Agenda Notes for 51st Meeting of the

PROJECT SANCTIONING & MONITORING GROUP-I (PSMG – I)

Venue:

Conference Hall (Room No. 123-C), Ministry of Urban Development, Nirman Bhawan, New Delhi

> At 11:15 AM on 30th December, 2013



National Capital Region Planning Board Ministry of Urban Development, New Delhi.

Agenda Items for the 51st Meeting of the Project Sanctioning & Monitoring Group-I (PSMG-I)

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	ANNEXURE	
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Agenda Item No. 1: Confirmation of the Minutes of the 50th Meeting of the PSMG-I and its follow-up meeting

The Minutes of the 50th Meeting of the PSMG-I held on 07.08.2013 were circulated vide NCR Planning Board letter No. K-14011/4/2013/PMC/NCRPB dated 19.8.2013. As per the minutes, a follow up meeting was held for the five water supply projects in Alwar district, on 10.10.2013. Minutes of the follow up meeting were circulated to all members vide NCR Planning Board letter No. K-14011/4/2013/PMC/NCRPB dated 25.10.2013. No comments have been received.

The Minutes may be confirmed.

Agenda Item No. 2: ATR of 50th PSMG-I meeting decisions

The following actions have been taken on the decisions of the 50th Meeting of the PSMG-I held on 07.08.2013 and follow up meeting of 10.10.2013:-

Agenda proposed & decisions taken	Action Taken / Status
Agenda Item No. 1: Confirmation of Minutes of the 49 th Meeting of PSMG-I held on 11.12.2012	No action to be taken
The minutes were confirmed	
Agenda Item No. 2: ATR of 49 th PSMG-I meeting decisions	
 Assessment study Evaluation of NCRPB Assisted Water Supply & Sewerage Projects Post Completion 	Separately taken up at Agenda Item No.4.
Agenda Item No 3: Status note on assistance by Asian Development Bank (ADB) & KfW (German Development Bank) to NCRPB.	
The PSMG decided to intimate DEA regarding (a) cancellation of US\$ 18 million in the first stage (b) cancellation of balance amount after the necessary contracts are awarded.	Separately taken up at Agenda Item No.3.
The group suggested that NCRPB should have a clause in the sanction letter clearly indicating that in case of delay / withdrawal of the project, the borrowing agency is liable to pay the commitment charges. NCRPB may take necessary action accordingly.	Suggested clause has been added in all sanction orders.

Agenda proposed & decisions	Action Taken / Status
taken	
Keeping in view that the financing functions of NCRPB have expanded, due to external borrowings from ADB/KfW, a Finance & Accounts Sub Committee may be formed which would decide such matters following the necessary accounting policy and standards.	 A Finance & Accounts Sub Committee has been constituted under the chairmanship of Member Secretary, NCRPB with 5 members to discuss the following issues:- 1. Review the progress of utilization of funds raised from ADB & KfW 2. Review the debt servicing by the Board. 3. Review loan recovery position One meeting held.
Agenda Item No. 4.1:	One meeting neid.
Agenda item No. 4.1.	
Two Water Supply projects from GNIDA, Uttar Pradesh	
Agenda Item No. 4.1A: Raw Water Conveyance Main from Intake at Dehra (Ghaziabad) to WTP site at Palla (Greater Noida) Clear Water Main from WTP site to Master Reservoir	Sanction for the loan amount of ₹ 137.39 Cr. issued on 23.10.2013.
Agenda Item No. 4.1B: Primary Treatment Works at Dehra (Ghaziabad), 210 MLD Water Treatment Plant at Palla (Greater Noida) and Allied Works	Sanction for the loan amount of ₹ 87.16 Cr. issued on 23.10.2013.
Agenda Item No. 4.2 Water supply projects for the towns of Alwar, Tijara, Rajgarh and Behror in Alwar District in Rajasthan from PHED Rajasthan	As per decision of the follow-up Meeting of the 50 th PSMG Meeting held on 10.10.13, necessary sanctions issued.
Agenda Item No. 4.2 A: Alwar Water Supply Upgradation Project	Sanction for the loan amount of ₹ 131.14 Cr. issued on 19.11.2013.
Agenda Item No. 4.2 B: Tijara Water Supply Upgradation Project	Sanction for the loan amount of ₹ 12.35 Cr. issued on 19.11.2013.
Agenda Item No. 4.2 C: Rajgarh Water Supply Upgradation Project	Sanction for the loan amount of ₹ 15.18 Cr. issued on 11.11.2013.
Agenda Item No. 4.2 D: Behror Water Supply Upgradation Project	Sanction for the loan amount of ₹ 19.51 Cr. issued on 11.11.2013.

Agenda proposed & decisions taken	Action Taken / Status
Agenda Item No. 4.3: Bhiwadi Water Supply Improvement Project	Sanction for the loan amount of ₹ 30.52 Cr. issued on 19.11.2013.
Agenda Item No. 4.4: Two Sewerage projects from GNIDA, Uttar Pradesh	
Agenda Item No. 4.4 A: Construction of 20 MLD Sewage Treatment Plant and Pumping Station at Ecotech-III, Greater Noida	Sanction for the loan amount of ₹ 21.10 Cr. issued on 28.10.2013.
Agenda Item No. 4.4 B: Construction of 15 MLD Sewage Treatment Plant and Pumping Station at Ecotech-II, Greater Noida	Sanction for the loan amount of ₹ 15.87 Cr. issued on 25.10.2013.

Agenda Item No. 3: Status Note on Assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB.

Asian Development Bank

ADB has approved a loan of US \$ 150 million to NCRPB as a multi-tranche financing facility for financing infrastructure projects in the National Capital Region (NCR) and its Counter Magnet Areas (CMAs). The loan agreement for the 1st tranche of US \$ 78 million was signed between ADB and NCRPB on 17.3.2011. The loan is to be utilized by Dec., 2014. **The repayment period is 25 years with 5 years moratorium for repayment of the principal amount.**

The loan is disbursed to participating States subject to compliance with ADB procurement guidelines and environmental and social safeguards requirements. As on date, the following amount has been drawn by the Board from ADB:-

Loan Amount Sanctioned	Loan withdrawn as of 50 th PSMG (held on 07.08.2013)	Loan withdrawn from ADB (upto 20.12.2013)	Balance loan amount to be utilized by 2014
60 million USD	25 million USD (INR 137.64 crore)	30.32 million USD (INR 170.35 crore)	29.68 million USD

Due to three non-starter projects NCRPB has decided to cancel \$18 million loan from tranche I after approval of PSMG.

Status of Projects under ADB line of credit: The status of projects identified for financing under the ADB loan facility is as follows:-

S.	Project/Agency	Project	Loan	Current Status
No.		Cost	Sanctioned	
1	Improvement of Roads in Jhajjar districts, Haryana - PWD (B&R)/HSRDC	(Rs. Cr.) 169.98	(Rs. Cr.) 127.48	99 % completed.
2	Improvement of Roads in Sonepat district, Haryana - PWD (B&R)/HSRDC	125.40	94.05	90 % completed.
3	Construction of Badli- bypass, Haryana - PWD (B&R)/HSRDC	62.92	39.45	100% completed.
NEW	PIPELINE OF PROJECTS			
4	Widening & Strengthening of Gohana Lakhanmajra Bhiwani road upto district Rohtak boundary road from km. 0.000 to 37.700 - PWD (B&R)/HSRDC	99.77	74.83	Bid has been approved by ADB and contract awarded. 1st installment of loan released by the Board.
5	Widening & Strengthening of U.P. border Sonepat	176.26	132.20	Bid has been approved by ADB and contract awarded. 1st

S. No.	Project/Agency	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
	Gohana road upto District Sonepat boundary from km. 11.600 to 74.000 - PWD (B&R)/HSRDC			installment of loan released by the Board.
6	Widening & up-gradation of Gurgaon-Chandu-Badli Bahadurgarh Road - PWD (B&R)/HSRDC	244.10	183.08	This project is divided into two contract packages. For Bahadurgarh Badli Road, bid has been approved by ADB and contract awarded. For Gurgaon Badli Road, price bid evaluation report has been approved by ADB. 1st installment of loan released for the project.
7	Sonepat Drainage Scheme - PHED, Haryana	21.72	16.29	Bid has been approved by ADB and contract awarded. 1st installment of loan released by the Board.
8	Augmentation of Water Supply in Pataudi - PHED, Haryana	75.10	56.32	Bid documents, Technical Evaluation and Price Negotiations has been approved by ADB. Final Price Bid Evaluation report is awaited from PHED.
9	Water Supply Scheme for Nulhar Medical College & Nuh town - PHED, Haryana	105.61	79.21	Technical Bid Evaluation report has been submitted to ADB. 1 st installment of loan released by the Board.

Three projects viz., two MMTC projects at Anand Vihar and Sarai Kalen Khan and Panipat water supply project have been dropped. Letter dated 13.8.2013 was issued by Secretary, MoUD to Chief Secretary, Govt. of Delhi and Chief Secretary, Govt. of Haryana requesting for reimbursement of commitment charges paid by NCRPB to ADB. Subsequently, reminder letters dated 11.9.2013 were also issued by Member Secretary, NCRPB. While no response has been received from Government of Delhi till date, Govt. of Haryana vide its letter D.O.No.5899/PHED/U3 dated 01.10.2013 requested for the waiver of the commitment charges. The request could not be considered as NCRPB had already borne the commitment charges and the same was conveyed to Government of Haryana by NCRPB vide D.O. letter dated 28.11.2013 alongwith a request to expedite the necessary reimbursements.

Board has also been making regular payments of its dues to ADB. So far, Board has made payment of Rs.1.86 cr. (\$0.33 million) to ADB on account of interest and commitment charges.

KfW - (German Development Bank)

Loan agreements of Euro 100 million + Euro 1 million Grant for environment friendly schemes in the water supply, sewerage, drainage, solid waste management and urban transport Sectors to National Capital Region Planning Board were signed between NCRPB & KfW on 09.02.2012 & 30.03.2012. The repayment period will be 15 years with 5 years moratorium for repayment of the principal amount. The loan is at a <u>fixed rate of Interest @ 1.83% p.a.</u> A total amount of Rs.108.45 Crores (Euro: 15.77 million) has been claimed & disbursed by KfW to the Board.

The status of projects to be funded under KfW line of credit are as follows:-

SI.	Name of the Project	Project	Loan	Current Status
No.	_	Cost	sanctioned	
		(Rs. Cr.)	(Rs. Cr.)	
1	Augmentation of Water Supply in Kota, Rajasthan - UIT, Kota	151.66	113.74	87% Completed.
2	Water supply scheme at Farrukh Nagar Distt., Gurgaon - PHED, Haryana	28.78	21.58	Bid documents, Technical Evaluation and Price Negotiations has been approved by KfW. Final Price Bid Evaluation report is awaited from PHED. 1st installment of loan released by the Board.
3	Sewerage scheme at Farrukh Nagar Distt., Gurgaon - PHED, Haryana	11.48	8.61	Due to poor response by bidders, re-tendering has been initiated by PHED.
4	Sewerage scheme and treatment plant for SADA, Gwalior - SADA, Gwalior	28.38	21.28	This project is divided into two contract packages. For Sewerage Network Scheme, the bid has been approved by KfW. For Sewerage Treatment Plant, Bid documents are under preparation by SADA, Gwalior.
5	15 Mld Sewage Treatment Plant and Pumping Station At Ecotech-II, Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	21.17	15.87	PSMG has approved the project in its 50th meeting held on 07.08.2013. Bid documents are under preparation by GNIDA.
6	20 Mld Sewage Treatment Plant and Pumping Station At Ecotech-III, Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	28.15	21.10	- do -

SI. No.	Name of the Project	Project Cost	Loan sanctioned	Current Status
7	Raw Water Conveyance Main from Intake at Dehra (Ghaziabad) to WTP Site at Palla (Greater Noida) and Clear Water Main from WTP Site to Master Reservoir (Greater Noida) Under 85 Cusec Ganga Jal Project for Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	(Rs. Cr.) 183.19	(Rs. Cr.) 137.39	- do -
8	Primary Treatment Works at Dehra (Ghaziabad) & 210 Mld Water Treatment Plant At Palla (Greater Noida) & Allied Works Under 85 Cusec Ganga Jal Project For Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	121.48	87.16	- do -
9	Alwar Water Supply Upgradation Scheme - PHED, Rajasthan	174.86	131.14	PSMG has approved the project in its Follow-Up Meeting of the 50 th meeting held on 10.10.2013. Bid documents are under preparation by PHED, Rajasthan.
10	Rajgarh Water Supply Upgradation Scheme - PHED, Rajasthan	20.24	15.18	- do -
11	Behror Water Supply Upgradation Scheme - PHED, Rajasthan	26.02	19.51	- do -
12	Tijara Water Supply Upgradation Scheme - PHED, Rajasthan	16.46	12.35	- do -
13	Bhiwadi Water Supply Scheme-PHED, Rajasthan	40.69	30.52	- do -

Board has also been making regular payments of its dues to KfW. So far, Board has made payment of Rs.1.64 cr. (€ 0.22 million) to KfW on account of interest and commitment charges.

Matter is placed before the PSMG for information.

Agenda No. 4: Consultancy Services for Evaluation of NCRPB Assisted Water Supply & Sewerage Projects

Background

As per the provision under Section 8(e) of the NCRPB Act, 1985, NCRPB is empowered to select and approve comprehensive projects, call for priority development and provide such assistance for the implementation of those projects as the Board may deem fit. Accordingly, the Board has been providing loan assistance to the participating states and their implementing agencies for selected infrastructure development projects. Till September 2013, the Board has sanctioned financial assistance for 278 nos. of infrastructure projects having estimated cost of 18719 crore, out of which an amount of Rs.8493 crore has been sanctioned as loan. As on date out of 278 projects financed by the Board, 204 projects have been completed and balance 74 are at various stages of implementation.

Since, water supply and sanitation/ sewerage are the core infrastructure that determines the environmental status of any habitat, augmentation of existing systems/ treatment facilities as well as adoption of new technologies of waste treatment for small and marginal settlements and rural areas presents a gigantic task demanding special efforts. The Board has sanctioned loan of Rs.1885 crore for 94 nos. of projects of water supply and sewerage sector out of which 50 no. have been completed. The details of water supply and sewerage projects sanctioned by Board are as under:-

(Rs. in Crore)

S.No.	Sector	No. of pro	No. of project		Loan Sanctioned
		Ongoing	Completed		
1	Water Supply	14	30	2255.00	1500.00
2	Sewerage	20	20	805.00	490.00
	Total	34	50	2915.00	1885.00

The water sector projects includes bulk water supply, water distribution and conservation & the sewerage projects includes sewage treatment plants (STPs), sewage pipeline, storm water drainage, effluent treatment etc.

Need for the Study Proposal

The various water supply & sewerage projects implemented in the NCR need to be evaluated in terms of their impacts and functionality especially in comparison to their envisaged objectives.

Keeping this in view, the Board proposed to undertake assessment of some of the projects that have been financed by NCPRB and have been implemented in various NCR Towns. A copy of the Terms of Reference for the study is at **Annexure-I** of the agenda notes. NCR Planning Board had invited Expression of Interest (EoI) for the "Consultancy Services for Evaluation of NCRPB Assisted Water Supply & Sewerage Projects Post Completion" and the advertisement inviting proposals was published in National newspaper and uploaded on website of NCRPB on 14.5.2013 for wide publicity. NCRPB received 14 EoI responses by the due date of 12.6.2013 which were evaluated as per the stipulated criteria by the

Consultancy Evaluation Committee. Based on the evaluation, seven firms were shortlisted for issue of the Request for Proposals (RFP) under two bid system. The RFPs were issued to the seven firms on 8.10.2013 and the last date for the receipt of proposals was 7.11.2013.

Three firms submitted the bids by the due date and time. The bids were first technically evaluated by CEC which recommended two firms as technically competent (i.e. on the basis of qualifying marks of more than 70%). Financial bids of the two firms were opened on 6.12.2013.

The final evaluation was done on QCBS method with a weightage of 70:30 for technical & financial bid scores respectively.

As was specified in RFP, the Study is to be awarded to the highest scorer under QCBS (70% weightage to technical score and 30% to financial score). The CEC observed that the financial proposal of M/s. Engineers India Limited was Rs. 10,00,000/- (Rupees Ten Lakh only) plus Service Tax which was also the lowest, scored 83.2 against the other bidder namely M/s IPE Global Private Limited who scored 76.13.

The CEC accordingly recommended that the consultancy works for "Evaluation of NCRPB Assisted Water Supply & Sewerage Projects Post Completion" be awarded to M/s. Engineers India Limited.

Point for Decision

The matter is placed before PSMG-I for awarding the "Consultancy Services for Evaluation of NCRPB Assisted Water Supply & Sewerage Projects Post Completion" to M/s. Engineers India Limited at a total cost of Rs. 10,00,000/- (Rs. Ten Lakh only) plus Service Tax as applicable for consideration and approval.

Agenda No.5: New Projects submitted to NCRPB with Loan Requests

The Board has received requests for sanction of financial assistance for:-

- 1. One (1) Office Building project from East Delhi Municipal Corporation (EDMC)
- 2. Seven (7) road sector projects from PWD(B&R) Haryana:
 - a. 3 bye pass projects
 - b. 4 road development projects

Agenda Item No. 5.1: Construction of Multi-storied office building at Karkardooma Institutional area at Shahdara South Zone by EDMC

Background

The erstwhile Municipal Corporation of Delhi has been trifurcated into – (i) North Delhi Municipal Corporation, (ii) South Delhi Municipal Corporation and (iii) East Delhi Municipal Corporation. The East Delhi Municipal Corporation (EDMC) covers the East Delhi and North East Delhi districts.

A new centralized MCD office was constructed in the form of Civic Centre at JLN Marg, New Delhi by MCD with financial assistance from NCRPB and the office is now being used by North Delhi Municipal Corporation and South Delhi Municipal Corporation.

At present the various offices of Shahdara South Zone under EDMC are scattered and operate from different buildings. Moreover the available office spaces are inadequate and in dilapidated condition. Therefore, with an objective to accommodate all the offices of Shahdara south (EDMC) at one place and to facilitate the public of the area under its jurisdiction, EDMC has proposed construction of a state of art office building at an estimated cost of Rs. 101.65 Cr.

Project Details

The proposed state of art office complex is expected to come up in East Delhi in the Central Business district of Shahdara and falls within urbanizable area of MPD 2021. The site is located in the institutional area and the required land belongs to EDMC. The building is proposed to be centrally air conditioned with 100% power backup and parking facility. The building will be located on a prime plot of land, measuring about 2 acres behind Karkardooma Court of Karkari Road i.e. main road leading from Maharaja Surajmal Marg to Vishwas Nagar. It is abutting 80 ft. wide road on one side and 60 ft. and 45 ft. wide roads on two other sides. It is well connected both by road and Delhi Metro, i.e. near Karkardooma Metro Station and proposes Mukund Pur Metro Station. The office complex will have about 1.5 lakh sq. feet office space, including about 15,000 sq. feet commercial space. The project components include government office, retail shops, cooperative stores, health center, canteen, P&T office, bank and PSU / commercial office (restricted to 10% of FAR).

After the project was submitted, NCRPB suggested EDMC to include various environment friendly initiatives in the direction of waste & water management, energy efficiency, etc. EDMC accordingly made changes for making the new building energy efficient. Highlighting the efforts made in the direction, it was informed that steps have been taken to orient the building climate with a view to enable lowering electricity and HVAC load. The entire building is placed in such a way that it gets maximum light from east façade and west harsh sun is avoided. East elevation has the maximum glazed area so as to receive diffused light. The south elevation has minimum glazed area to reduce heat intake from the harsh south sun. The entire façade glazing has a system of aluminium aerofoil vertical fins which act as an important design element and provides shade for the interior spaces. Necessary specifications have been adhered to meet the criteria of Green buildings/GRIHA buildings.

For waste and water management STP and two recharge pits have also been proposed. Similarly, for air conditioning VRV system has been adopted which is eco-friendly as well as having low operating energy demand. Also for lighting system solar lamps / lightings have been adopted for lighting on path ways as well as in the office building.

The project aims to provide not only accommodation for the staff of EDMC but also to generate the revenue. It is proposed to provide at least 40% of the space on lease / rent to meet out the day to day maintenance and cost of construction. In this way, it shall be a self-sustainable project. The FIRR for the project comes to 12.92 considering 50 years of commercial lease for 10% of the developed area.

Status of Approvals

The agency has taken the administrative and financial approvals from competent authority i.e. Corporation vide resolution No. 136 dated 23.10.2012 and resolution No. 168 dated 24.12.2012. DUAC and Airport Authority of India have approved the project. The approvals from Forest for cutting of trees and Fire Department are awaited. Necessary applications have been filed.

Project Benefits & Justification

EDMC being a new entity requires a centralized office space for its own efficiency as well as convenience of citizens. The environmental friendly office building shall facilitate increase in efficiency of EDMC's general working. The office shall be able to carry out most of its functions such as grant of licenses, sanction of building plans, birth death registrations, property tax, etc. under one roof. The project shall also help in optimal utilization of the land resources available with EDMC.

The Project Cost & Financing

The project is proposed to be implemented in two years at total estimated cost of Rs. 101.65 crore. The component wise breakup of cost estimates are as under:-

S. No	Description	Estimated Cost (Rs in Cr)
A.	Civil, Structural, Architectural Finishes and Horticulture Works	
1.	Earth Work	1.13
2.	Concrete & Reinforced Concrete Work	27.88
3.	Brick Work	2.62
4.	Stone & Marble Work	2.23
5.	Wood & PVC Work	0.82
6.	Steel Work	2.16
7.	Flooring & Roofing	5.87
8.	Finishing Works	1.41
9.	Dismantling and Demolishing	0.13
10.	Road Work	1.61
11.	Aluminum Work	7.67
12.	Waterproofing Work	1.35
13.	Horticulture Work	0.23
	Sub-total	55.11
14.	Add: 14% escalation as per latest cost index	7.71
	Total (A)	62.82
B.	Plumbing & Fire Fighting Works	4.56
C.	Electrical Works	21.16
D.	HVAC Works	9.68
E.	Total (A+B+C+D)	98.22
	Contingency @ 2% of (E) (as per CPWD norms)	1.96
	Supervision & consultancy charges @ 1.5% of (E)	1.47
	Grand Total	101.65

The cost sharing basis is as follows:

		Rs. in Crores
Loan amount from NCRPB		76.24
EDMC		25.41
-	Total	101.65

The project is proposed to be executed in <u>36 months from the date of issue of loan sanction letter</u>, as per the following details:-

(Rs. In crore)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan	Moratorium period	Phasing of expend- iture on works
2014-15	45.74	15.25	10	2	60.99
2015-16	30.5	10.16			40.66
Total	76.24	25.41			101.65

Abstract of the project is enclosed at Appendix 5.1.

Appraisal of DPR

The project report received from EDMC was reviewed and appraised technically and financially by the NCR Planning Board. The project has also been scrutinized as per the Environmental and Social Management System (ESMS) adopted by the NCRPB. As per the ESMS, the project has been categorized as 'E-2' and the Initial Environmental Examination Report has been accordingly prepared to measure the impacts related to construction, operation and maintenance. Environment Management Plan to mitigate the impacts have also been prepared. The project has been found technically and environmentally viable. Certain clarifications pertaining to the project were sought both for the main report, approvals as well as IEE and the reports were revised accordingly.

Operation & Maintenance of Project

The agency proposes to meet the operation & maintenance cost of the project through its internal sources and revenues expected from leasing / renting out at least 40% of the space available through the project completion.

Point for Decision

It is proposed that loan assistance of **Rs. 76.24 crore** for the project for "Construction of Multi-storied office building at Karkardooma Institutional area at Shahdara South Zone by EDMC" may be approved subject to fulfillment of requirements as committed by the Corporation, including the necessary approvals which are in process as well as abiding by the environment management plan prepared under the IEE report. Loan for the project will be released by NCRPB as per project details at **Appendix-5.1**. The total estimated cost of the project is **Rs. 101.65 crore**. The loan will carry interest rate as applicable on the date of release of loan installment. The present rate is 9.25% p.a. The principal along with interest is to be repaid in 10 years with a moratorium period of 2 years for principal. The project is to be completed in 36 months from the date of issue of loan sanction letter after necessary approval of project from PSMG-I. The loan will be subject to furnishing of adequate security by EDMC.

APPENDIX 5.1

I. General Particulars

1	Project	Construction of Multi-storied office building at Karkardooma Institutional area at Shahdara South Zone by EDMC	
2	Type of project	Infrastructure (Office Building)	
3	Borrowing agency	East Delhi Municipal Corporation	
4	Implementing agency	East Delhi Municipal Corporation	
5	Land Acquisition Involved	No. About 2 acres of required land is in possession of	
		the EDMC.	

II. Financial Particulars

6	Estimated total cost of projects	Rs. 101.65 crore
7	Loan from NCRPB	Rs.76.24 crore
8	EDMC own funds	Rs. 25.41 Cr.
9	Tenure of loan	10 years (with 2 year moratorium)
10	Rate of Interest	As applicable on the date of release of loan installment. The present rate is 9.25% p.a.
11	Security for loan	Appropriate security will be provided by EDMC
12	Stipulated date of completion	36 months from the date of sanction.

III. Phasing of Expenditure & Loan Schedule

(Rs. in Cr.)

Year	Loan from NCRPB	Contribution from EDMC	Phasing of Expenditure on Works
2014-15	45.74	15.25	60.99
2015-16	30.5	10.16	40.66
Total	76.24	25.41	101.65

Agenda No.5.2: Road Sector Projects from PWD (B&R), Haryana

Agenda No.5.2 A : Construction of Chhuchhakwas Bypass in Jhajjar District

Agenda No.5.2 B : Construction of Chhara Bypass (Southern side) in Jhajjar

District

Agenda No.5.2 C : Improvements/construction of Sonepat Bypass Phase-II

from Sonepat Ganaur to Sonepat Gohana Road in Sonepat

District

Agenda No.5.2 D : Construction of road from Junction of NH-10 & NH-71 at

Southern Bypass in Rohtak District

Agenda No.5.2 E : Four Lanning of Jhajjar Farukhnagar Gurgaon Road in

Jhajjar / Gurgaon Districts

Agenda No.5.2 F : Improvement of Sanghi-Chhichhrana-Mirzapurkheri-Madina

to GLMB Road Km 0.000 to 11.078 in Rohtak/ Sonepat

Districts

Agenda No.5.2 G : Various Roads in Rewari Division (Hailymandi to Pahlawas

road, Kosli-Guryani to Pahlawas NH-71 Dahina Jatusana

road) in Rewari District

Introduction

The Transport Plan policies and strategies of the Regional Plan-2021 recommend that accessibility should be provided to all parts of the NCR to promote and support economic development. It further calls for linkages amongst regional centers and also sub-regional centers with efficient transport network for facilitating faster movement of traffic amongst such centers. Due to increase in the economic activity and consequent load on road transport, the road network in the Haryana sub-region of the National Capital Region needs improvement in terms of carriageway width, crust thickness, and removal of inherent deficiencies such as acute curves, culverts, rail level crossings etc. NCRPB has been providing financial assistance to Haryana for its road development. In line with its requirements, PWD (B & R) has approached NCRPB for financial assistance for seven more road projects which include three bypasses and four road widening and improvement projects.

Project Proposal & Details

General Approach

Bridges, culverts & Junctions, Bus Shelters: The existing culverts in the four roads (S No 5.2 D to 5.2 G) to be widened / improved are proposed to be reconstructed wherever they are weak & narrow. New culverts of required numbers as per the site conditions have been proposed. The culvert types primarily include box culverts and pipe culverts except minor bridges. The junctions, crossing the project roads are proposed for improvements at grade. Necessary traffic signs, road furniture and traffic calming measures have been provided as part of the projects. Required bus shelters in the form of widened paved shoulders are proposed as applicable.

Design Standards: Design Million Standard Axle (MSA) has been taken as per traffic volume and IRC standards. Design life is 15 years. Design California Bearing Ratio (CBR) is 8. Widened surface shall be with 500 mm subgrade with soil of CBR 8 and relative dry density of 97%. Capacity of the road has been designed based on level of service (LOS) B corresponding to IRC 64. The geometry of the road has been designed based on IRC 73 with a design speed of 80 Kmph for State Highways, 65 Kmph for Other District Roads except in built-up areas where it is 30 Kmph.

Estimate: The cost estimates have been prepared based on DSR of Haryana and rate analysis of Indian Road Congress (IRC) / Ministry of Road Transport & Highways (MORT&H).

Environmental & Social Management System (ESMS): Implementing agencies are to follow Environmental & Social Management System (ESMS) framework as adopted by NCRPB for all its financially assisted infrastructure projects. As first step, PWD (B&R), Haryana submitted check list giving particulars of environmental & social impacts. Based on the check list, all project proposals except for Jhajjar-Farukhnagar-Gurgaon Road project had been categorized as S2 for social aspects indicating moderate impacts and E2 for environment aspects indicating moderate impacts. The Jhajjar-Farukhnagar-Gurgaon road project has been categorized as E1 for Environment and S 2 for social aspects, as about 132 m of stretch is passing through Sultanpur Bird Sanctuary. Implementation of this road project will require necessary approvals from National Board of Wildlife and MOEF. As per the requirements of E2 & S2 categories PWD (B&R), Haryana has to prepare Short Resettlement Plan (SRP) and Initial Environmental Examination (IEE) reports. As these reports are under review & may require further modification by PWD (B&R), Haryana, therefore Lump sum provision has, been made in the DPRs for preparation, implementation and monitoring of the SRP and IEE proposals. Any increase over & above the lump sum provision shall have to be borne by PWD (B & R). Proposals for Land Acquisition under Section 4 (1) have been prepared.

Environmental and social up gradation Measures: Following measures have been proposed in the DPRs for environmental and social up gradation

- Pedestrian footpath and cycle tracks in built up areas.
- Rain water harvesting provisions at every 2.5 Km of the project road.
- Bus lay byes, two wheelers parking slots, truck lay byes, rest areas with water & toilet facilities.
- Solar lighting in the built up area, rest area and junctions.
- Traffic signs and retro reflective markings, guard rails and pedestrian crossing, marking in the built ups and junctions.
- Plastic roads using waste plastics in the top wearing surface in the selected stretches (Minimum 10%)
- Interception drains & Turfing the slopes
- Tree plantations 10 times the trees cut
- Tree transplantation around 20% of the trees proposed to be cut

Economic and Financial Viability

i) Economical Internal Rate of Return (EIRR): Economic analysis has been carried out using the guidelines of Indian Roads Congress (IRC) and multilateral funding agencies for all projects. The quantifiable project benefits such as i) Savings in vehicle operating cost for vehicles using the project road; and ii) Savings in travel time for the road users using the project roads have been considered. Life cycle based economic analysis has considered both incremental costs (construction and O&M costs) and benefits based on 'without' and 'with' project scenarios during the analysis period of 20 years including sensitivity analysis. Based on the analysis, the project road sections are found to be economically viable for the proposed improvements as the economic internal rate of return (EIRR) are more than the minimum required 12% for such projects as given below:

Results of Economic Viability Analysis

S	Name of the Road	Length	Total	Cost	Economi	c Internal Ra	te of Return	(EIRR %)
No		(Km)	Cost	of LA	Scenario 1*	Scenario 2*	Scenario 3*	Scenario 4*
			Rs.	Rs.				
			Crore	Crore				
1	Chhuchakwas By pass	6.88	53.05	23.69	14.61	13.25	12.84	11.56
2	Chhara Bypass	3.16	26.89	10.87	13.99	12.64	12.25	10.98
3	Sonepat Bypass	4.74	89.50	41.52	12.62	10.83	10.51	9.06
4	NH 10- NH 71, Rohtak	7.85	53.25	4.12	21.90	19.50	17.80	16.90
5	Jhajjar Farukhnagar 4 Ianning	34.80	290.84	88.63	25.22	23.10	22.71	20.76
6	Sanghi Chhichhrana- GLMB Road	11.08	35.97	3.94	23.65	21.16	20.77	18.50
7	Roads in Rewari District							
i)	Kosli Guryani Pahlawas road	16.724	59.44	15.87	19.00	17.31	17.00	15.43
ii)	Hailey Mandi -Pahlawas	12.65	20.46	0.00	25.21	22.97	22.55	20.51
iii)	Dhahina -Jatusna Road	16.43	24.58	0.00	19.70	17.97	17.60	15.93

*Note:

- 1. Sensitivity Analysis Scenario1: Base cost^a and base benefits^b)
- 2. Sensitivity Analysis Scenario 2: 1.15 times base cost and base benefits
- 3. Sensitivity Analysis Scenario 3: Base cost and 0.85 times base benefits
- 4. Sensitivity Analysis Scenario 4: 1.15 times base cost and 0.85 times base benefits
 - a: base cost is project cost excluding Land Acquisition cost and price contingency
 - b: Base benefits are the normal estimated benefits

The estimated project return is minimum as many project benefits like improved road safety and reduction in road accidents, improved road environment, increase in industrial activities etc. are not considered for analysis due to lack of sufficient data.

ii) Financial Internal Rate of Return (FIRR): The proposed project is a non-revenue earning project as no toll is proposed by PWD (B&R), Haryana for the project road sections. Hence financial feasibility analysis is not carried out.

Project Details

Project-wise summary for each of the seven projects is presented below:-

A. Construction of Chhuchhakwas Bypass

Length in Km	6.875 Km		
Total Estimated Cost	Rs.53.05 Cr		
Existing ROW	New Bypass road as such no ROW at present		
Proposed ROW	30m		
Chainage	0/0 to 6/875		
Land Acquisition	51 Acres		
Land Acquisition Cost	Rs 23.69 Cr (Rs 46.5 Lacs/acre)		
Proposal	Two lane with paved shoulders		
Culverts proposed	21 box culverts & 2 pipe culverts		
Branching Km	Branching from SH 20 Sampla Jhajjar at 88/8 Km		
Connecting villages	Crosses Jhajjar-Achej road, Dadri road, Matanhaili		
	road & Kosli road		
EIRR	14.61		
Environment Categorization	E2		
No of Trees to be cut	98		
Social Categorization	S2		
Present Average Daily Traffic	2032 PCU		
(ADT) (estimated)			
Projected ADT in 2029	17209 PCU		
Cost per KM	Rs. 7.72 Cr including LA, Rs. 4.27 Cr Excluding LA		
Design Standards			
Design Speed	80 Km/Hour (In built up area 30 Km/Hour)		
Design Life	15 Years		
Capacity of Road	Level of Service(LOS) B corresponding to IRC 64		
Million Standard Axle	70		

B. Construction of Chhara Bypass (Southern side)

Length	3.16 Km
Total Estimated Cost	Rs.26.89 Crores
Existing ROW	New Bypass as such no ROW at present
Proposed ROW	30 m
Chainage	0/0 to 3/160
Land Acquisition	23.43 Acres
Land Acquisition Cost	Rs.10.87 Crores (Rs. 46 Lacs/acre)
Proposal	Two lane with paved shoulders
Culverts proposed	13 box culverts, 1 minor bridge (4 spans of 9 m each)
	over Chhara channel, 1 slab culvert, 1 pipe culvert
Branching Km	Branching from 56//050 of SH 20 Sampla Jhajjar road
EIRR	13.99
Environment Categorization	E2

No of Trees to be cut	52
Social Categorization	S2
Present Average Daily Traffic	9195 PCU
(ADT) (estimated)	
Projected ADT in 2030	20072 PCU
Cost per KM	Rs 8.51 Cr including LA, Rs. 5.07 Cr excluding LA
Design Standards	
Design Speed	80 KM/Hour (In built up area 30 Km/Hour)
Design Life	15 Years
Capacity of Road	level of service (LOS) B corresponding to IRC 64
Million Standard Axle	41

C. Improvements/construction of Sonepat Bypass Phase-II from Sonepat Ganaur to Sonepat Gohana Road

to Sonepat Gonana Road	
Length in Km	4.735 Km
Total Estimated Cost	Rs.89.50 Crores (Include Major Bridge Rs 25.45 Crores)
Existing ROW	New Bypass as such no existing ROW
Proposed ROW	30.175 m
Chainage	0/0 to 4/735
Land Acquisition	37.77 Acres
Land Acquisition Cost	Rs.41.52 Crores (Rs 110 Lacs/acre)
Proposal	Two lane with paved shoulders with one ROB
Culverts proposed	4 box culverts, 1 minor bridge & 10 pipe culverts
Branching Km	The branching Km of this by-pass is 6.68 km of Sonepat
	by-pass phase-II under construction and Joining Km of
	existing Delhi-Khanpur-Panipat road is 41/762 km.
EIRR	12.62
Environment Categorization	E2
No of Trees to be cut	Nil
Social Categorization	S2
Present Average Daily	5939 PCU
Traffic (ADT) (estimated)	
Projected ADT in 2030	17250 PCU
Cost per KM (Excluding	Rs 13.53 Cr including LA, Rs. 4.76 Cr excluding LA
Major Bridge)	
Design Standards	
Design Speed	80 Km/Hour (In built up area 30 Km/Hour)
Design Life	15 Years
Capacity of Road	level of service (LOS) B corresponding to IRC 64
Million Standard Axle	50
Million Standard Axle	50

D. Construction of road from Junction of NH-10 & NH-71 (Southern Bypass in Rohtak District)

Length in Km	7.85 Km
Total Estimated Cost	Rs.53.25 Crores
Existing ROW	20.12 m



Proposed ROW	40.24 m in 1.4 Km length	n & in rest 20.12 m	
Chainage	0/850 to 8/7		
Land Acquisition	8.7 Acres		
Land Acquisition Cost	Rs 4.12 Crores (Rs 47 L	acs/Acre)	
Proposal	0/850 to 3/9 two lane;	3/9 to 8/7 four lane with	
	paved shoulders		
Culverts proposed		oridge across JLN canal &	
	1 minor bridge across JS		
Junctions	13 T type to be improved		
Branching Km		rom NH-10 in Rohtak City	
		s and merges in NH-71	
	(Southern Bypass of Rohtak City) Km 8/7		
Connecting points	Connects Hissar Chungi, Bhiwani Chungi, Sunaria		
	Chowk and Jhajjar Chungi in Rohtak city		
EIRR	21.9		
Environment Categorization	E2		
No of Trees to be cut	111		
Social Categorization	S2		
Traffic	At present	Projected	
Traffic in reach 0/0 to 3/9 at Km 3	6701 PCU	15358 PCU	
Traffic in reach 3/9 to 8/7 at Km 4.8	15078 PCU 34558 PCU		
Cost per KM	Rs 6.78 Cr including LA, Rs. 6.26 Cr excluding LA		
Design Standards			
Design Speed	80 Km/Hour (In built up area 30 Km/Hour)		
Design Life	15 Years		
Capacity of Road	level of service (LOS) B corresponding to IRC 64		
Million Standard Axle	31.4		

E. Four Lanning of Jhajjar Farukhnagar Gurgaon Road in Jhajjar / Gurgaon Districts (Earlier 2 laning of the same road was also financed by NCRPB)

Length in Km	34.8 Km
Total Estimated Cost	Rs.290.84 Crores
Existing ROW	20.12 m
Proposed ROW	30.49 m in open areas & 45.73 m for two bypasses
Chainage	0/0 to 34/8
Land Acquisition	136.36 Acres
Land Acquisition Cost	Rs.88.63 Crores (Rs 65 Lacs/acre)
Proposal	Divided four lane with paved shoulders & two bypasses
	at Faruknagar & Chandu
Culverts proposed	42 box culverts, 10 minor bridges & 8 pipe culverts
Branching Km	Branching at 392/0 in Jhajjar of NH 71 & ending at 34/8
Connecting villages	Dadritoe, Yakubpur, Faruknagar, Chandu
EIRR	25.22
Environment Categorization	E1
No of Trees to be cut	343
Social Categorization	S2
Present Traffic at Km 38/100	16423 PCU

near toll plaza Dhancoat	
Projected traffic in 2030	37641 PCU
Cost per KM	Rs 8.35 Cr including LA, Rs. 5.81 Cr excluding LA
Design Standards	
Design Speed	80 Km/Hour (In built up area 30 Km/Hour)
Design Life	15 Years
Capacity of Road	level of service (LOS) B corresponding to IRC 64
Million Standard Axle	64

F. Improvement of Sanghi-Chhichhrana-Mirzapurkheri-Madina to GLMB Road Km 0.000 to 11.078 in Rohtak/ Sonepat District

0.000 to 11.078 in Rontak/ Sonepat District			
Length in Km	11.078 Km		
Estimated Cost	Rs.35.97 Crores		
Existing ROW	10 m		
Proposed ROW	16.76 m		
Chainage	0/000 to 11/078		
Land Acquisition	9.71 Acres		
Land Acquisition Cost	Rs.3.94 Crores (Rs 41 Lacs/acre)		
Proposal	Two lane with earthen shoulders		
Culverts proposed	35 box culverts, 1 minor bridge, 3 slab culverts, 5 pipe culverts		
Branching Km	Branching from Jasia to Sanghi road ODR which is connecting project road with NH 10 (3.5 Km from project road) and ends at SH 16A at RD 6.900 Km on GLMB road		
Connecting villages	Sanghi, Mirjapur Kheri, Chhichhrana, Madina		
EIRR	23.65		
Environment Category	E2		
No of Trees to be cut	114		
Social Categorization	S2		
Present Traffic	3200 PCU		
Projected traffic in 2030	7200 PCU		
Cost per KM	Rs 3.25 Cr including LA, Rs. 2.89 Cr excluding LA		
Design Standards			
Design Speed	65 Km/Hour (In built up area 30 Km/Hour)		
Design Life	10 Years		
Capacity of Road	level of service (LOS) B corresponding to IRC 64		
Million Standard Axle	10		

G. Various Roads in Rewari Division (Hailymandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71. Dahina Jatusana road)

to ramawas itir ri, Banma satasana readj						
	Hailymandi	to	Kosli-Guryani	to	Dahina	Jatusana
	Pahlawas road		Pahlawas NH-71		road	
Length in Km	12.65 Km		16.724 Km		16.43 Km	
Estimated Cost	Rs 20.46 Crores		Rs 59.44 Crores		Rs 24.58 C	rores
Existing ROW	13.41-20.12 m		20.12 m from 0/0	to	20.12 m	
_			7/4 & 13.41 m fro	m		
			7/4 to 16/724			

	Hailymandi to Pahlawas road	Kosli-Guryani to Pahlawas NH-71	Dahina Jatusana road
Proposed ROW	13.41 m	20.12 m	20.12 m
Chainage	km 0/0 to 12/650	km 0/0 to 16/724	km 0/0 to 16/43
Land	Nil	22.91 Acres	Nil
Acquisition			
Land Acquisition	Nil	Rs 15.87 Crores (Rs 69 Lacs/acre)	Nil
Cost	Two long with contless	Tura lama usida	Two long with power
Proposal	Two lane with earthen shoulders	Two lane with earthen shoulders	Two lane with paved shoulders
Culverts proposed	31 pipe culverts & 13 Box culverts	41 pipe culverts & 8 Box culverts	41 culverts
Branching Km	Branching at 84.800 Km (From Pataudi to Kaluna,) & joining km is 420.16 km (Jhajjar to Rewari road, NH- 71)	Branching at 56.58 Km (Jhajjar to Kanina, SH-22) & joining km is 420.16 km (Jhajjar to Rewari road, NH-71)	Branching at 22.200 Km (From Rewari – Mohindergarh road, SH-24) & joining km is 9.500 km (Rewari Kosli road, ODR)
Connecting villages	Hailymandi to Pahlawas via Jatauli ,Rajpura, Gudhana ,Chowki No.1, Jeewra	The road will connect on one side to Jhajjar, Rohtak, Pataudi and Gurgaon Delhi road and on the other side to Rewari, Dahina, Jatusana and Mohindergarh	Connects with NH-71 & then Pataudi- Gurgaon road from Pahlawas
EIRR	25.21	19	19.70
Environment	E 2	E 2	E 2
Trees to be cut	Nil	2545	Nil
Social category	S 2	S 2	S 2
Present Traffic	1581 PCU	4560 PCU (2015)	5926 PCU
Projected traffic in 2030	5030 PCU	13494 PCU	18851 PCU
Cost per KM	Rs 1.62 Cr	Rs 3.55 Cr including LA, Rs. 2.61 Cr excluding LA	Rs 1.49 Cr
Design Standar	ds		
Design Speed	65 Km/Hour (In built up	area 30 Km/Hour)	
Design Life	15 Years	15 Years	15 Years
Road Capacity	LOS B as per IRC 64	LOS B as per IRC 64	LOS B as per IRC 64

Project Cost & Financing

PWD (B&R), Haryana is the implementing agency for all the seven projects. The component-wise break up of cost estimate for each of the project is as presented below:-

A. Construction of Chhuchhakwas Bypass

S. No	Description	Estimated Cost
		(Rs. in Cr.)
Α	Site Clearance	0.07
В	Earthwork	5.11
С	Sub base & Base Course	5.94
D	Bituminous Course	12.16
Е	Drainage and Cross Drainage works	3.45
F	Traffic safety & Road Appurtenances	0.57
G	Miscellaneous	0.06
Н	Construction cost (A+B+C+D+E+F+G)	27.36
	Forest Clearance	0.10
J	Subtotal	27.46
K	Contingency charges @ 0.25 % on H	0.07
L	Supervision & Quality Control Charges @ 2% on H	0.55
М	Grand Total	28.08
N	Financial Progress in Current Year @ 40% of M	11.23
0	Financial Progress in Next Year @ 60% of M	16.85
Р	Price Escalation @ 6% for next year of O	1.01
Q	Total cost including price escalation (M+P)	29.09
R	Land Acquisition	23.69
S	Implementation of ESMS @ 1% of construction cost H	0.27
Т	Grand Total including price escalation & land acquisition	53.05

The total estimated cost of the project amounting to Rs. 53.05 Crores is proposed to be met as under:

Loan amount from NCRPB @ 75%	39.79 Crores
Govt. of Haryana, PWD (B&R), Haryana Share @ 25%	13.26 Crores

B. Construction of Chhara Bypass (Southern side)

S. No	Description	Estimated Cost
		(Rs. in Cr.)
Α	Site Clearance	0.03
В	Earthwork	1.96
С	Sub base & Base Course	2.99
D	Bituminous Course	5.50
Е	Drainage and Cross Drainage works	4.19
F	Traffic safety & Road Appurtenances	0.24
G	Miscellaneous	.01
Н	Construction cost (A+B+C+D+E+F+G)	14.93
I	Forest Clearance & afforestation	0.05
J	Subtotal	14.98
K	Contingency charges @ 0.25 % of H	0.04
L	Supervision & Quality Control Charges @ 2% of H	0.30

S. No	Description	Estimated Cost
		(Rs. in Cr.)
M	Grand Total	15.32
N	Financial Progress in Current Year @ 40% of M	6.13
0	Financial Progress in Next Year 2, 60% of M	9.19
Р	Price Escalation at 6% for next year of O	0.55
Q	Total cost including price escalation (M+P)	15.87
R	Land Acquisition	10.87
S	Implementation of ESMS @ 1% of Construction cost H	0.15
Т	Grand Total including price escalation & land acquisition	26.89

The total estimated cost of the project amounting to Rs. 26.89 Crores is proposed to be met as under:

Loan amount from NCRPB @ 75%	20.16 Crores
Govt. of Haryana, PWD (B&R), Haryana Share @ 25%	6.73 Crores

C. Improvements/construction of Sonepat Bypass Phase-II from Sonepat Ganaur to Sonepat Gohana Road

S. No	Description	Estimated Cost
	•	(Rs. in Cr.)
Α	Site Clearance	0.06
В	Earthwork	1.78
С	Sub base & base Course	5.19
D	Bituminous Course	9.05
Е	Drainage and Cross Drainage Works	3.74
F	Traffic Safety & Road Appurtenances	0.23
G	Miscellaneous	1.02
Н	Total Construction Cost (A+B+C+D+E+F+G)	21.07
I	Contingency @ 0.25% of construction cost H	0.05
J	Quality control and Supervision charges @ 2% of H	0.42
K	Implementation of ESMS @ 1% of H	0.21
L	Cost with contingency & supervision	21.75
M	Financial progress in 1st year @ 40% of L	8.7
N	Financial progress in 2nd year @ 60% of L	13.05
0	Price Escalation @ 6% for 2 nd Year of N	0.78
Р	Total including price escalation (L+O)	22.53
Q	Cost of Land acquisition 37.77 acres @1.10 Crores/acre	41.52
R	Total cost with land Acquisition (P+Q)	64.05
S	Cost of ROB	25.45
Т	Grand Total with ROB & land (R+T)	89.50

The total estimated cost of the project amounting to Rs. 89.50 Crores is proposed to be met as under:

Loan amount from NCRPB @ 75%	Rs 67.13 Crores
Govt. of Haryana, PWD (B&R), Haryana Share @ 25%	Rs 22.37 Crores

<u>D. Construction of road from Junction of NH-10 & NH-71 (Southern Bypass in Rohtak District)</u>

S. No	Description	Estimated Cost
		(Rs. in Cr.)
Α	Site Clearance	0.05
В	Earthwork	3.70
С	Sub base & Base Course	5.87
D	Bituminous Course	11.53
Е	Drainage and Cross Drainage works	15.73
F	Traffic safety & Road Appurtenances	0.41
G	Miscellaneous	7.98
Н	Credit of Reclaimed Material	-2.64
I	Construction cost (A+B+C+D+E+F+G-H)	42.63
J	Forest Clearance & afforestation	1.07
K	ESMS monitoring & implementation @ 1% of construction, I	0.43
L	Shifting of Electric/Telephone Pole/Water Supply Pipe Lines	2.25
М	Subtotal	46.38
N	Contingency charges @ 0.25 % of I	0.11
0	Supervision & Quality Control Charges @ 2% of I	0.93
Р	Subtotal with contingency & supervision	47.42
Q	Financial Progress in Current Year @ 40% of P	18.97
R	Financial Progress in Next Year @ 60% of P	28.45
S	Price Escalation at 6% for next year of R	1.71
	Total cost including price escalation but excluding land	49.13
Т	(P+S)	
U	Land Acquisition 8.7 Acre @ 47 Lacs per acre	4.12
	Grand total including Price escalation & land Acquisition	53.25
V	(T+U)	

The total estimated cost of the project amounting to Rs. 53.25 Cr. is proposed to be met as under:-

Loan amount from NCRPB @ 75%	Rs 39.94 Crores
Govt. of Haryana, PWD (B&R), Haryana Share @25%	Rs 13.31 Crores

E. Four Lanning of Jhajjar Farukhnagar Gurgaon Road in Jhajjar / Gurgaon Districts

S. No	Description	Estimated Cost (Rs. in Cr.)
Α	Site Clearance	1.44
В	Earthwork	17.65
С	Sub base & Base Course	27.70
D	Bituminous Course	85.04

S. No	Description	Estimated Cost
		(Rs. in Cr.)
Е	Cement Concrete Pavement	1.09
F	Drainage and Cross Drainage works	28.48
G	Traffic safety & Road Appurtenances	3.46
Н	Miscellaneous	1.01
I	Construction cost (A+B+C+D+E+F+G+H)	165.87
J	Forest Clearance & afforestation	1.66
K	ESMS monitoring & implementation @ 1% of I	1.66
L	Removal of Electric-Telephone Pole/Water Supply Pipe Lines	21.68
М	Subtotal	190.87
N	Contingency charges @ 0.25 % of I	0.48
0	Supervision & Quality Control Charges @ 2% of I	3.82
Р	Grand Total	195.17
Q	Financial Progress in Current Year @ 40% of P	78.07
R	Financial Progress in Next Year @ 60% of P	117.11
S	Price Escalation at 6% for next year of R	7.03
Т	Total cost including price escalation (P+S)	202.21
U	Land Acquisition	88.63
	Grand Total including price escalation & land acquisition	290.84
V	(T+U)	

The total estimated cost of the project amounting to Rs. 290.84 Crores is proposed to be met as under:

Loan amount from NCRPB @ 75%	Rs 218.13 Crores	
Govt. of Haryana, PWD (B&R), Haryana Share @ 25%	Rs 72.71 Crores	

F. Improvement of Sanghi-Chhichhrana-Mirzapurkheri-Madina to GLMB Road Km 0.000 to 11.078 in Rohtak/ Sonepat district of Haryana State

S. No	Description	Estimated Cost	
		(Rs. in Cr.)	
Α	Site clearance and dismantling (Excluding Tree Cutting)	0.30	
В	Earth work	1.04	
С	Granular base course and Sub-base	3.45	
D	Bituminous Work	5.07	
Е	Rigid Pavement	7.02	
F	Bridges, Culverts, Drain, Retaining Wall etc.	10.70	
G	Traffic Signs Marking And Other Appurtenances	0.39	
Н	Junction, Bus lay By & Truck Lay By	0.31	
	Pedestrian Facilities	0.25	
J	Construction Cost (A+B+C+D+E+F+G+H+I)	28.53	
K	Contingency charges @0.25% on Construction cost J	0.07	
L	Supervision & Quality Control Charges @ 2% of J	0.57	
М	Shifting utilities	1.43	
N	Implementation of ESMS of J	0.28	

S. No	Description	Estimated Cost (Rs. in Cr.)
0	Total	30.92
Р	Financial progress in Current Year@ 40% of O	12.37
Q	Financial progress in Current Year@ 60% of O	18.55
R	Price Escalation @6% for next year of Q	1.11
S	Total cost including price escalation (O+R)	32.03
Т	Land Acquisition	3.94
	Grand Total including price escalation & land	35.97
U	acquisition (S+T)	

The total estimated cost of the project amounting to Rs. 35.97 Crores is proposed to be met as under:

Loan amount from NCRPB @ 75%	Rs 26.98 Crores	
Govt. of Haryana, PWD (B&R), Haryana Share @ 25%	Rs 8.99 Crores	

G. Various Roads in Rewari Division (Hailymandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71, Dahina Jatusana road)

S No	Description	Estimated Cost (Rs. in Cr.)			
		Hailymandi-	Kosli-Guriyani-	Dahina-	
		Pahlawas	Pahlawas	Jatusana	
A.	Cost of road work	14.41	36.78	18.58	
B.	Cost of Box type culverts	1.81	0.96	0.86	
C.	Cost of Hume pipe culverts	0.72	0.88	1.05	
D.	Cost of Diversion	2.11	2.07	2.40	
E.	Cost of Dismantling of existing				
	culverts	0.04	0.00	0.04	
F.	Total (A+B+C+D+E)	19.10	40.69	22.93	
G.	Surveying, investigations & DPR	0.03	0.05	0.05	
H.	Contingency @0.25% on F	0.05	0.10	0.06	
I.	Supervision charges @ 2% on F	0.38	0.81	0.46	
J.	Implementation of ESMS @ 1% on F	0.19	0.41	0.23	
K.	Total Cost (F+G+H+I)	19.75	42.06	23.73	
L	Financial progress in 1st year @ 40%	7.90	16.82	9.49	
М	Financial progress in 2 nd year @ 60%	11.85	25.24	14.24	
N	Price escalation for 2 nd year @ 6%	0.71	1.51	0.85	
0	Total (K+N)	20.46	43.57	24.58	
Р	Land Acquisition	0.00	15.87	0.00	
Q	Grand Total (O+P)	20.46	59.44	24.58	
R	Cost of three Roads (Rs. in Crores)		104.48		

The total estimated cost of the project amounting to Rs. 104.48 Cr. is proposed to be met as under:

Loan amount from NCRPB @ 75%	Rs 78.36 Crores
Govt. of Haryana, PWD (B&R), Haryana Share @25%	Rs 26.12 Crores

Drawl Schedule and Sharing Pattern

The target duration of completion for all the projects has been taken as 24 months from the date of issue of loan sanction letter. PWD (B&R) Haryana shall be implementing the project through financial assistance from NCRPB as per the following phasing & schedule:-

A. Construction of Chhuchhakwas Bypass						
	Rs. In Cro					
Year	Year Loan from Contribution from Tenure Moratorium					
	NCRPB	State Govt.	of Loan	period	expenditure	
2013-14	15.92	5.30	10 years	2 years	21.22	
2014-15	23.87	7.96	9 years	1 years	31.83	
Total	39.79	13.26			53.05	

B. Construction of Chhara Bypass (Southern side)						
	Rs. In Cror					
Year	Year Loan from Contribution from Tenure Moratorium					
	NCRPB	State Govt.	of Loan	period	expenditure	
2013-14	8.06	2.70	10	2	10.76	
2014-15	12.10	4.03	9	1	16.13	
Total	20.16	6.73			26.89	

C. Improvements/construction of Sonepat Bypass Phase-II from Sonepat Ganaur to Sonepat Gohana Road						
	Rs. In Crores					
Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure	
2013-14	26.85	8.95	10	2	35.80	
2014-15	40.28	13.42	9	1	53.70	
Total	67.13	22.37			89.50	

D. Construction of road from Junction of NH-10 & NH-71 (Southern Bypass in Rohtak District)							
	Rs. In Crores						
Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure		
2013-14	15.98	5.32	10	2	21.30		
2014-15	23.96	7.99	9	1	31.95		
Total	39.94	13.31			53.25		

E. Four Lanning of Jhajjar Farukhnagar Gurgaon Road in Jhajjar/Gurgaon Distt.							
	Rs. In Crores						
Year Loan from Contribution from Tenure Moratorium Phasing o							
	NCRPB	State Govt.	of Loan	period	expenditure		
2013-14	87.26	29.09	10	2	116.35		
2014-15	130.87	43.62	9	1	174.49		
Total	218.13	72.71			290.84		

F. Improvement of Sanghi-Chhichhrana-Mirzapurkheri-Madina to GLMB Road Km 0.000 to 11.078 in Rohtak/ Sonepat district Rs. In Crores Year Loan from Contribution from Tenure Moratorium Phasing of expenditure **NCRPB** State Govt. of Loan period 10.79 14.39 2013-14 3.60 10 2 2014-15 16.19 5.39 9 1 21.58 26.98 35.97 Total 8.99

G. Various Roads in Rewari Division (Hailymandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71, Dahina Jatusana road)						
	Rs. In Crores					
Year Loan from Contribution from Tenure Moratorium Phasi NCRPB State Govt. of Loan period expense.						
2013-14	31.34	10.45	10	2	41.79	
2014-15	47.02	15.67	9	1	62.69	
Total	78.36	26.12			104.48	

Appraisal of DPR

Technical, financial, environmental & social appraisal of the project reports have been done by the Project Management Consultancy Services (PMCS) available at NCRPB. The original reports submitted by the PWD (B&R), Haryana have been revised based on observations raised during appraisal. Final Revised DPRs submitted by the PWD (B&R), Haryana have been found to be in order. The cost estimates have also been found to be reasonable. As no tolls are proposed to be levied, the O&M expenses have to be met out of the PWD's budget only. The environmental examination report and social resettlement report are under revision although indicative cost for the same has been included in the estimated project cost.

Justification for Proposed Roads: In Haryana, in spite of large scale expansion of road network, the road length per 100 Sq. Km is only 84.67 Km against the all India average of 55.87 Km & Delhi average of 1999 Km. Population coverage of Haryana's road network is only 148.13 Km/lakh population against the all India average of 292.62 Km/lakh population whereas the number of vehicles per lakh population in Haryana is 14599 against the all India average of 8712. Thus there is a general need for further expansion of the road transport infrastructure in Haryana. (*Reference: Ministry of Surface transport, Government of India New Delhi in the year 2010-11*)

The proposed roads are important roads for the NCR region as some of these are by passes to towns and others connect important towns of Haryana state. These roads are important alternate route for non-destined vehicle to Delhi. There is a huge requirement of construction material in the area and all the construction material is being transported from these roads. The roads, however, are in need of improvement not only for current usage but also to cater to the future needs. Further, as per orders of Hon'ble Supreme Court of India, non-destined heavy traffic to Delhi is banned and accordingly, such traffic is to be provided with alternative corridors for movement and these roads serve the purpose and provide an alternate corridor. These roads are significant section of road network in the region and are of vital importance for achieving the objective of improving connectivity and accessibility apart from other social and economic benefits.

Point for Decision

It is proposed that loan assistance for various roads may be approved as per project details at **Appendix-5.2 A to G** which are summarized below:

- 1. It is proposed that loan assistance of Rs.39.79 Cr. for the project for "Construction of Chhuchhakwas Bypass, Jhajjar" may be approved for PWD (B&R), Haryana as per project details/loan schedule at Appendix-5.2 A.
- 2. It is proposed that loan assistance of **Rs. 20.16 Cr.** for the project for "Construction of Chhara Bypass (Southern Side), Jhajjar" may be approved for PWD (B&R), Haryana as per project details/loan schedule at **Appendix-5.2 B**.
- 3. It is proposed that loan assistance of **Rs. 67.13 Cr.** for the project for "Improvement / Construction of Sonepat bypass Phase-II from Sonepat Ganaur road to Sonipat Gohana road" may be approved for PWD (B&R), Haryana as per project details/loan schedule at **Appendix-5.2 C**.
- 4. It is proposed that loan assistance of **Rs. 39.94 Cr.** for the project for "Construction of Road from NH-10 to NH-71 at southern ByPass in Rohtak district" may be approved for PWD (B&R), Haryana as per project details/loan schedule at **Appendix-5.2 D**.
- 5. It is proposed that loan assistance of **Rs. 218.13 Cr.** for the project for "Four lanning of Jhajjar Farukhnagar-Gurgaon road in Jhajjar/Gurgaon district" may be approved for PWD (B&R), Haryana as per project details/loan schedule at **Appendix-5.2 E**.
- 6. It is proposed that loan assistance of **Rs. 26.98 Cr.** for the project for "Improvement of Sanghi Chhichhrana Mirjapurkheri-Madina to GLMB road km. 0.00 to 11.078 in Rohtak / Sonipat district of Haryana State" may be approved for PWD (B&R), Haryana as per project details/loan schedule at **Appendix-5.2 F**.
- 7. It is proposed that loan assistance of **Rs. 78.36 Cr.** for the project for "various roads in Rewari Division Hailymandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71, Dahina Jatusana road" may be approved for PWD (B&R), Haryana as per project details/loan schedule at **Appendix-5.2 G**.

The loan will be released in two installments for all the projects and will carry an interest rate as applicable for basic infrastructure project on the date of release of installment. The present rate is 7.5% p.a. The principal along with interest is to be repaid in 10 years with a moratorium period of 2 years for principal. The project is to be completed in 2 years from date of issue of sanction letter. The project is being proposed for funding under the ADB /

KFW / NCRPB line of credit and accordingly necessary procedures as applicable shall be followed by PWD (B&R), Haryana. The loan will be subject to Govt. of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. In addition the loan release shall be subject to following;

- Land should be in possession of PWD (B&R), Haryana before physical commencement of work.
- Approvals & clearances from Forest Department, Wildlife Authority & MOEF, where applicable, shall be obtained before award of work.
- The Environment Management Plan (EMP) along with the relevant mitigation measures
 provided in the IEE/EIA reports will be part of the bid document for implementation
 during the construction period.
- A Social Impact Assessment identifying all project affected person (PAP) and assessing the impacts & mitigation measures shall be prepared & implemented as per NCRPB ESMS. If there is any increase in fund requirement of R&R then PWD (B&R), Haryana will provide additional funds to implement R&R.

APPENDIX - 5.2 A

I. General Particulars

1	Project	Construction of Chhuchhakwas Bypass in Jhajjar district			
2	Type of project Infrastructure Transport construction of road				
3	Whether a project at the same location has been earlier financed by NCRPB	No			
4	Location	Branching from SH 20 Sampla Jhajjar at 88/8 Km & Crosses Jhajjar-Achej road, Dadri road, Matanhaili road & Kosli road and ending at Jhajjar Chuchakwas road			
5	Borrowing agency	Haryana Government			
6	Implementing agency	Haryana State Roads and Bridge Development Corporation Ltd. (PWD (B&R), Haryana)			
7	Length	6.875 km.			
8	Land Acquisition	30 m wide in 6.875 Km length as it is new by pass			

II. Financial features

9	Estimated total cost of project	Rs. 53.05 Crores	
10	Loan from NCRPB	Rs. 39.79 Crores	
10	LUAITIIUIII NCRFD		
11	Interest rate	As applicable at the time of loan disbursement.	
12	Provision in State Budget of	To be provided by Govt. of Haryana in the budget	
	Principal & interest	of corresponding financial year.	
13	Other sources of funds	Haryana State Government Rs 13.26 Crores	
14	Tenure of loan	10 years 2 year Moratorium period	
15	Provision of State Govt.	Not required as loan to be given to State Govt.	
	Guarantee		
16	Other Security proposed	Letter of comfort from Govt. of Haryana along wit	
		Loan Agreement.	
17	Stipulated date of completion	24 months from the issue of sanction letter	

(Rs. In Crores)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2013-14	15.92	5.30	10 yrs	2 yrs	21.22
2014-15	23.87	7.96	9 yrs	1 yr	31.83
Total	39.79	13.26			53.05

APPENDIX - 5.2 B

I. General Particulars

1	Project	Construction of Chhara Bypass Southern side in Jhajjar district
2	Type of project	Infrastructure Transport construction of new bypass
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Location	This bypass starts from SH-20 (Sampla Jhajjar Road Km. 56.050) towards Jhajjar and ends on Bahadurgarh Chhara Kalanaur Road (Km. 19.300) towards Bahadurgarh.
5	Borrowing agency	Haryana Government
6	Implementing agency	PWD (B&R), Haryana
7	Length	3.160 km
8	land acquisition	New bypass requires land acquisition for 23.43 acres in width of 30 m which is proposed ROW

II. Financial features

	i illaliciai icatales	
9	Estimated total cost of project	Rs. 26.89 Crores
10	Loan from NCRPB	Rs. 20.16 Crores
11	Interest rate	As applicable at the time of loan disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	Other sources of funds	Haryana State Government Rs 6.73 Crores
14	Tenure of loan	10 years 2 year Moratorium period
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with Loan Agreement.
17	Stipulated date of completion	24 months from the issue of sanction letter

(Rs. In Crores)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2013-14	8.06	2.70	10yrs	2 yrs	10.76
2014-15	12.10	4.03	9 yrs	1 yr	16.13
Total	20.16	6.73			26.89

APPENDIX - 5.2 C

I. General Particulars

1	Project	Sonepat Bypass Phase-II from Sonepat Ganaur Road to Sonepat Gohana Road km 0/0 to 4/735			
2	Type of project	Infrastructure Transport Up gradation of roads			
3	Whether a project at the same location has been earlier financed by NCRPB	No			
4	Location	The project corridor branching Km from by-pass 6/680 km of proposed under construction Sonepat by-pass phase-II, crossing Sonepat Purkhas road and Sonepat Gohana road, joining at km 41/762 of Delhi-Khanpur-Panipat road			
5	Borrowing agency	Haryana Government			
6	Implementing agency	PWD (B&R), Haryana			
7	Length	4.735 km.			
8	Land availability	New bypass of 30.175m width and 37.77 acres of land to be acquired			

II. Financial features

9	Estimated total cost of project	Rs 89.50 Crores		
10	Loan from NCRPB	Rs 67.13 Crores		
11	Interest rate	As applicable at the time of loan disbursement.		
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.		
13	Other sources of funds	Haryana State Government Rs 22.37 Crores		
14	Tenure of loan	10 years with 2 year Moratorium period		
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.		
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with Loan Agreement.		
17	Stipulated date of completion	24 months from the issue of sanction letter		

(Rs. In Crores)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2013-14	26.85	8.95	10 yrs	2 yrs	35.80
2014-15	40.28	13.42	9 yrs	1 yr	53.70
Total	67.13	22.37			89.50

APPENDIX - 5.2 D

I. General Particulars

1	Project	NH-10 to NH-71 Southern Bypass in Rohtak district			
2	Type of project	Infrastructure–Transportation (Up gradation of Roads)			
3	Whether a project at the same location has been earlier financed by NCRPB	No No			
4	Location	The project road starts from NH-10 in Rohtak City at RD 0/850 and ends and merge in NH-71 (Southern Bypass of Rohtak City) Km 8/700 in the Rohtak city			
5	Borrowing agency	Haryana Government			
6	Implementing agency	PWD (B&R), Haryana			
7	Length	7.85 km.			
8	Land availability & land acquisition	The additional land is proposed to be acquired in Km 6/0 to 7/4 for a width of 40.24m against the existing ROW of 20.12m. The land to be acquired is 8.7 acres.			

II. Financial Particulars

9	Estimated total cost of project	Rs. 53.25 Crores
10	Loan from NCRPB	Rs. 39.94 Crores
11	Interest rate	As applicable at the time of loan disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	State Government of Haryana funds	Rs. 13.31 Crores
14	Tenure of loan	10 years with 2 year Moratorium period
15	Provision of State Govt. Guarantee	Not required as loan is to be given to State Govt.
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with Loan Agreement.
17	Stipulated date of completion	24 months from the issue of sanction letter

Year	Loan from	Contribution	Tenure	Moratorium	Phasing of
	NCRPB	from State Govt.	of Loan	period	expenditure
2013-14	15.98	5.32	10 yrs	2 yrs	21.30
2014-15	23.96	7.99	9 yrs	1 yr	31.95
Total	39.94	13.31			53.25

APPENDIX - 5.2 E

I. General Particulars

1	Project	Up gradation by Four Lanning Jhajjar- Farukhnagar - Gurgaon road in Jhajjar and Gurgaon districts		
2	Type of project	Infrastructure Transport Up gradation of roads		
3	Whether a project at the same location has been earlier financed by NCRPB	Yes (for 2 laning of the road)		
4	Location	Road branching from Jhajjar and joining at Gurgaon passing through Faruknagar and Chandu		
5	Borrowing agency	Haryana Government		
6	Implementing agency	PWD (B&R), Haryana		
7	Length	34.8 km.		
8	Land availability & land acquisition	Existing ROW is 20.12m. Acquisition for 30.49m in open areas against existing 20.12 m and 45.73 m for by passes totaling to 136.36 acres.		

II. Financial features

9	Estimated cost of project	Rs. 290.84 Crores	
10	Loan from NCRPB	Rs. 218.13 Crores	
11	Interest rate	As applicable at the time of loan disbursement.	
12	Provision in State Budget of	To be provided by Govt. of Haryana in the budget of	
	Principal & interest	corresponding financial year.	
13	Other sources of funds	Haryana State Government Rs 72.71 Crores	
14	Tenure of loan	10 years 2 year Moratorium period	
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.	
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with Loan Agreement.	
17	Stipulated date of completion	24 months from the issue of sanction letter	

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2013-14	87.25	29.08	10 yrs	2 yrs	116.34
2014-15	130.88	43.63	9 yrs	1 yr	174.50
Total	218.13	72.71			290.84

APPENDIX - 5.2 F

I. General Particulars

1	Project	Improvement of Sanghi - Chhichhrana - Mirzapurkheri - Madina to GLMB Road Km 0.000 to 11.078 in Rohtak/Sonepat District of Haryana State		
2	Type of project	Infrastructure Transport Up gradation of roads		
3	Whether a project at the same location has been earlier financed by NCRPB	No		
4	Location	Branching from Jasia to Sanghi road ODR which is connecting project road with NH 10 (3.5 Km from project road) and ends at SH 16A at RD 6.900 Km i.e. GLMB road		
5	Borrowing agency	Haryana Government		
6	Implementing agency	PWD (B&R), Haryana		
7	Length	11.078 km.		
8	Land availability & land acquisition	Available ROW is 10 m & proposed ROW is 16.76 m involving 9.71 land acres acquisition.		

II. Financial features

9	Estimated cost of project	Rs. 35.97 Crores		
10	Loan from NCRPB	Rs. 26.98 Crores		
11	Interest rate	As applicable at the time of loan disbursement.		
12	Provision in State Budget of	To be provided by Govt. of Haryana in the budget of		
	Principal & interest	corresponding financial year.		
13	Other sources of funds	Haryana State Government Rs 8.99 Crores		
14	Tenure of loan	10 years 2 year Moratorium period		
15	Provision of State Govt.	Not required as loan to be given to State Govt.		
	Guarantee	-		
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with		
		Loan Agreement.		
17	Stipulated date of	24 months from the issue of sanction letter		
	completion			

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2013-14	10.79	3.60	10 yrs	2 yrs	14.39
2014-15	16.19	5.39	9 yrs	1 yr	21.58
Total	26.98	8.99			35.97

APPENDIX - 5.2 G

I. General Particulars

1	Project	Up gradation of 3 roads i) Hailymandi-Pahlawas, ii) Kosli-Guriyani-Pahlawas –NH71 and iii) Dahina-Jatusana in Rewari district roads
2	Type of project	Road Improvement (Infrastructure)
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Location	Hailymandi-Pahlawas: Branching at 84.800 Km (From Pataudi to Kaluna,) & joining km is 420.16 km (Jhajjar to Rewari road, NH-71) Kosli-Guriyani-Pahlawas: Branching at NH71: 56.58 Km (Jhajjar to Kanina, SH-22) & joining km is 420.16 km (Jhajjar to Rewari road, NH-71) Dahina-Jatusana: Branching at 22.200 Km (From Rewari – Mohindergarh road, SH-24) & joining km is 9.500 km (Rewari Kosli road, ODR)
5	Borrowing agency	Haryana Government
6	Implementing agency	PWD (B&R), Haryana
7	Length	45.792 km.
8	Land Acquisition	22.91 acre on Kosli-Guriyani-Pahlawas road

II. Financial features

9	Estimated total cost of project	Rs. 104.48 Cr.				
10	Loan from NCRPB	Rs 78.36 Cr				
11	Interest rate	As applicable at the time of loan disbursement.				
12	Provision in State Budget of	To be provided by Govt. of Haryana in the budget				
	Principal & interest	of corresponding financial year.				
13	Other sources of funds	Rs 26.12 Cr by State Government				
14	Tenure of loan	10 years & years moratorium				
15	Provision of State Govt.	Not required as loan to be given to State Govt.				
	Guarantee					
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with				
		Loan Agreement.				
17	Stipulated date of completion	24 months from the issue of sanction letter				

Year	Loan from NCRPB			Moratorium period	Phasing of expenditure
2013-14	31.34	10.45	10 yrs	2 yrs	41.79
2014-15	47.02	15.67	9 yrs	1 yr	62.69
Total	78.36	26.12			104.48

Agenda Item No. 6: Review of Projects financed by the NCR Planning Board

As on date, the Board has provided financial assistance to **283** infrastructure development projects with an estimated cost of Rs. **18997** Crore, out of which an amount of Rs. **8702** Crore has been sanctioned as loan. The Board has released a loan amount of Rs. **6774** Crore till December, 2013. The sector wise break up of estimated cost of projects and the loans sanctioned by the NCRPB are shown in Figure 1 and Figure 2 below, respectively.

Figure 1

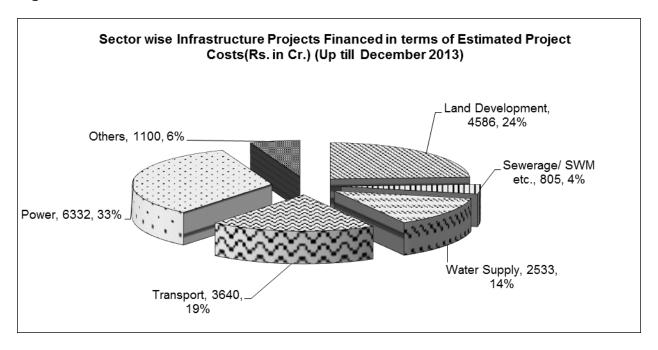
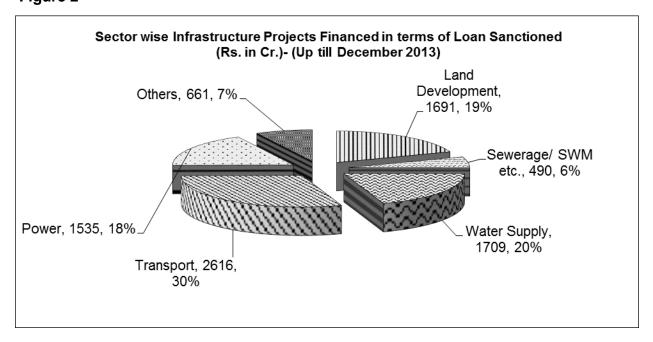


Figure 2



Out of **283** projects for which loans have been sanctioned by the Board, **204** projects have been completed and balance **79** are at various stages of implementation. State-wise analysis of **79** ongoing projects is as under:-

Project Description	Haryana	Uttar Pradesh	Rajasthan	Punjab	Madhya Pradesh	Total
Delayed						
Delayed > 1 Year	11	2	-	-	-	13
Delayed from 6-12 Months	2	1	-	-	-	3
Delayed < 6 Months	7	-	1	-	-	8
Ongoing Within Sanctioned Time	24	5	6	-	2	37
Reported Completed						
Completion Certificate Received	10	-	-	-	-	10
Completion Certificate/Clarification Awaited	6	-	1	1	-	8
Total	60	8	8	1	2	79

• 10 of the ongoing projects have been reported as completed and Completion Certificates received (List at **Appendix-II**). Another 8 have though reported completed but are yet to submit the necessary Completion Certificates (List at **Appendix-III**).

Point for Decision

- 10 projects have been reported completed and completion certificates received since last PSMG. The 10 projects may be shifted to List of Completed projects.
- Out of 13 projects delayed by more than year (including those where extensions were granted and have expired), 6 have sought fresh extensions (highlighted at Appendix-I). This is a matter of concern and the States/agencies need to take necessary steps to avoid any further delays in these projects. The reasons for delay may be looked into and actions may be taken to avoid such delays.
- The respective agencies need to expedite submission of the completion certificates and related clarifications for the 8 projects that have been reported completed pending submission of completion certificates. They may ensure that the assets proposed under the project have been actually created and are functional on ground as envisaged.

Appendix-I

Ongoing Projects - ongoing but delayed by more than a year from original/revised date of completion

Project Description	Haryana	Uttar Pradesh	Total
Delayed more than 1 Year	11	2	13

(Rs. in Cr)

S.No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original completion Date / revised date	Estimated cost	Loan Sanctioned	Loan released	Reported Expenditure
	Haryana Sub region								
1.	IInd water works newly developed area in western side of Rewari town, dist. Rewari*	Water Supply	PHED	Oct-07	Oct-10	16.65	12.49	9.99	17.18
2.	Augmentation of rural drinking water supply for Mewat region- Phase- I, Haryana with variations *	Water Supply	PHED	Nov 04 and Nov 09	Dec-07/ Nov-12	300.49	225.36	217.59	300.18
3.	Extension of sewerage system and treatment of sewage in Ganaur*	Sewerage.	PHED	Feb-08	Mar-11/ Mar- 12	15.08	11.31	11.31	17.37
4.	Development of Sewerage System and Construction of two STPs at Rohtak town. *	Sewerage.	PHED	Feb-06	Feb-09/ Feb 10/Mar 12	44.25	33.20	33.20	57.73
5.	Scheme for HVDS/LVDS & Reallocation of meters under DHBVN in NCR *	Power	DHBVN	Nov-08	Nov-10/ Dec- 11	138.47	103.85	103.85	146.90
6.	Improvement & Upgradation of Sub transmission of distribution	Power	DHBVN	Nov-08	Oct-10	40.01	30.01	16.50	23.39

(Rs. in Cr)

S.No.	Name of the Projects	Type of	Implementing	Date of	Original completion	Estimated	Loan	Loan	Reported
		Project	Agency	sanction	Date / revised date	cost	Sanctioned	released	Expenditure
	network, Hisar *								
7.	Establishment of								
	Technical Institutions at Rohtak*	Social	DTE, GoH	May-10	Mar-12	197.00	67.50	50.00	175.42
8.	Construction of Medical College with Teaching Hospital at Nalhar, Mewat	Social	Health Dept., Haryana	Jun-09	Jul-11	318.91	239.18	227.54	342.00
9.	Development of Industrial Zone Sector 34-35, Gurgaon	Land Devt.	HSIDC	Sep-05	Mar-09/ Mar- 10	366.65	86.00	86.00	141.35
10.	Scheme for strengthening power infrastructure in NCR area of Haryana – Augmentation of	Power	HVPN	Nov-08	Nov-09/ Sep-12	79.43	59.58	59.58	48.26
	Transmission Works*								
11.	Project for creating power infrastructure in Haryana	POWER	HVPN	Jul-07	Nov-10/	117.45	82.01	82.01	107.32
	subregion of NCR *				Sep-12				
	U.P. Sub region								
12.	Anand Vihar Housing Scheme at Hapur	Land Devt.	HPDA	Dec-07	Mar-11	178.40	133.80	50.00	193.20
13.	Transport Nagar Scheme, Bulandshahr	Transport	BKDA	Nov-04	Mar-08	33.71	20.65	17.79	64.14

^{*} Fresh extensions requested and taken up at Agenda Item No. 6.1.

Appendix-II

Projects Reported Completed & Completion Certificate Received

Following projects have been reported completed through completion certificates by respective agencies:-

Project Description	Haryana	Total
Completion Certificate Received	10	10

(Rs. in Cr.)

S.No.	Name of the Projects	Type of Project	Imple- menting Agency	Date of sanction	Original Date of complet- ion/ revised date	Estimate d cost	Loan Sanction ed	Loan released	Final Expenditure
	Haryana Sub Region								
1.	Providing sewerage system and STP for Samalkha Town, Haryana	SEWERA GE/swm/ drng.	PHED	Feb-06	Feb-09/ Feb 10/ Sep 12	8.10	6.08	5.68	8.00
2.	Providing Master Water Supply Scheme of distribution main Zone-3 (Ph-III) Urban Estate, Gurgaon	WATER SUPPLY	HUDA	Sep-02	Mar-05/ Mar-08	23.80	17.85	1.50	23.82
3.	Construction of 200 bedded hospital in Sector- 10, Gurgaon (Phase-I)	Social	HUDA	Oct-03	Oct-06 / Mar-08	12.08	9.06	1.50	11.72
4.	Development of Sector- 44/47 (Resd.) at Faridabad	LD	HUDA	Mar-01	Mar-05 / Mar-11	56.37	42.28	33.53	50.34
5.	Revamping of Sewerage System and Sewage Treatment Works in Faridabad, Haryana	SEWERA GE/SWM/ DRNG.	Municipal Corporation of Faridabad (MCF)	Feb-07	Mar-10	103.83	23.36	23.36	101.96

Agenda

(Rs. in Cr.)

S.No.	Name of the Projects	Type of Project	Imple- menting Agency	Date of sanction	Original Date of complet- ion/ revised date	Estimate d cost	Loan Sanction ed	Loan released	Final Expenditure
6.	Infrastructure Development Works (Drainage) in Old Faridabad Zone, Faridabad	SEWERA GE/SWM/ DRNG.	Municipal Corporation of Faridabad (MCF)	Jun-09	Dec-09	30.65	6.90	6.90	21.31*
7.	Integrated Solid Waste Management Project, Faridabad	SEWERA GE/SWM/ DRNG.	Municipal Corporation of Faridabad (MCF)	Jun-09	Jun-11	76.50	17.20	17.20	74.30*
8.	Urban Renewal Project at Dabua Colony, Faridabad (1968 DUs)	LD	Municipal Corporation of Faridabad (MCF)	Feb-07	Mar-10	38.96	9.02	9.02	39.55*
9.	Urban Renewal Project at Bapu Nagar, Faridabad (1280 DUs)**	LD	Municipal Corporation of Faridabad (MCF)	Feb-07	Mar-10	25.27	5.85	2.93	19.46*
10.	Improvement and Widening of Roads in Sonepat Distt. in Haryana.	TPT	PWD (B&R)	Nov-09	Dec-12/ Sep-13	125.40	94.15	36.32	80.14

^{*} Physically completed but final financial closure awaited.
** 928 DUs completed

Appendix-III

Projects Reported Completed but Completion Certificate Awaited

Following projects have been reported to be completed by the agencies but the completion certificates are still awaited. The details are as follows:-

Project Description	Haryana	Rajasthan	Punjab	Total
Completion Certificate/Clarification Awaited	6	1	1	8

(Rs. in Cr)

S. No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original Date of completion/ revised date	Estimated cost	Loan Sanctioned	Loan released	Expenditure reported
	Haryana Sub Region								
1.	Improvement by way of four laning of Jhajjar Dhaur Beri road	Transport	PWD (B&R)	Nov-08	Dec-10	29.34	22.00	17.50	27.59
2.	Improvement by way of four laning of Dighal Beri Jahazgarh road.	Transport	PWD (B&R)	Nov-08	Dec-10/ Sep- 11	42.86	32.14	24.17	32.23
3.	Project for improvement and construction of road in Jhajjar circle of NCR sub Region - Bahadurgarh Chhara Dujana Beri Kalanur road	Transport	PWD (B&R)	Nov-08	Dec-10/ Sep- 11	128.65	96.49	76.44	101.96
4.	Establishment of Polytechnic at Sampla, Rohtak District, Haryana	Social	DTE, GoH	Jun-09	Jun-10	22.00	13.22	13.22	25.58
5.	Setting up of a coal based Thermal Power Project under stage I for 1200 MW (2 x 600 MW) in Hisar District, Haryana	Power	HPGCL	Feb-07	Apr-10/	4,258.65	500.00	500.00	4,003.01

(Rs. in Cr)

S. No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original Date of completion/ revised date	Estimated cost	Loan Sanctioned	Loan released	Expenditure reported
6.	Augmentation and Extension of Water Supply in Kharkhoda town district Sonepat *	WATER SUPPLY	PHED	Oct-07	Oct-10/ Dec-11	13.91	10.43	7.50	13.91
	Rajasthan Sub Region								
7.	EHV Transmission Schemes in NCR area of Rajasthan i.e. Alwar Distt. (including 6 Nos. of schemes)	Power	Rajasthan Rajya Vidyut Prasaran Nigam Ltd.	May-10	Mar-11/ June 2012	125.98	88.18	88.18	134.07
	CMA Patiala, Punjab								
8.	Extension & Augmentation of Water Supply, Sewerage & Solid Waste Mgmt, Patiala	Sewerage	Patiala Urban Development Authority	Sep-02	March 2005 / Dec 2006	59.93	44.95	44.95	49.55

^{*} Reported completed but clarifications awaited on the project completion report and hence, balance loan to be released.

Agenda Item No. 6.1: Request for extensions of completion dates of projects

Request for extension of completion dates for **12** ongoing projects were made by five (5) agencies. These include **two** water supply & **four** sewerage sector projects of PHED Haryana, **2** projects of DHBVN, **one** project from Technical Education, **2** projects from HVPN Haryana and **one** project each from UIT, Kota (water project).

A. Requests for extension of project completion dates received from Public Health and Engineering Department (PHED), Haryana.

Out of the **23** ongoing projects of PHED Haryana, 10 pertain to water sector and the other 13 to the sewerage sector. Extension of completion date has been requested for 2 water supply & 4 sewerage projects as per details below:-

S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
1.	Augmentation of rural drinking water supply for Mewat region- Phase- I, Haryana with variations	300.49	Nov 04 and Nov 09	Dec-07/ Nov-12	Mar-14	Work on construction of two ranney wells encountered problems due to soil strata following which work was abandoned for 4-5 months due to rains. Now the works are on and are scheduled for completion by March 2014.
2.	Water Suply at Sohna Town & Rojka Meo Industrial Area,Sohna	65.34	Nov-08	Dec-11/ Dec-12	Dec-14	Due to late permission of Forest Department to lay the pipeline.
3.	Extension of sewerage system and treatment of sewage in Bawal,	6.29	Oct-07	Oct-10/ Dec-11/ Sep-13	Mar-14	Due to non-availability of land for STP construction.

S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
4.	Providing sewerage facilities in village kosli, Bhakli and Railway station area of Kosli, Dist. Rewari	8.70	Oct-07	Oct-10/ Mar-12/ Aug-13	Sep-14	Due to delay in permission for crossing the railway line.
5.	Extension of sewerage system and treatment of sewage in Ganaur, Dist Sonepat	15.08	Feb-08	Mar-11/ Mar-12	Sep-14	Due to non-construction of MPS as the contractor failed to execute the work. Fresh tender called on the risk and cost of contractor.
6.	Development of Sewerage System and Construction of two STPs at Rohtak town.	44.25	Feb-06	Feb-09/ Feb 10/ Mar 12	Dec-14	Work of 40 MLD STP not completed due to dispute regarding approach to site.

B. Requests for extension of project completion dates received from Dakshin Haryana Bijli Vitran Nigam, Haryana.

DHBVN Haryana has requested for extension of completion date for **2** of its ongoing projects. The details are as follows:-

S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
1.	Improvement & Upgradation of Sub transmission of distribution network in Hisar	40.01	Nov-08	Oct-10	Dec-13	An impact study was to be undertaken as per state government instructions. The same has since been completed and approved, the balance works are now expected to be completed by March 2014.

S.No	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
2.	Scheme for HVDS/LVDS & Reallocation of meters under DHBVN in NCR area	138.47	Nov-08	Nov-10 / Dec-11	Dec-13	Part of work could not be undertaken due to hindrances from villagers in executing the works and accordingly, now being short closed. The remaining works being executed departmentally as the contractor is not executing the work due to hindrance.

C. Requests for extension of project completion dates received from Technical Education, Haryana.

Out of 2 ongoing projects of Technical Education, Haryana, the agency has requested for extension of completion date for one of its ongoing projects. The details are as follows:-

S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
1.	Establishment of Technical Institutions at Rohtak	197.00	May-10	Mar-12	Mar-14	Necessary clearances, NOCs, CTO, CTE, etc. were being sought from Haryana State Pollution Control Board, Fire Department and other related departments.

D. Requests for extension of project completion dates received from Haryana Vidyut Prasaran Nigam, Haryana.

HVPN Haryana has requested for extension of completion date for **2** of its ongoing projects. The details are as follows:-

S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
1.	Scheme for strengthening power infrastructure in NCR area of Haryana – Augmentation of Transmission Works,	79.43	Nov-08	Nov-09/ Sep-12	Mar-14	In a review meeting the officers from HVPN informed that the projects were getting delayed due to
2.	Project for creating power infrastructure in Haryana subregion of NCR	117.45	Jul-07	Nov-08/ Sep-12	Mar-14	thefts in the project area

E. Requests for extension of project completion dates received from Urban Improvement Trust, Kota

UIT, Kota has requested for extension of completion date for **one** of its ongoing project. The details are as follows:-

S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons for delay
1.	Augmentation of Water Supply in Kota, Rajasthan	181.77	Aug-11	Jan-13/ Sep-13	Dec-13	Partly commissioned in Sep-13. Delayed due to delay in permission from Deptts. like Forest, Railways, NHAI, State Electricity Boards, etc.

Point for Decision: The Group may approve the requested extensions directing the Implementing Agencies to complete the pending works within the sought extensions and take necessary steps to avoid such delays in the projects.

Annexure I

ToR – "Consultancy Services for Evaluation of NCRPB Assisted Water Supply & Sewerage Projects Post Completion"

Terms of Reference and Reporting Requirements

Background

As per the provision under Section 8(e) of the NCRPB Act, 1985, NCRPB has been empowered to select and approve comprehensive projects, call for priority development and provide such assistance for the implementation of those project s as the Board may deem fit. Accordingly, the Board has been providing loan assistance to the participating states and their implementing agencies for selected infrastructure development projects. The Board has so far provided financial assistance for 277 nos. of infrastructure projects having estimated cost of 18994 crore, out of which an amount of Rs.8703 crore has been sanctioned as loan. As on June, 2013, out of 277 projects financed by the Board, 188 projects have been completed and balance 89 are at various stages of implementation.

Since, water supply and sanitation/ sewerage are the core infrastructure that determines the environmental status of any habitat, augmentation of existing systems/ treatment facilities as well as adoption of new technologies of waste treatment for small and marginal settlements and rural areas presents a gigantic task demanding special efforts. The Board has sanctioned loan of Rs.1901 crore for 81 nos. of projects of water supply and sewerage sector out of which 47 no. have been completed. The details of water supply and sewerage projects sanctioned by Board are as under:-

(Rs. in crore)

S No	Sector	No. of projects		Cost	Loan sanctioned
		Ongoing	Completed		
1	Sewerage	20	18	756	453
2	Water Supply	14	29	2181	1448
	Total	34	47	2937	1901

Need & Objective for the Study

National water policy and Regional Plan 2021 for the NCR lay emphasis on provision of drinking water and sewerage/sanitation facilities on priority basis. The water supply and sewerage/sanitation should also be sustainable and should expand corresponding to increase in population. Studies indicate that the existing systems are found wanting to meet the increasing requirements and targets to be achieved. NCRPB is supplementing efforts to fill the gap. However, it is important to assess the NCRPB's efforts in terms of their effectiveness in this direction and how these efforts can be further improved. As such it is important to evaluate completed works and assess gaps, system weaknesses and understand what measures need to be taken know what measures be taken by implementing agencies and NCRPB to improve performance and outputs of projects.

Terms of Reference

- 1. NCRPB intends to take consultancy services to evaluate performance of seven water supply and six sewerage projects implemented through its financial assistance (refer Annexure-I).
- 2. Scope of post evaluation services will be as follows;
 - i. **Performance Evaluation:** Whether WTPs, STPs, Pumps are giving outputs in terms of quality and quantity as per the designs. Reasons for gap if any. Whether the output of source is as envisaged in design. Reasons for gap if any. Whether any other outputs & impacts expected under DPR are met with. Whether improvement in quality of water supplied earlier and that after implementation of project. Whether capacities created are used.
 - ii. **Improvement in Benchmarks:** MoUD has established monitoring benchmarks for water supply and sewerage. Such as for water supply these are service coverage, extent of metering, cost recovery, LPCD, Leakages and losses, supply duration, quality of water supply, collection efficiency, Efficiency of redressal of customer complaints. Similarly in sewerage these are coverage, treatment capacity, effluent utilization, effluent quality etc. What were the bench mark levels before implementation and what improvements happened in benchmarks after implementation of project. Analyze reasons of less improvement if any?
 - iii. **Review of Designs:** The DPRs will be examined to assess adequacy and quality of designs. Whether designs address all issues comprehensively, design period of project taken is more or less, whether designs and provisions are cost effective, whether financial, social and environmental feasibility considered, design periods for different units are more or less, whether the technology considered is best for required conditions, whether current technology and good practices are used. Check correctness of designs. Compare pump head designed verses actual operating head.
 - iv. **Review of Project Costs and time overruns:** The firm shall review the time and cost over runs if any and in case yes, then the reasons thereof
 - v. **Physical Infrastructure:** The physical infrastructure proposed under the sanctioned project and actual developed under the sanctioned project will be compared. The gaps will be identified. Reasons for difference will be explored. These may be like length of pipe, capacity of treatment plant, Pump kilowatt, capacity and number of tanks, no of tube wells etc. Whether all infrastructure developed is in use and functional and if not then why?
 - vi. **Quality of Civil Structures:** What is the quality of civil structures constructed? If quality of construction is poor, what measures are required to improve quality of construction in future? Poor quality is due to poor specifications or due to lack of

supervision.

- Vii. Quality of Mechanical & Electrical Equipment's provided under the Project: What is the condition of electric and mechanical items and equipment's provided and installed during implementation. If quality of items and equipment's is poor, what measures are required to improve the quality in future? Poor quality is due to poor specifications or due to lack of supervision? Any specific relation noticed of pump/valves make with respect to quality. Whether all equipment installed is operational. If not reasons thereof.
- viii. **Quality of pipe material -** Specials, fittings and quality of laying of pipes are important issues in water supply project. The evaluation will include assessment of performance of pipes of different materials. Regarding quality of laying of pipe, the evaluation will cover whether pipe cover is adequate, whether pipes are field tested after laying as per prescribed standards. The evaluation will include assessment of frequency of leakages and bursts and also whether thrust blocks are provided.
 - ix. **Water borne disease:** What was level of water borne diseases before and after implementation of project? Analyze difference.
 - x. **Laboratory:** Whether the laboratory facility are adequate in terms of trained manpower, chemicals/ glassware, instruments/ equipment's etc., and whether regular quality checks are done.
 - xi. **Environmental issues:** Analyze impact of project on the environment.
- xii. **Social issues:** Analyze social impacts of project such as coverage in slums, effect on displaced persons,
- xiii. **Implementation arrangement:** Review implementation arrangements in place. Are these leading to achieve objectives?
- xiv. **Quality of Operation and Maintenance:** Review quality of operation and maintenance.
- xv. **Power availability envisaged verses actual:** Compare power availability with the assumption taken in design.
- xvi. **Diesel generators provided and their utilization:** On many projects diesel generators have been provided to supplement power. Comment on the capacity, capacity utilization, usefulness of them etc.
- xvii. **Review bid documents:** Whether bid specifications are good & whether bid specifications are followed stringently? Any comment on bid procedure, bid conditions and time period allowed for construction.

- xviii. **Implementation delays:** Evaluate extent of delays in implementation of projects-compare proposed time of completion with actual. Evaluate reasons of delay.
 - xix. **Recommendations:** Based on reviews and assessment conditions stated above make recommendations for improvement in DPRs, quality of construction, bidding, specifications, implementation arrangements, operation and maintenance etc. and procedures to be adopted to follow recommendations.
 - xx. **Presentation:** The consultancy firm will make presentation of evaluation and recommendations in NCRPB and to implementing agencies. Facilities will be provided by NCRPB/Implementing Agencies. Travel cost of person making presentation will be borne by the consultancy firm.
- 3. **Staff Deployment:** Consultancy firm will deploy one water supply expert and one waste water expert for the project duration. The experts should be having minimum post-graduation in civil engineering and experience of more than 10 years in water supply and sewerage sectors. Experience in post evaluation studies will be preferred.
- 4. **Duration of Study:** Work will be completed in **three months** from the date of start of work. The duration includes the necessary site visits for each of the project as mandated.
- 5. **Reporting Requirements:** Consultancy firm will submit Inception Report within 7 days containing work program, staffing schedule and showing dates of outputs, and dates of presentations. Interim Evaluation Report is to be submitted within 40 days covering at least seven projects (covering both water supply & sewerage sector). The Final Evaluation Report shall be required to be submitted within 75 days covering all projects as indicated in Annexure-I. All submissions will be followed by presentations. All reports will be submitted in soft copies and hard copies (three sets) to Director (A&F), NCRPB.
- **6. Facilities to be provided by NCRPB:** NCRPB will provide all available project related information for the projects proposed for post evaluation. NCRPB will also facilitate required information from implementing agencies to the consultancy firm.
- **7. Payments:** The payment schedule shall be as follows:-

Deliverable	Payment
On submission, presentation and acceptance of Inception Report	10%
On submission, presentation and acceptance of Interim Evaluation Report	50%
On submission, presentation and acceptance of Final Evaluation Report	40%

Annexure-I

Following projects have been implemented in NCR with NCRPB's financial assistance are proposed to be evaluated and assessed under the Study



Water sector

N	Name of the Projects	Implementing Agency	Estimated cost (in Cr)	Loan Sanctioned (Rs. In Cr.)	Actual Loan Amount released	Expenditure (in Cr.)
1.	Augmentation of Water Supply in Rohtak, Haryana	PHED Haryana	59.00	44.25	44.25	60.91
2.	Augmentation of Water Supply in Palwal, Haryana	PHED Haryana	20.15	15.11	15.11	20.15
3.	Augmentation and Extension of Water Supply in Bahadurgrh, Dist. Jhajjar	PHED Haryana	24.45	18.34	16.85	26.45
4.	Augmentation of water supply scheme at Sampla Town (3 Villages) in Rohtak District	PHED Haryana	10.30	7.73	6.85	11.53
5.	Augmentation and extension of water supply in Meham Town, District Rohtak	PHED Haryana	12.48	9.36	9.36	12.87
	Augmentation and Extension of Water Supply in Beri, Dist Jhajjar	PHED Haryana	8.25	6.19	6.19	8.25
7.	Augmentation and Extension of Water Supply in Ganaur, Dist Sonipat	PHED Haryana	27.74	20.80	20.80	27.73

Sewerage Sector

N	Name of the Projects	Implementing Agency	Estimated cost (in Cr)	Loan Sanctioned (Rs. In Cr.)	Actual Loan Amount released	Expenditure (in Cr.)
1.	Providing sewerage facilities in Palwal, Haryana	PHED Haryana	9.76	7.32	6.84	8.65
2.	Providing sewerage system for new colonies in Hodal Town, Haryana	PHED Haryana	11.94	8.95	8.95	10.59
3.	Providing sewerage scheme & Treatment Plant for Sampla Town,Dist.Rohtak	PHED Haryana	9.42	7.07	6.33	9.41
4.	Extension of sewerage system and treatment of sewage in Beri, Dist Jhajjar	PHED Haryana	7.08	5.31	4.15	7.08
5.	Providing Sewerage facilities in Rewari Town, Haryana	PHED Haryana	12.24	9.18	5.51	12.56
6.	Extension of sewerage scheme and treatment of sewage in Meham Town, District Rohtak	PHED Haryana	9.65	7.24	7.24	9.65