati Pillai (ET Consultant), Sheena Arora (Consultant), and Tjark Gall (Consultant). The mission was supported by Atul Khurana (Senior Program Assistant).

Component Description	Implementing Agencies
Digitization, Information Platforms, and Risk Modelling	PIU DRM
Green and Grey Infrastructure Investments in Flood Risk Mitigation	PIU WRM
Institutional Capacity Building, Analytics and Technical Assistance	PIU DRM
Climate and Disaster Risk Financing and Private Capital Mobilization	PCU
Project Management	PCU
Contingent Emergency Response Component	PCU

3. **Project context:** Floods and droughts have emerged as significant climate-related challenges in Maharashtra. In the past 50 years alone, the state has seen a seven-fold increase in the frequency of drought and a six-fold increase in the frequency of flood events. Such extreme climate conditions, including heavy rains, floods, drought, and landslides have strongly impacted the livelihoods of people and are taking a heavy toll on the state's economy. The state recorded seven flood events since 2005 due to factors such as nallah-overflows and poor drainage systems that had exacerbated and added to the impacts of heavy rains through loss of lives and destruction of dwellings, crops, and food stocks. Floods further devastated farmlands, washed away irrigation systems, eroded vast tracts of land, or rendered them unusable. These events required redirecting state budgetary resources to response, relief, and recovery from the catastrophic impacts. Financial compensation accorded by the state to affected persons was INR 641 crore in 2019-2020 and INR 336 crore in 2020-2021. Additionally, the expenditure for restoration of affected public infrastructure, such as bridges, roads, electric transmission lines, and public buildings was nearly INR 800 crore per year. An increase in incidents of droughts and floods has created complex challenges for the population, agriculture, and overall water management in the state. Extreme weather events occurring simultaneously in different districts strain resources and require comprehensive and integrated strategies to mitigate and adapt to the changing climate. This multi-hazard risk is further exacerbated by the changing climate, as well as a lack of risk-informed decision-making tools and mainstreaming of disaster risk management (DRM) and climate resilience across critical infrastructure and services, capacity gaps (knowledge and human resources), and regulatory gaps, and inadequate emergency response frameworks. Addressing these challenges requires careful intervention due to the complexity of Maharashtra's water system. The selection and design of individual interventions for water resources, flood and drought risk management require a detailed understanding of their individual and cumulative impacts, both at present and across future climate change scenarios.

4. **Maharashtra Resilience Development Project (MRDP)**: The proposed project aims to enhance resilient development in Maharashtra through climate-informed and integrated flood, drought and landslide risk management. This entails the following:

- a. Strengthening the institutional capacities for adaptive planning and mainstreaming integrated flood and multi-hazard mitigation and risk management, to reduce the impacts of climate change (CC) and build resilience to future extreme weather events.
- b. Establishing a knowledge base and systems for informed decision-making based on scientific evidence for planning and investments, for enhanced management of d flood, drought, and landslide risk in Krishna and Bheema river basins, and for emergency response.
- c. Building on conducted studies, developing risk modeling and climate scenarios along with a feasibility study and detailed project reports (DPRs) for long-term investments in water resource and flood risk management as well as potential intra-basin water resource diversion.

5. **DEA readiness criterion:** The mission reiterated the importance of meeting DEA's readiness criteria of having 30 percent of investments (US\$120 million) ready for contracting by negotiations, expected in November 2024. At least 35 percent of investments should be ready for contracting, to consider potential exchange rate fluctuations or failure of attracting competent bidders in certain incidences.

6. The project activities² may include, but are not limited to, the following:

Component 1: Digitization, Risk Modeling, Open Data, and Information Platforms

- a. Develop an integrated dynamic decision support system (DSS) for reservoir operations connected with predictive operation. This will ensure the utilization of real-time data, predictive analytics, and advanced modeling techniques to inform and optimize the management of water reservoirs.
- b. Strengthen hydrological and meteorological (hydromet) services, hazard monitoring, impact forecasting, multi-hazard early warning systems (MHEWS), and last-mile communication, including strengthening of State Emergency Operation Centre (SEOC) and District Emergency Operation Centers (DEOCs) to provide timely and accurate information to authorities and the public, enabling better preparedness and a more timely, efficient and effective response to reduce the risk and impact of severe weather and other hazards.
- c. Develop a comprehensive disaster risk database (DRDB), a Risk Atlas for the State of Maharashtra, comprising all key hazards, vulnerabilities, and risk information to support informed decisions for development and DRM. The DRDB and Risk Atlas will use Big Data and permit effective and innovative processing and analysis for multi-hazard risk assessment. Further, they enable evaluating the hazard exposure of people and assets, which, together with vulnerability data, inform the estimation of potential economic and other losses across

² The list of activities is preliminary and subject to further analysis and discussions.

different hazard scenarios. Building on best practices and regulations, open data principles shall guide the project activities where possible.

Component 2: Green and Grey Infrastructure Investments in Flood Risk Mitigation

- a. Implement no-regret measures in water resources management in the districts of Kolhapur and Sangli by enhancing water body capacity to handle floodwaters and water flow. These measures may include but are not limited to restoration, widening, deepening, and de-silting of rivers and channels, construction of flood protection bunds, river training works, enhancing data collection and monitoring systems, afforestation, and reforestation. Implement systems for landslide risk monitoring and slope stabilization measures.
- b. Develop and comprehensive drainage plans for select cities, and implement integrated measures, including nature-based solutions and green infrastructure resulting in soil and water conservation by applying innovative approaches, such as sponge cities concept which will help urban areas absorb, convey, collect, and use water effectively, to reduce flood risk and water scarcity and consequently provide multi-dimensional benefits to urban dwellers.

Component 3: Institutional Capacity Building, Analytics, and Technical Assistance

- a. Establish a Maharashtra Centre of Excellence as regional knowledge lighthouse for riskinformed water resources management that will serve as platform for research, innovation, and knowledge sharing, aiming to develop and promote best practices, tools, and policies that help effectively manage hydromet risks such as floods, droughts, and cascading risks, such as precipitation-induced landslides.
- b. Develop comprehensive policy guidelines for dam reservoirs operation.
- c. Conduct comprehensive assessments to explore feasibility of water utilization through flood moderation and water diversion to mitigate flood and drought risk.

Component 4: Climate and Disaster Risk Financing and Private Capital Mobilization

a. Provide support to identifying climate finance solutions for adaptation and resilience building for which public and private finance can be leveraged with innovative tools, such as guarantees, risk-sharing, blended finance, and public financial management. Development of risk financing and private capital mobilization strategies to enhance financial protection from catastrophic events and to expand Maharashtra's fiscal space. Potential instruments may include disaster risk transfer or risk retention options, such as catastrophe insurance, catastrophe risk bonds, or contingent funding options. Strengthening financial resilience against disasters will help i) enhance rapid mobilization of funds; ii) improve budgetary delivery channels; iii) provide diversification of financial instruments to ensure cost-effectiveness of these tools; and iv) capacitate use of robust data and analytics.

Component 5: Project Management

a. The component will be implemented by MITRA as the PCU. It will support the implementing agencies of the project through: (i) capacity building, and (ii) carrying out the day-to-day

coordination, financial management, procurement, environmental and social management, communication, monitoring and evaluation, and stakeholder engagement.

Component 6: Contingent Emergency Response Component (CERC)

a. This component will allow for the reallocation of loan proceeds from other components to provide immediate support to recovery and reconstruction following an eligible crisis or emergency, as needed.

Lessons Learned

7. The proposed project is drawing on key lessons learned from past and ongoing DRM operations in the country, including:

- a. **Reaching scale**: While many projects started as emergency operations in the postdisaster context, the proposed project will shift away from a reactive approach towards a proactive resilience building and risk reduction, strengthening institutional and policy frameworks in several sectors to integrate resilience to influence investments outside the project, and strengthening state capacities for disaster and climate resilience as an essential element to ensure the long-term sustainability of the investments.
- b. **Communities as first responders**: Strengthening community-based DRM is critical. International evidence suggests that ownership of disaster resilience by communities is a determining factor in reducing their vulnerability. The proposed project will focus on partnerships with local governments, engaging local communities and increasing their capacities. The disproportional negative effect of disasters on women and other disadvantaged groups, as well as their active role in building disaster resilience will receive particular attention.

III. PRE-IDENTIFICATION FOLLOW-UP

Government preparation

8. **Staffing:** The GoM will appoint dedicated staff for the preparation of the proposed project under a Project Coordination Unit (PCU).

Implementation Arrangements

9. The proposed project implementation setup involves the establishment of a PCU and two Project Implementation Units (PIUs).

10. **A PCU will be set up at MITRA** to undertake the overall planning, coordination, and monitoring of the project progress, including through setting up a high-level Steering Committee for regular monitoring and coordination within GoM and with the World Bank.

11. **The PIU for DRM activities** will be housed within the State Relief and Rehabilitation Department (R&R) and will be the nodal agency in charge of implementation. The department will be primarily responsible for the following activities envisaged under the project: multi-hazard risk assessment and Decision Support Systems (DSS), modernization and upgrading of the State

Emergency Operations Center (SEOC) and District Emergency Operations Centers (DEOCs), Multi-Hazard Early Warning System (MHEWS), and last-mile connectivity through dissemination systems, pilot flood and landslide risk assessment and mitigation planning, and technical support for overall DRM functions and project management. The PIU will be headed by a project director and supported by technical experts, functional specialists (e.g., fiduciary, safeguards, monitoring and evaluation), and support staff to advance the implementation of the project investments. Consequently, key positions in the PIU shall include the following: Project Director, Project Manager, Financial Management Specialist, Procurement Specialist, Environment Specialist, Social Management Specialist, Technical Specialist (e.g., Hydrologist, IT, GIS, Geotechnical/Geology, Emergency Communications), Management Information System (MIS) Specialist, IT Administrator, Monitoring and Evaluation Specialist, Communications Specialist, Support and Office Assistance.

12. The principal tasks of the PIU will include:

- **a. Planning:** Prepare the investment proposals, detailed project reports (DPRs), bidding documents, and implementation plans.
- b. Project Implementation: i) Coordinate with the line departments for implementation of DRM activities and inform the progress to State Project Steering Committee; ii) Coordinate and report to the PCU on progress of project implementation; iii) Monitor and supervise constructions through regular site visits; iv) Ensure application of Environment and Social Safeguards; v) Monitor the physical and financial progress on the project and seeking corrective action, where applicable; vi) Establish grievance redressal system for the project and disseminate the grievance redressal processes widely to allow communication of grievances; vii) Implement directions given by the State-level Steering Committee for the Project; vii) Coordinate and collaborate with other departments/administrative machinery to ensure timely implementation of the project activities; viii) Monitor procurement and award of packages and purchase orders for the State where applicable); as well as the following:
 - i. Financial Management,
 - ii. Procurement Management,
 - iii. Environment and Social Management,
 - iv. Overall Monitoring, Evaluation, and Management.

13. Additional technical support consultants (TSC) or project management and technical consultants (PMTC) can be contracted to provide knowledge and management support to the PIU, for carrying out surveys, assessments, third party quality monitoring, risk and vulnerability studies, DPR vetting, preparation of bid documents, legal support and finance, as necessary.

14. The second PIU for WRM activities will be established within the Krishna Valley Irrigation Development Corporation (KVIDC), Water Resources Department (WRD), GoM, and will be

responsible for overseeing flood risk mitigation interventions comprising both structural and nonstructural measures such as strengthening of existing Reservoir Operations System (ROS) to a dynamic flood predictive model for operations of reservoirs during flood and high-water period.

15. The PIU will consist of dedicated staff in project management, technical, financial management, procurement, environment, social, communications in addition to other support staff such as administration, information technology, and human resources. Various units within WRD such as, but not limited to, the Central Designs Organization (CDO) will provide technical support to the project as appropriate. The PIU will work together with the Relief, Rehabilitation and Disaster Management Department to design the urban flood risk mitigation investments. The PIU will be supported by a full-time PMTC firm.

16. To meet the DEA 30-percent readiness criterion, the PIU will complete the following:

- a. Set up a functional mathematical modelling unit by March 2024 comprising experts on hydrology, meteorology, and hydraulic modelling by i) nominating staff from its Basin Simulation Division ii) leveraging existing institutional partnerships with technical agencies as well as iii) hiring technical subject experts.
- b. Undertake the scoping and design of the flood risk mitigation interventions based on validation of the existing proposals while also informing the same with additional analytics and field surveys.
- c. Undertake the preparation of DPRs, including priority investments needed to meet the DEA readiness criteria.
- d. Ensure that the past and ongoing surveys and studies, such as the proposed LiDAR survey feed into the scoping and design process.

Procurement

17. The mission asked the PCU to confirm the implementing agencies to enable the World Bank to conduct the fiduciary assessments. All procurement under the project will be governed by the World Bank's *Procurement Regulations for Investment Project Financing (IPF) Borrowers for Goods, Works, Non-Consulting and Consulting Services*, dated July 1, 2016 (revised in November 2017, August 2018, and November 2020). According to the requirement of the Regulations, a Project Procurement Strategy for Development (PPSD) needs to be developed based on the anticipated procurement under the proposed project. The GoM proposed implementing agencies in addition to the PCU and confirmed that individual procurement staff will be recruited for each proposed PIU who will be responsible for the procurement activities for the respective PIUs.

Financial Management (FM)

18. It was discussed that the GoM does not foresee any major funds flow issues. The mission requested the GoM to finalize the proposed fund flow arrangement once the project implementation arrangements are agreed upon. In anticipation of the new project, the mission suggested that it would be prudent for the GoM to create a budget head with token provision

while creating the next fiscal year budget. It was highlighted that retroactive financing for agreed activities can be done for one year prior to effectiveness. More suitable assessments will be carried out during the preparation process going forward.

Environment Management and Social Safeguards

19. **Applicability of the Environment and Social Framework (ESF):** Environmental and social requirements applicable to the proposed project are set out in the Bank's ESF³.

20. **Key ESF Instruments/Documents Required for Project Processing:** Based on the understanding of project contours at pre-identification stage, an Environment and Social Assessment (ESA) for the project will be required to develop project level instruments/documents for appraisal. These will include: (i) Environment and Social Management Framework (ESMF), (ii) Resettlement Policy Framework, (iii) Indigenous People Policy Framework (IPPF); (iv) Stakeholder Engagement Plan (SEP), (v) Environment and Social Commitment Plan (ESCP); and (vi) Labor Management Procedures (LMP), including Occupational Health and Safety Plan. All instruments are to be consulted upon with stakeholders and disclosed prior to Appraisal, following the requirements of the ESF. The project preparation needs to create and build-in mechanisms for: (i) consultation with key stakeholders; (ii) effective, efficient, and responsive communication program for stakeholder engagement; (iii) robust real time monitoring systems for accountability and evidence-based reporting. Findings/recommendations of ESA and other documents need to be integrated into project design/detailed project reports, Bidding Documents, and Implementation Plan to be prepared for the project.

21. **Staffing for Environment and Social Management**: For effective leadership and coordination on EHS aspects during the entire project cycle, it is imperative that suitable staff and experts (with required qualifications and experience) are deployed by the project to discharge functions and responsibilities associated with this role. It was agreed that current Social and Environment Specialists at the PCU will closely work with social and environmental counterparts to be hired at the PIU level and they will liaise with nodal officials from Implementation Agencies. Additional specialists will be required at both PCU level as well as at PIUs to provide the required support for project preparation and eventually its implementation. The mission requested the PCU to formalize the implementation arrangements and fill-in vacant positions at the earliest to fully kick start preparatory activities for EHS management. Specifically for social safeguards, it was agreed that three specialists (social development, gender, and labor) will be hired at the PCU level. This team will work with the social specialists hired at the PIU level. With increasing dependence on contractual staff, the proposed project will require developing a comprehensive Human Resource Policy for the direct employees which will enable the proposed project to align the requirements of World Bank's ESF.

Gender and Citizen Engagement

³ <u>https://www.worldbank.org/en/projects-operations/environmental-and-social-framework</u>

22. The project will seek to address gender gaps in the areas of climate change and disasters. Women are severely underrepresented in the state's disaster preparedness institutions. To address this issue, the project will aim to promote female employment, for example, in the State Disaster Response Force. During preparation, a gender action plan will be developed together with indicators to track the progress to increase women's participation in the workforce in the state.

23. Continuous citizen engagement, using different modes of engaging with stakeholders throughout the project, and adopting a structured approach for which SEP will be prepared in accordance with the ESF.

IV. NEXT STEPS AND AGREED ACTIONS

24. An identification mission is planned in the second half of April 2024. The following schedule is proposed to prepare the project:

Table 2: Proposed Tentative Milestones

Preparation	Appraisal	Negotiations	Board
04/22/24	09/30/24	10/14/24	12/03/24

Table 3: Agreed Next Steps

To ensure fast progress in the proposed project preparation, the actions listed in the table below are critical.

No.	Actions	Responsible	Due Date
1	Open the budget head and allocate nominal resources to facilitate seamless operations.	MITRA	March 31, 2024
2	Establish the PCU within the MITRA to streamline coordination and oversee project progress effectively.	MITRA	March 31, 2024
3	Establish the PIU DRM and PIU WRM within the R&R and the KVIDC to ensure focused preparation and efficient execution.	R&R, KVIDC	March 31, 2024

Annex 1: List of Officials Met

List of Government of Maharashtra Officials Met During the Mission

Name	Designation	
Mr. Devendra Fadnavis	Deputy Chief Minister	
Dr. Nitin Kareer	Chief Secretary	
Mr. Shrikar Pardesi	Secretary to the office of Deputy Chief Minister	
Mr. Praveen Pardeshi	CEO, Maharashtra Institution for Transformation (MITRA)	
Dr. Rajendra Bharud	Joint CEO, Maharashtra Institution for Transformation (MITRA)	
Ms. Shaila A	Finance Secretary (Reforms)	
Mr. Deepak Kapoor	Additional Chief Secretary, Water Resources Department,	
Dr. Sanjay Belsare	Secretary, Water Resources Department	
Dr. Sonia Sothi	Principal Secretary, Relief & Rehabilitation and Revenue & Forest	
Dr. Sonia Sethi Department		
Mr. Appaso Dulaj	Director of Disaster Management	
Mr. Atul Kapole	Executive Director, Krishna Valley Development Corporation	
Rashmi Darad	Deputy General Manager, NABARD	
Dr. Sachin Ombase	Collector & District Magistrate, Dharashiv	
Amol Yedge	District Collector, Kolhapur	
Mr. H.V. Gunale	Chief Engineer, Pune Division (Nodal Officer for Krishna Bhima	
	Sub-Basin)	
Mr. Smita Mahne	Executive Engineer, Kohlapur	
Mr. Yogesh Sawant	Executive Engineer, ITI,	
Dr. H.T. Dhumal	Chief Engineer, Nodal Officer for Bhima Basin	
Mr. Chandrashekhar		
Patole,	Superintendent Engineer, Sangli Irrigation Circle	
Mr. Nitish Poddar	Executive Engineer, Koyna Irrigation Circle (Dam Operations)	
Mr. Ashish Jadhav	Sub-Divisional Engineer, Koyna (Dam Incharge)	
	SE, Dharashiv	

Time	Venue	Detail	WB Team
February	12		
Feb 12: Te	am A		
First-half	Pune	Team A reaches Pune.	Team A Satya Priya, Deepak Singh, Sheena Arora
TBC	Pune City	Executive Director, Krishna valley irrigation corporation, Pune City	Team A Satya Priya, Deepak Singh, Sheena Arora
Feb 12: Te	am B	·	•
	Mumbai	Team B reaches Mumbai. Accommodation: President, Mumbai - IHCL SeleQtions, 90 Cuffe Parade, Mumbai *Note: No meetings on Feb 12 for Team 'B'	Team B Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Swati Pillai, Savinay Grover
February	13		
Feb 13: Te	eam A		
TBC		Team A leaves early morning towards Satara	Team A Satya Priya, Deepak Singh, Sheena Arora
3 pm	Pune City – Koyna	 Team A meets KVIDC/and covers KVIDC flood sites in Satara Visit Koyna dam and see flood control measures 	Team A Satya Priya, Deepak Singh, Sheena Arora
8 pm Feb 13: Te	Solapur am B	Halt and stay at Solapur Hotel	Team A Satya Priya, Deepak Singh, Sheena Arora

Annex 2: Mission Schedule (February 12-15, 2024)

Time	Venue	Detail	WB Team
10:00 to	MITRA	Kick-Off Meeting (VC facility required)	Team B
11.00	Office, Mumbai	Shri Praveen Pardeshi, Maharashtra Institution for Transformation (MITRA)	Jolanta Kryspin- Watson, Anup
		Shri Deepak Kapoor, Secretary, <i>Water Resources</i> <i>Department</i> ,	Karanth, Tjark Gall, Swati Pillai, Savinay Grover,
		Dr. Sonia Sethi, Principal Secretary, Relief & Rehabilitation and Revenue & Forest Department	Ranjan (virtual)
		Shri Om Prakash Gupta, Secretary, Finance Department	Satya Priya, Deepak Singh, Sheena Arora (virtual)
11.30	Mumbai	Visit to the SDMA and State Emergency Operation	Team B
am to 12.30 pm		Centre	Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Swati Pillai, Savinay Grover
1:00 pm	Mumbai	Meeting with the Climate Change Cell	Team B
			Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Swati Pillai, Savinay Grover
2:00 pm	Mumbai	Discussions on fiduciary aspects with	Team B
		implementing agencies in Mumbai (with WRD and MITRA)	Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Swati Pillai, Savinay Grover
		Team B stays back in Mumbai	Team B
			Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Swati Pillai, Savinay Grover

Time	Venue	Detail	WB Team
February	14		
Feb 14: Te	eam A		
ТВС	Solapur to Tuljapur	Team A travels to Tuljapur from Solapur	Team A Satya Priya, Deepak Singh, Sheena Arora
1 pm		Meeting with Dharashiv Collector for discussions on urban flood mitigation and emergency management.	Team A Satya Priya, Deepak Singh, Sheena Arora
7:30 pm	Dharashiv	Dinner with Collector	Team A Satya Priya, Deepak Singh, Sheena Arora
8:30 pm	Dharashiv- Solapur	Leave for Solapur Railway	Team A Satya Priya, Deepak Singh, Sheena Arora
10:30 pm	Solapur Railway station	Sidheshwar Train 12116 at 10:30 pm: Solapur to Mumbai. Arrive Mumbai 0n 15 February at 630 am	Team A Satya Priya, Deepak Singh, Sheena Arora
Feb 14: Te	eam B		
09:35 am	Mumbai- Kolhapur	Flight to Kolhapur	Team B Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
	Kolhapur	Team B checks into Hotel	Team B Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover

Time	Venue	Detail	WB Team
2:30 pm	Kolhapur	Meeting with Kolhapur District Collector:	Team B
onwards		 To understand the MRDP components at Kolhapur and discuss more concerns, as required, Discussions on Krishna and Bheema river basin concerns and other departmental/sectoral spin over effect Discussions with DDMA. Meeting with DEOC- data inflow at the district Discussion on who the district focal point will be 	Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
	Kolhapur	Meeting with Kolhapur Municipal Corporation to	Team B
		understand from urban flood mitigation and emergency management perspective	Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
	Kolhapur	Site visit and discussion	Team B
		 Landslide prone areas Different components of MRDP at Kolhapur Dam visit 	Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
7:00 pm	Kolhapur	Dinner hosted by district collector	Team B
			Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
8:50 pm	Kolhapur	Team B takes train to Mumbai	Team B
			Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
February 15			
Feb 15: Team A			

Time	Venue	Detail	WB Team
6:30 am	Mumbai	Team A reaches Mumbai from Solapur via 12116 Sidheshwar at 6:30 am.	Team A Satya Priya,
		Checks into hotel.	Deepak Singh, Sheena Arora
Feb 15: Te	am B		
7:30 am	Mumbai	Arrival by train in Mumbai	Team B
			Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
11:30	Mumbai	Travel time, hotel check in	Team B
am to 1:30 pm			Jolanta Kryspin- Watson, Anup Karanth, Tjark Gall, Savinay Grover
2:30 pm	Chief	Wrap-up Discussions:	Jolanta Kryspin-
	Minister's Office,	Hon' Chief Minister	Watson, Anup Karanth, Tjark
	Government of	Shri Devendra Fadnavis, Hon' Deputy CM and Minister Water Resources	Gall, Savinay Grover, Deepak
	Maharashtra	Shri Dr. Nitin Kareer, Chief Secretary	Singh, Satya
	6th Floor, Mantralaya,	Shri Praveen Pardeshi, Maharashtra Institution for Transformation (MITRA)	Priya, Sheena Arora, Abhas Jha
		Shri Deepak Kapoor, Secretary, Water Resources Department	
		Dr Sonia Sethi, Principal Secretary, Relief & Rehabilitation and Revenue & Forest Department	
		Shri Om Prakash Gupta, Secretary, Finance Department	
		WB team stays back in Mumbai	