

16th December, 2021

Syed Murad Ali Shah
Chief Minister
Government of Sindh
CM House
Karachi

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TL21/1216/1A

Subject: Allegation of loss of Rs. 136 Billion to the exchequer in K IV Water Supply Project due to design change by introducing 84 inches Steel Pipe to carry water, to benefit pipe suppliers, resulting in increase in cost from Rs. 45 billion to over Rs.191 Billion, which is more than the Contract Cost of Rs 183.5 Billion of Mohmand Dam

Dear Sir,

Transparency International Pakistan has received a complaint on the allegation of loss of Rs. 136 Billion to the exchequer in K IV Water Supply Project, due to design change by introducing 84 inches Steel Pipe to carry water, to benefit pipe suppliers, resulting in increase in cost from Rs. 45 billion to over Rs.191 Billion, which is more than the Contract Cost of Rs 183.5 Billion of Mohmand Dam awarded by WAPDA.

The complainant has made the following allegations which are attached as **Appendix**.

That;

1. A Revised PC-1 of K IV Project has been prepared by Consultants and submitted by WAPDA to Ministry of Water Resources, which has forwarded it to Planning Commission in end Nov 2021.
2. According to the revised PC-I, the K-IV Project have been designed for full 650 MGD against the original PC-I designed, and Contract awarded to FWO in 2015 for 260 MGD in 2015. Water availability of even 260 MGD is very difficult to arrange because of water shortage in Indus River.
3. The Revised PCI Cost is Rs 191 Billion (**Annex-A**).
4. Revised PC-1 with Ministry of Water Resources as sponsoring Agency, to be corrected to include all Essential components as per decision of ECNEC, as without these components K-IV project will not get completed.
 - i. 260 mgd Water Filtration Plants (part of Original Design/PC-1) excluded from Revised PC-I, which means it will be responsibility of GoS.
 - ii. Electrical works & Utilities connections cost (not calculated by Consultant)
 - iii. 3 x Staff Housing & Lab Equipment for effective O&M (part of Original Design/PC-1)
 - iv. 80-100 MW Power Plants / Grid Station, made responsibility of GoS.
5. Consultant is proposing to change the Canal to Pressurized Pipe on cross drainage issues. However, as per their own hydrology report, only 12 main nullahs & 82 streams are on K-IV route in which 76% are minor stream having little or no impact (in their own words). Original design already has 88 cross drainage structures besides siphons for main nullahs
6. Technical Committee comprising of leading experts has already cleared the Canal based system as it caters for 88 cross drainage structures. New Consultants agree that 82 mostly minor stream exist, but then proposing Steel Pipe having only 25 years life.



7. 84 inches diameter MS Steel Pipe is added in the design, which is estimated to cost Rs 131 Billion. Consultant has changed the design to Pressured Pipeline without detailed design & modeling in Revised PC-1 and the Pipeline design has been put under the scope of the Contractor (under EPC), hence, the Revised PC-1 is not based on any sound engineering design but is made the responsibility of Contractor, to carry out after the award of Contract.
8. Consultant Scope of Work includes the Design of Power Plant, Grid Stations, Transmission lines, etc, but no Feasibility/Design is yet done nor is their cost included in Revised PC-1.
9. Consultant has changed the location of the Intake Structure without doing Geotech investigations or fresh Bathymetric survey near their new proposed location which is an illogical action & a serious Engineering Design flaw.
10. EIA of K-IV project already approved by SEPA is used by the Consultants in Revised PC-1. However, SEPA approval was based on Canal based design on original route and Filtration Plant based design which becomes ineffective automatically with major changes or deletion of Filtration plants.
11. Consultant has changed the ROUTE of K-IV without properly visiting the site or doing Geotech investigations on changed route, and has concluded that land is allotted to Wind Mills whereas full 1000' ROW is available between these Wind Mills and the Canal is already constructed (proper topographic survey by the Consultants would have revealed this basic fact. This change is to benefit wind power projects. No detail about acquiring new ROW (about 40 KM) is given which will delay the project (**Annex-B**).

Following are the Observations of TI Pakistan.

1. TI Pakistan had informed the Chief Minister vide letter number TL21/06/08/1A dated 8th June, 2021, about efforts of introducing Steel Pipe in K-IV (**Annex-C**).
2. In the interest of completing K-IV Water Supply Project to provide 260 MGD extra water for Karachi, along with 300% saving of additional cost, TI-P strongly believes that the GoS Technical Committee recommendations of **March 2020**, developed as a result of deliberations on the NESPAK Design Review Report, should be adopted without delay.
3. Government of Sindh needs to maintain the existing route / alignment for K-IV Project and allow the resumption of works on ground once the rectification / modification suggested by the Technical Committee are finalized by M/s. OCL along with submission of revised PC-I by KW&SB to the competent forum for approval.
4. Government of Sindh needs to approve implementation of 260 MGD of K-IV Project as envisaged and planned earlier, preferably adopting **Option-I**, referred in March 2020 report, in view of its advantages & early completion of the Project .

TI Pakistan Recommendations.

- a) Transparency International Pakistan requests the Chief Minister Sindh to examine the above allegations in the light of TI Pakistan observations.
- b) Government of Sindh should consider reconvening the Technical Committee constituted on 30th October 2019, to examine WAPDA proposal of K-IV Project, and review the design change due to which cost of K-IV 260 MGD is likely to increase by 400%, as a result of change of contractor & consultants by WAPDA.



- c) It is the responsibility of Sindh Government to ensure that Karachi gets additional 260 MGD water by end of 2022.

Transparency International Pakistan is striving for across the board application of Rule of Law, which is the only way to stop corruption.

With Regards,

Ms. Yasmeen Lari
Sitara-e-Imtiaz, Hilal-i-Imtiaz
Chairperson
Transparency International Pakistan

Justice (R) Nasira Iqbal
Vice Chair, Sitara-e-Imtiaz
Transparency International Pakistan

Encl: Appendix.

Copies forwarded for the information with request to take action under their mandate to:

1. PSPM, PM House, Islamabad,
2. Commander 5 Corps, Shara-e-Faisal, Karachi
3. Chairman, National Accountability Bureau (NAB) ,Islamabd
4. Mr. Asad Umar, Minister for Planning, Development & Special Initiative, Islamabad
5. Auditor General of Pakistan, Islamabad
6. Registrar, Supreme Court of Pakistan, Islamabad
7. MD, PPRA, Islamabad.

Table - 1

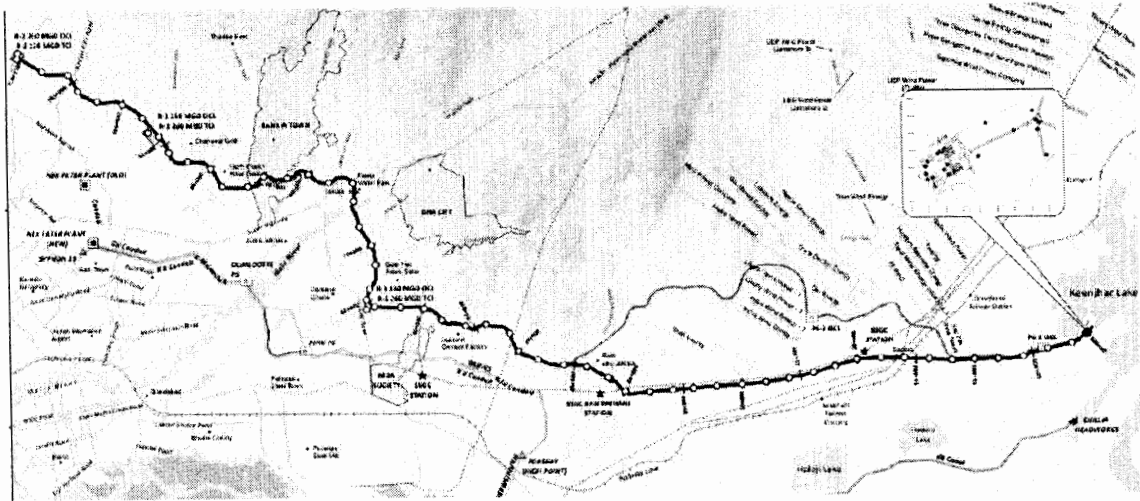
**GREATER KARACHI BULK WATER SUPPLY SCHEME, K - IV PROJECT
(650 MGD)
CONSTRUCTION OF CONVEYANCE SYSTEM INCLUDING ALLIED STRUCTURES
COST SUMMARY**

S. No.	TITLE	AMOUNT (PKR Million)
1	COST OF CIVIL WORKS	
	A - CIVIL WORKS	
I	GENERAL WORKS	2,100.565
II	MAIN AND GUIDE EMBANKMENT	308.784
III	INTAKE STRUCTURE	489.987
IV	FIVE CELL CONDUITS	795.913
V	COMMON INLET CHAMBER FOR PUMPING STATION	1,320.389
VI	RESERVOIR (5 No. X - 130 = 650 MGD)	5,060.540
VII	PRESSURISED WATER TRANSMISSION PIPELINE	132,155.892
VIII	PUMPING COMPLEX AND STAFF COLONY	1,353.597
IX	ACCESS ROAD (8 Km)	741.169
X	WEATHER STATION AND FLOW MONITORING SYSTEM	28.233
XI	PMU AND FIELD OFFICES DEVELOPMENT	63.662
	SUB TOTAL - A - (CIVIL WORKS)	144,418.731
2	B - E & M WORKS	
	B - (i) - PUMPING STATIONS (CIVIL WORKS) 5 NO.)	4,200.000
	B - (ii) - PUMPING STATIONS (E & M WORKS) 5 Nos.	18,155.364
	SUB TOTAL - B - (EPC WORKS)	22,355.364
	1 - COST OF WORKS (A + B)	166,774.095
	Engineering and Administration	
3	a) Consultancy Services (Detailed design, Installation supervision, O & M etc.) @ 2%	3,335.482
	WAPDA Administration including security measures	
	b) WAPDA Admin Cost including Security measures	1,514.707
	c) Security Measures During Implementation and O&M	133.528
	2-Sub Total (Project Implementation Cost) (3a+3b+3c)	4,983.717
	3-Sub Total (1+2+3)	171,757.812
4	Physical Contingencies @ 2 % of Sub Total (1)	3,335.482
5	Price Escalation @ 6.5% per Annum	10,116.039
6	Authority Overheads @ 2.25% of of Grand Total	4,301.878
7	Operation and maintenance cost for 3 years. *	1,683.345
	Total (1 to 7)	191,194.556
	Grand Total Million (PKR)**	191,195

*Excluding the utilities cost to be borne by KWSB / G.o.S.

**Expenditure by KW&SB, GoS June, 2021 (Not included) 10,398 Million

Annex-B





**TRANSPARENCY
INTERNATIONAL - PAKISTAN**

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Website: www.transparency.org.pk

8th June, 2021

TL21/06/08/1A

Syed Murad Ali Shah
Chief Minister
Government of Sindh
CM House
Karachi

**Subject: Allegation of loss of Rs. 55 Billion to the exchequer.
Delay in Completion of Karachi 260 MGD K-IV Water Supply Project, and design change by
WAPDA by introducing GRP/Steel to benefit pipe suppliers, resulting in increase in cost from
Rs. 45 billion to over Rs.100 billion**

Dear Sir,

Transparency International Pakistan has received a complaint on the allegation of undue delay in the completion of 260 MGD K-IV Water Supply Project, which has been stopped since January 2018, along with changes in design by WAPDA by introducing GRP/Steel pipe in the duct of already constructed open channel, resulting in a change in the Project Scope to increase the cost from Rs. 45 billion to over Rs.100 billion under pressure of pipe mafia, which is likely to cause a loss of Rs. 55 billion to the exchequer

The complainant has made the various allegations, which are attached as **Appendix**.

Important allegations are,

That;

1. Karachi is suffering from 260 MGD water shortage. Initially K-IV Water Supply Project from Sep 2018 to March 2020 went through 30 months delay because of M/s KWSB and M/s NESPAK, as well as due to undue interference of M/s CGGC & M/s China Energy Engineering Group Planning & Engineering Co. Ltd. and their unfounded objection on the design of the K-IV.
2. However, since October 2020, WAPDA, having taken over the K-IV Project, is responsible for an additional 7 months delay, along with further 2-3 years delay as a result of changes in design of K-IV Water Supply Project, which were carried out without an engineering study by new consultant/contractors. We are of the view that Government of Sindh should not allow WAPDA to further delay the implementation of Karachi Water K-IV Project, which, we believe, can be completed in only 18 months i.e. by December 2022 by organizations such as M/s FWO.
3. On 30th October 2019, GoS, in consultation with Corps 5 HQ, constituted a Technical Committee & Sub-Committee of Technical Committee to examine the K-IV Design Review Reports of M/s NESPAK & M/s OCL, , and recommend way forward based on technically viable solution for GoS. The Technical Committee consisted of more than 10 eminent engineers drawn from E-in-C Branch GHQ, 5 Corps HQ, vice chancellors of NED and Mehran Universities, GOS, KW&SB and FWO. The Committee on 30 March 2020 cleared the Water Conveyance System by Canal based on engineering reports of M/s NESPAK/ M/s Dettare, M/s OCL, & M/s Techno Consult. Through its act of pressure pipe system design, WAPDA has challenged professional competence of M/s NESPAK/ M/s Dettare, M/s OCL, & M/s Techno Consult as well as other members of the GoS Technical Committee.



4. It is pertinent to note that WAPDA has been unable to complete its projects in contracted time. The most recent case is the US \$ 4.2 Billion, 4,320 MW DASU DAM contract, that was awarded to CGGC in March 2017 when Lt. Gen (R) Muzammil Hussain, chairman WAPDA announced that 1st Phase of 2,160 MW will become operational in **2021**. However, after 3 years, on 25.2.2020, chairman WAPDA erroneously declared that 2,160 MW of 4,320MW Dasu hydropower **is on schedule** to begin generation in **2025**. It means that the project of Dasu Dam which has already been delayed by 4 years is now further delayed by another 4 years (while only 20% work was so far completed). The cost of the project has already increased by 100% and AGP in annual Audit Report has also made several allegations of financial irregularities that have been committed in this Project.
5. Since WAPDA is unable to comply with completion schedules of projects, we apprehend that and if K-IV remains in the hands WAPDA, it is likely to become a replication of Neelum Jhelum Project with its delays and manifold increase in cost.
6. The Auditor General has made serious allegations on WAPDA's performance as can be noted in para 7 of the below report which indicates incompetency /non professionalism of WAPDA, awarding work to favourite contractors and consultants, which AGP has declared to be a violation of PPRA Rules, such as PPRA Rule No. 2(f) (Corruption), and is likely to attract action under NAB Section 9, reference page Nos. 8, 11, 16, 17, 19, 22, 23, 25, 27 and 48:
<https://www.agp.gov.pk/AuditReports> .
7. It is clear that there is an urgency for the completion of K-IV as soon as possible within next 18 months, in order that an extra 260 MGD water becomes available to citizens of Karachi who are currently suffering from severe water shortage.

Following are the Observations of TI Pakistan.

1. In the interest of completing K-IV Water Supply Project to provide 260 MGD extra water for Karachi, along with 100% saving of additional cost, TI-P strongly believes that the GoS Technical Committee recommendations of **March 2020**, developed as a result of deliberations on the NESPAK Design Review Report, should be adopted without delay.
2. Government of Sindh needs to maintain the existing route / alignment for K-IV Project and allow the resumption of works on ground once the rectification / modification suggested by the Technical Committee are finalized by M/s. OCL along with submission of revised PC-I by KW&SB to the competent forum for approval.
3. Government of Sindh needs to approve implementation of 260 MGD of K-IV Project as envisaged and planned earlier, preferably adopting **Option-I**, referred in March 2020 report, in view of its advantages & early completion of the Project .
4. Corresponding augmentation works of Phase-I of K-IV Project need to be taken up for implementation as a priority project under World Bank / AIIB funded KWSSIP Project.
5. Wherever required along the alignment of the Project, Government of Sindh needs to facilitate K-IV Project Authority in early acquisition of land.
6. Subject to the approval of Government of Sindh, M/s. OCL needs to carry out detailed redesigning accordingly and submit complete and comprehensive Modified Design Report, incorporating all the technical issues discussed hereinabove.
7. M/s OCL needs to subsequently provide the precise cost estimation of the approved option in light of the modified design with due diligence and professionalism. M/s OCL will also prepare revised



PC-I of Phase-I K-IV to be submitted to KW&SB for onward submission to competent authority for approval.

8. It is clear that, Pakistan's economy cannot bear a loss of Rs. 55 billion, just because, as alleged by the complainant, WAPDA unilaterally decided to change the design of K-IV.

9. It is also clear that prima facie WAPDA has committed violation of PPRA Rule No. 30, (no evaluation criteria shall be used for evaluation of bids that had not been specified in the bidding documents) by qualifying M/s Techno Consult JV, against condition of Conflict of Interest Condition in the RFP.

10. WAPDA's negative past performance needs to be noted which resulted in 9 years delay, with changes in design, and cost increase from Rs. 90 Billion to Rs. 500 Billion, as highlighted in Auditor General Pakistan, Performance Audit Report on Neelum Jhelum Hydropower 2016-17, http://www.na.gov.pk/uploads/documents/1596523006_305.pdf.

11. Based on WAPDA's past record, K-IV project completion is likely to be further delayed by 4/5 years, while the cost is likely to increase from Rs. 45 billion to over Rs. 100 billion. record, which should not be allowed.

TI Pakistan Recommendations.

- a) Transparency International Pakistan requests the Chief Minister Sindh to examine the above allegations in the light of TI Pakistan observations.
- b) Government of Sindh should consider reconvening the Technical Committee constituted on 30th October 2019, to examine WAPDA proposal of K-IV Project, and review the design change due to which cost of K-IV 260 MGD is likely to increase by 100%, as a result of change of contractor & consultants by WAPDA.
- c) It is the responsibility of Sindh Government to ensure that Karachi gets additional 260 MGD water by end of 2022.

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With Regards,

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Chairperson
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Encl: Appendix.

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3. Chairman, National Accountability Bureau (NAB), Islamabad
4. Mr. Asad Umar, Minister for Planning, Development & Special Initiative, Islamabad
5. Auditor General of Pakistan, Islamabad
6. Registrar, Supreme Court of Pakistan, Islamabad
7. MD, PPRA, Islamabad.



Allegations.

1. M/s FWO was awarded 260 MGD K IV Project at Cost of Rs 25.5 Billion in June 2016, however, the project was derailed due to delays in acquisition of land by KW&SB, and in the start of other separate projects, viz Energy Supply & Improvement of distribution system. M/s FWO almost completed the civil works till KM 86, and has been asking for arrangement of land since 2017. From January 2018 the project slowed down, and has almost stopped in October 2018, due to non-availability of land, no decisions by PD K-IV, and efforts of KSWB to include different non PC-1 components in K-IV project cost by KWSB. As these components were not included in the approved PC-1 of K-IV by CDWP, unfounded objection were raised on the alignment/route of 120 km canal by Project Director of K-IV since February 2018, although the canal works by M/s FWO were already near completion till 86 KM.
2. K-IV is a fourth open-air canal built since Partition that was supposed to bring extra supplies of water from Keenjhar Lake to serve the city of Karachi.
3. On design apprehensions of K-IV by KWSB, GoS in March 2019 appointed M/s NESPAK to review and submit report in 90 days, (June 2018) the Design of K-IV, and NESPAK in association with M/s Dettare Consulting Ltd, Cypress. In October 2019 (after 4 months delay), NESPAK submitted its report, raising technical objections, major being on the alignment of 120 km Canal, being in seismic zone, and embankments being vulnerable in high floods, & on velocity etc.
4. GoS in consultation with Core 5 HQ, constituted Technical Committee & Sub-Committee of Technical Committee on 30th October 2019 to examine the Design Reports, and recommend way forward bases on technical viable solution of GoS. The Technical Committee comprised of more than 10 eminent Engineers from EnC Branch GHQ, HQ 5 Corps, Vice Chancellors of NED and Mehran Universities, GOS, KW&SB and FWO.
5. During this period, M/s China Gezhouba Group of Companies (CGGC) of China, who are Contractors of WAPDA on Mohmand Dam Project, supervised by M/s NESPA JV, visited KWSB and were briefed on the design report of NESPAK. Based on the feedback of NESPAK, M/s CGGC submitted a letter of interest to CM Sindh, on 25 December 2019, stating that K-IV Design is not feasible, and offered to re-design and construct the project. .
Again on 25 January 2020, M/s China Energy Engineering Group Planning & Engineering Co. Ltd wrote an Expression of Interest letter to the Ministry of Finance and Sindh Chief Minister, saying that CEEC is already working on CPEC, and that its President Luo Bixiong had met Sindh Chief Minister Murad Ali Shah earlier, on October 25 and discussed Karachi's projects infrastructure, especially K-IV. They stated **"Our preliminary study reveals many flaws in the K-IV water supply project in terms of project design, engineering and financial aspects"**. And that **"With our vast experience in similar projects, we are encouraged to inform you that the project needs to be seriously redesigned for a practical, durable, sustainable and bankable execution."** **Annex-A**
6. The past history of Projects awarded to M/s CGGC by WAPDA in violation of PPRA Rules as well as trillion of rupees losses caused to exchequer is reported by Auditor General Pakistan in 2019-20 Annual Audit report has charged WAPDA of causing Rs. 466 Billion Losses in Dasu Dam and also that these allegations are currently under NAB Inquiries. AGP has also loss of billion rupees in award by WAPDA/NESPAK in Mohmand Dam Hydropower Project to M/s CGGC on non-competitive rates. WAPDA has also awarded Consultancy Contract whose 1st bid prices by NESPAK JV was Rs 3.6 Billion, at Rs 9.5 Billion by rebidding on QCB Method, which was initially M/s CGGC/WAPDA/NESPAK are also responsible loss of Rs 410 Billion, for increase in cost of Neelum Jehlum Power Project from Rs 90 Billion to Rs 502 Billion. **Annex-B**
7. WAPDA has never completed any project in the contracted time. The most recent case is the US \$ 4.2 Billion, 4,320 MW DASU DAM contract, awarded to CGGC in March 2017. Chairman WAPDA Lt. Gen (R) Muzamil Hussain announced in March 2017 that 1st Phase of 2,160 MW will become operational in 2021. However, after 3 years, on 25.2.2020, Chairman WAPDA has declared (false statement) that 2,160 MW of 4,320MW Dasu hydropower **is on schedule** to begin generation in 2025, which means that the project of Dasu Dam which has already been delayed by 4 years is now further delayed by another 4 years (and only 20% work is done). The