Pranahitha Project



CHAPTER Pranahitha Project

SUMMARY

During re-engineering of the PCSS project, it was decided to reduce the FRL of Tummidihetti barrage from +152 Mtrs to +148 Mtrs to reduce submergence in Maharashtra State and to lift 20 TMC of water at Tummidihetti to irrigate 2 lakh acres of new CA in the erstwhile Adilabad district. The work of preparation of the DPR for identification of the new CA was entrusted on nomination basis to WAPCOS, an agency which had not even participated in the bidding process. Though, it was initially proposed to draw water by constructing a barrage near Tummidihetti, the Department is now proposing to shift the barrage location further upstream across Wardha River.

The Department took more than six years since the re-engineering decision in June 2016 to identify the source location of the barrage and the targeted CA and the scope of works. The DPR had been submitted to CWC only in May 2023 and clearances are yet to be obtained. Concurrence of Maharashtra State for the submergence issue is yet to be obtained. As such, there has been no progress of work in the existing four civil contracts in the last four years. In this scenario, the expenditure incurred on the works executed and lands acquired remains unproductive and it may take many more years before any irrigation benefits are achieved under the project.

7.1 Planning for the Project

During re-engineering the earlier PCSS project, it was decided to construct the barrage near Tummidihetti with a reduced height of +148 M (instead of +152 M proposed earlier) to reduce the submergence in Maharashtra State, and to draw 20 TMC of water from Tummidihetti. The proposal was to utilise the same for providing irrigation to two lakh acres (*i.e.*, 1.44 lakh acres to be identified in addition to the 56,500 acres proposed to be created under the already existing Package Nos.4 and 5) of new CA in erstwhile Adilabad District. It was decided to continue the execution of work under the first four packages of Link-I of PCSS project and to delete the Package No.5. The work of creation of 36,000 acres of CA originally proposed under Package No.5 was now proposed to be tagged to Package No.4. This project was renamed as Dr. B.R. Ambedkar Pranahitha Project.



Figure 7.1 - Proposed barrage location near Tummidihetti

Source: I&CAD Department



Figure 7.2 - Proposed barrage location near Tummidihetti

Source: Google Earth Pro image as on 17th April 2023

7.1.1 Preparation of Detailed Project Report (DPR)

7.1.1.1 Vitiation of tender process

The Department invited (September 2015) bids for 'Preparation of DPR for CA survey for creation of additional CA under Pranahitha Project'. In response, seven firms quoted their rates. The tender evaluating authority, Superintending Engineer, MIP Circle, Bellampalli recommended (November 2015) for entrustment of the work to the lowest (L1) bidder whose quoted price was ₹1.49 crore. However, setting aside the entire tendering process, the Government issued (March 2016) orders for entrustment of the work to WAPCOS¹80 (who had not participated in the bidding) on nomination basis at a cost of ₹6.66 crore, which was ₹5.17 crore more than the price quoted by the L1 bidder. Accordingly, the Department concluded (March 2016) the agreement with WAPCOS for CA survey.

Moreover, as already discussed in Paragraph 3.2.3, WAPCOS had been involved in the preparation of DPR for the earlier PCSS Project and there were major flaws in that DPR (like incorrect assessment of the quantum of water available at Tummidihetti, inadequate storage reservoirs proposed under the project, *etc.*) which led to the reengineering of the project. Despite this bad experience, the Government chose to entrust the DPR work of Pranahitha Project to WAPCOS on nomination basis.

The Government replied (May 2023) that the work of preparation of DPR for an additional CA of 1.42 lakh acres was entrusted to the agency, WAPCOS Ltd., based on the recommendation of SLSC. The recommendation of the Committee *inter-alia* stated that in view of the time constraint the consultant of GoI was nominated as the agency has substantial experience in having carried out similar nature of work. Further, it was stated that the survey work is completed and the DPR has been submitted to CWC on 8 May 2023.

The Government further replied (October 2023) that initially, estimate was prepared for conducting survey for one lakh acres using conventional survey method. As the Government did not accord administrative approval for the same, the initial bids invited for preparation of DPR were cancelled. Later the cost of work was increased to ₹6.66 crore due to increase in the proposed CA to 1.42 lakh acres and change in the survey method to LiDAR and the work was entrusted to WAPCOS.

The fact remains that despite knowing the several defects in the earlier DPR submitted by WAPCOS which led to the re-engineering of the PCSS Project, the new DPR work was awarded to it on nomination basis.

¹⁸⁰ M/s Water and Power Consultants Ltd. (WAPCOS) – a Public Sector Enterprise under the Union Ministry of Jal Shakti, Government of India

7.1.1.2 Non-completion of DPR work

- (i) Identification of CA: As per the agreement concluded (March 2016) with WAPCOS for identification of CA, the agency was to complete the DPR work within two months *i.e.*, by May 2016. However, the agency did not complete the work and submit the DPR (as on March 2022), despite a time overrun of nearly six years. Thus, the targeted CA of two lakh acres proposed under the project is yet to be identified.
- (ii) Identification of source location: Even the source of water for the Pranahitha project had not been finalized (as on March 2022). During re-engineering of PCSS project (June 2016), the Department had initially proposed to construct a barrage near Tummidihetti with a reduced height of +148 M and to draw 20 TMC of water for the project. Later, in August 2018, the Department proposed to shift the location of the barrage 1.5 Km upstream i.e., near the confluence point of Wardha and Weinganga rivers. This proposal was initiated to avoid submergence of the Chaprala Wildlife Sanctuary in the vicinity of Tummidihetti barrage location. However, this revised location was not considered for the reasons not on record. Now, the Department is considering the feasibility of constructing the barrage at a further upstream location across Wardha River near Virdandi village in Koutala Mandal, Kumuram Bheem Asifabad District. It entrusted the work to WAPCOS for preparation of DPR for barrage across Wardha River in January 2022 and the DPR was not finalised till the completion of Audit (as on March 2022).

Audit observed that it took more than six years since the decision on re-engineering was taken in June 2016 to identify the barrage location, the targeted CA and the scope of works, and to prepare and submit the DPR to CWC. Further, though two lakh acres of new CA was proposed under the project at the time of re-engineering, only 1.1955 lakh acres of new CA had been identified and an already existing CA of 21,185 acres is proposed to be stablilised.

The Government replied (November 2023) that the location of the barrage was not finalized earlier due to concerns of the Maharashtra State and that the CA of 2.00 lakh acres was not identified earlier as the location of the barrage was not finalized. It was further stated that the barrage location has now been finalized on the Wardha river instead of the Pranahitha river, a gross CA of 2.00 lakh acres has been identified in the Kumuram Bheem Asifabad and Mancherial Districts and the integrated DPR Preparation of Wardha Barrage including canal network duly utilising the existing Pranahitha main canal is finalised and has been submitted on 08 May 2023.

The fact remains that there were significant delays in the entire process right from identification of barrage site to submission of DPR to CWC.

7.1.2 Statutory clearances

As the scope of the revised Pranahitha project had not been firmed up and the DPR had not been prepared, the proposals for obtaining project clearance had not been submitted to CWC (as on March 2022). Further, the assessment of forest lands required, submergence areas effected and the impact on environment/wildlife had not been done and the statutory clearances from MoEF and MoTA were still to be obtained (March 2022).

Moreover, barrage location now proposed across Wardha river is bordering the neighbouring Maharashtra State. Thus, construction of a barrage at this location is likely to cause submergence in the Maharashtra State and therefore requires concurrence of that State. The Department had addressed (January 2022) the Chief Engineer, Water Resources Department of Maharashtra State for their comments on the proposed barrage on Wardha River. Concurrence of Maharashtra State was yet to be obtained (March 2022).

The Government replied (November 2023) that the integrated DPR including construction of pump house, Canal network to create an irrigation potential of 1.20 lakh acres was submitted to CWC in May 2023 for getting all statutory clearances from the various Directorates of CWC and Ministries and is under process. It was further stated that clearances have been received from MoTA, Central Groundwater Board, the Central Electricity Authority and the Hydrology Directorate of CWC and the remaining clearances are under process. The Government did not furnish any reply on the status of obtaining concurrence of Maharashtra State.

The fact remains that it took more than six years since the decision on re-engineering was taken in June 2016 to identify the barrage location, the targeted CA and the scope of works, and to prepare and submit the DPR to CWC. The State is yet to obtain all the statutory clearances including the CWC clearance and the concurrence of Maharashtra State for the project (November 2023).

7.2 Project Execution

As of March 2022, a total expenditure of ₹1,727.44 crore was incurred on the Pranahitha Project (including the Package No.5 which was deleted) for works, land acquisition, *etc*.

7.2.1 Status of project works

The aggregate value of agreements of the four packages that were brought under the Pranahitha Project was ₹2,759.13 crore. As against this, the value of work done to the end of March 2022 was ₹830.52 crore (*i.e.*, 30 *per cent*), as shown below:

Table 7.1 – Status of the four packages brought under the Pranahitha Project

S. No.	Pkg. No.	Reach of the water conveyor system	Agreement Date	Agreement Value (₹ in crore)	Target date of completion (Extension of time)	Value of work done up to March 2022 (₹ in crore)	Payment made to contractors upto March 2022 (₹ in crore)	Progress (%)
1	1	From Km 0.5 to Km 15	06.06.2008	229.14	05.12.2010 (31.03.2020)	101.80	98.41	44
2	2	From Km 15 to Km 28.5	26.05.2008	215.47	25.11.2010 (30.06.2019)	72.70	70.62	34
3	3	Barrage at Tummidihetti	21.11.2008	639.27	20.11.2012 (30.06.2019)	16.67	15.92	3
4	4	From Km 28.5 to Km 71.5	21.05.2009	1,675.25	11.11.2012 (30.06.2019)	639.35	620.40	38
		Total		2,759.13		830.52 ¹⁸¹	805.35	30

Source: Records of the I&CAD Department

Audit observed that there has been no progress in execution of the four works in the last three and half years (June 2018 to March 2022), due to non-identification of the targeted CA and non-firming up of revised scope of works.

Out of the four packages, Package No.3 deals with Construction of barrage near Tummidihetti and the remaining three packages (Package Nos. 1, 2 and 4) relate to excavation of canal.

- (i) Barrage work (Package-3): As per the original agreement, a barrage was to be constructed across Pranahitha River near Tummidihetti. Now, the Department is contemplating construction of the barrage at a different location across Wardha River (refer Paragraph 7.1.1.2). However, the revised location of the barrage is yet to be finalized. Due to non-finalisation of the revised scope of work, the barrage work has not taken off even after more than five years since re-engineering.
- (ii) Canal works (Packages-1, 2 and 4): After re-engineering, a total CA of two lakh acres was proposed to be created in Adilabad District under the Pranahitha project. This includes the 56,500 acres 182 of CA proposed to be created under Packages-4 and 5 in the earlier PCSS project. The remaining new CA of 1,43,500 acres was to be identified. The task of identification of entire two lakh acres of CA under the project was entrusted to WAPCOS in March 2016. However, this work had not been completed as on March 2022. Thus, no CA could be identified even after more than five years since re-engineering. As a result, the revised scope of work including the revision in the canal designs were yet to be finalised and revised estimates for none of the package works were prepared. As a result, there was no progress of work in

¹⁸¹ The total amount paid to contractors in these four works was ₹805.35 crore

¹⁸² The 36,000 acres of CA contemplated under the deleted Package-5 is now tagged to Package-4.

Packages-1, 2 and 4 since July 2017, June 2017 and June 2018, respectively and the project was in a standstill position (as on March 2022).

Audit further observed that the extended period of these four agreements was over in June 2019/March 2020. While no work was being executed in these works, the Department neither granted extension of time nor closed these four contracts.

The Government replied (November 2023) that the barrage location is now finalised at 3.50 Km upstream of the confluence of Wainganga and Wardha rivers and the integrated DPR for the barrage on Wardha River including canal network to irrigate a gross CA of 2 lakh acres has been completed and submitted to CWC in May 2023. It was further stated that Pranahitha main canal package works of 1, 2 and 4 will be carried out up to Km 56.50 by providing 2 lifts at Km 11.00 and Km 56.50 to irrigate a gross CA of 2 lakh acres and net CA of 1.20 lakh acres. The Government further replied that it had permitted closure of the contract of Package-IV and action would be taken either to close the contracts or to restart the works of Packages-I, II and III.

Thus, there has been no progress in the project works as it took more than six years since the re-engineering decision to identify the barrage location, the targeted CA and the scope of works, and to prepare and submit the DPR to CWC. The statutory clearances and the concurrence of Maharashtra State for the project are yet to be obtained and lands yet to be acquired even after more than six years since the reengineering decision. Therefore, construction of the project and deriving any irrigation benefits from it may take many more years.

7.2.2 Utility of the work executed/expenditure incurred

As the scope of the project and the CA had not been established even after five years since re-engineering, the works executed so far on the four package works have not yielded any benefits. The utility of the expenditure incurred thereon is also doubtful as discussed below:

(i) Barrage work (Package-3): Due to change in location of the proposed barrage, the expenditure of ≥ 15.92 crore incurred on payment made to the EPC contractor towards survey and investigation (refer to Table 7.1) and the expenditure of ≥ 5.19 crore already incurred on acquisition of 383.55 acres of land for barrage at the earlier proposed location near Tummidihetti has been rendered wasteful. A total of ≥ 1.11 crore was already incurred on it which is rendered wasteful. Moreover, an amount of ≥ 6.39 crore paid towards mobilisation advance remained blocked up with the contractor.

The Government replied (November 2023) that out of the 383.55 acres acquired, an extent of 225.69 acres was in the riverbed and the remaining 157.86 acres was *Patta* land acquired for submergence and dumping area. It was further replied that the *Patta* land would be utilized for spoil dumping and for construction of office buildings and other purposes. Government further replied that the blocked mobilization advance with contractor will be recovered with specified rate of interest as mentioned in the

agreement conditions. It was further replied that write-off orders for the expenditure incurred on survey and investigations would be obtained from the Government.

(ii) Canal works (Packages-1, 2 and 4): Under the three canal packages, canal excavation work was partially executed in the reaches where lands were acquired. So far (March 2022), a total amount of ₹789.43 crore (refer to Table 7.1) was paid to contractors for the work executed. Further, an expenditure of ₹61.63 crore was incurred on acquisition of 4,677.94 acres of lands in these works. As the CA under the project had not yet been identified and distributary network was yet to be created, the utility of the expenditure of ₹851.06 crore incurred on these canal works remains doubtful. Moreover, the canal was designed and executed with a discharge capacity of 583 cumecs¹83 for pumping 160 TMC of water in 90 days to irrigate a CA of 16.4 lakh acres as per the requirement of the earlier PCSS project. Now, after re-engineering, only 20 TMC of water was proposed to be drawn from River Pranahitha/Wardha to irrigate two lakh acres. Thus, even in case new CA is identified in future, providing irrigation to the CA may necessitate reduction in the discharge capacity and changes in the profile and levels of the already excavated canal. This will involve additional expenditure.

The Government replied (November 2023) that after re-engineering of the Pranahitha Project, the location of the barrage was shifted on to the Wardha river for utilising 11.5 TMC of water for the CA under this project. The existing canal profile on Pranahitha main canal would be retained and there will be no extra financial implication involved in the already excavated canal portion. It was further replied that the water column in the main canal will be useful as extra storage capacity.

The reply is not tenable since the purpose of an irrigation canal is to carry water for irrigation and not storage. The fact remains that the already excavated canal has not served any purpose so far. While it is uncertain as to when this canal would be put to use, the expenditure incurred on the canals which were excavated with a discharge of 583 cumecs is rendered largely wasteful since the requirement as per the revised project proposal is only 50 cumecs.

(iii) Package-5: The scope of work under Package-5 included conducting detailed survey and investigations, preparation of designs/drawings, excavation of canal, construction of pumphouse with lifts and laying of delivery mains (pipelines). During re-engineering, the Package-5 was shelved. By that time, work valuing ₹897.72 crore had already been executed and an amount of ₹838.14 crore had been paid to the contractor. Out of this, ₹108.96 crore paid towards survey and investigations, ₹43.47 crore paid for excavation of adit tunnel and ₹5.11 crore paid towards insurance and bankers charges was rendered wasteful. Further, the expenditure of ₹10.74 crore incurred on acquisition of 610.99 acres of land for this work was also rendered wasteful.

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¹⁸³ Cubic metres per second

The Government replied (November 2023) that survey and investigations were prerequisite before commencement of work and also that the contractor had to pay the insurance and bankers charges and therefore the expenditure/payments towards survey and investigations, insurance and bankers charges cannot be treated as wasteful. It was further replied that write-off orders for the expenditure incurred on survey and investigations, insurance and bankers' charges would be obtained from Government. Regarding the land, the Government replied that the land acquired under this Package work would become part of the land bank maintained by it and the land can be used in future needs.

The reply is not acceptable. The expenditure incurred on survey and investigations, insurance and bankers charges would be productive only when the work is completed and put to use. However, in the instant case the package work has been completely deleted and the expenditure incurred on the above components including land acquisition did not serve any purpose.

Further, the Department also agreed that write-off orders would be obtained for the expenditure incurred on survey and investigations, insurance. The reply is silent on the wasteful expenditure on the adit tunnel.

Hyderabad

The 19 January 2024

(ANINDYA DASGUPTA) Accountant General (Audit) Telangana

Countersigned

New Delhi

The 24 January 2024

(GIRISH CHANDRA MURMU)
Comptroller and Auditor General of India