आर्थिक कार्य विभाग
DEPARTMENT OF
ECONOMIC AFFAIRS

2024

OUTCOME REPORT: PPP STRUCTURING TOOLKIT

WATER & SANITATION
26 - 27 FEBRUARY, 2024

PREPARED BY:
INFRASTRUCTURE FINANCE SECRETARIAT
MINISTRY OF FINANCE
GOVERNMENT OF INDIA

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1. Background and Objective of the workshop

1.1. Background of the Workshop

There exists a mutually causal relationship between infrastructure investment and economic development. It is mutually causal because infrastructure investment and economic development impact each other in the process of development. In fact, infrastructure can be considered as just another input in the production function that has a positive impact on Total Factor Productivity. Sustainable economic growth cannot be achieved if infrastructure development takes a back seat.

PPP is one of the tried and tested mode of infrastructure service delivery in today's world. However, the experience of PPP is not unique across sectors. There are some sectors such as road and ports where we have full-blown PPP and there are some areas where PPP is evolving gradually.

Union Budget FY22 provisioned a capital outlay of Rs 5.54 lakh cr, a sharp increase of 34.5% over FY21. This further saw a jump of 35% again with capex allocation increased to 7.54 lakh cr in FY23. Adding to these various grants for capital expenditure, 'Effective Capital Expenditure' of the Central Government goes up to well over 10 lakh crores in 2022-23.

It is imperative for the public sector to create a pipeline of projects which can attract private sector interest and investment. In supporting this endeavour, the Infrastructure Finance Secretariat in Department of Economic Affairs has taken many initiatives to boost private sector investment in the country such as empanelment of Transaction Advisers, enhanced support to social sector PPP projects under the revamped VGF Scheme, funding support to PSAs for appointing TAs under IIPDF Scheme, preparing model concession agreement for nascent sectors, etc. IFS has already published three reference documents viz. Reference Guide for Project Implementation Mode, Reference Guide for Project Appraisal and Reference Guide for setting-up State PPP units. "PPP Structuring Toolkit" is one among the initiatives to support the Project Sponsoring Authorities (PSAs) to develop their projects with objectivity.

Currently, the PSA are heavily dependent on their Transaction Advisors to develop the project. To equip PSAs to develop projects internally, IFS has developed a hand-tailored toolkit, i.e., the **PPP structuring Toolkit** which will provide a base for PSA to structure projects internally. Recently, the stakeholder workshop titled "PPP Structuring Toolkit for Water and Sanitation Sector" was organized by the Infrastructure Finance Secretariat (IFS), Department of Economic Affairs (DEA), Ministry of Finance (MoF). The workshop specifically aimed to develop a robust pipeline of water and sanitation projects using the web-based PPP Structuring Toolkit.

The objective of the workshop was to connect and collaborate with the stakeholders within the PSAs, over a two-day workshop and to listen to their views/ suggestions and the issues while implementing PPP projects. The event was attended by 65 + participants from public and private sector institutions.

The workshop was organised at the SCOPE Complex in New Delhi, on 26th – 27th February 2024. The workshop commenced with an inaugural session by Joint Secretary, DEA Shri Baldeo Purushartha, followed by walk through of the PPP structuring toolkit for the sector. The participants completed a case study using the web-based toolkit.

The Toolkits are available for use by PPP professionals across India on www.pppinindia.gov.in. It currently covers four sectors – Road & Highway, Water and sanitation, Port and Solid Waste Management respectively.

The Workshop was intended towards awareness building and guidance to use on these toolkits.

About toolkits

The section below briefly discusses various tools of the toolkit discussed during the workshop.

The Toolkit assists the PPP practitioners at all key stages of the PPP project cycle and improve the quality of the PPPs that are being developed. It facilitates identification, assessment, development, procurement and monitoring of PPP projects. The toolkit is structured to cover the full life cycle of PPP projects. The Toolkit contains the following 5 tools to strengthen decision-making for PPPs:

- **Suitability filter:** This is the key tool to test whether the project is suitable to be developed on PPP basis. It tests for qualitative factors that have an impact on the ease or challenges of developing a project on PPP basis. It provides **Go/ No Go** decision for the project to be implemented on PPP. This tool also acts a preliminary qualitative value for money tool.
- **Family indicator:** Family indicator tools help to identify the appropriate PPP family that the project may be best fit. The tool uses a decision tree to assist the PSA in identifying the PPP family.
- **Mode validation:** The mode validation is based on the risk profile of the project.
- **Financial viability indicator**: Financial viability indicator evaluates the viability of the project with returns on various PPP modes.
- **Value for money indicator:** VFM tool helps to examine whether the project provides for value for money if structured as a PPP project.

Contingent liability toolkit was also presented in the workshop. The toolkit has been developed to assist Project Sponsoring Authorities (PSAs) in assessing the amount of financial liability arising from a PPP project. It is also expected to aid PSAs in making informed decisions regarding the financial payout to Concessionaire as a result of occurrence of unforeseen events.

1.2. Workshop Objectives

The workshop was meticulously organized to serve as a platform for guiding participants through the PPP structuring toolkit and Contingent Liability toolkit. Additionally, it offered an opportunity to highlight the various guidance materials developed by the Department of Economic Affairs (DEA), Ministry of Finance, Government of India. This workshop marked the second in a series, with the specific goal of raising awareness, enhancing usability, and providing clear direction to Project Sponsoring Authorities and their officials on how to maximize the use of these toolkits in developing PPP Projects.

The workshop also provided an opportunity to the participants to develop a project based on a case study of **Water & Sanitation sector** using the tools of the toolkit. It gave participants hands on experience to learn the use of the toolkit. At the same time, the workshop also provided an excellent opportunity to seek suggestions for improvements in the toolkits.

A total of **463** user logins have been created for the PPP Structuring toolkit as of 29 February 2024.

Summary of the workshop

1.3. Workshop Schedule

The detailed agenda of the workshop is provided below:

Day	Timing	Details	Presenter
Day 1	1000 – 1030	Registration & Tea	
	1030 - 1045	Welcome Address	Ms. Preeti Jain, Director, DEA
	1045 – 1100	Inaugural Address	Shri Baldeo Purushartha, Joint Secretary, DEA
	1100 – 1130	Introduction of the participants, their expectation from the workshop	Participants
	1130 – 1215	Introduction of PPP structuring toolkit (Objectives, sectoral coverage, modules etc.)	Ms. Arya B Kumari, Joint Director, ISD, DEA
Session I	1215 – 1245	Walkthrough of Tool 1: Suitability filter	Ms. Puja Sharma, PPP Expert, ADB Consultant
	1245 – 1315	Case study	Ms. Puja Sharma PPP Expert, ADB Consultant
	1315 – 1400	Lunch Break	
Session II	1400 – 1500	Walkthrough of the Tool 2: Family mode and Tool 3: Mode selection tool	Ms. Puja Sharma PPP Expert, ADB Consultant
	1500 – 1530	Case study	Ms. Puja Sharma, PPP Expert, ADB Consultant
Session III	1530 – 1600	Financial Viability Indicator Tool	Ms. Puja Sharma, PPP Expert, ADB Consultant
	1600 – 1630	Tea Break	
	1630 – 1700	Q & A session	

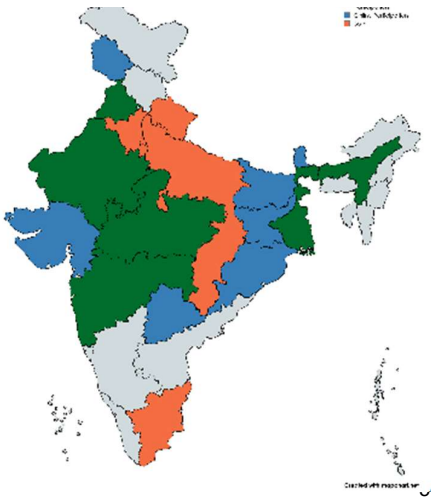
Day	Timing	Details	Presenter
Day 2	0930 – 1000	Tea	
Session III	1000 – 1130	Financial Viability indicator tool	Ms. Puja Sharma, PPP Expert, ADB Consultant
	1130 – 1230	Case Study	Ms. Puja Sharma, PPP Expert, ADB Consultant
	1230 – 1330	Lunch Break	
Session IV	1330 – 1400	Value for money indicator tool	Ms. Puja Sharma, PPP Expert, ADB Consultant
Session V	1400 – 1545	Contingent liability toolkit	Ms. Nikita Chhabra, KPMG, Consultant
	1545 – 1615	Tea	
	1615 – 1630	Q & A session	
	1630 – 1645	Vote of thanks and next steps	Ms. Arya Balan, Joint Director, ISD, DEA

Figure 1:*Welcome Address by Ms. Preeti Jain, Director,*

The Workshop was inaugurated by Joint Secretary DEA, Shri Baldeo Purushartha with a welcome address and context setting note delivered by the Ms. Preeti Jain, Director, Infrastructure Support and Development (ISD) Division, DEA in which she highlighted the potential in PPPs and the importance of structuring of the projects before it is sent for appraisal and approval to various stakeholders.

1.4. Coverage of the workshop

Figure 2*: Participation Matrix*



The workshop was attended by officers of PSA who are associated with the Water & Sanitation sector. The Workshop witnessed active participation of more than **70 participants** through hybrid mode from Central Infrastructure Line Ministries and Departments including MOHUA, NITI Aayog, Department of Expenditure, Department of Drinking Water and Sanitation and Department of Economic affairs. 19 States and UT including Assam, Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Jammu & Kashmir, Jharkhand, Madhya Pradesh,

Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and, Arunachal Pradesh, Kerala, Ladakh, Uttarakhand and West Bengal participated in the workshop.

The detailed list of participants, both online and offline mode is given in **Annexure B**.

1.5. Suggestions & feedback from participants

Each session was followed by a Q&A session, where both online and physical participants

shared their experiences with PPP projects, toolkits and extended suggestions to enhance the utility and awareness about the toolkits. At the end of workshop on February 27, 2024, an online feedback form was circulated to all participants to seek their feedback related to all sessions of the workshop. Feedback was sought with respect to the content, quality of delivery, satisfaction level, etc. aspects of the workshop. As on 29 February 2024, a total of 29 responses have been received.

Subsequent section highlights the feedback received from the participants. The feedback was sought on the scale of 1 to 5 where 1 indicate low score and 5 indicate highest score as mentioned below:

1= Poor

2= Needs improvement

3= Effective

4= Very Effective

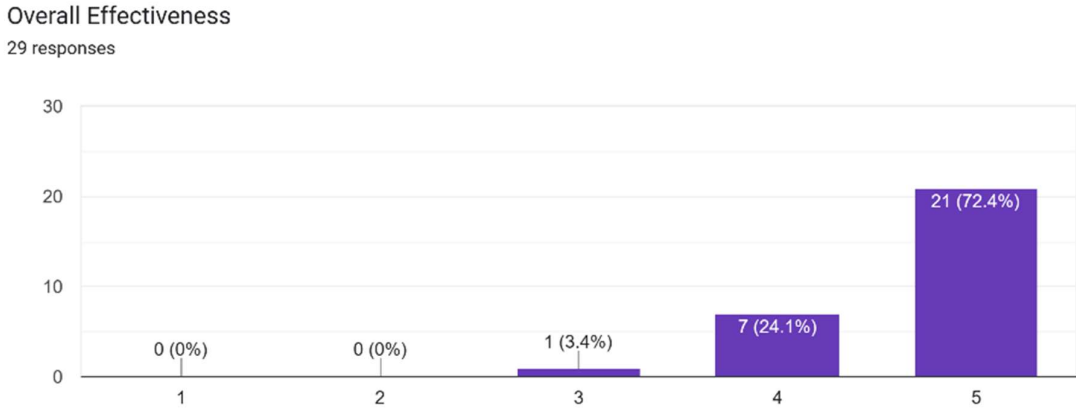
5= Excellent

Summary of the feedback is presented in the following section.

1.5.1. Overall feedback on the workshop

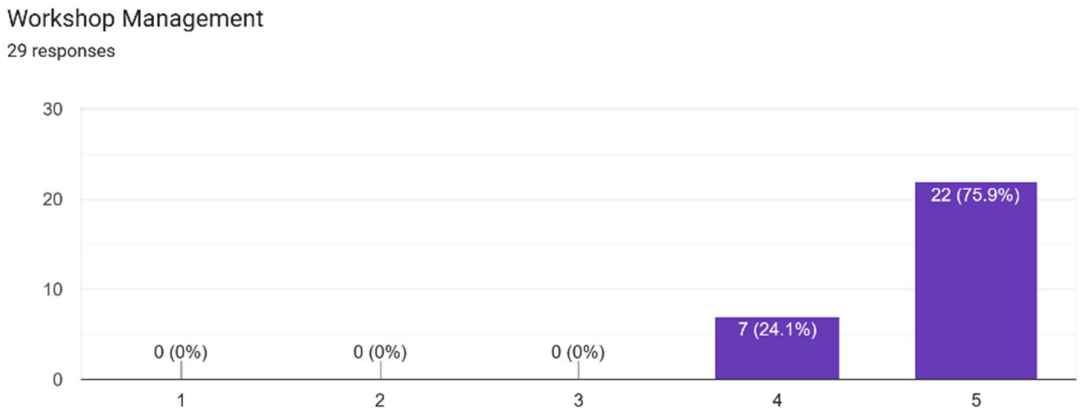
Figure 1 and Figure 2 below highlights the 'Level of satisfaction of participants' and 'Interest for participating in similar workshops in future'.

Figure 3: Scoring on overall effectiveness of the workshop



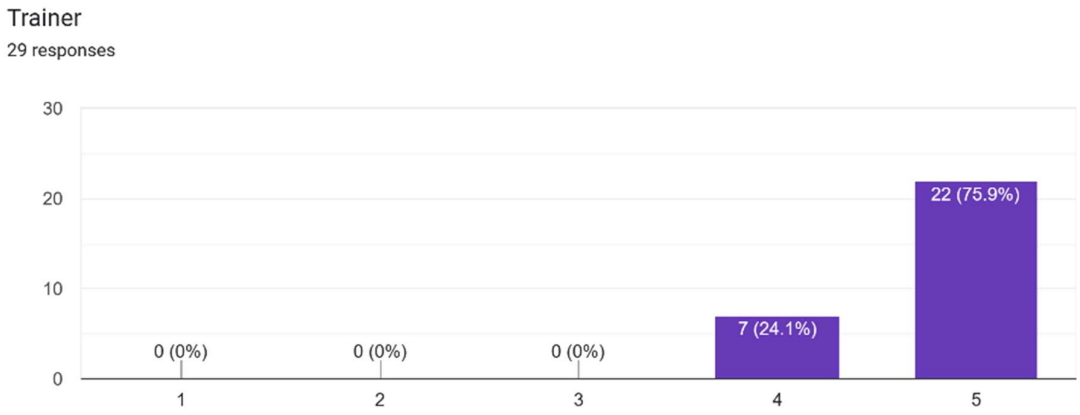
Workshop was rated excellent by majority of the respondents. The participants also provided feedback to have more such workshops in the states and choose the participants from the field.

Figure 4: Overall workshop managment feedback



The participants rated overall management of the workshop on a rating of 4 or 5 indicating that participants found the workshop and related infrastructure conducive and useful.

Figure 5: Feedback on trainier



100% of the participants rated the trainer's effectiveness and delivery on a scale of 4 and 5. They were satisfied with the speed, content, knowledge and delivery aspect of the trainer.

Figure 6: Feeback on contextual relevance

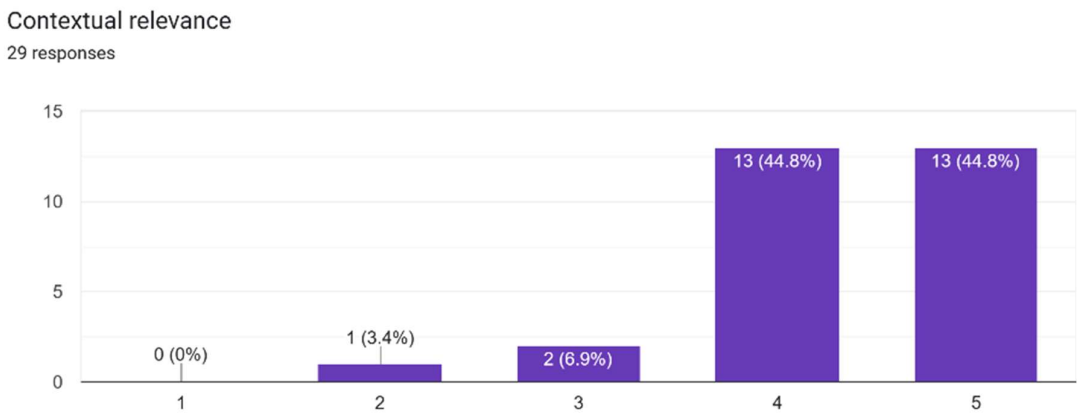
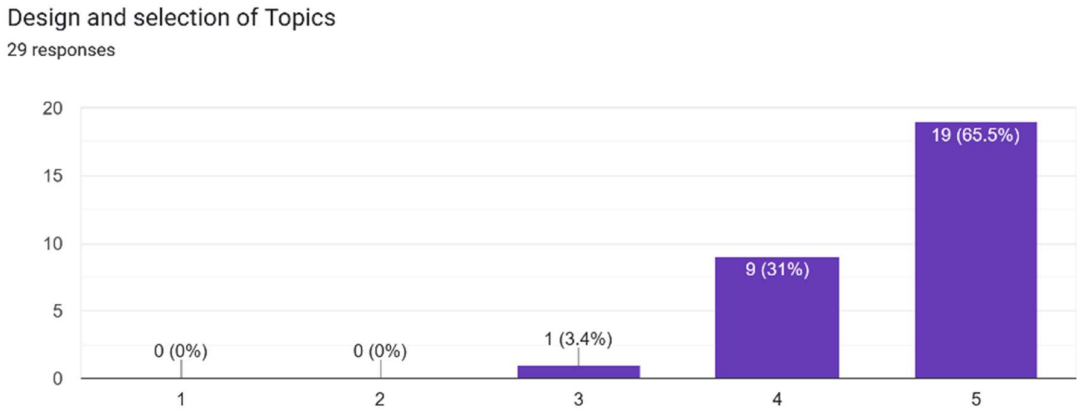
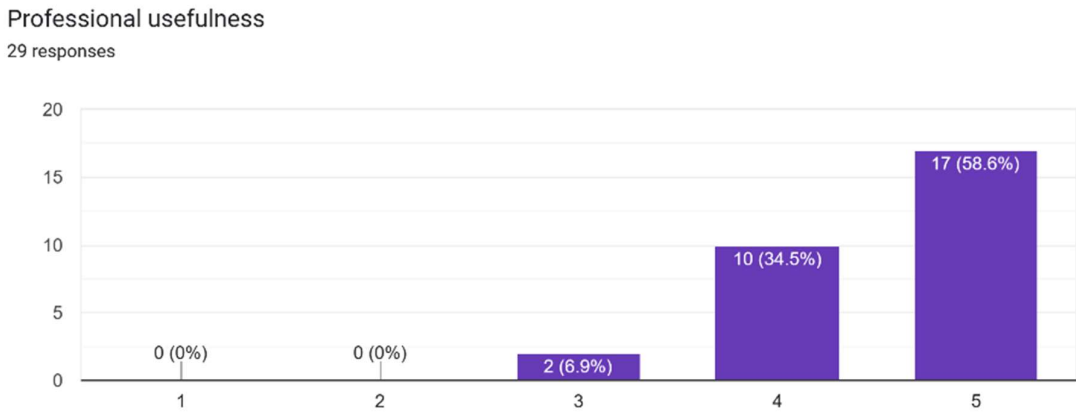


Figure 7: Design and selection of Topics



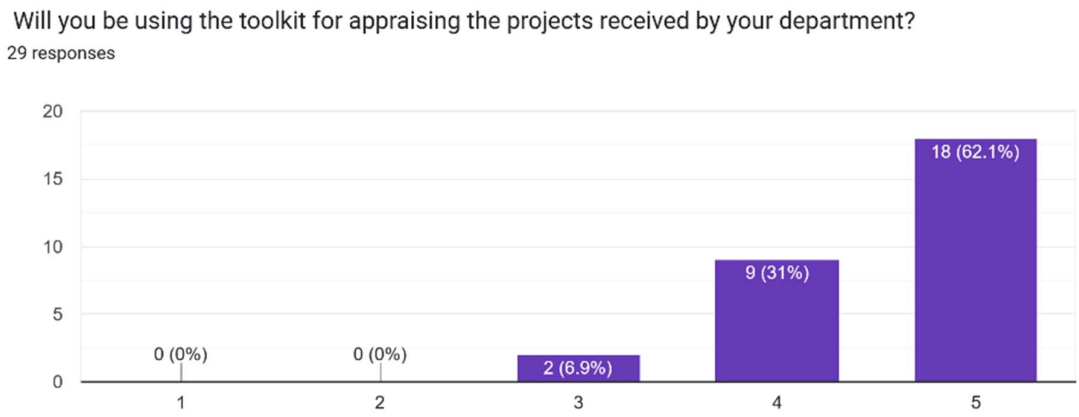
All the respondents to the feedback survey were satisfied with the contents of the workshop. They found it relevant and in line with their work.

Figure 8: Professional usage of toolkit feedback



All the respondents found the content to be useful in their profession. 90%+ of respondents rated the workshop content on a scale of 4 and 5 for their professional usage.

Figure 9: Feedback on using toolkit for project appraisal

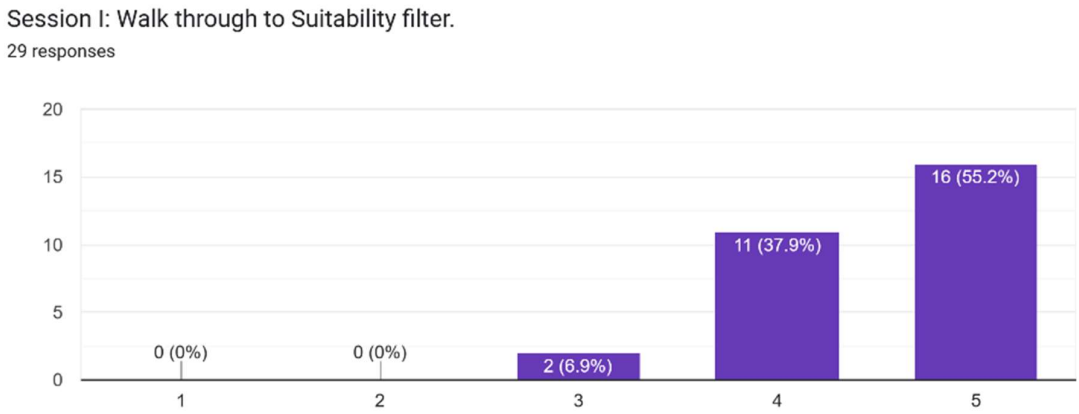


Respondents were enthusiastic to use the toolkit to appraise the projects in their departments.

1.5.2. Feedback on individual sessions

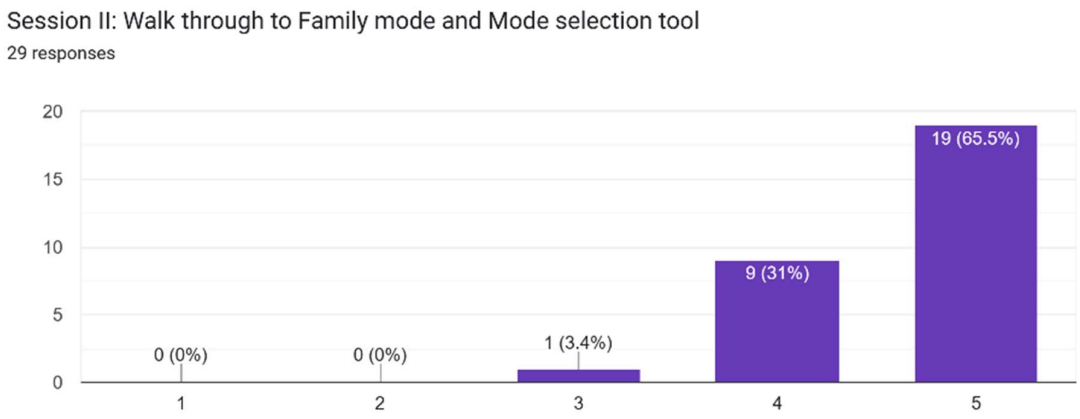
The participants were requested to share the feedback on four critical aspects of each of the session. The section below highlights the feedback.

Figure 10: Suitability Filter tool



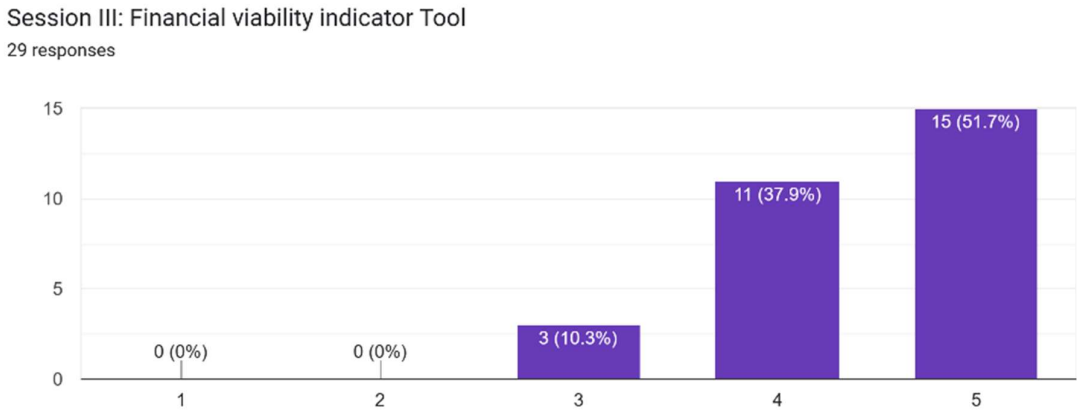
All the respondents rated the Session I between 3 to 5 scale. They rated the session as very effective.

Figure 11: Family Indicator & Mode validation tool



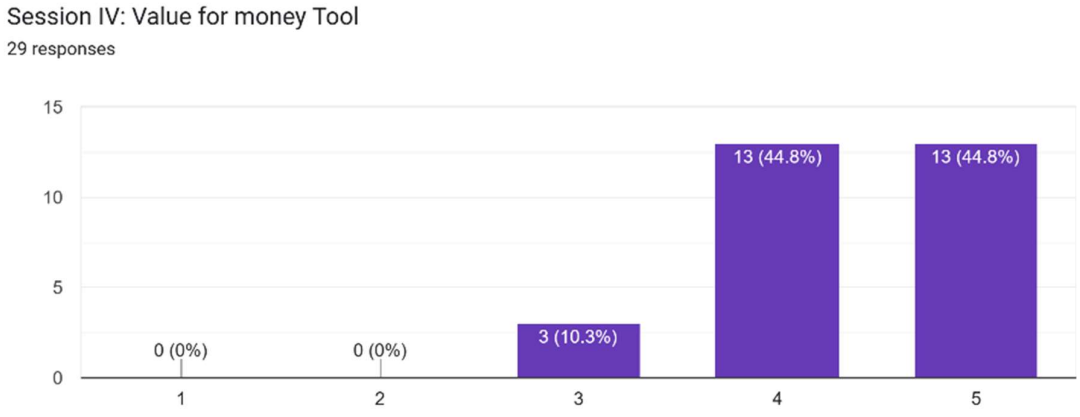
~97% of the respondent rated the Session II between 4 and 5 scale. They rated the session as effective and liked the quality of delivery of the session.

Figure 12: Financial viability indicator tool



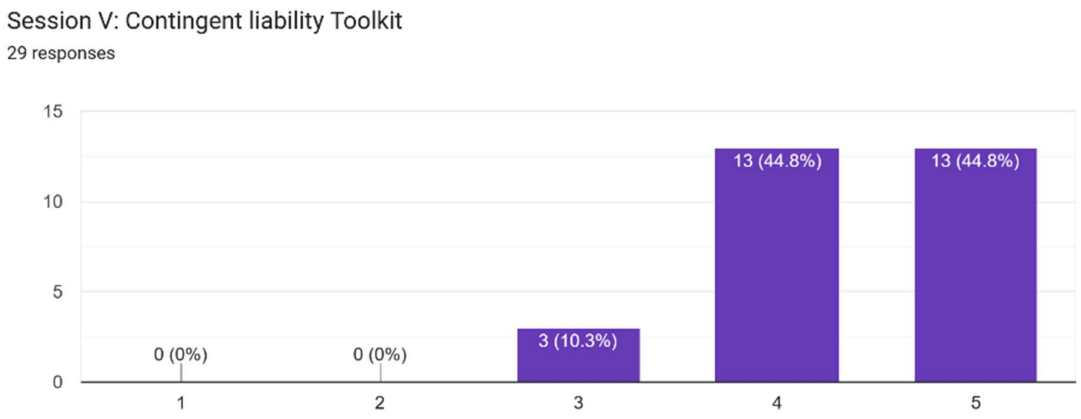
~90% respondents were very satisfied with the case study used to learn the financial viability tool.

Figure 13: Value for money indicator tool



~90% respondents were extremely satisfied with the learning of Value for money indicator tool.

Figure 14: Feedback on Contingent liability tool



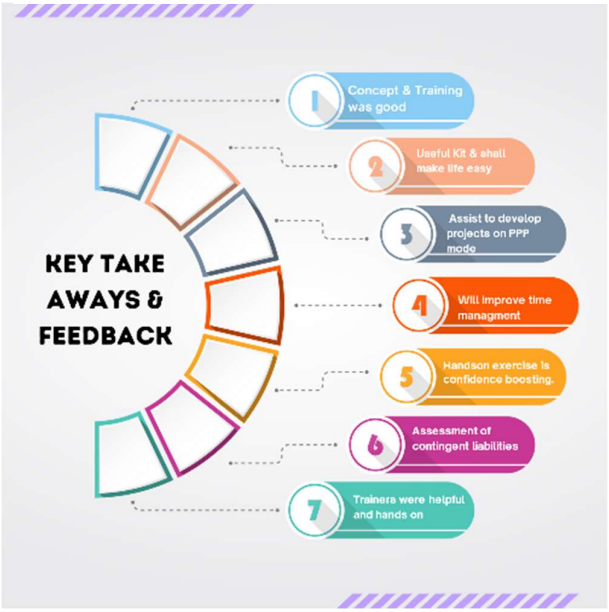
~96%+ respondent was satisfied with the delivery and understanding of the Contingent Liability Toolkit. They have rated the session on a scale of 3 to 5 respectively.

1.6. Key Takeaways and Feedback

Key takeaways and feedback received from the workshop is as below:

- **Concept & training was good** and it gave good ideas for preparation of PPP mode project.
- **Very useful** kit for the water and sanitation sector and vision for tomorrow
- PPP is a very new field and is the need of the hour for most of the ULBs. This toolkit **will surely help to take up some projects in the PPP** mode.
- By the use of tools, **life has been made extremely easy**.
- Might be useful to make SPV self-sustainable.
- Excellent knowledge gained from workshop.
- Assessment of contingent liability.

Figure 15: Key takeaways & feedback



- **Opening up of mind** towards almost all the parameters related to decision making for PPP implementation in such a short span of time.
- Improving in work evaluation with respect to time management.

1.7. Suggestion for improvement

Some of the key suggestions received from participants during the workshop and through feedback form are as follows:

- **More case studies** More hand on case studies to be done by the participants to have quick access to practice
- **Extend the coverage of PPP toolkits for other sectors**: Participant requested that these tools should be customised and extended for other sectors and sub-sectors also such as revamping of aged Govt. buildings which are earning revenue also like Siri Fort Auditorium etc.
- Add some live tenders documents for better understanding
- Workshop should have **One more day** to get more exercise on case studies.
- **Frequent workshops should be conducted to impart such trainings.**
- Online participants also need to be interactive.
- The trainees' accommodations and transportation should be the part of training management
- **Allocate more time** to Financial Viability Indicator module.

1.8. Vote of Thanks

The workshop concluded with a vote of thanks from Ms. Preeti Jain, Director. On behalf of the Private Investment Unit (PIU) - DEA, Ms. Jain expressed gratitude to the honourable Joint Secretary, Shri Baldeo Purushartha, who took time out of his busy schedule to inaugurate and contribute to the workshop. Shri Baldeo Purushartha has been the driving force behind the development of these toolkits. Ms. Jain also extended her appreciation to Ms. Puja Sharma for her contribution to revamping the PPP Structuring toolkit and to Ms. Nikita Chhabra for presenting the Contingent Liability toolkit.

Ms. Jain conveyed her well wishes and gratitude to all the participants who joined both physically and virtually from various central ministries, state departments, and Public Sector Undertakings. Their active participation and valuable contributions enriched the discussions. She acknowledged the feedback and suggestions received from the participants and assured that the DEA is already incorporating many of these inputs.

In conclusion, Ms. Jain emphasized that the DEA will continue organizing a pipeline of workshops to support government institutions in making informed decisions for PPP projects. She encouraged participants to provide honest feedback to further enhance the toolkits for the benefit of a wider audience.

Appendix A **– Snapshots of the workshop**

Following is the glimpse of the workshop:

Figure 16: Joint Secretary, Shri Baldeo Purushartha lighting the lamp

Figure 17: Inaugral Address by Joint Secretary DEA, Shri Baldeo Purushartha

Figure 18: Day 1 Ms. Balan presenting Overview of PPP structuring toolkit

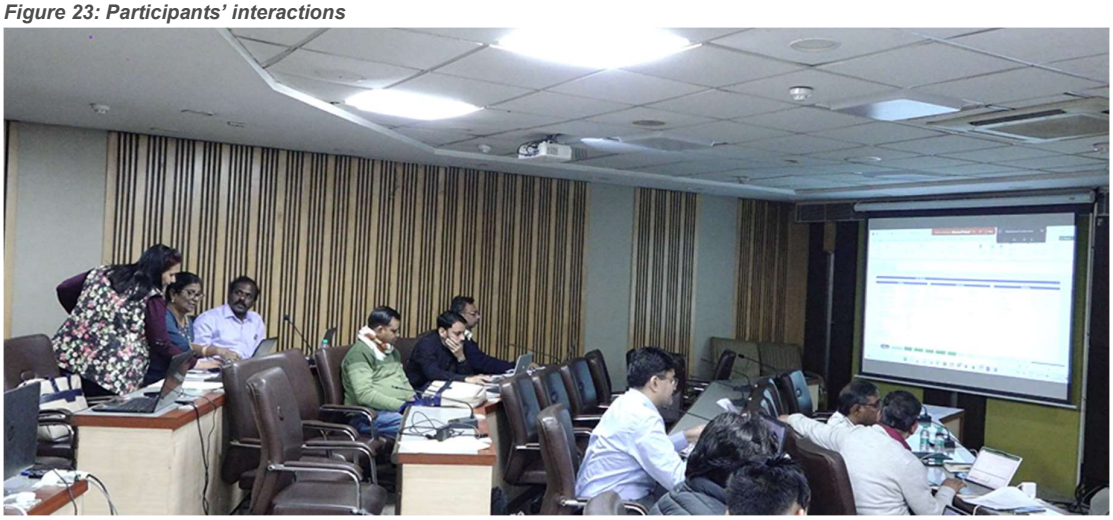
Figure 19: Day 1 Session I presentation by Ms. Puja Sharma

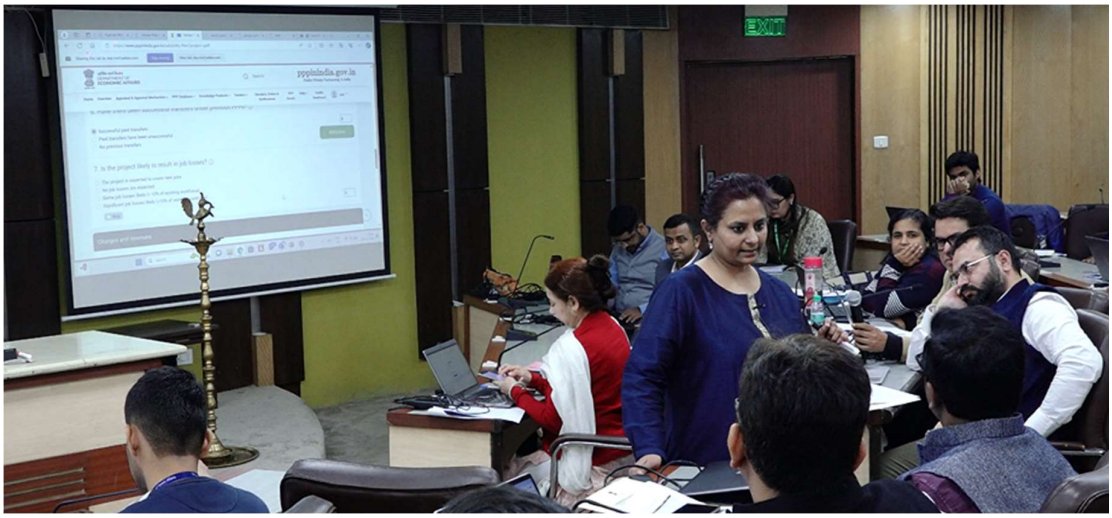
Figure 20: Day 2 Session III presentation by Ms. Puja Sharma

Figure 21: Day 2 Ms. Nikita Chhabra presenting Contingent liability toolkit

Figure 22: Deputy Director, Dr. Kartik Agrawal presenting VGF, IIPDF and other schemes of DEA

Figure 23: Participants' interactions





Appendix B – **Participants List**

List of Physical participants			
S. No.	**Participant Name**	**Designation**	**Name of the Organization/Firm**
Participants from Department of Economic Affairs			
1.	Ms. Preeti Jain	Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
2.	Shri Manoj Kumar Madholia	Joint Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
3.	Ms. Arya Balan Kumari	Joint Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
4.	Dr. Kartik Agrawal	Deputy Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
5.	Ms. Anmol Waraich	Assistant Director	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
6.	Shri Rajender Singh	Section Officer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
7.	Shri Manjeet Yadav	Assistant Section Officer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
8.	Ms. Puja Sharma	Consultant, PPP Expert	Asian Development Bank
9.	Shri Dhruv Rohatgi	OSD	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
10.	Shri Gaurav Jumrani	Consultant	Infrastructure Support and Development Division (ISD), Department of Economic

List of Physical participants			
S. No.	**Participant Name**	**Designation**	**Name of the Organization/Firm**
Participants from Department of Economic Affairs			
			Affairs (DEA), Ministry of Finance
11.	Shri Shubham Varun	Stenographer	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
12.	Shri Anurag Choudhary	Data Entry Operator	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance
13.	Shri Anup Kumar	MTS	Infrastructure Support and Development Division (ISD), Department of Economic Affairs (DEA), Ministry of Finance

List of Physical participants - PSA			
S. No.	**Participant Name**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
14.	Shri Kripashankar Yadav	team Leader, SBM(G)	Panchayat and Rural Development Department
15.	Ms. Shivani Verma	Joint Commissioner, SBM	Panchayat and Rural Development Department
16.	Shri Suhail Malik	Chief Executive Officer	Housing and Urban Development Department, J&K
17.	Shri Arvind K S Chauhan	Chief Finance Officer	Assam Urban Infrastructure Development & Finance Corporation
18.	Shri Mohammad Wasim Ahmad	Superintending Engineer	Uttarakhand Peyjal Nigam
19.	Shri Naveen Kumar Khare	SE(Project) Water	Delhi Jal Board
20.	Shri Saurabh Upadhyay	Junior Engineer	Nagar Nigam Jaipur Heritage
21.	Ms. Deepti Arora	Chartered Accountant	Transaction advisor
22.	Shri Nitish Jha	Assistant Engineer	Municipal Corporation Raipur
23.	Shri Anshul Sharma	Assistant Engineer	Municipal Corporation Raipur

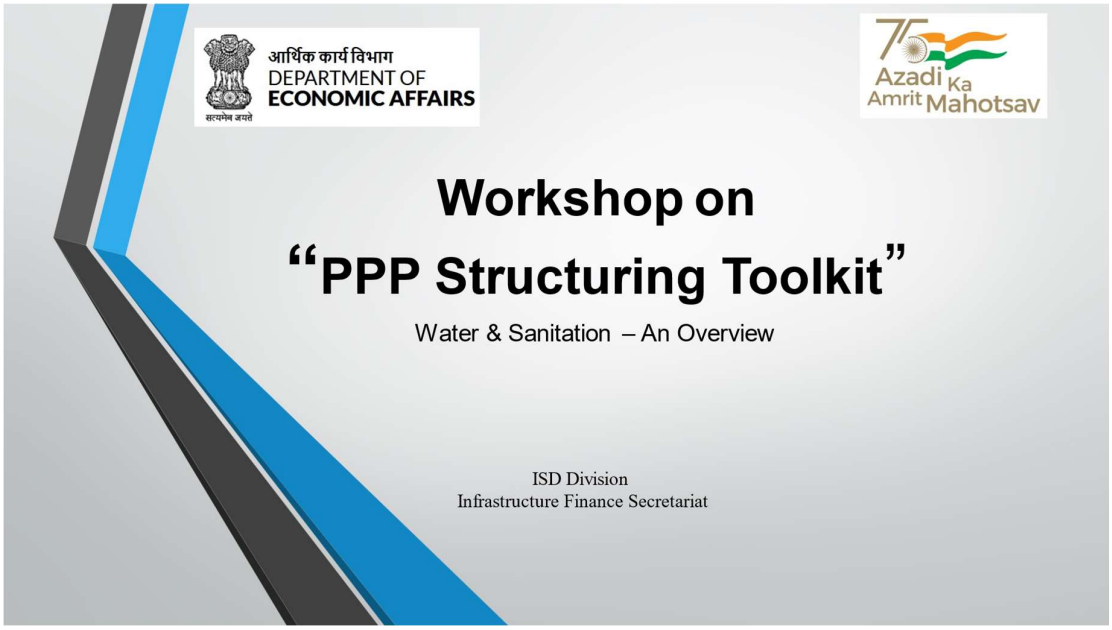
List of Physical participants - PSA			
S. No.	**Participant Name**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
24.	Shri Kehari Singh Meena	Assistant Director	Department of Drinking Water and Sanitation
25.	Shri Jay Ram Prasad	Deputy Municipal Commissioner	Urban Development & Housing Department, Bihar
26.	Shri Shailendra Narayan Dubey	Deputy Project Director	Urban Development & Housing Department, Bihar
27.	Shri Manoj Malhotra	Superintending Engineer	Department of Water Supply and Sanitation, Punjab
28.	Shri M. Arunkumar	Executive Engineer	Desalination wing, Tamil Nadu
29.	Shri Waseem Akram	Assistant Engineer	Municipal Corporation, Gurugram
30.	Shri Ankit Kapoor	Junior Engineer	Municipal Corporation, Gurugram
31.	Ms. G B Vydahi	Superintending Engineer (Desal)	Desalination wing, Tamil Nadu
32.	Dr Harish Yadav	Asstt. Director	Capacity Building unit, Department of Economic Affairs
33.	Ms. Seema Joshi	Joint Director	Capacity Building unit, Department of Economic Affairs
34.	Shri Kunal Bansal	Assistant Section Officer	Capacity Building unit, Department of Economic Affairs
35.	Shri Gurparkash Singh	Executive Engineer	Department of Water Supply and Sanitation, Punjab
36.	Shri Ghanshyam Das	Assistant Engineer	DLB JAIPUR
37.	Shri Prashant Gandhi	Assistant Engineer	DLB JAIPUR
38.	Shri Sanjay Kumar Barman	Superintending Engineer	UP Jal Nigam (Rural)
39.	Shri Ram Bhawan Ram	Chief Engineer	UP Jal Nigam (Rural)
40.	Shri Rohit Kakkar	Deputy Adviser	MOHUA
41.	Shri Neeraj Agrawal	Consultant	MOHUA
42.	Shri Sanjay Kumar Sinha	Director	Department of Drinking Water and Sanitation
43.	Shri Magan Lal	Under Secretary	Department of Drinking Water and Sanitation
44.	Shri Prashant Khullar	Superintending Engineer	Jal Nigam Ambikapur

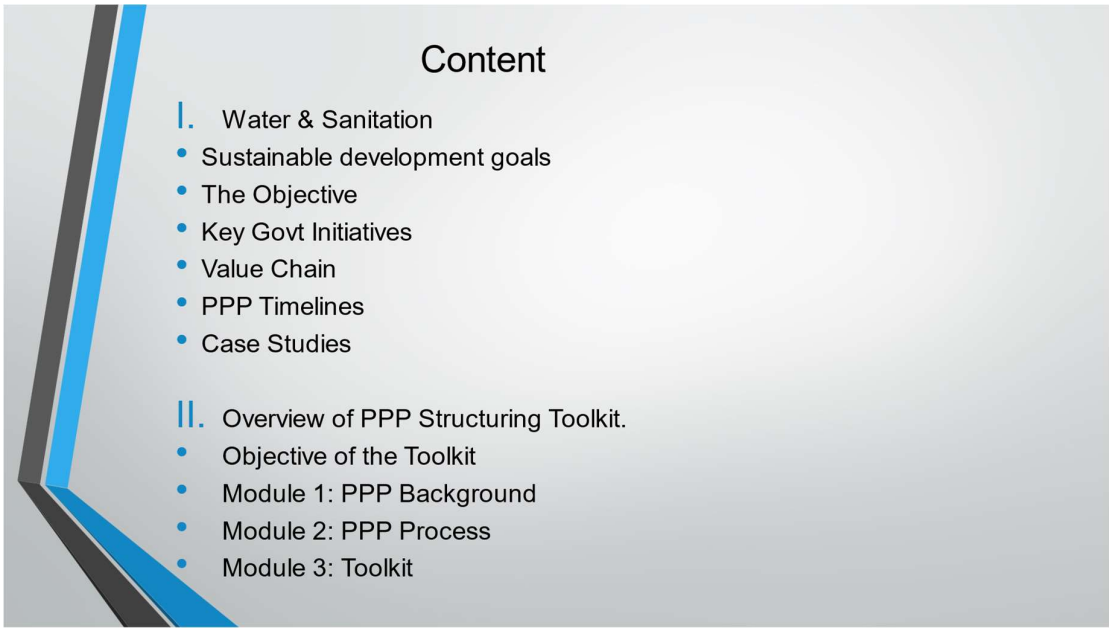
List of Physical participants - PSA			
S. No.	**Participant Name**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
45.	Shri Ramesh	Assistant Engineer	Department of Drinking Water and Sanitation
46.	Shri Akhilesh Ojha	Assistant Engineer	DJB, Jaipur
List of Physical participants - Private			
S. No.	Full Name of Participant	Designation	Name of the Organization/Firm
47.	Shri Anand Menon K	Transaction advisor	Darashaw and Co Pvt Ltd
48.	Shri Soubhik Kumar	Transaction advisor	PwC
49.	Shri Haider Saikh	Transaction advisor	PwC
50.	Shri Debmalya Bhattacharya	Transaction advisor	KPMG
51.	Shri Vishwas Nagi	Transaction advisor	KPMG
52.	Ms. Nikita Chhabra	Transaction advisor	KPMG
53.	Shri Gaurav Sharma	Transaction advisor	KPMG
54.	Shri Amritesh Bhaskar	Transaction advisor	KPMG
55.	Ms. Priyanka Uberoi	Transaction advisor	Ernst & Young
56.	Shri Rohit Trivedi	Transaction advisor	KPMG

List of Online participants			
S. No.	**Participant Name**	**Designation**	**Name of the Organization/Firm**
Participants from States/ Line Ministries			
57.	Shri Anand Kumar	Consultant	Rural Development Department Government of Bihar
58.	Shri Chetram Koli	Head - PMU	Department of Higher Education
59.	Shri Sonam Pincho Bhutia	Assistant Engineer	Rural Development Department - Sikkim
60.	Shri Prasoon Kaushik	Assistant Municipal Commissioner	Dhanbad Municipal Corporation
61.	Shri Saroj Tamang	Assistant Engineer	Rural Development Department - Sikkim
62.	Shri Rajesh Sharma	Assistant General Manager - Bidding & BD	Transaction advisory
63.	Shri Rajesh Sharma	Executive Engineer	Public Health Engineering, Jammu
64.	Shri Himshikha Sahu	Under Secretary	Finance Department, Chattisgarh
65.	Ms Vartika Srivastava	Manager	Transaction advisory
66.	Shri Satyananda Sarangi	Under Secretary to Government	Finance Department, Odisha
67.	Ms Sheetal Shashwat Verma	Special Secretary	Finance Department, Chattisgarh
68.	Shri Pankaj Bhushan	Environment Engineer	Municipal Corporation Agra
69.	Shri Abhinav Gupta	Deputy Manager	Transaction advisory
70.	Shri Nishanth Vadduri	Manager	Transaction advisory
71.	Shri Rajesh Amarsinh Jethwa	Retired Chief Engineer	GWSSB, Gujarat
72.	Shri Siddharth Patel	Consultant - Water	UNICEF, DEL
73.	Shri Baldev Bharti	PMU, Jal Shakti	Public Health Engineering Department, Jammu
74.	Shri Kamal Kishore	Consultant, Knowledge Resource Centre, NJJM and Centre for Engineering Studies	Mahatma Gandhi State Institute of Public Administration, Chandigarh
75.	Shri Malika Raina	Under Secretary	Civil Secretariat, Jammu & Kashmir
76.	Shri Devesh Dubey	PMU, Jal Shakti	Public Health Engineering Department, Jammu

Appendix C – Presentation on PPP structuring toolkit and Contingent liability toolkit

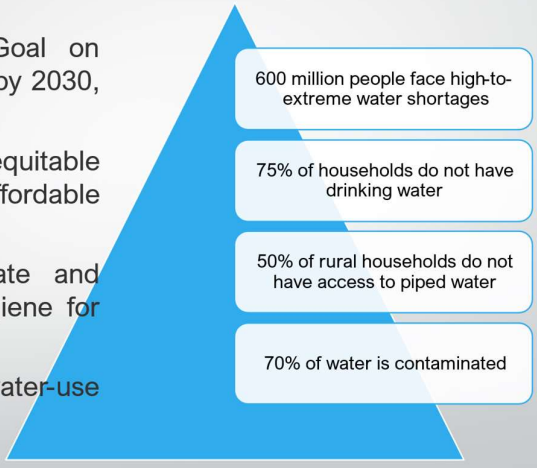
- **Presentation of PPP structuring toolkit**





Challenge & Sustainable Development Goals

- Sustainable Development Goal on Clean Water and Sanitation, by 2030, sets targets:
- achieve universal and equitable access to safe and affordable drinking water for all
- achieve access to adequate and equitable sanitation and hygiene for all
- substantially increase water-use efficiency across all sectors.



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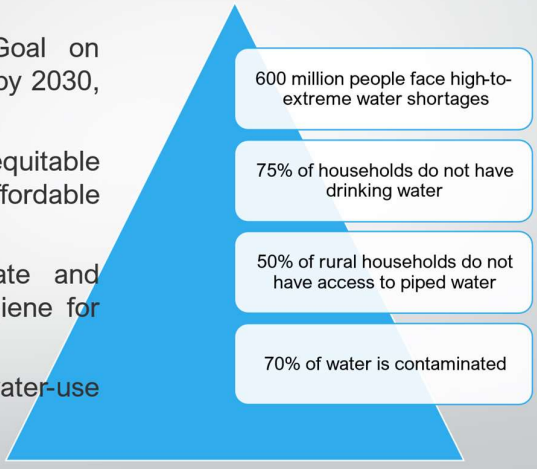


Key Govt Initiatives

Jal Shakti Abhiyan: Catch the rain
- To preserve the rain water

National Perspective Plan
- Interlinking rivers to t/f water from surplus basins to deficit basin

Jal Jeevan Mission
- to make provision of potable tap water supply to every rural household of the country at the service level of 55 litre per capita per day

AMRUT 2.0
- providing universal coverage of water supply through functional household tap connections in all statutory towns in the country

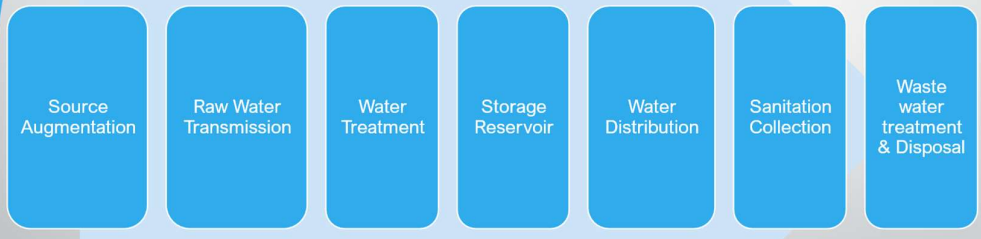
Pradhan Mantri Krishi Sinchayee Yojna
- To enhance physical access of water on farm and for expanding cultivable area under assured irrigation, improve on-farm water use efficiency, introducing sustainable water conservation practices

Sahi Fasal by National Water Mission
- to nudge farmers in the water stressed areas to grow crops which use water efficiently, are economically remunerative, are healthy and nutritious, suited to the agro-climatic-hydro characteristics of the area, and are environment friendly.

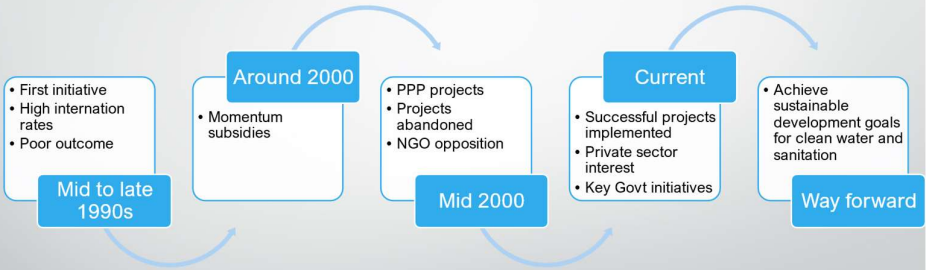
Atal Bhujal Yojana
- Community participation and demand side intervention for sustainable ground water management in identified water stressed areas ofseven States namely Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

Value Chain

Water and sanitation services can be unbundled into several components, including raw water production and treatment, bulk water supply, retail distribution, and sanitation collection, waste water treatment, and disposal.



PPP timelines



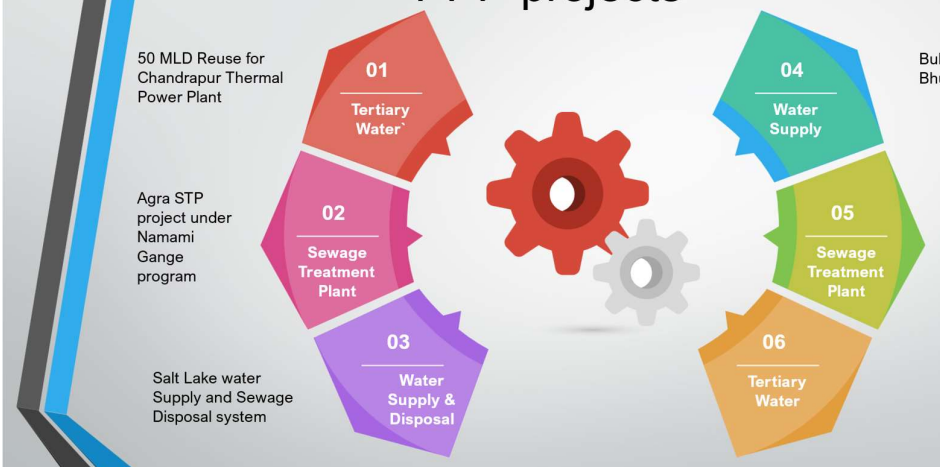
PPP Projects - Water sector

24x7 Water Supply project, Nagpur

- 50:50 JV of Veolia and Vishvaraj
- **500 Mil Citizens benefited along Ganga basin**
- Scope
  - End to end scope from WTP to customer tap including billing and collection
  - 187 MLD treatment | 3700 Km pipeline | 325,000 house service connection.
- Operation duration – 15 years
- Project cost – 550 Crs.
- Performance linked PPP contract with 50% investment by the operator
- Many national and international accolades including Prime Minister's "Best Water Practice" award

PPP Partner – VA TECH WABAG LIMITED and Kathari Water Management

PPP projects



50 MLD Reuse for Chandrapur Thermal Power Plant

Agra STP project under Namami Gange program

Salt Lake water Supply and Sewage Disposal system

Bulk water supply IIT, Bhuvaneshwar

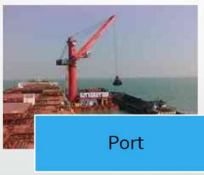
Construction of 3 Sewage Treatment Plants of 187 MLD, Kolkata

Industrial water Supply project, Tirupur

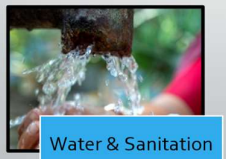
What is PPP Structuring Toolkit?

- The PPP Toolkit is a web -based resource that has been designed to help improve decision-making for infrastructure PPPs in India
- It is designed for the use by officials in Project Sponsoring Agency (PSA)
- The Toolkit is being developed for six sectors. Currently it supports **four** sectors namely:


Road & Highway


Port


Solid Waste Management


Water & Sanitation


Urban Transport (BRTS)


Healthcare

Toolkit structure and content

3 main parts to the toolkit :

- **Module 1: PPP Background**
  - General information and explanation about PPPs
- **Module 2: PPP Process**
  - Describes the process of developing a PPP through four Phases
- **Module 3: Tools and resources**
  - 5 decision-making tools: (Family Indicator, Model Validation Tool, Suitability Filter, PPP Financial Viability Indicator Model and VFM Indicator Tool)

Module1: PPP Background
Module 2: PPP process
Module 3: Tools and Resources

Module 1: PPP Background

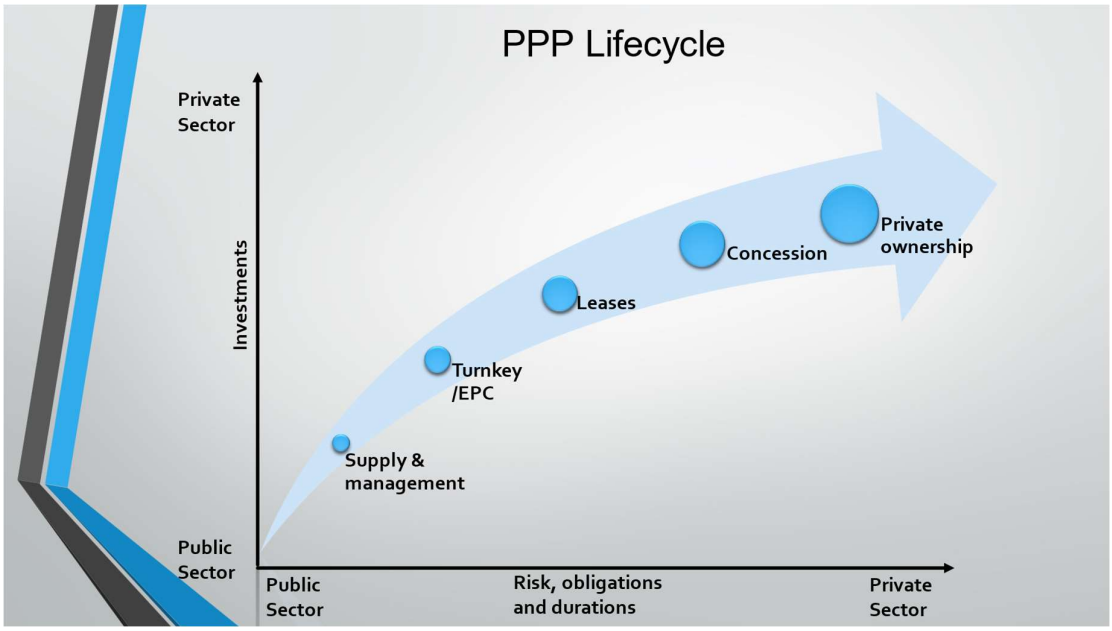
Overview of PPP in Infrastructure
- PPP in Infrastructure
- Why use PPP?
- When should PPP be used
- PPPs internationally

Overview of PPP in India
- Need and Potential of PPP
- PPP framework in India
- Sectoral overview

Risk – a focal element in PPP design
- Major Risk in Infrastructure Projects

Overview of PPP modal variant
- Project characteristics
- PPP modal families
- Risk allocation under different PPP modes

PPP Supporting Environment
- Public Sector PPP capacity and experience
- Public sector funding assistance
- Private sector appetite and capacity
- Legal environment and Policy support
- Government support



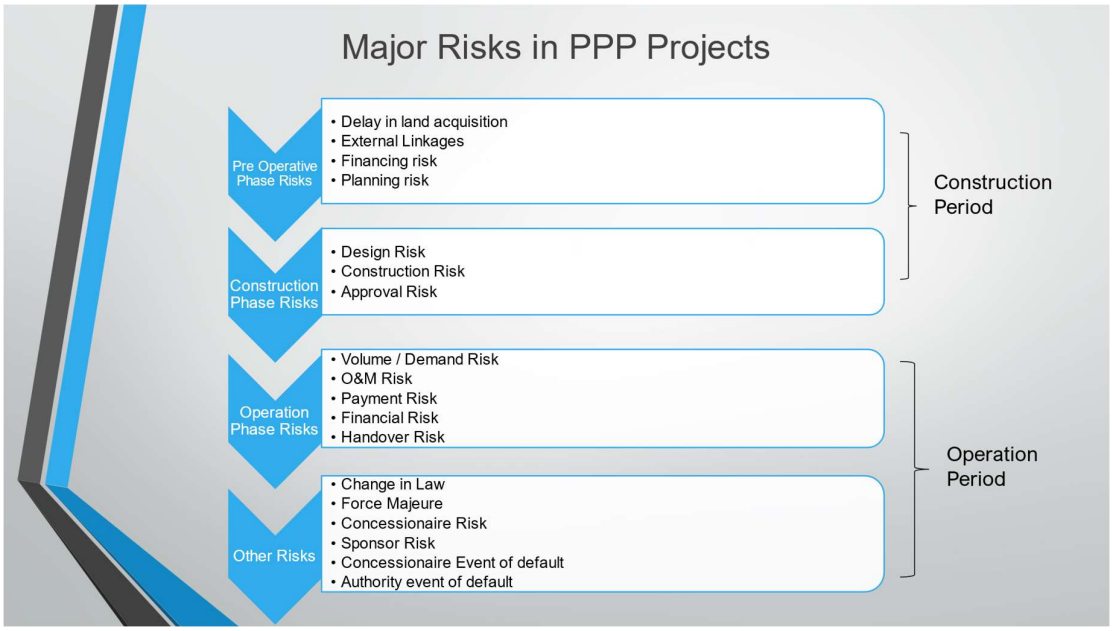
Component of PPPs

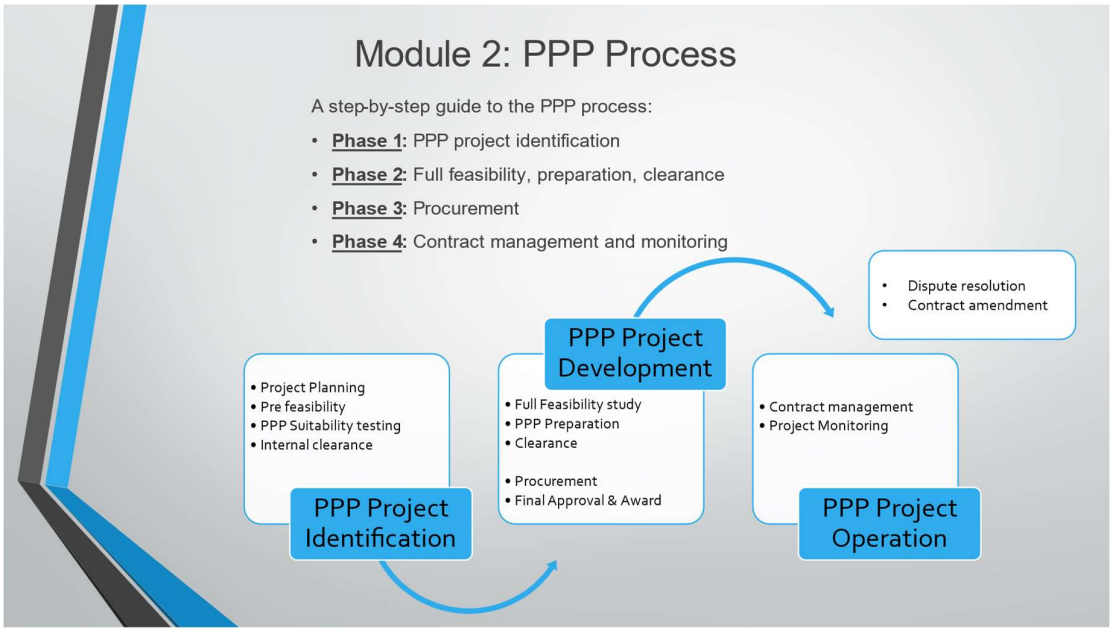
Contract
- The contract is between the public and the private party for a fixed period of time

Concession
- The contract contains a set of rights and obligations that is granted to the private party during the fixed period of time.

Partnership
- The partnership between the public and the private parties to share rights and duties and risk and rewards optimally between the parties.

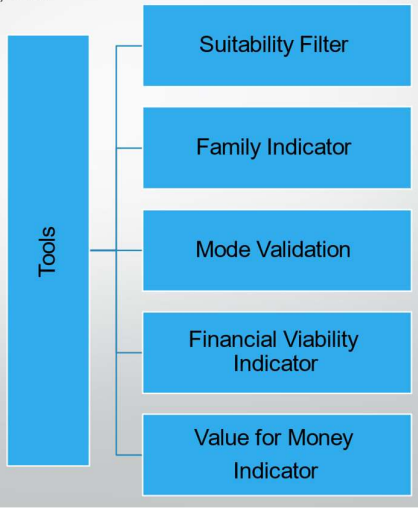
Payment
- The service provided by the private party has payment associated with it.


Major Risks in PPP Projects
Pre Operative Phase Risks
• Delay in land acquisition
• External Linkages
• Financing risk
• Planning risk
Construction Phase Risks
• Design Risk
• Construction Risk
• Approval Risk
Construction Period
Operation Phase Risks
• Volume / Demand Risk
• O&M Risk
• Payment Risk
• Financial Risk
• Handover Risk
Other Risks
• Change in Law
• Force Majeure
• Concessionaire Risk
• Sponsor Risk
• Concessionaire Event of default
• Authority event of default
Operation Period


Module 2: PPP Process
A step-by-step guide to the PPP process:
• Phase 1: PPP project identification
• Phase 2: Full feasibility, preparation, clearance
• Phase 3: Procurement
• Phase 4: Contract management and monitoring
• Project Planning
• Pre feasibility
• PPP Suitability testing
• Internal clearance
PPP Project Identification
PPP Project Development
• Full Feasibility study
• PPP Preparation
• Clearance
• Procurement
• Final Approval & Award
• Contract management
• Project Monitoring
PPP Project Operation
• Dispute resolution
• Contract amendment

Module 3: Tools and resources

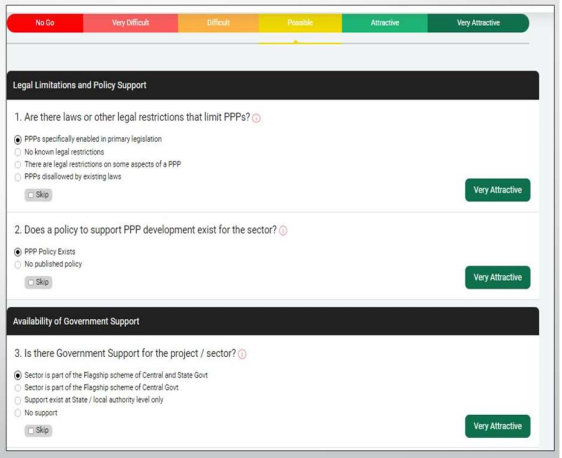
Contains the **five** decision-making tools, and other PPP resources:



Module 3 –Tools – Suitability Filter

Is the key tool to test whether the project is suitable to be developed on PPP basis.

- Answers to questions are scored
- Result shown on **Suitability Indicator**
- '**Very Attractive**' or '**Very Difficult**
  - Give clear result for or against
- **'Difficult'**
  - Probably not suitable as a PPP
- **'Possible'**
  - Could be suitable, need to address problems first
- **'Attractive'**
  - Probably suitable



Module 3 –Tools – Suitability Filter

Parameters	Questions	Explanation
Legal	• Are there laws or other legal restrictions that limit PPPs? • Does a policy for private participation in the sector exist?	Legal parameters help the user to understand if the law permits the implementation of PPPs or not?
Political	• Is there Political Support for the sector/ project? Is there support of PPP in the affected communities?	Political parameter helps the user to understand if the public environment is supportive implementation of PPP projects.
Public sector PPP capacity and experience	• Is there a PPP Unit/Dept in the State? • Does the Public Sponsoring Agency have the capabilities to procure PPPs? • Does the Sponsoring Agency have the capabilities to manage and monitor a PPP contract? • Does the Sponsoring Agency have previous experience with PPPs? • Would the physical infrastructure pass through multiple jurisdictions?	This parameter analyses PSAs capacity to execute and implement PPP project.

Module 3 –Tools – Suitability Filter

Parameters	Questions	Explanation
Public sector funding assistance for PPPs	• Is funding assistance available for project development? • Is the project likely to be eligible for Viability Gap Funding? • Is the project likely to be eligible for funding from other grant schemes? • Is the project eligible for funding / guarantees from multi-lateral agencies?	This parameter helps in understanding difference funding options that may be available for development of the project to the PSA.
Private Sector	• Are multiple firms active in the PPP market? • Have other similar PPP projects reached Financial Close?	These parameters assess private sector participation and interest in the PPP projects in the chosen sector

Module 3 –Tools – Suitability Filter

Parameters	Questions	Explanation
Land availability and acquisition	• Will the PPP require land acquisition? • If land acquisition is required, will the public sector do this?	These parameters assess the land requirement and potential issues related to acquisition of land for the project and their impact on the project timelines.
Environmental and Social Impact	• Will the PPP have significant environmental impacts? • Will the PPP have significant social impacts?	These parameters assess the impact of the project on Environment and social factors related to it.
Labour	• Will a significant transfer of employees take place under the PPP? • Have there been successful transfers under previous PPPs? • Is the project likely to result in job losses?	This parameter helps the PSA evaluate potential unrest by the employees and to prepare for its resolution.

Module 3 –Tools – Suitability Filter

Parameters	Questions	Explanation
Outputs	• Are outputs definable, measurable and verifiable?	If it is not possible to clearly specify outputs then there is a high risk of disputes arising during the course of the PPP. There should also be an agreed understanding on the desired outputs before proceeding to PPP procurement.
Timing	• Are there time constraints? • Can PPP project be tendered at a short notice?	A PPP procurement will generally take more time than a conventional procurement-although this will be offset by the faster speed of delivery once the contract is awarded. If there are significant time constraints on the contracting process, a PPP may not be appropriate. This parameter understands the time available to procure the PPP.

Module 3 –Tools – Family indicator

Is the key tool to suggest PPP mode "**Family"** for the particular project

2. Would assets under the proposed PPP be 'greenfield' (newly-built) or 'brownfield' (additions to existing infrastructure)?

Greenfield assets

3. Which party would own the assets under the PPP?

Assets would be publicly owned

4. Finance responsibility:For any solid waste management PPP involving capex the main finance source will be the private sector

Private sector finance required

Results: Indicative PPP family

Indicative roles for private sectors	Suggest PPP "family":	Typical revenue structures :
Design, finance, construction, operation and maintenance	User Pay	User Charges

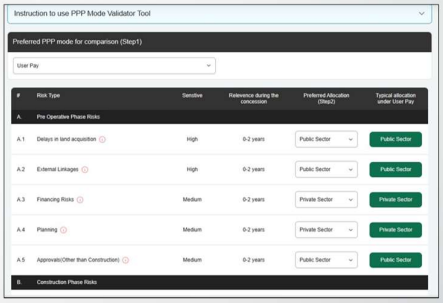
Module 3 –Tools – Mode validation

The tool uses a risk allocation analysis to help decide further whether the selected PPP mode is best for the project.

The risk are assigned based on the latest model concession agreement.

Risks are broadly classified in the following major categories

1. Pre operative Risk
2. Construction Risk
3. Operation Risk
4. Other Risk



Outputs of the tool

Number of matches to preferred risk allocation:	
BOT User Pay	**17of 20**
BOT Annuity	**15 of 20**
BOT Annuity – HAM	**16 of 20**
OMT	**9 of 20**
Score of 20 = perfectly matched	

Module 3 –Tools – Mode validation

Risks	Description
Pre-Operative Phase Risks	
Delay in land acquisition	Refers to the risk that the project site will be unavailable or unable to be used within the required time, or in the manner or the cost anticipated or the site will generate unanticipated liabilities due to existing encumbrances and native claims being made on the site. This risk is most relevant to greenfield projects involving treatment and disposal facilities.
External linkages	Refers to the risk that adequate and timely connectivity to the project site is not available, which may impact the commencement of construction and the overall pace of development of the project. Eg. Road's connectivity to Landfill site.
Financing risks	Refers to the risk that sufficient finance will not be available for the project at a reasonable cost (e.g., because of changes in market conditions or credit availability) resulting in delays in the financial closure of the project.
Planning risks	Refers to the risk that the pre-development studies (technical, legal, financial, and others) conducted are inadequate or not robust enough resulting in possible deviations from the planned or expected outcomes in the PPP project development .

Module 3 –Tools – Mode validation

Risks	Description
Construction Phase Risk	
Design risk	Refers to the risk that the proposed design will not meet the performance and service requirements in the output specification. It can result in additional costs for modification and redesign.
Construction risk	Refers to the risk that the construction of the assets required for the project will not be completed on time, within budget, or to specification. It may lead to additional raw materials and labour costs, an increase in the cost of maintaining existing infrastructure or providing a temporary alternative solution due to a delay in the provision of the service.
Approval risk	Refers to the risk that delays in approvals to be obtained during the construction phase will result in a delay in the construction of the assets as per the construction schedule. Such delays in obtaining approvals may lead to cost overruns.

Module 3 –Tools – Mode validation

Risks	Description
Operation Phase risk	
Technology risk	Refers to the risk that the technology used will be unexpectedly superseded during the term of the project and will not be able to satisfy the requirements in the output specifications. It would result in increased costs of replacement technology.
Operations and maintenance risk	Refers to the risks associated with the need for increased maintenance of the assets over the term of the project to meet performance requirements.
Volume / Demand risk	Refers to the risk that demand for service will vary from that initially projected, such that the total revenue derived from the project over the project term will vary from initial expectations.
Payment risk	Refers to the risk that tolls are not collected in full or are not set at a level that allows recovery of costs. This is a risk for the public sector under shadow tolls and for the private sector under user tolls. There is no risk in annuity contracts.
Financial risk	Refers to the risk that the private sector overstresses a project by inappropriate financial structuring. It can result in additional funding costs for increased margins or unexpected refinancing costs.
Handover risk	Refers to the risk that the concessionaire will default in the handover of the asset at the end of the project term or will deviate from the minimum quality/value of the asset that needs to be handed back to the public entity.

Module 3 –Tools – Mode validation

Risks	Description
Other risks	
Change in law	Refers to the risk that the current legal/regulatory regime will change, having a material adverse impact on the project.
Force Majeure	Refers to the risk that events beyond the control of either entity may occur, resulting in a material adverse impact on either party's ability to perform its obligations under the PPP contract. E.g.: pandemics, strikes, act of war.
Sponsor risk	Refers to the risk that the Private entity will prove to be an unsuitable partner for the project, for example, due to poor project management, lack of funds or a failure to fully recognise the agreed terms of the Concession Agreement.
Concessionaire event of default	Refers to the risk that the private entity will not fulfil its contractual obligations and that the Public Sponsoring Authority will be unable to either enforce those obligations against the sponsors or recover some form of compensation or remedy from the sponsors for any loss sustained by it as a result of the breach or the private partner will prove to be inappropriate or unsuitable for delivery of the project.
Authority event of default	Refers to the risk that the Public Sponsoring Authority will not fulfil its contractual obligations and that the Concessionaire will be unable to either enforce those obligations against the Authority or recover some form of compensation or remedy from the Authority for any loss sustained by it as a result of the breach.

Risk allocation

	Risk Type / PPP Mode	User Pay	Authority Pay	Authority Pay - HAM	Management
A	PRE OPERATIVE PHASE RISKS				
A.1	Delays in land acquisition	Public Sector	Public Sector	Public Sector	Not Relevant
A.2	External linkages	Public Sector	Public Sector	Public Sector	Not Relevant
A.3	Financing risks	Private Sector	Private Sector	Private Sector	Not Relevant
A.4	Planning	Private Sector	Private Sector	Private Sector	Not Relevant
B	CONSTRUCTION PHASE RISKS				
B.1	Design Risk	Private Sector	Private Sector	Private Sector	Not Relevant
B.2	Construction Risk	Private Sector	Private Sector	Private Sector	Not Relevant
B.3	Approvals	Private Sector	Private Sector	Private Sector	Not Relevant

Risk allocation

	Risk Type / PPP Mode	User Pay	Authority Pay	Authority Pay - HAM	Management
C	OPERATIONS PHASE RISKS				
C.1	Operations & Maintenance Risk	Private Sector	Private Sector	Private Sector	Private Sector
C.2	Volume Risk	Private Sector	Public Sector	Public Sector	Public Sector
C.3	Payment Risk	Private Sector	Public Sector	Public Sector	Public Sector
C.4	Financial Risks	Private Sector	Private Sector	Private Sector	Private Sector
C.5	Performance Risk	Private Sector	Private Sector	Private Sector	Private Sector
C.6	Environmental Risk	Private Sector	Private Sector	Private Sector	Private Sector
C.7	Handover Risk	Private Sector	Private Sector	Private Sector	Private Sector

Risk allocation

	Risk Type / PPP Mode	User Pay	Authority Pay	Authority Pay - HAM	Management
D	**OTHER RISKS**				
D.1	**Change in Law**	Public Sector	Public Sector	Public Sector	Public Sector
D.2	**Force Majeure**	Shared	Shared	Shared	Shared
D.3	**Concessionaire risk**	Private Sector	Private Sector	Private Sector	Private Sector
D.4	**Sponsor risk**	Private Sector	Private Sector	Private Sector	Private Sector
D.5	**Concessionaire event of default**	Private Sector	Private Sector	Private Sector	Private Sector
D.6	**Authority event of default**	Public Sector	Public Sector	Public Sector	Public Sector

Module 3 – Tools – Financial Viability Tool – SWM

Category	BOT – User Pay	BOT – Authority Pay	BOT – Authority Pay (HAM)	Management
Volume	Included	Included	Included	Included
Bidding Criteria	Highest Upfront premium Highest Royalty Lowest VGF	Lowest Annuity Lowest VGF	Lowest Annuity	Lowest annual maintenance
Revenue	User charge Sale of treated water Non-Water revenues	User charge Sale of treated water Non-Water revenues	User charge Sale of treated water Non-Water revenues	User charge Sale of treated water Non-Water revenues
Operating Cost	Chemicals Connection cost Purchase of raw water Power consumption Salaries and expenses Other admin expenses IE/IA expenses Insurance Routine Maintenance	Chemicals Connection cost Purchase of raw water Power consumption Salaries and expenses Other admin expenses IE/IA expenses Insurance Routine Maintenance	Chemicals Connection cost Purchase of raw water Power consumption Salaries and expenses Other admin expenses IE/IA expenses Insurance Routine Maintenance	Chemicals Connection cost Purchase of raw water Power consumption Salaries and expenses Other admin expenses IE/IA expenses Insurance Routine Maintenance
Financing				
Sources of Funds	Equity	Equity	Equity	Equity
	Senior Debt Sub Debt	Senior Debt Sub Debt	Senior Debt Sub Debt	Senior Debt Sub Debt
	VGF Grant	VGF Grant	Grant – 40% construction	n/a without Capital Expenditure
Taxes	GST / Corporation Tax	GST / Corporation Tax	GST / Corporation Tax	GST / Corporation Tax
Major Maintenance	Included	Included	Included	n/a

Module 3 –Tools – Value for Money

Testing for Value for Money (VfM) should be an important part of any PPP project development.

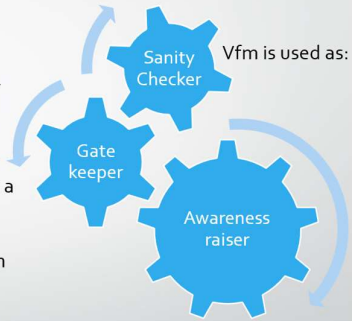
VFM is used as procurement decision i.e. What is the best mode for project implementation? (Public procurement or PPP)

Value for Money (VfM) means the public sector is financially better off if the project is implemented as a PPP rather than if it is done as a traditional public sector project.

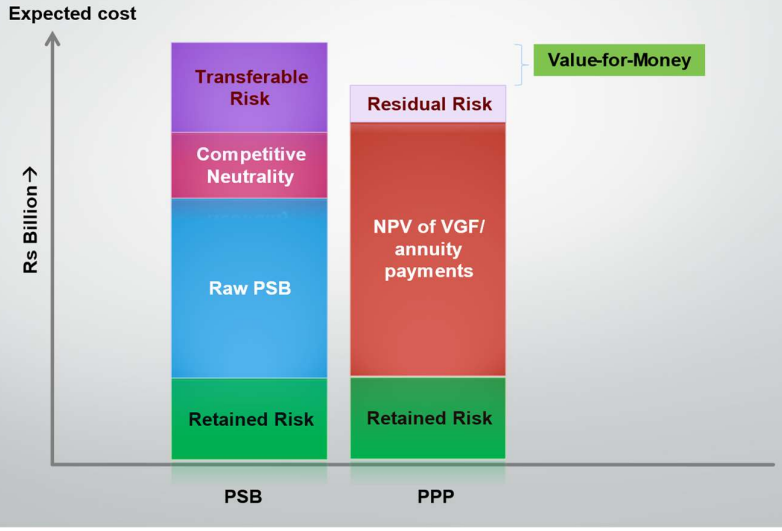
If a project is not expected to provide VFM for the public sector then the project should not be implemented as a PPP.

A VFM test compares the estimated cost of procuring the project in the public sector (the traditional route) with the estimated cost of procuring it as a PPP. The public sector procurement option is called the public sector benchmark (PSB).

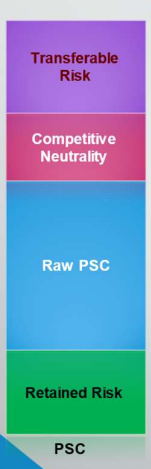
VFM = Cost of PSB – Cost of PPP



Module 3 –Tools – Value for Money



Elements of Quantitative VFM – PSC



Transferable risks

- These capture the impact of the specific risks which are generally transferred to the private sector in case of PPP
- Typically includes – construction cost/ time over-run, design risk, O&M cost over-run, interest rate, exchange rate, inflation and revenue risks.

Competitive neutrality

- Identify effects of PSA ownership and the advantages/ disadvantages it brings in vis-à-vis private sector
- Typical example is the taxation

Retained risks

- These are risks retained with the public sector in case of traditional procurement and PPP
- Eg: delay in land acquisition, providing approvals for the project

Raw PSC

- Generally the life-cycle cost of the project includes:-
- The total project cost and the NPV of the annual O&M cost
- This cost is relevant only during the estimation of PSC

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Elements of Quantitative VFM – PPP

Residual risks

- These the residual risks retained by the PSA on the ones transferred to the private sector
- For example: renegotiation risks

Annuity payments / VGF

- In case of annuity model wherein the private sector is supported by annuity payments. Calculated as the NPV of the payments
- It also includes any upfront VGF or capital grant paid by the Govt. to the private sector

Retained risks

- These are risks retained with the public sector in case of traditional procurement and PPP

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Module 3 –Tools – Value for Money

Present value inputs are calculated using cashflows provided by the Financial Viability Indicator tool, discounted at the user-input discount rate.

All calculations should be made in nominal terms.

Cash costs and receipts - from Financial Viability Indicator tool		*PSB*		*PPP*
PV of payments for a public sector project	*R cr.*	220.6		
PV of payments under PPP	*R cr.*			15.2
Total costs for public finances	*R cr.*	220.6		15.2
Gross VAT received	*R cr.*	0.0		0.0
Corporate tax (including MAT) received	*R cr.*			19.3
Third party income (eg, tolls, charges, advertising) received	*R cr.*	276.4		
Total receipts for public finances	*R cr.*	276.4		19.3
Net cash cost to Public Finances (= costs - receipts)	*R cr.*	-55.8		-4.1

Risk adjustment		*PSB*		*PPP*
Expected value of risk that would be transferred under PPP	*R cr.*	**116.4**		
Expected cost of added risks from a PPP for the public sector	*R cr.*			**0.8**
Adjusted net cost to Public Finances	***R cr.***	**60.6**		**-4.9**
Expected VFM	***R cr.***			**65.5**

Module 3: Summary of the Tools

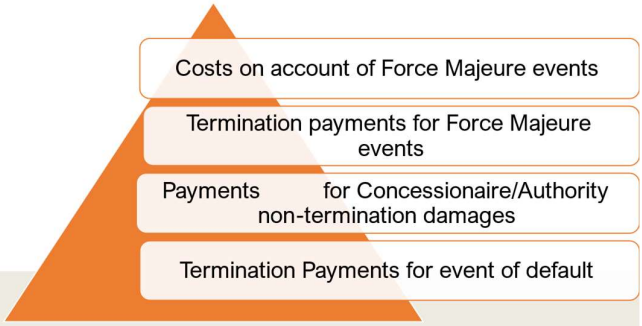
Tool	What's it for?	For use in which phase of the PPP Process?		
		Pre-feasibility	Feasibility	Procurement
PPP Suitability Filter	Should you do the project on PPP? A Go/No Go decision	●		
PPP Family Indicator	Which type of PPP?	●		
PPP Mode validation	Risk-based check of PPP type	●	●	
Financial Viability Model	Viable for private partners?	●	●	●
VFM Indicator	Likely VFM for public sponsor?	●	●	●

No / little experience of PPPs ● ● ● ● Experienced with PPPs

Contingent Liability Toolkit

Table of Contents

Contingent Liabilities arising from a PPP Contract



Obligations of the government arising from a valid PPP contract whose occurrence, timing, and amount depend on some uncertain future event or circumstance.

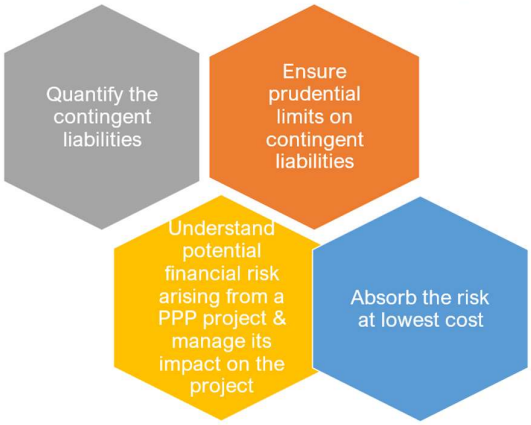
Direct Liability versus Contingent Liability

ELEMENT OF LIABILITY	DIRECT LIABILITY	CONTINGENT LIABILITY
Obligation and Need for Payment	Present and certain obligation resulting from a past event; obligations and payment needs are known upfront.	Possible obligation from a past event; obligations may be confirmed by occurrence/ nonoccurrence of uncertain future events.
Quantum of amount	Known upfront with certainty; reliable estimates of the amount of the obligation can be made for accounting and budgeting.	Uncertain amounts; estimates may also not be possible with reasonable accuracy and reliability.
Timing	Known with certainty	Uncertain/ unknown
Outflow of resources	Known with certainty	Uncertain and depend on the occurrence/nonoccurrence of an event in future;

Types of Direct and Contingent Liabilities

Direct Liabilities	Contingent Liabilities
1. Viability Gap Payments	1. Cost on account of Force Majeure Events
2. Annuity Payments	2. Termination payment for Force Majeure Events
3. Any project related specific subsidies	3. Payment for Concessionaire/Authority event of defaults, if such defaults lead to termination of contract

Objective & Applicability of the Contingent Liability Toolkit



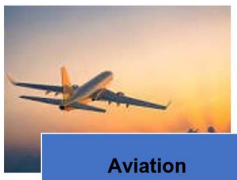
- To be used by **Project Sponsoring Agencies (PSAs)** to calculate the contingent liability arising from a PPP project.
- Accordingly, **appropriate funds** could be demarcated at the beginning itself to meet any contingent liabilities arising in the future.
- Also, this would help PSAs in taking measures such as introduction of **suitable clauses** in **bid documents** to minimize the impact of adverse events and **wisely allocate risks**.

Key Sectors Covered under the Toolkit

Road & Highway

Port

Solid Waste Management



Aviation

Sports

Contingent Liability Toolkit – Case Study

Case Study: Construction of Water Treatment Plant on PPP basis

S.No.	Particulars	Key Details
1.	Name of the project	Construction of water treatment plant
2.	Type of PPP (BOT, BOOT, BOLT, OMT etc.)	BOT
3.	Location	New Delhi
4.	Administrative Ministry/Department	Ministry of Housing and Urban Affairs (MoHUA)
5.	Implementing Agency	Delhi Jal Board
6.	Capacity (MLD)	200
7.	Estimated Project Cost (Rs. Cr)	i. Civil Construction Cost: 400 ii. Pre-Operative Cost: 4 iii. Financing Charges: 4 iv. Interest during Construction: 50 v. 18% GST on Civil Cost: 72 **vi. Total Capital Cost: 530**

Case Study: Construction of Water Treatment Plant on PPP basis

S.No.	Particulars	Key Details
8.	Concession Period (years)	30
9.	Construction Period (years)	2
10.	Financing (Rs. Crore)	Equity: 30% Debt: 70%
11.	Appointed Date	30.04.2020
12.	COD	30.04.2022
13.	End of Concession Period	30.04.2050
14.	Date of Termination of Contract	30.04.2027

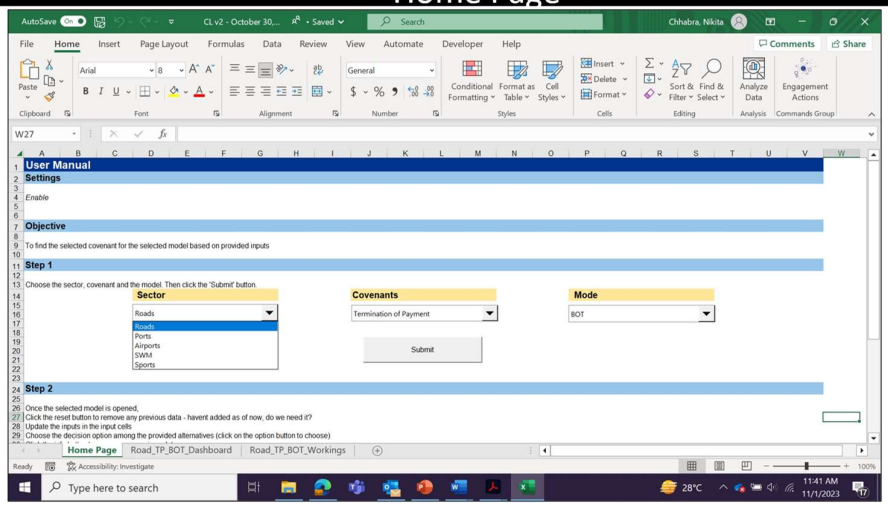
Checklist for Calculation of Contingent Liability

Checklist for Calculation of Contingent Liability

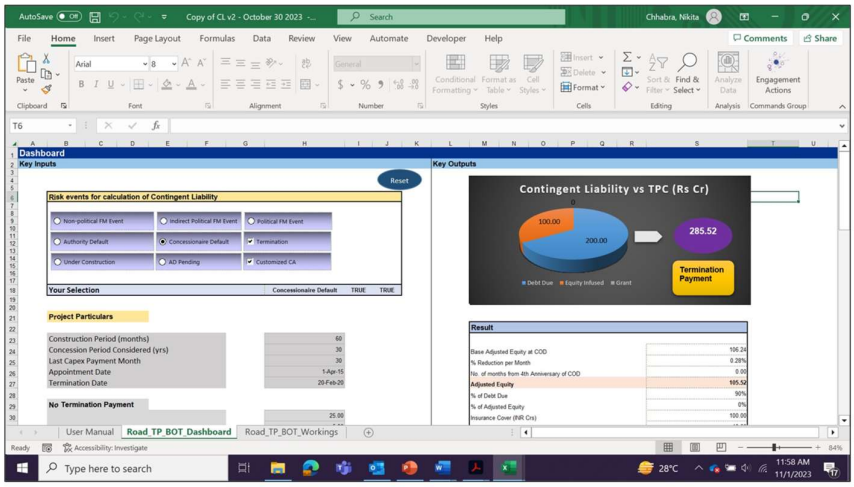
- √ Total Project Cost
- √ Concession Period
- √ Construction Period
- √ Appointed Date
- √ Commercial Operation Date (COD)
- √ Termination Date
- √ Debt
- √ Equity
- √ Det Due
- √ Grant/VGF
- √ Insurance Cover
- √ Insurance Claim (not admitted and paid)

Checklist for Calculation of Contingent Liability

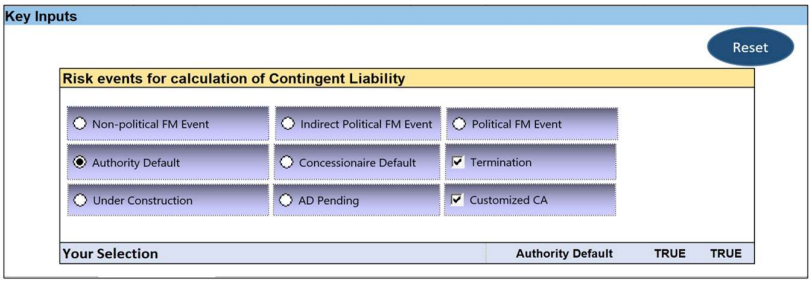
Step 1: Choose the Sector, Convenant, and the PPP mode on the Home Page



Step 2: Once the selections are made, press submit. Dashboard and workings sheet will appear



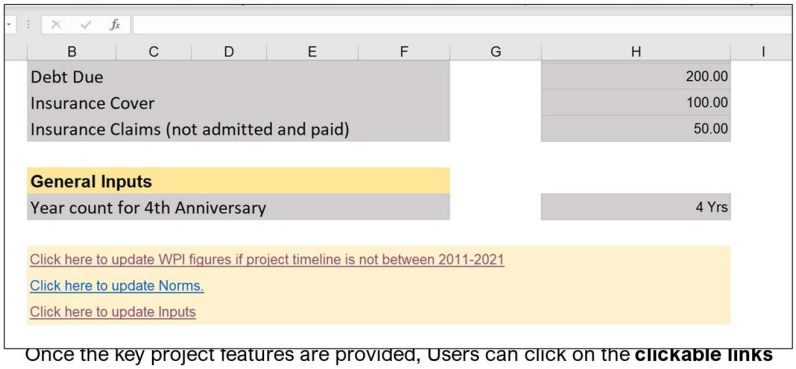
Step 3: Risk Event Selection



The Dashboard Page consists of **Key Inputs** and **Key Outputs.** On the **Key Inputs** side**, following actions are required:**

1. **Select the Risk Event**
2. **Select Termination/Non-termination**
3. **Select Customized CA, if not based on Model Concession Agreement**
4. **Provide Project Details/Particulars - Key Dates, Concession Period, Construction Period, Means of Finance, etc.**

Step 4: Key Inputs to be Edited/Updated

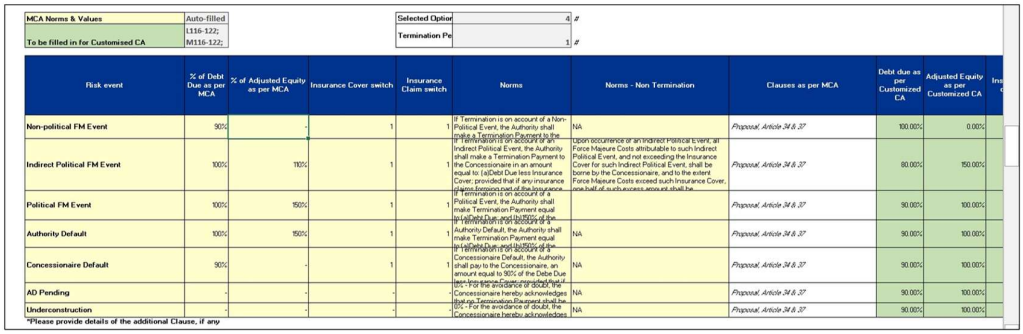


	B	C	D	E	F	G	H	I
	Debt Due						200.00	
	Insurance Cover						100.00	
	Insurance Claims (not admitted and paid)						50.00	
	General Inputs							
	Year count for 4th Anniversary						4 Yrs	
	Click here to update WPI figures if project timeline is not between 2011-2021							
	Click here to update Norms.							
	Click here to update Inputs							

Once the key project features are provided, Users can click on the **clickable links** provided on the **Dashboard** to update/change:

1. **WPI figures**
2. **Norms/Articles/Clauses for Termination Payment**
3. **Other Key Inputs, if any**

Step 4: Key Inputs to be Edited/Updated



MCA Norms & Values	Auto-filled	Selected Option	4	#
To be filled in for Customised CA	L116-122; M116-122;	Termination Pe	1	#

Risk event	% of Debt Due as per MCA	% of Adjusted Equity as per MCA	Insurance Cover switch	Insurance Claim switch	Norms	Norms - Non Termination	Clauses as per MCA	Debt due as per Customized CA	Adjusted Equity as per Customized CA	Ins
Non-political FM Event	90%	-	1	1	If Termination is on account of a Non-Political Event, the Authority shall make a Termination Payment to the	NA	*Proposal, Article 34.6.3?*	100.00%	0.00%	
Indirect Political FM Event	100%	110%	1	1	If Termination is on account of an Indirect Political Event, the Authority shall make a Termination Payment to the Concessionaire in an amount equal to: [a]Debt Due less Insurance Cover; provided that if any insurance claims forgone part of the Insurance	Upon occurrence of an Indirect Political Event, an Force Majeure Costs attributable to such Indirect Political Event, and not exceeding the Insurance Cover for such Indirect Political Event, shall be borne by the Concessionaire, and to the extent Force Majeure Costs exceed such Insurance Cover, one half of such excess amount shall be	*Proposal, Article 34.6.3?*	80.00%	150.00%	
Political FM Event	100%	150%	1	1	If Termination is on account of a Political Event, the Authority shall make Termination Payment equal to [a]Debt Due; and [b]150% of the		*Proposal, Article 34.6.3?*	90.00%	100.00%	
Authority Default	100%	150%	1	1	If Termination is on account of a Authority Default, the Authority shall make Termination Payment equal to [a]Debt Due; and [b]150% of the	NA	*Proposal, Article 34.6.3?*	90.00%	100.00%	
Concessionaire Default	90%	-	1	1	If Termination is on account of a Concessionaire Default, the Authority shall pay to the Concessionaire, an amount equal to 90% of the Debt Due less Insurance Cover; provided that if	NA	*Proposal, Article 34.6.3?*	90.00%	100.00%	
AD Pending	-	-	-	-	0% - For the avoidance of doubt, the Concessionaire hereby acknowledges that no Termination Payment shall be	NA	*Proposal, Article 34.6.3?*	90.00%	100.00%	
Underconstruction	-	-	-	-	0% - For the avoidance of doubt, the Concessionaire hereby acknowledges	NA	*Proposal, Article 34.6.3?*	90.00%	100.00%	

*Please provide details of the additional Clause, if any

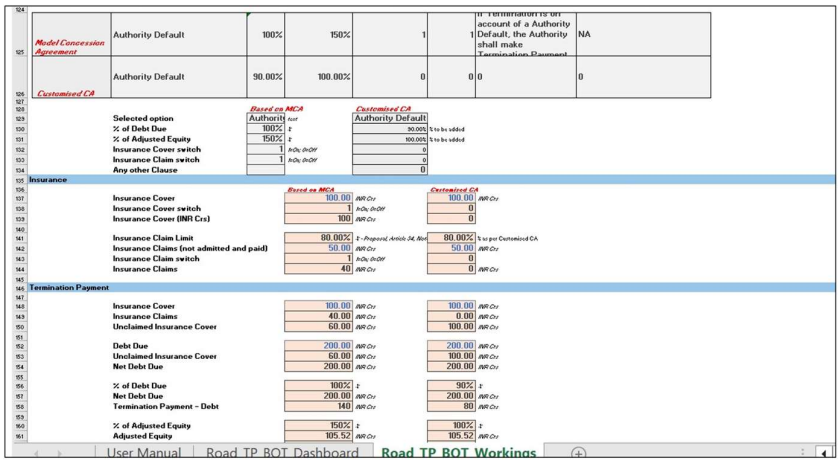
In case of Concession Agreement being based on the **Model Concession Agreement**, **Norms** will be auto-filled in based on the clauses provided in the MCA.

Step 4: Key Inputs to be Edited/Updated

Risk event	Debt due as per Customized CA	Adjusted Equity as per Customized CA	Insurance cover	Insurance claim	Any other Clause (please provide the value	Clauses as per the DCA/Signed CA
Non-political FM Event	100.00%	0.00%				
Indirect Political FM Event	80.00%	150.00%				
Political FM Event	90.00%	100.00%				
Authority Default	90.00%	100.00%				
Concessionaire Default	90.00%	100.00%			100	
AD Pending	90.00%	100.00%				
Underconstruction	90.00%	100.00%				
*Please provide details of the additional Clause, if any						

In case of Customized CA, the User will need to termination payment clauses/norms for risk events to be updated

Step 5: Workings would be updated based on Key Inputs



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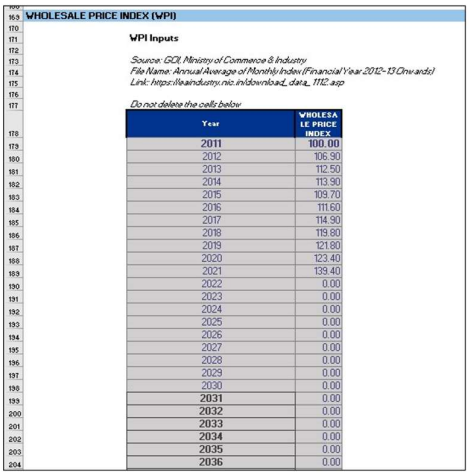


WHOLESALE PRICE INDEX (WPI)

WPI Inputs

Source: GOI, Ministry of Commerce & Industry
File Name: Annual Average of Monthly Index (Financial Year 2012-13 Onwards)
Link: https://eaindustry.nic.in/download_data_1112.asp

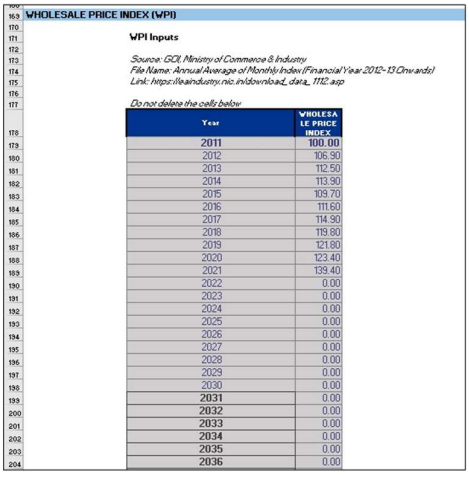
Do not delete the cells below

Year	WHOLESALE PRICE INDEX
2011	100.00
2012	106.90
2013	112.50
2014	113.90
2015	109.70
2016	111.60
2017	114.90
2018	119.80
2019	121.80
2020	123.40
2021	139.40
2022	0.00
2023	0.00
2024	0.00
2025	0.00
2026	0.00
2027	0.00
2028	0.00
2029	0.00
2030	0.00
2031	0.00
2032	0.00
2033	0.00
2034	0.00
2035	0.00
2036	0.00

WPI Figures can be updated by clicking on the link given in the Dashboard page under Key Inputs.

Once all the Key Inputs have been provided and norms have been updated based on MCA/Customized CA, Termination Payment will be automatically calculated and shown on the Dashboard.

Step 5: Workings would be updated based on Key Inputs



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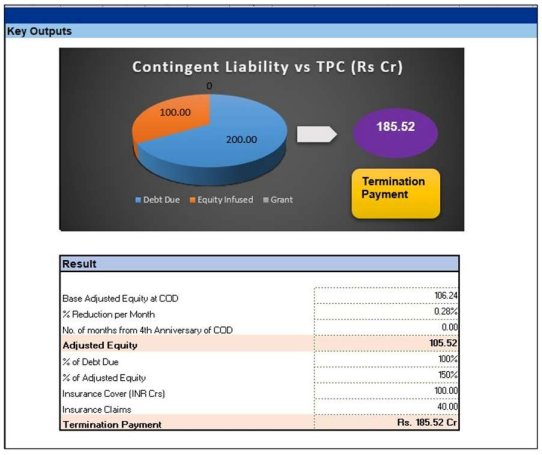
2021	139.40
2022	0.00
2023	0.00
2024	0.00
2025	0.00
2026	0.00
2027	0.00
2028	0.00
2029	0.00
2030	0.00
2031	0.00
2032	0.00
2033	0.00
2034	0.00
2035	0.00
2036	0.00

WPI Figures can be updated by clicking on the link given in the Dashboard page under Key Inputs.

Once all the Key Inputs have been provided and norms have been updated based on MCA/Customized CA, Termination Payment will be automatically calculated and shown on the Dashboard.

Step 6: Key Outputs for Calculation of Contingent Liability



Termination Payment for the selected risk event is shown on the Dashboard

Important inputs for calculation of Termination Payment:

- **Adjusted Equity**
- **Debt Due**
- **Insurance Cover**
- **Force Majeure Cost**

Advantages of the Toolkit

- Managing contingent liabilities or financial commitments arising from PPP projects
- Educate the Project officer about contingent liabilities
- Ensure proper management of project risks
- Provides easy to understand analytical tools
- It is time saving and cost-effective process

Other Initiatives to support PPP structuring

- Project implementation mode selection waterfall framework
- Model RFP document for PPP Projects
- Procurement Manual for PPP Projects
- Appraisal manual for PPP Projects
- Reference guide for setting up PPP cells/units
- Post award contract management

Thank you