

PUBLIC ACCOUNTS COMMITTEE (1975-76)

(FIFTH LOK SABHA)

HUNDRED AND NINETY-SIXTH REPORT

FARAKKA BARRAGE PROJECT

**MINISTRY OF AGRICULTURE AND IRRIGATION
(DEPARTMENT OF IRRIGATION)**

**[Paragraph 28 of the Report of the Comptroller and
Auditor General of India for the year 1973-74—
Union Government (Civil)].**



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16-6-1975 (FN)

16-6-1975 (AN)

17-6-1975 (FN) &

20-1-1976

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(1975-76)

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Shri H. G. Paranjpe—*Chief Financial Committee Officer.*

Shri N. Sunder Rajan—*Senior Financial Committee Officer.*

INTRODUCTION

I, the Chairman, Public Accounts Committee, having been authorised by the Committee, do present on their behalf this Hundred and Ninety-Sixth Report on Paragraph 28 of the Report of the Comptroller and Auditor General of India for the year 1973-74—Union Government (Civil) relating to Excavation of the feeder canal of Farakka Project.

2. The Report of the Comptroller and Auditor General of India for the year 1973-74—Union Government (Civil) was laid on the Table of the House on the 30th April, 1975. The Committee examined paragraph 28 of the said Audit Report at their sittings held on the 16th and 17th June, 1975. The Committee considered and finalised this report at their sitting held on the 20th January, 1976. Minutes of these sittings form Part II* of the Report.

3. A statement showing the main conclusions/recommendations of the Committee is appended to the Report (Appendix VII). For facility of reference these have been printed in thick type in the body of the Report.

4. The Committee place on record their appreciation of the assistance rendered to them in the examination of the subject by the Comptroller and Auditor General of India.

5. The Committee would also like to express their thanks to the Ministry of Agriculture and Irrigation (Department of Irrigation), the Ministry of Shipping and Transport and the Ministry of Law, Justice and Company Affairs for the cooperation extended by them in giving information to the Committee.

H. N. MUKERJEE,

NEW DELHI;

Chairman,

January 21, 1976.

Public Accounts Committee.

Magha 1, 1897(S).

*Not printed. (One Cyclostyled copy laid on the Table of the House and five copies placed in Parliament Library).

CHAPTER I

INTRODUCTORY

1.1. On 21st May, 1975, Farakka, the largest Project of its kind, was dedicated to the nation. For many in the country, specially in the north-eastern region, it was almost like a dream come true. Hopes long deferred now seemed near fulfilment. The resuscitation of an entire area, facing crucial difficulties and in some ways the richest in India, was no longer to remain problematical. On the success of this project, thus, our country has banked a great deal, in terms not only of money but also of expectation.

1.2. The main purpose of the Farakka Barrage Project, while necessarily inclusive of such things as provision of an inland navigation route linking Calcutta directly with the Ganga and the concomitant improvement of irrigation and other facilities, has been and continues to be the guaranteed provision of headwater supply along the Bhagirathi-Hooghly for the preservation of the long seriously threatened Port of Calcutta.

1.3. Even at the risk of repeating what has been often talked about, it is worth recalling the basic reasons behind the 'ills' of Calcutta Port and the conception of Farakka as the medicine which, the experts generally agreed, could prevent its 'slow death.'

1.4. The Port of Calcutta was set up more than two hundred years ago, some 125 miles inland of the Bay of Bengal, with depths available for sea-going vessels, that were considered ample for a long time. However, owing to the diversion of the main flow of the Ganga into the Padma, the water flowing from the Ganga *via* the Bhagirathi into the Hooghly became less and less over the years. This actually accentuated problems that have to be faced by all tidal rivers, and the Hooghly's hydrological situation has always been somewhat precarious, entailing an incessant fight against masses of silt and sand and the bores breaking in, calling for, among other things, expensive and expert dredging work on a scale that is stupendous.

1.5. As long ago as in 1853 an eminent engineer of the age, Sir Arthur Cotton, examined the problems of the river and its port, reaching conclusions that appear basically valid today. Committee

after Committee cogitated on the issue continuously—in 1853, 1854, 1863, 1872, 1896, 1902, 1912, 1913, 1914-15, 1916-19, 1930, 1939 and 1946. This is a tiring catalogue, but it is witness to the persistence of a problem that just could not be ignored, even if it could not perhaps, in the conditions of those days, be solved. Study of the river was made in 1930 by so celebrated a man as Sir William Willcocks who is remembered in India with much respect. It seems that in all these studies, while 'doctors differed' on specific remedies, there was agreement that supply from the Ganga had been progressively decreasing and that more headwater supply must come into the Hooghly if Calcutta Port was to endure.

1.6. In spite of so much cogitation, however, tangible relief was not being seen, and it appears, as if in desperation, a proposal was made in 1946 for the construction of a navigational channel of 26 miles from Calcutta to Diamond Harbour, by-passing the 42 mile deep-water reach of the Hooghly. The project was not pursued. Difficulties in negotiating the bars between Diamond Harbour and the sea would still remain. Besides, experiments in Poona showed that if left to itself, the Hooghly in the reach of Calcutta would drastically deteriorate and the deterioration would travel down-stream, adversely affecting the river also beyond Diamond Harbour. It is exactly this deterioration which has set in for quite some time now, and Farakka is intended to counter and control it. The deterioration, it needs to be noted early in our report, has become very extensive at Diamond Harbour and also dangerously discernible at Haldia. If the Disease, for which Farakka is meant to be the remedy, continues to spread widely and perilously, and if Calcutta is not saved in time, Haldia may also go down—a shuddering thought for all who care for the country's future.

1.7. The spectre that haunted even the foreign rulers of India could not but disturb the government of our independent country. Even before freedom came, the Radcliffe Commission (1947), demarcating the lines of the partition of Bengal, preliminary to Britain's transfer of power to our people, pointed out:—

“The existence of the Port of Calcutta depends entirely upon the maintenance of adequate water supply in the River Hooghly. Not only the existence of the Calcutta Port but the health, sanitation and industrial life of the entire tract of land known as Central Bengal hinges upon this river. The river Hooghly is formed by the confluence of the Bhagirathi with the Jalangi at Nabadwip, and the Matabhanga

subsequently joins them at Chakdah. The Bhagirathi, the Jalengi and the Matabhanga are known as the Nadia rivers and they are the principal fresh-water feeders of the Hooghly. It is well known that the Bhagirathi which once constituted the main channel of the Ganges now practically remains out off from the latter except during the floods, and even then the share of the Ganges flood that it receives is almost insignificant as compared with what passed before the diversion.... Once the Ganges is trained and the banks protected and the Nadia barrage built, the Hooghly will become suitable and there will be enough of water all the year round...."

Further:

"The construction of a barrage across the Ganges is the only solution of the problem. The improvement of these rivers is essential for the preservation of the Central Bengal and whether a barrage is to be constructed, or dredging has to be resorted to, it is not pertinent for us to discuss for our present purpose. It is necessary that some means or other should be found by which an appreciable portion of the Ganges flood can be induced to pass through these three Nadia rivers in preference to the Padma the hydraulic conditions of which are, of course, much more efficient. In order to do this, and to prevent the Hooghly from languishing altogether and ruining the health and industry of Bengal, it is absolutely necessary that the headwaters of the Hooghly should be under the control of the West Bengal State."

1.8. Immediately after partition, in accordance with the recommendation of the Central Board of Transport, the Government of West Bengal were asked to undertake investigations in connection with the Ganga Barrage. However, progress was slow and the task was transferred by the Ministry of Transport to the Central Water-Power Irrigation & Navigation Commission in July, 1949. On 22nd February 1957 Dr. Walter Hensen, a German Engineer with a world reputation on tidal hydraulics, came for this purpose at the invitation of the Government of India, and submitted a report in which he concluded:—

"It is the most purposeful measure with which *long-term deterioration in the Bhagirathi—Hooghly can be stopped*

and possibly converted into gradual improvement". adding:

"I fully recommend the proposal for the construction of a barrage across the Ganga." (*Italics added*).

The Farakka Barrage Project was based on Dr. Walter Hensen's Report. Its cautious wording indicates that the task is intricate and over-optimism should be discouraged.

1.9. To revert to details, the main features of the Project are:

- "(i) A Barrage at Farakka with the road-cum-rail bridge over it, a Head-Regulator on the right bank of the Farakka Barrage. It consists of 109 bays. The length of the barrage between abutments is 2,244 metres (7,366 ft.).
- (ii) A Barrage across the Bhagirathi at Jangipur. It consists of 15 bays. The length of the barrage between abutments is 213 metres (698 ft.).
- (iii) A Feeder Canal about 39 kilometres (24 miles) long taking off from the Head-regulator and tailing into the Bhagirathi on the downstream side of the Jangipur Barrage. It is designed to carry a discharge of 1133 cumecs (40,000 cusecs), its bed width being 151 metres (495 ft.) and water depth 6 metres (20 ft.).
- (iv) Four navigation locks to facilitate navigation along with Ganga across the Farakka Barrage and between Bhagirathi and the Ganga viz. Feeder Canal.
- (v) Two road-cum-rail bridges and three road bridges are also provided across the Feeder Canal to maintain communication between both sides of the canal."

1.10. Reference to the anticipated discharge of 1133 cumecs (40,000 cusecs) is especially important. Adequate headwater supply to the navigation channel by diversion from the Ganga has been the crux of the matter. Masses of sand descending during the monsoon and accumulating in the river, apart from the silt and sand brought in daily from the sea, could be countered only by an adequate flow of headwater supply. In the absence of such supply during virtually nine months of the year, the entire river system is visibly choking up. Improvement by dredging, extraordinarily expensive as it is, has reached its limit long ago. Diversion from the Ganga, of nothing

less than 40,000 cusecs—the figure agreed upon by experts and considered irreducible in official statements—appear to provide, on all reliable evidence, to be the only potentially effective, remedial measure.

1.11. On 2nd September, 1958, the Deputy Minister of Irrigation and Power stated the following in Parliament:—

“The Government of India are most concerned over the progressive deterioration of the navigable sea-route of the Port of Calcutta owing to the heavy siltation occurring in the river Hooghly, especially since 1919.”

“There is a general consensus of opinion that the channels of the Hooghly and the Bhagirathi will progressively deteriorate, if they are left to themselves, and that the most effective method of stopping the long-term deterioration is by regulation of upland supplies to the Hooghly through Bhagirathi, by the construction of a barrage on the Ganga at Farakka. Such a barrage would also reduce the frequency and intensity of the bores which have noticeably affected the handling capacity of the Port.”

“The Government is fully seized of the problem of the deterioration of the Port of Calcutta which, apart from being an important international link, is *vital not only the economy of West Bengal but also to the whole of India.*”
(Italics added).

1.12. On 16th August, 1961, Prime Minister Jawaharlal Nehru made the following statement in the Lok Sabha:—

“The House knows very well about the Farakka Barrage Scheme, which essentially, apart from other things, is *meant for the vital purpose of protection for the port of Calcutta.* It is a most urgent matter, and unless we take it up, the port of Calcutta may just gradually become useless and where will the city of Calcutta be, if the port of Calcutta goes that way? It is a matter of the greatest importance.”
(Italics added).

1.13. In 1966 the Ministry of Transport and Aviation, Deptt. of Transport & Shipping informed the Estimates Committee of Lok Sabha as follows:

“It is well known that due to factors beyond the control of the Port authority the River Hooghly has been deteriorat-

ing for a long time. While intensive studies have been and are being made and very large expenditure is being incurred on intensive dredging, it would not be possible to arrest the deterioration until the Farakka Barrage is ready and upland water supply from the Ganga is available throughout the year. Government and the Port authority recognise the great importance of improving the draft available to shipping. Every attempt will be made to minimise any further deterioration of the Hooghly until the Farakka Barrage is completed and to improve the draft as much as possible after the completion of the Farakka Barrage."

[Estimates Committee 15th Report, 4th Lok Sabha]

1.14 The Farakka Project was approved in 1960. For various reasons, the actual work on the Barrage did not start before 1963-64. It took till June 1971 for the works on the main Farakka and the Jangipur barrages to be completed. The Rail bridge, a fine structure, over the Barrage was opened to traffic during that year, and the road bridge alongside completed in February 1972. For a variety of reasons the Feeder Canal, the main link between the Farakka Barrage and the River Bhagirathi-Hooghly, which had been designed for completion in 1970-71, got delayed. On the 16th August, 1972, the Union Minister of Irrigation and Power informed the Lok Sabha, in reply to a Calling Attention Notice, that the work of excavation of the canal was expected to be completed by December, 1973, and that the Government hoped to let down the Ganga water through the canal early in 1974. Regarding the discharge of adequate quantum of Ganga water through the Feeder Canal into the River Hooghly, the Minister laid a statement on the Table of the House which stated *inter-alia*.

"Having regard to the doubts expressed by some people Government of India wish to reiterate that Calcutta Port will not be allowed to deteriorate and all the modern techniques of adequate supply of head water discharge and optimum dredging of tidal prism, where necessary, river training measures, etc., will be fully utilised to ensure the health of the great Port of Calcutta.

The canal could not, however, be completed till April, 1975. On 21st April, 1975 the Canal was declared operational and the cherished Ganga waters flowed into the Bhagirathi-Hooghly.

1.15 The river Hooghly and the port of Calcutta have reached today's predicament during these long years of waiting for the truly life-giving waters. Sand accumulation in the upper reaches of the river was in 1954-55 of the order of 1.6 million tons a year, while in 1972-73 tides could not proceed upstream on account of the accumulation reaching the figure of 9 million tons. The position might temporarily improve for purely natural reasons during the monsoon months, but there must be no reduction in the discharge of 40,000 cusecs in the year's lean months, of which three, March, April and May, are in fact, from this angle, excruciating. Otherwise, the root cause of the progressive silting and choking up of the tidal system would continue; the rate of decline might be slightly modified and the Port, as a working if not flourishing proposition, linger on for some years more. The West Bengal Government, primarily and most directly concerned, have over the years sent numerous 'S.O.S.' appeals to the Union Government, insisting, therefore, on the guaranteed supply of 40,000 cusecs—appeals which, while never turned down with relevant arguments, appear to have often during the last decade been shied away from. From all available evidence it is clear that with 40,000 cusecs guaranteed, Calcutta Port will have a fair chance of winning the fight for its own life and the life of the river, in the process ensuring that no harm comes further downstream to the enormously important Haldia complex in which the country has invested so much of its scarce resources. For this 'holding operation' in the battle for Calcutta Port and the entire economic region abutting on it, the guaranteed inflow, from Farakka, of 40,000 cusecs is, let it be repeated, indispensable.

1.16. The Committee are glad that though belated, the Farakka Project has now been completed and the Bhagirathi-Hooghly has, according to reports, started receiving 40,000 cusecs of water. Audit has commented* upon the long and expensive delay in the execution of the project which, according to experts, has already accentuated the forces adversely affecting the continued navigability of the river. If for any reason the discharge of an adequate volume of water, estimated by experts at 40,000 cusecs and repeatedly assured by the authorities, does not happen the Committee fear it will be a grievous blow not only to Calcutta Port but to the entire economy of the wide, populous and productive region abutting on it, as also imperil Haldia's enormous potentialities. The Committee trust, however, that all difficulties will be overcome and the hopes, so long generated by Farakka, will to the extent possible, be fulfilled.

*Vide Audit Paragraph at Appendix I.

CHAPTER II

PROGRAMME OF CONSTRUCTION AND ESTIMATES OF THE PROJECT

Delay in Construction

*Audit Paragraph**

2.1 In October 1961, an eight-year construction programme for the Project from 1962 to 1970, with a small spillover into 1970-71, was approved. However, in December, 1962, an "accelerated" or "crash" (seven years) programme was adopted reducing the period of construction by one year i.e. from 1962 to 1969. Subsequently, the construction schedule was extended to 1970-71.

Having regard to the essentiality and benefits to be derived from the various works, in October 1965, execution of the project was split into three units. The revised construction programme envisaged efforts to be concentrated, primarily, on completing such essential works with least possible delay as would secure fulfilment of the most important functions of the project, viz. diversion of the flow of the Ganga, to feed the Bhagirathi-Hooghly system for improvement of Calcutta Port. The first two units taken up together in phase I, comprise the two barrages, the canal including bridges, and certain appurtenant works. Unit III, in phase II, would embrace navigational works excepting upstream navigation locks, at Farakka and Jangipur, to be constructed in phase I, to maintain *status quo* in river traffic.

[Para 28, Audit Report (Civil) for the year 1973-74]

2.2. It took till June, 1971, a little later, that is to say, than the target date of completion of the extended construction schedule, to complete the work on Farakka Barrage and Jangipur Barrage. However, the work of excavation of the Feeder Canal (including bridges, cross drainages and control works) could be completed and the canal made operational only in April, 1975. Thus four valuable years in the battle to save Calcutta Port were lost.

*The Audit Paragraph in full has been reproduced in Appendix I.

2.3. The Committee desired to know in detail the reasons for delay in excavation of the canal. The Ministry have stated in reply:

"The canal work was taken up in September, 1963. The canal work in the reach RD 8 to 48 was started by letting out the work to 9 small contractors with dates of completion varying between June, 1964 and February, 1965. There was some delay in commencing the canal works (it was earlier scheduled to commence the canal work from September, 1962) because several details concerning finalisation of canal sections, disposition of spoil banks, proportion of manual labour to dredge excavation etc. had to be settled with Dr. Lackner, the German Expert. Further, no contractor was willing to undertake work at the schedule rates. There was response from only three tenderers and the rates were 220 per cent to 225 per cent over and above the draft schedule. The contractor who was allotted the work of the canal from RD 8 to 12 and 17 to 28, met with a fatal accident on 22-10-63 as a result of which the firm expressed its inability to proceed with the work and requested for the termination of contract without payment of penalty. Other contractors except one also left the work incomplete since the leads were long and they could not build up adequate degree of mechanisation. In pursuant to the decision taken by the Control Board in its 8th meeting held on 13-1-1964, tenders were invited for excavation of feeder canal in dry of the upper part of the feeder canal in the reach RD 10 to 68. The tenderers were given option to quote for wet excavation to full canal section. No final decision on the tenders could be taken as the question was linked up with the excavation to be done by dredgers. The question of buying a fleet of dredgers was kept in abeyance and in January, 1965, the contract was awarded for excavation in the reach 10-68; thus, the canal work could really start in a big way only from 1965. However, there was difficulty in providing adequate funds and hence tenders beyond RD 68 could not be fixed till 1967 end.

The working conditions in the Project area were indeed difficult. There were other difficulties such as early rains and even floods which not only limited the working period but also caused damages to the work already done. Further, the law and order situation was far from satisfactory, particularly during the latter part

of the completion period. The Project staff as well as the contract labour had apprehensions that after completion of the work, there would be no employment for them. This led to agitations and unrest which were more pronounced since 1968. The power supply position was also not quite satisfactory and there were a large number of interruptions which delayed the dewatering operations. There were unexpected rains during 1968 working season and this had also upset the construction schedule for the season.

The Feeder Canal is the largest canal in the country having a discharging capacity of 40,000 cusecs. The types of soil upto bed level in the different reaches vary widely from clay to sandy soils. There were numerous road crossings including cart-track crossings all along the alignment of the canal and the local people insisted that unless the road bridges crossings are provided the existing crossings should not be disturbed. As a result the excavation of the canal was rendered more difficult. Firstly, the excavation of the canal had to be resorted to within the smaller reaches which prevented optimum use of the equipment and secondly it resulted in longer leads. Drainages of the canal portions which were excavated during different working seasons, posed serious problems, particularly as the monsoon in this area is quite heavy. Explorations and investigations with the soil properties also took time in finalising the detailed estimates for the purpose of invitation of tenders. Land acquisition in the reach beyond 68.00 also was lagging and this held up invitation of tenders far beyond RD 68.

There was also shortage of competent and resourceful contract agencies who could complete such large quantities of earthwork (which had necessarily to be done by mechanised equipment) in time as it needed huge fleet of earthmoving equipment and adequate inventory spare parts which the contracting firms would require to maintain till completion of the work. It must also be stated that such large earthwork was beyond the capacity of manual labour.

Progress of work on the excavation received a further set-back due to prevailing adverse law and order situation. In fact labour troubles had at that time become chronic throughout the whole State of West Bengal since 1969.

reason that it did not comply with the provision of Article 299 of the Constitution according to the aforesaid judgement of the Supreme Court. But these decisions of the Supreme Court, on similar issues, had not been pointed out to the arbitrator.

In February 1971, when the question of *ex-gratia* increase of contracted rate was still under consideration of Government the contractor had confirmed that the minimum which could be acceptable to him would be Rs. 12.83 per 100 cft. for 1967-68 and 1968-69. Again, in March 1971, when the claim prior to October 1969 was rejected by Government, the contractor had requested for payment at Rs. 12.50 per 100 cft., for work done in 1967-68 and 1968-69, i.e. the rate at which the work in RD 68—97 had been allotted to contractor 'B' in December 1967. At these stages, contractor 'A' had not claimed compensation for work done by him prior to October 1967. These, however, were not pointed out by the project before the arbitrator. Besides, in April 1969 work in excavation of the canal, in RD 97—103 had been awarded to contractor 'A' at the negotiated rate of Rs. 12.43 for 100 cft. The point was also not placed before the arbitrator.

In fact, the project had contented itself with general denial of the claim before the arbitrator, without going into the quantum which might be payable, in the event of upholding of the claim of the contractor by the arbitrator.

Under the award increased rates (per 100 cft.) of Rs. 13.10 for 1967 (full year), Rs. 16.05 for 1968 and Rs. 15.55 for the period January 1969 to September 1969, were allowed against the contracted rate of Rs. 11.30.

Law Ministry was of the view, that there was remote possibility of the court interfering and setting aside the award but advised the project to take the risk and file a petition for setting aside the award instead of accepting it without contest.

An objection petition was accordingly filed in the Court of Subordinate Judge, Murshidabad. But in June 1973, in consultation with the Ministries of Law and Finance, it was decided not to pursue the case and the Ministry of Irrigation and Power directed the Project to persuade the court to proceed to pronounce judgement according to the award, followed by a decree, as early as possible to avoid payment of further interest to the contractor. The suit was decreed in terms of the award, in June 1973 and payment of Rs. 100.31 lakhs including interest of Rs. 2.36 lakhs from 30th December 1972 to 23rd June 1973, was made to contractor in July 1973.

For execution of the works of the project there is a General Manager on the project site with powers more or less of a Chief Engineer of the C.P.W.D. Over him there is a Control Board in Delhi, set up in April 1961, to ensure efficient, economical and early execution of the Project. The Board, however, has not been meeting frequently. For instance, it met in June 1969, May 1970, April 1971, December 1972 and has not met thereafter (August 1974). Government stated (September 1974) that "according to the Rules of the Business of the Control Board, it transacts its business, either through holding regular meetings or through processing of the cases under the Emergency procedure. In the latter case, the concurrence of Finance is also taken and thereafter the decisions taken are ratified by the Board" and that "infrequent meetings of the Board have not, in any way, affected the execution of the works on the project".

The two barrages at Farakka and Jangipur and the feeder canal are indivisible parts of the project, from which the expected benefits cannot be derived, unless all the three inter-related components are completed. In the scheme of this project, the canal providing the vital link between the Ganga and the Bhagirathi through the Farakka and the Jangipur barrages, holds the key. Although the most difficult and complicated parts of the project, viz., the two barrages, were completed by June 1971, (except the erection of gates and hoisting arrangements of the barrage at Jangipur which was also completed by the end of Monsoon of 1973) the link canal is not yet ready. Upto November 1973 out of 157.83 crores cft. of earthwork allotted to the contractors (in September 1974 the total quantity was intimated by Government as 154.47 crores cft. on re-assessment) 149.47 crores cft. had been executed. By June 1974, 152.52 crores cft. of earthwork were completed. Counting from 1962, it has taken about twelve years to excavate the canal. Owing to the delay in completion of the canal the capital investment of Rs. 127 crores on the project, upto October 1974 remains mostly unproductive, and Calcutta port, not yet deriving the benefits from the project, continues to spend Rs. 8-9 crores every year, on dredging operations. The only benefit so far provided by the project is the improvement of communication facilities in the region by the contractor of the rail-cum-road bridge over Farakka Barrage.

(Vide Audit Paragraph 28)
Earth work done in different years by different Agencies

Enclosure to Appendix I

(Quantities in crores cft).

Item of work	When allotted	Estimated quantity	Allotted quantity	Upto working season 1965-66	Upto working season 1966-67	Upto working season 1967-68	Upto working season 1968-69	Upto working season 1969-70	Upto working season 1970-71	Upto working season 1971-72	Upto working season 1972-73	Total quantity done upto working season 1972-73	Balance quantity remaining to be done beyond 1972-73 working season with reference to sub-allotted quantity	Balance quantity remaining to be done beyond 1972-73 working season as assessed sub-quantily (April 1974) by the Project
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Working season normally from middle of November to middle of June (7 months)														
Departmental RD 0 to 10		14.82	14.82	3.59	3.28	0.59	0.43	2.45	1.20	3.18	0.10	14.82	..	..
Contractor A RD 16 to 19 to 68	January 1965	76.62	75.00	14.69	18.15	14.11	11.09	8.96	1.95	..	2.70	71.65	3.35	1.62*
RD 97 to 103	April 1969	6.61	6.61	..	..	..	0.01	1.54	0.25	4.69	..	6.49	0.12	0.08
RD 103 to 126	January 1971	26.25	22.35	..	..	..	..	..	5.10	5.74	9.80	20.64	1.71	1.45
Total Contractor A			103.96	14.69	18.15	14.11	11.10	10.50	7.30	10.43	12.50	98.78	5.18	3.15

* 1.85 According to the Ministry (December 1974).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Contractor B RD 68 to 97	December 1967	31.14	32.26	..	..	0.80	4.90	6.03	1.69	7.38	8.28	29.08	3.18	1.5**
Contractor C RD 109 to 126	December 1967	26.25	21.50	..	..	0.42	0.84	..	..	..	..	1.26	(Contract terminated and re- maining work allotted to contractor A)	..
Other petty contractors RD 8 to 48 (Works closed)		9.23	2.23	..	..	..	..	..	..	..	..	2.23	(Work closed)	(Work closed)

**0.28 According to the Ministry (December 1974).

APPENDIX II

(Vide Para 6.6)

Notes in the Ministry of Law Branch Sectt. Calcutta

SUBJECT:—*Excavation of feeder canal by Messrs. Tarapore and Co. claims for enhancement of rates—arbitrator for dispute.*

REF.—*Letter No. 3W-54|2537, dated 9|16-9-71 from SE, Canal Circle F.B. Project.*

It appears that the contractors claim for increase in the units rates has been agreed to on an *ex-gratia* basis with regard to works done by the contractor from September 1969 and that the contractor's claim with regard to increase in the unit rate for works done prior to that period has been rejected. Due to the rejection of the contractors claim for enhancement of the rate for the work done prior to September 1969, the contractor has requested that as there is a dispute between the contractor and the Government arising as a result of the rejection, the same should be referred to arbitration under clause 25 of the contract conditions.

2 The Department has posed the question whether the above dispute is referable to arbitration under clause 25 of the conditions of contract in view of the fact that the contract does not contain any condition for enhancement in the unit rate on the grounds mentioned by the contractor. From the terms and conditions governing the contract under consideration, it appears that the contract envisages increase in the rate only in two contingencies, namely:

- (i) those mentioned in clause 10(c) of the conditions of contract at page 11; and
- (ii) those mentioned in item No. 25 of the additional terms and conditions in chapter III at page 38.

The Departments' contention is that the contractor's claim for increase in the rate is not covered by the above provisions and as such he is not entitled to the increase in accordance with the terms and conditions of the contract. Such being the position the Department has sought our opinion whether the dispute arising as

a result of rejection of the contractor's claim for increase the unit rate is outside the scope of the contract and as such no referable to arbitration.

3. Clause 25 of the conditions of contract which deals with arbitration appears to be very widely worded and it seems difficult to contend that such a dispute is outside the scope of arbitration clause. Further on reference to the terms and conditions of the contract there appears nothing to indicate that it is one of those excepted matters referred to in the arbitration clause. In the above circumstances, if the contractor's claim for reference of the above disputes to arbitration is not acceded to, it will be open to the contractor to file an application under sec. 20 of the Arbitration Act, 1940, in which event if the court grants the application, the court may appoint an arbitrator of its own choice, who may not be a Government servant, if there is no agreement between the parties upon the arbitrator. Again, if the request for arbitration made by the contractor is rejected, the contractor may also file a suit and in the above circumstances it may not be possible for the Government to make an application for stay of the suit under Sec. 34 of the Arbitration Act, 1940. In the above circumstances, the better course to follow seems to be to accede to the request of the contractor for reference of the dispute to arbitration under clause 25 and appoint an arbitrator, reserving at the same time the Government's right to raise objection as the arbitrability of the dispute sought to be referred by the contractor. As the decision of the dispute referred to the arbitrator will be mainly dependent upon the interpretation of the terms and conditions of the contract which is a question of law; at the earliest possible opportunity the Department should make application in writing to the arbitrator to state a case for the opinion of the court as to the question of law involved under Sec. 13(b) of the Arbitration Act, 1940. If the Department does not make such a prayer to the arbitrator and leaves the decision of the above question of law with the arbitrator, the arbitrator's decision as to the point of law even if erroneous would be final and binding in view of the decision of the Supreme Court in Thawerdas Vs. Union of India (AIR 1955 S.C. 408) and subsequent decisions of the Supreme Court.

Sd/- (S. S. KAR),
Joint Secretary and Legal Adviser,
SSE, Canal Circle, F.B.P.

APPENDIX III

(Vide Para 6.8)

No. 7(20)/73-IF

BHARAT SARKAR

GOVERNMENT OF INDIA

(Sinchai Aur Vidyut Mantralaya)

Ministry of Irrigation and Power

New Delhi, the 14th August, 1973

(As amended vide corrigendum No. 7(20)/73-IF dated 20-8-1973)

OFFICE MEMORANDUM

It has come to the notice of this Ministry that in a Central Project the Chief Engineer appointed the Superintending Engineer as arbitrator under the relevant clause of the contract agreement to arbitrate over the contractors claims which had been examined by a highpowered Committee appointed by the Ministry and that Committee had rejected certain claims of the contractor. The Ministry of Finance took a strong exception to the appointment of the Superintending Engineer as arbitrator in the said case to arbitrate and sit in judgment on the recommendations of the Committee. That Ministry held the view that in such cases a more senior officer should have been appointed as arbitrator considering both the magnitude of the claims of the contractor, and the level of the Committee which had already gone into these claims.

The matter has been carefully examined in the Ministry and the following instructions are issued for the guidance of the Chief Engineers and other authorities concerned with the appointment of arbitrator and dealing with arbitration cases.

1. Contracts costing upto Rs. 100 lacs.

- (a) The Chief Engineer shall appoint an arbitrator, where the aggregate claims of the contractor do not exceed Rs. 5 lacs, from the panel of arbitrators, approved by the Central Water and Power Commission or the Ministry of Irrigation and Power. In case no panel has been drawn an officer of the rank of Director/Superintending Engineer with known integrity having previous experience

and not connected with the execution of the work in question may be appointed as arbitrator.

- (b) The Chief Engineer shall obtain prior approval of the Ministry of Irrigation and Power, where the aggregate claims, of the contractor exceed Rs. 5 lacs.

2. Contract costing more than Rs. 100 lacs.

The Chief Engineer shall obtain prior approval of the Ministry of Irrigation and Power to the appointment of arbitrator irrespective of the amount involved of the claims of the contractor.

3. Notwithstanding item 1(a) above, where a Committee constituted by the Ministry of Irrigation and Power has gone into the claims of the contractor and has made recommendations thereon, the appointment of arbitrator shall, in such cases, be made with the prior approval of the Ministry of Irrigation and Power. Further, if a representative of the Ministry of Finance was a member of the Committee, that Ministry's concurrence would also be obtained.

The receipt of this O.M. may please be acknowledged.

(Sd/-

(D. RAJAGOPALAN)

Director (Internal Financial Adviser).

Copy forwarded to:—

1. Chief Engineer, Salal Hydro Electric Project, Riasi (J&K).
2. Chief Engineer, Loktak Hydro Electric Project, P.O. Bishenpur (Manipur) Imphal.
3. Chief Engineer, Baira Suil Hydro Electric Project, P.O. Chamba (Himachal Pradesh).
4. Financial Adviser & Chief Accounts Officer, Central Hydro Electric Project Control Board, New Delhi.
5. Secretary, Central Hydro Electric Projects Control Board, New Delhi.
6. General Manager, Farakka Barrage Project, P.O. Farakka Barrage, District Murshidabad, West Bengal.
7. Financial Adviser and Chief Accounts Officer, Farakka Barrage Project, P.O. Farakka Barrage, District Murshidabad, West Bengal.

8. Secretary, Farakka Barrage Control Board, Shastri Bhavan, New Delhi.
9. Chief Project Engineer, Badarpur Project, New Delhi.
10. Financial Adviser & Chief Accounts Officer, Badarpur Project, Badarpur, New Delhi.
11. Secretary, Badarpur Power Project Control Board, New Delhi.
12. Central Water and Power Commission (Water Wing), New Delhi.
13. Central Water and Power Commission (Power Wing), New Delhi.
14. JS (I), JS (GB), JS (P), JS (A), Ministry of I. & P.
15. P.S. to Addl. Secretary, Irrigation and Power, New Delhi.
16. P.S. to Secretary, Irrigation and Power.
17. D.S. (P) | DS (E) | US (P) | US (EL), DD (GB), Min. of I & P.
18. FBP & E.L. III Sections Ministry of I & P.

Sd,- (D. RAJAGOPALAN)
Director (Internal Financial Adviser).

APPENDIX IV
(Vide Para 6.13)
GOVERNMENT OF INDIA
MINISTRY OF IRRIGATION AND POWER
PLANT MACHINERY CIRCLE, F.B.P.

No. Con-4(3)

Dated, the 1st Jan., 1973.

From:—Shri D. N. Rao,
Arbitrator & Superintending Engineer,
Plant & Machinery Circle, Farakka
Barrage Project, P.O. Farakka Barrage.

To,

1. Messrs. Tarapore & Co.
175 1, Mount Road, Madras.
2. The Superintending Engineer,
Canal Circle,
Farakka Barrage Project,
P.O. Farakka Barrage.

Dear Sirs,

SUBJECT:—*Arbitration in the matter of disputes between M s. Tarapore and Co. and the Union of India, in respect of excavation of Feeder Canal from RD-10.00 to RD-68.00 on the Farakka Barrage Project under tender No. EE' (FCD)-1 1966-67.*

With reference to the above, I hereby give you notice that I have made and published my award in the matters referred to me and a copy thereof is forwarded herewith for your information.

Yours faithfully,

Enclo:—As stated.

Sd/-
(D. N. RAO)
Arbitrator and Superintending Engineer,
Plant and Machinery Circle,
Farakka Barrage Project.

Copy to the General Manager, Farakka Barrage Project, P.O. Farakka Barrage, with a copy of the award.

Sd/-

(D. N. RAO)

Arbitrator and S.E., P and M,
Circle, FBP.

AWARD

In the matter of arbitration regarding disputes and differences arising out of and in connection with the contract for excavation of Feeder Canal on the Farakka Barrage Project, between R.D. 10.00 and R.D. 68.00 under tender No. EE(FCD)-1/1966-67 between the contractors, Messrs. Tarapore & Co., Engineers and Contractors, 175/1, Mount Road, Madras-2, herein after called "the claimant" and the Union of India, hereinafter "the Respondent".

1.00. By his communication No. DB/Con/1/12207(6) dated the 6th Nov. 1971, the General Manager, Farakka Barrage Project, acting on for and on behalf of the President of India, appointed me as the sole Arbitrator to decide the disputes that had arisen between the President of India and the Claimant, Messrs. Tarapore & Co. under or in connection with the contract between the Union of India and the claimant for excavation of the Feeder Canal on the Farakka Barrage Project between R.D. 10.00 and R.D. 68.00 the value of the contract being Rs. 8,47,54,400.00.

1.01. The said appointment was made pursuant to the provisions in the said contract providing for disputes between the parties being referred to Arbitration of person to be appointed by the General Manager of the Farakka Barrage Project.

2.00. Pursuant to the said appointment, I entered upon the reference on the 24th November, 1971 and called upon the claimant to submit the statement of case and also provide a copy thereof to the Superintending Engineer, Canal Circle, Farakka Barrage Project, who represented the Union of India. The respondent was also called upon to furnish their counter-statement to the contractor's claim

and both parties were also required to submit all documents on which they intended to reply and provide copies of the same to the other side.

2.01. The claimant submitted their statement of claim under cover of their letter No. Ab/3295/71 dated the 14th December, 1971, wherein they claimed an aggregate compensation of Rs. 2,52,10,385.33, for the period from January, 1966 to September, 1959, less such amount as had already been paid for increase in prices of petrol, H.S.D. and lubricants for the relevant period, together with interest at nine per cent on the net amount of compensation from 14th December 1971 till date of payment. The respondents furnished their counter-statement under cover of their letter No. 3W-54/1326(4) dated the 12th May, 1972 denying the said claim. The claimant also submitted with their statement of claim, copies of documents, on which they intended to rely.

3.00. Due to various pre-occupations, the hearing of the case could not be taken up till the 22nd August, 1972.

3.01. After due notice to both parties, the hearing was taken up on 22-8-72. Both parties were present and were also represented by counsel. The hearing was commenced on 22-8-72 and the counsel for the claimant stated the case and exhibits C to C 27(a) were marked by consent to both parties on behalf of the claimant.

3.02. The hearing was adjourned and in the meanwhile the parties were directed to obtain the necessary orders of Court extending the time for making of the award by a further period of four months.

3.03. In compliance with my directions, the parties instituted miscellaneous case No. 66 of 1972 on the file of the sub-ordinate Judge, Murshidabad, praying for an extension of time for making of the award. By order dated the 1st September, 1972, the learned sub-ordinate Judge of Murshidabad, allowed the prayer in the petition and extended the time for making of the award to 2nd January, 1973.

4.00 Notice of the further hearing to be held on the 7th and 8th October, 1972 was given to both parties and at the request of the claimant, the hearing was adjourned to the 26th and 27th October, 1972.

4.01. The hearing was resumed on the 26th and 27th Oct. '72 and the marking of the documents of the claimant was completed with the consent of both parties. The claimant submitted two additional sets of documents and also furnished copies of the same to the other

party. The said documents were received and marked with consent of parties as Exhibits C 28 to C 42.

4.02. The Respondent also produced certain documents called for by the claimant and also submitted their set of documents. These were received and marked by consent of parties as Exhibits D to D-6-Y.

4.03. Both parties stated that they are not leading any oral evidence.

4.04. Counsel for the claimant made his submissions on behalf of the claimant, and referred to various documents in support of his contentions. Thereafter the counsel for the respondent made his submissions on behalf of the Union of India and the claimants counsel replied to the same.

4.05. Both parties agreed that the quantities of earth work executed in the different periods from 1-1-1966 to 30-9-1969 as furnished by the respondent in their counter-statement may be accepted as correct.

5.00. After carefully going through the statement of claim and the counter statement and after carefully considering the documentary evidence placed before me and after carefully considering the legal arguments advanced on behalf of each party, I, Shri D. N. Rao, proceed now to make and publish my award, to-day, the 30th day of December, 1972 at my office at the Farakka Barrage Project, P. O. Farakka Barrage, Distt. Murshidabad, West Bengal.

1. I reject the claim of Messrs. Tarapore & Co. for compensation in respect of the work executed from 1-1-1966 to 31-12-1966.

2. I award that the Union of India, the respondent herein, do pay to Messrs. Tarapore & Co., the claimant herein, in respect of the work executed by the claimant during the period from 1-1-1967 to 30-9-1969, the following amounts:

(a) For work done from 1-1-1967 to 31-12-1967	Rs. 31,85,170.20
(b) For work done from 1-1-1968 to 31-12-1968	Rs. 49,19,218 75
(c) For work done from 1-1-1969 to 30-9-1969 .	Rs. 40,83,170.50
<hr/>	
TOTAL	Rs. 1,21,87,559.45

I further direct that the Union of India, the respondent, will be entitled to deduct from the amount of Rs. 1,21,87,559.45, the sum of

Rs. 23,92,610.00 (Rupees Twenty three lakhs ninety two thousands six hundred and ten) only being the amount paid to the claimant, Messrs. Tarapore & Co. towards increase in cost of petrol, H.S.D. oil and lubricants for the above period.

In the result, I award that the respondent do pay to the claimant, the net sum of Rs. 97,94,949.45 (Rupees Ninety seven lakhs ninety four thousand nine hundred forty nine and paise forty five) only. This will be in addition to what has been already paid or payable to them under the said contract for the works executed during the said period.

This does not cover the claim resulting from the devaluation of the Indian rupee, since the claimant had state that such claim is being separately considered.

3. The claim of the contractor for payment of interest on the amount claimed by them upto the date of this award is rejected.

4. I direct the Union of India, to pay the claimant, Messrs. Tarapore & Co. interest at five percent on the aggregate amount of Rs. 97,94,949.45 (Rupees Ninety seven lakhs ninety four thousands nine hundred forty nine and paise forty five) only awarded by me to the claimant herein above, from the date of this award till date of payment or decree whichever is earlier.

5. I direct that such of the parties to the reference shall bear his or their costs in these proceedings.

6.00. Made and pronounced by me this 30th day of December, 1972 at my office at the Farakka Barrage Project, P. O. Farakka Barrage, Distt. Murshidabad, West Bengal.

Sd/- D. N. RAO;
Arbitrator and
Superintending Engineer,
P and M, Sircle, F. B. Project.

APPENDIX V

(Vide Para 6.15)

Notes in the Ministry of Law Branch Sectt. Calcutta

The Claims of the contractor are mainly based on the following grounds;

- (i) that there was radical change in the working conditions in the project area due to deterioration in the law and order situation and this resulted in increase in costs of execution of the work; and
- (ii) that there was an alleged assurance given to the contractor that it would in due course be compensated for the loss sustained by it.

2. As regards the first contention, reference may be made to the case of Messrs. Alopi Prosad & Sons Ltd., vs. Union of India reported in AIR 1960, SC 588, in which the following principles of Law relevant to the present case have been laid down:—

- (1) a contract is not frustrated merely because the circumstances in which the contract was made are altered.
- (2) the contract does not enable a party to a contract to ignore the express covenants thereof and to claim payment of consideration for performance of the contract at rates different from the stipulated rates on some plea of equity.
- (3) Compensation quantum meruit is awarded for work done, cannot be awarded for work done or services rendered pursuant to the terms of a contract where the contract provides for consideration payable in that behalf and an express stipulation governing the relations to the parties under a contract cannot be displaced by assuming that the stipulation is not reasonable.

3. In my view, the judgment in Alopi Prosad's case is a complete answer to the contractors claims for payment at increased rates on account of altered working conditions and the arbitrator was bound to follow the principles laid down in the said Supreme

Court case. In this connection, it may also be pointed out that an arbitrator is not a conciliator and cannot ignore the law or misapply it in order to do what he thinks as just and reasonable. He is a tribunal selected by the parties to decide their disputes according to law and so, he is bound to follow and apply the law and if he does not, he can be set right by the court provided his error appears on the face of the award. Parties who make a reference to arbitration have the right to insist that the tribunal of their choice shall decide their dispute according to law (AIR, 1955, Supreme Court, page 468). There is however one exception to the above proposition and exception is that when the Parties choose specifically to refer a question of Law as a separate and distinct matter the parties will be bound by the decision of the Arbitrator even if it is based on wrong interpretation of law. It seems that in the present case no question of law as a separate and distinct matter has been specifically referred to the Arbitrator for his decision so as to oust the jurisdiction of the court to set it right. As regards, the other ground namely that assurances were given to compensate the contractor for the losses sustained it may be stated that this ground does not seem to carry much force as such an assurance even if it was given is not binding on the Government of India as an agreement for the reasons that it does not comply with the provisions of Article 299 of the Constitution of India. Para 25 of the Judgment reported in A.I.R. 1955, S.C. at page 468 may be seen in this connection. The present award seems to be a flagrant case where Arbitrator has misapplied the mistake (please see A.I.R. 1971 S.C. page 696).

4. The law relating to party's right to have the award set aside or remitted seems to be that when an arbitrator commits a mistake either in law or in fact in determining the matters referred to him but such mistakes do not appear on the face of the award or in a document appended to or incorporated in it so as to form part of it, the award will neither be remitted nor set aside notwithstanding the mistake (please see A.I.R. 1971 S. C. page 696).

5. The arbitrator in the present case has been no reasons in the award nor does the said award itself show any error or mistake on the part of the arbitrator. It is however true that unless the first ground on which the contractor based its claims were accepted by the Arbitrator, the Arbitrator could not have made the award in favour of the contractor. It have stated earlier in this note that the contractor's said claims cannot be sustained in law. Can it then be said that it is apparent on the face of the award that the Arbitrator has committed a mistake by misapplying the law? The award does not disclose that the Arbitrator has tied himself down by any parti-

a fleet of cutter suction dredgers, establish a Marine organisation and excavate the canal. This was done in foreign countries on the river Lawrence for instance, but in our country we have not done it so far. It is a very long canal and ground water table alone would not be able to supply enough water. These were the problems. We were also considering at the same time whether we could excavate it by normal means by using heavy earth moving machinery. Ultimately it was decided that we should go in for the indigenous technique of excavating the canal by using heavy earth moving machinery and we should not think of purchasing a fleet of cutter suction dredgers for excavating the canal, because this method has not been used anywhere in our country.

A high level Control Board headed by the Minister of Irrigation & Power was set up. Secretaries and officers of West Bengal Government and also of the Government of India were represented on this Board, which was the executive organ for the implementation of the project. A General Manager of the rank of Chief Engineer was appointed. Various officers like Superintending Engineers, Executive Engineers etc. were delegated suitable powers. Some more powers were also given so that in an emergency they can take action on their own without reference to higher authorities.

* * * *

....it was thought during 1963-64 that the local potential of smaller contractors was available; in order to give employment to the local people, it was thought that we should employ as many local agencies as possible, knowing well that these agencies will not be able to complete the whole work. But an experiment was started. Tenders were invited and certain agencies, fixed up: the experience was not happy, because these agencies did not have any earth-moving equipment, particularly when 3 embankments had to be constructed. They had to resort to bullock carts and trucks and these could not be mobilised. The work was ultimately left only half-completed; only one of the contractors (out of ten) could complete it fairly well. * * *

The reaches given to the small tenderers were so small that the heavy earth moving equipment could not be mobilised.

They were given reaches measuring I.R.D. or so, for which it was not economical to use such equipment."

3.3. Asked about the performance of the ten local contractors to whom contracts were awarded initially, the representative of the Ministry stated:—

"The position is as follows:

First Contractor:

His excavation work was completed excepting trace. He could not complete the work assigned to him because of non-availability of land.

Second Contractor:

He could not complete the work and his security deposit had been forfeited.

Third Contractor:

The contract was terminated without imposing penalty because the land was not available. He could do only earth work. He could not handle longer lifts and higher lifts.

Fourth Contractor:

His case is sub-judice. The contractor went to the Court against termination notice. His security deposit had been forfeited.

Fifth Contractor:

The contract was terminated. No penalty was imposed on him because the rates were unworkable. He could not complete the work.

Sixth Contractor:

The contract was terminated without imposing penalty because the land could not be made available.

Seventh Contractor:

The contract was terminated without imposing penalty because the land could not be made available.

Eighth Contractor:

According to the agreement, he could complete the work.

Ninth Contractor:

The work could not be completed due to the death of the main contractor.

Tenth Contractor:

The work could not be completed within time and the security deposit is still with the Government. His security deposit was forfeited."

3.4. The Committee find that while the decision to associate small local contractors with the work of canal excavation was laudable, it was not followed up by any real help to contractors with meagre resources of their own. The work of excavation of dry layers of the land being not very technical or complicated, the local contractors could, with the necessary facilities and encouragement, have done it successfully. The representative of the Ministry stated during evidence that the authorities knew very well that "these agencies will not be able to complete the whole work". This bland assertion suggests that perhaps certain interests were intent on justifying the induction of big contractors, instead of small local contractors.

3.5. It is surprising, and also a reflection of a lack of planning, that contracts were given for excavation work without ensuring in advance the availability of land for the purpose. This peculiar proceeding ensured the failure of the small contractors and ironically enough, helped them also to escape the imposition of any penalty for non-completion of the stipulated work.

Experiment with Departmental Excavation

3.6. Out of the five reaches (viz. RD 0—10; RD 68—97; RD 97—103 and RD 103—126) into which the canal was divided for purposes of excavation, only the first reach namely RD 0—10 was done departmentally, all the other reaches having been ultimately given to big contractors.

3.7. The work of excavating the reach (RD 0—10) was commenced in May, 1965 and completed only by the middle of May, 1973. The reasons for departmental excavation of this work have been stated to be as follows:—

- (i) This reach was occupied by Departmental Stores, N.P.C.C. Stores, Railways sidings, pump houses, site offices.

H.T. lines feeding power to works, telephone lines and some homesteads.

- (ii) Some canal structures, viz., drainage Inlet, Trimohini Inlet and Road-cum-rail bridge and a road across the canal at RD 2.2 connecting the colony to NH—34 were also required to be put up in this reach.

3.8. As for the reasons for delay in completion of this reach, it has been stated that the area of operation was not available in full stretch at any time and that machineries for this work could be freed only after completion of the cofferdam in each year resulting in short period of their deployment in this reach.

The cost of this work, carried out in substantial quantities in 1969-70, worked out to Rs. 192 per 1,000 cft., excluding departmental and supervision charges.

3.9. The Committee desired to know whether, before entrusting the work in other reaches to big contractors any analysis was made of the comparative cost of the work if done departmentally and if done through contractors, and also the reasons for preferring the same through contractors. The reply furnished by the Ministry is reproduced below:—

“The major items of work of the Project are normally got done through contractors. At Farakka Barrage Project there was no deviation from normal practice. The excavation of feeder Canal constituted the biggest item of works in volume. Since, however, bulk of the work had to be carried out below the ground water table, there were doubts whether contractors would come forward to carry out such work. Hence use of dredgers was also concurrently being considered for excavation below ground water table.

While inviting tenders for excavation for the top depths in dry it was mentioned in the Notice Inviting Tenders that the tenderers at their option could also quote for wet excavation to full canal section and that the Contractors would have to bring their own earthmoving machinery. The Tender Committee which considered the tenders decided that the Feeder Canal should be done for full Section dry as well as wet. The Committee was of the view that the decision to get full section work done from the contrac-

tors using their own equipment had a distinct advantage in as much as the Project will be saved from the trouble and expense of procuring a battery of dredgers involving a large amount of foreign exchange and maintaining elaborate Marine Organisation required therefor.

In view of this, the Farakka Barrage Control Board decided that since the excavation of the feeder canal was to be done by the contractors using their own equipment and not departmentally there is no question of obtaining some of the dredgers.

As the main criteria for executing the work through contractors was the feasibility doing the work, and to avoid huge capital investment on purchase of machinery etc., realistic analysis could not be formed in those conditions. Departmental work using dredgers would have involved several un-knowns and there was risk regarding the actual rate of earthwork proving to be much higher. As the main purpose was to get this Project completed which had international implications, it was decided to get the work done through contractors."

3.10. In regard to the utilisation of the services of public sector undertakings, like the National Project Construction Corporation, the Ministry have informed the Committee:—

"In order to bring down the rates of large civil construction jobs, National Projects Construction Corporation Limited, a Public Sector undertaking, was set up in the year 1957, under the administrative control of the former Ministry of Irrigation and Power

* * * *

Government has been carrying out the work through contractors (including Public Sector Undertakings) as far as possible but if adequate response from the contractors is not available or it is apprehended that the work would be delayed unduly, and that there is no other alternative, the works are taken up departmentally. In fact, for the Farakka Barrage works, the most difficult and risky work, viz., that of coffer dam and river diversion was taken up departmentally since no contractor was willing to undertake this work. The N.P.C.C. carried out work to the tune

of Rs. 22 crores (Rs. 19 crores on the barrage and Rs. 3 crores on the canal) but did not come forward for canal excavation work."

3.11. In another note furnished to the Committee, it has been stated that the specific cost analysis for the Feeder Canal excavation if done departmentally was not available in the earlier stages when the work was awarded to the contractors after inviting tenders. The position regarding comparative costs, as emerging after the excavation, is as follows:—

"The Unit rates of Feeder Canal excavation done departmentally in the reach 0—10 for the work done during the year 1969-70 and in the small gap portions below water level in the reaches 10—68 and 68—97 during 1973-74 by departmental dredging worked out to Rs. 17.20 and Rs. 20.38 per 100 cft. excluding departmental and supervision charges. The unit rates paid to the contractors during the corresponding period are Rs. 16.50 and Rs. 20.65 per 100 cft. respectively. The average unit rate of canal excavation done departmentally in the reach 0—10 for the work done in the period 1963-64 to 1973-74 comes to Rs. 19.43 per 100 cft. as per recent analysis. The average unit rate paid to Contractor 'A' for the work done in the reach 10—68 during the period 1964-65 to 1973-74 comes to Rs. 14.50 per 100 cft. and to Contractor 'B' for the work done in the reach 68—97 during the period 1967-68 to 1973-74 comes to Rs. 18.30 per 100 cft.

From the above, it is seen that the cost of departmental excavation has been more than the cost of excavation done through Contractors."

3.12. During evidence, the Committee desired to know whether the question of doing the entire excavation work departmentally was seriously considered by Government. The representative of the Ministry stated in reply:—

"..... this idea of carrying out the work (of excavation) departmentally was there right from the beginning. We thought of carrying out the work of top six feet by using earth-moving machinery and the portion below that would

have to be excavated by Suction dredgers. This was a very strong alternative which was before the Control Board right from the beginning, and they were working on that very much. A committee was also appointed to recommend the type of marine organisation that was to be set up and types of dredgers that have to be procured. A lot of preliminary work was done by this Committee. And, at the same time, the other alternative of fixing up a resourceful agency was also being explored. Once it was known that there were certain resourceful agencies in this country which could be mobilised, the Control Board felt that let us not pursue this alternative of doing the work departmentally. This is on record. The Control Board has given a very careful consideration and then has rejected this idea. Of course, there is no detailed reasoning why they had taken this decision. That is not there. It would be very difficult for me to tell at this stage what was in the mind of the Control Board because nothing is on record."

The representative of the Ministry has also stated during evidence:—

"The decision to carry out such a big work involving 150 crores cft. of earth work would have been a big work to be done departmentally and this would have involved huge equipments to be purchased worth several crores of rupees and department had to establish workshop etc., not at one place but at several places along the canal for repairs which have to be attended to from day to day. Machines are working at various places day to day. And to do it departmentally would have meant the setting up of a very big organisation like this which would be capable of maintaining the operation on such a huge scale. Such a big fleet of equipment was not thought to be economically feasible. And this matter came up before the Control Board. Therefore, the question arose of going into the prospects of utilising the services of contractors if such contractors' services were available. If however, these were not available right then, there would have been no other alternative with the Government but somehow to set up its own departmental organisation and carry out the work, facing all the attendant consequences."

In regard to the machinery available with the Project authorities, the representative of the Ministry has stated:—

“Department did not plant for procurement of equipment for the canal work. The machinery was there for the barrage work only.”

3.13. The Committee find that in the Audit Paragraph on “Procurement and utilisation of construction machinery and equipment in Farakka Barrage Project” [Paragraph 37 of the Report of Comptroller and Auditor General for 1972-73, Union Government (Civil)], it was stated:—

“C. Cutter Suction Dredgers

For construction of coffer dam (first stage), on the recommendation of foreign consultants the project imported in early 1969 two cutter suction dredgers with accessories and spares at a cost of Rs. 65.82 lakhs. Certain component parts required for their operation were also procured indigenously at a cost of Rs. 7.70 lakhs. Assembly and trial of the dredgers were completed towards the end of May, 1969. However, the coffer dam for which the dredgers were imported had already been completed in January, 1969.

From May, 1969, to December, 1969/January, 1970 the dredgers were deployed on some ancillary works for 300 hours each and then both remained out of commission for 1½ years till April/May 1971 due to mechanical breakdown. After repairs the two dredgers worked for 68 to 30 hours respectively up to July, 1971. One dredger is completely idle since July, 1971, and the other worked for 296 hours on dredging the feeder canal during January to August, 1973. The dredgers obtained at total cost of Rs. 73.52 lakhs (substantial part of which was incurred in foreign exchange) have remained nearly idle/poorly utilised for well over four years till August 1973. they logged total 994 hours against 13,598 available working hours, i.e., giving utilisation factor of 7.3 per cent.

The project marine engineer stated in June 1972, that these were put to use mostly on trial basis and could not be employed in project work. Government held, in May, 1973, that the work were affected by considerable labour unrest

in the later part of 1971 and early 1972, and that the dredgers were required for river training works, dredging the feeder canal and its maintenance in future."

3.14. The Committee regret that while certain difficult and risky works in the construction of the Farakka Barrage were successfully carried out departmentally with the help of public sector agencies like the National Projects Construction Corporation, the Farakka Project authorities persuaded themselves to change gear and allot the Feeder Canal excavation work to private contractors. There appear to have been a great deal of policy vacillation on the question of departmental excavation of the Canal, and the task was entrusted to contractors who were additionally favoured with special facilities like hire on easy terms of Government machinery, and supply of stores and spare parts from Government inventories to such an extent that the workers on the Project themselves sometimes objected. These contractors were also in some cases paid higher rates beyond the terms of their contract and given other concessions which have been discussed elsewhere in this report. Even so, excavation through big contractors involved, in the result, a delay of more than three years in the completion of the canal. The Committee are unhappy at the obviously inadequate realisation of the position by the Project authorities when they made their choice, somewhat mechanically, without careful thought, between 'departmental excavation' and 'excavation through contractors'.

3.15. The Committee feel that a more meaningful utilisation of departmental resources for work relating to excavation of the canal would have produced, in the long run, better results for the country. In the absence of any record of a reasoned justification for preference being given to contractors, the Committee fear that certain vested interests might in their subterranean way, have worked for the induction of big contractors in the excavation of the Feeder Canal, which, to make things worse, they could not also perform in time.

3.16. The Project authorities had already got some cutter suction dredgers and the Committee cannot accept the contention of the Ministry during evidence that by giving the work of excavation of the canal to the contractors, Government was saved from the trouble and expense of procuring a battery of dredgers involving a large amount of foreign exchange and of maintaining an elaborate marine organisation required therefor.

3.17. It may be that in terms purely of the arithmetical cost of excavation, the departmental cost per unit in the reach RD 0-10 was slightly higher than the cost of excavation through contractors in other reaches of the canal. But if contractors can do at lesser cost after hiring machinery from Government, it is quite likely that if the excavation work in all the reaches had been done departmentally, the average rate of departmental excavation would have considerably come down.

3.18. If anything, the repeated demands of the contractors for extension of time and for payment of higher rates than the contracted rates (discussed in subsequent chapters) are indicative of the need, in the public interest, to expand the scope of departmental work in all big projects of national importance. It is quite apparent in the context of excavation work in the Farakka Feeder Canal that much of the delay was due to the failure of the private contractors who dallied over the job and put up demands for various concessions, including higher rates, outside the terms of their contracts. In the opinion of the Committee, such dependence on private contractors can only be avoided if the departmental agencies are encouraged to develop the necessary confidence and capability. Other things being equal, challenging jobs should be given to them, even if the cost may be a little higher at the initial stages, since the return, in terms of national advance, would be so much better.

CHAPTER IV

EXECUTION THROUGH BIG CONTRACTORS

Audit Paragraphs

4.1. On the expectation that execution of the work through resourceful contractors, having adequate earthmoving equipment, would have better prospects of timely completion, it was decided to resort to this approach. For this purpose, the 24 miles length of the canal was divided into five portions, viz., RDs O—10 (estimated earthwork quantity, 14.82 crores cft), 10—68 (76.62 crores cft), 68-97 (31.14 crores cft.), 97—103 (6.61 crores cft.) and 103—126 (26.25 crores cft.).

* * * *

RD 10—68 (76.62 crores cft.)

Tenders for excavation of the top layer with option to bid for underwater layer also were invited in January, 1964 and were received in May 1964. Since it was decided, in the meantime, to get the entire work, dry as well as wet, done through contractors, the tenderers were asked, in August, 1964 to re-quote for the composite work of 75.00 crores cft., which was allotted in January 1965, to contractor 'A', with June 1968 as the target date of completion. By then, the contractor had excavated 46.95 crores cft. only. Since then 9 extensions were given; the last one up to June 1974. According to Government (September, 1974) at the end of November, 1973, the balance of earthwork was 1.85 crores cft, and pertained to three gaps at (i) RD 34.06.30, (ii) RD 47.50-48.50 and (iii) RD 61.30-62.40. The work in the first two gaps was suspended on demand of the local population, for a bridge in place of the contemplated ferry service. The project Control Board has approved in November, 1973 construction of the additional bridge. The entire third gap can be excavated, only after completion of the road bridge on the Pakur-Dhulian State Highway and diverting traffic through it. In January, 1974, it was decided to have the portions above water level excavated through the contractor, and the portions below water level by dredging departmentally. Thereafter the contractor resumed work from February 1974 and completed the

portions above water level in the first two gaps and full section in the middle portion of the third gap at RD 62 where the full stretch of land could not be made available due to non-completion of the road bridges (September 1974). The road bridge is expected to be completed in December 1974. Out of the total allotted quantity of 75.00 crores cft. the contractor had executed 67.00 crores cft. during the five working seasons 1965-66 to 1969-70. His progress in the 1970-71 and 1972-73 seasons was small and no work was done in 1971-72.

RD 68—97 (31.14 crores cft.)

In view of the scheduled completion of the Farakka barrage by 1970-71, the project had proposed, in November 1964, that tenders for the remaining portion, viz, RD 68—126, should be called immediately so that the work could be started by the selected contractor during the next working season. Tenders were invited in July 1966 for the three reaches RDs 68—97, 97—103 and 103—126. Although tenders were received in October 1966, earthwork involving 32.26 crores cft. was awarded, after a delay of one year, in December 1967, to contractor 'B', with 3rd November 1970 as the target date of completion. By November 1970, the contractor had executed 11.73 crores cft. only. Since then 15 extensions were granted; the last one up to August, 1974. Till November 1973 the total quantity of 29.08 crores cft. of earthwork had been completed. By August 1974 the contractor completed a further quantity of 1.02 crores cft. Certain portions of the work were also taken up departmentally from March 1974. About 0.08 crore cft. of earthwork remain yet to be dredged departmentally (October 1974) in this portion.

RD 97—103 (6.61 crores cft.)

Although tenders had been received in October 1966, this reach was left out of consideration in December 1967 and it was decided that it would be awarded subsequently to either contractor 'B', or 'C' depending upon his competence and satisfactory progress of work. Even though the progress of any of the three contractors 'A', 'B' and 'C' against their respective contracts was anything but satisfactory, this portion was allotted in April 1969, by negotiation, to contractor 'A' under supplementary extensions of the subsisting contract for RD 10.68, on the consideration that he had the considerable earthmoving equipment at site and had developed the necessary resources to take up this additional quantum of work. The due completion date was fixed as June 1970. The right to allot further additional work of 15 crores cft after June 1970, in continuation of this portion at the same rate, was also reserved. By the agreed

target date, however, contractor 'A' executed 1.55 crores cft only. The second of two extension was upto August 1973, by when 6.49 crores cft. had been excavated. The balance quantity was 0.08 crores cft. (as subsequently reassessed); the earthwork for this quantity was allotted to a small contractor, and was stated to be almost complete (August 1974).

RD 103—126 (26.25 crores cft.)

Tenders were received in October 1966. Out of the estimated quantity of 26.25 crores cft., earthwork involving 21.50 crores cft (excluding two gaps not expected to be available for excavation within the contract period) was awarded in December 1967 to contractor 'C' with scheduled date of completion set for 3rd April 1971. After executing 1.26 crores cft., this contractor stopped further work in June 1969.

In June 1969, the Project Control Board decided to determine this contract mutually, without invoking penal provisions of the contract, lest the contractor took legal recourse, causing delay in the time-bound work. The contract was finally terminated in March 1970.

On ground of labour unrest, contractor 'A' refused to take up the balance work, although in April 1969, he had agreed to accept additional work upto 15 crores cft. after June 1970.

Tenders for the remaining earthwork in this reach, involving 22.35 crores cft. were opened in August, 1970. The lowest tender of contractor 'D' (contractor 'B' under another name) was ignored on consideration of expeditious completion of the canal, and the work was entrusted in January 1971 to contractor 'A'—the second lowest tenderer with the completion date mutually agreed upon as May 1972.

By June 1972 and June 1973, contractor 'A' could execute 10.84 and 20.64 crores cft., respectively, against the allotted quantity of 22.35 crores cft. Eleven extensions were sanctioned; the last one stipulated completion by June 1974. The remaining quantity (re-assessed subsequently as 1.45 crores cft) mostly pertained to three gaps, viz., existing national highway 34 crossing, present railway crossing and length of about 160 feet at the tail end of the canal. The gaps left were programme to be removed by the March 1974 after diversion of the railway line and the national highway by the Railway and the State Public Works Department respectively. After it was decided in January 1974 to have the portions above water

level excavated through the contractor, the excavation was resumed by him in February 1974 and excavation above water level was completed in August 1974. The underwater excavation by dredging departmentally is in progress (October 1974). It would be seen that although for expeditious completion of the canal this reach was awarded (at higher cost) to contractor 'A', that contractor substantially defaulted. As a matter of fact, till the award of this work to him, his default was more than that of contractor 'B' and yet this work was awarded to him, in preference to contractor 'D' at extra cost of Rs. 90.66 lakhs (as compared with the tendered amount of contractor 'D'). Leaving aside 21.61 crores cft., undertaken departmentally etc., the quantity awarded to contractor 'A' (103.96 crores cft) constituted nearly 76 per cent of the remaining total volume of work. Whether, for expeditious completion of the canal, so much work should have been awarded to him is doubtful. It is to be added that the Farakka Project continued to carry surplus equipment, labour and operators and still additional work was awarded to the contractors whose progress was patently slow and departmental execution (save a minor portion) was not undertaken.

Additional expenditure in getting done by contractor 'A' the work left incomplete in RD 103—126 by contractor 'C' works out of Rs. 2.03 crores.

[Para 28, Audit Report (Civil) for the year 1973-74]

Rationale for division of execution work into five Reaches.

4.2. As already noted herein before, the work relating to construction of the barrages at Farakka and Jangipur was carried out departmentally, but the excavation of the Feeder Canal was done through Contractors. After failure of an experiment to get the work done through small local contractors, the Project authorities decided to divide the canal work into three parts—the first part (R.D. 0—10) to be done departmentally and the other two parts (R.D. 10—68 and R.D. 68—126) to be let out on contract.

4.3. The latter two parts had subsequently to be divided into four portions. The Committee desired to know the reasons for it and also the criteria adopted for the division of the canal into five portions. The reply of the Ministry is as follows:—

"The canal work in the reach R.D. 8—48 was started by entrusting it to 9 small contractors during the period 1963-64. However, the progress of earth work given by the Contractors was unsatisfactory. It was noticed that the leads required for the earthwork were long and unless

the entire work was mechanised, it would not be possible to complete the work expeditiously. The Control Board, therefore decided in January 1964 that the tenders should be invited for excavation of the feeder canal in the reach R.D. 10—68."

The General Manager/Chief Engineer, Farakka Barrage Project divided whole length of canal into three parts as given below:—

	Estimated quantity	Remarks
(1) R.D. 0 to 10	14.82 crores cft.	To be done departmentally
(2) R.D. 10 to 68	70.17 crores cft.	} To be let out on contract
(3) R.D. 68 to 126A	70.44 crores cft.	

(1) R.D. 0—10. Estimated quantity for this reach is 14.82 crores cft. The reach was proposed to be excavated departmentally as and when earthmoving equipments could be spared from Barrage works.

* * * *

(2) R.D. 10—68: Estimated quantity—70.17 crores cft.

The remaining portion of canal reach between R.D. 10 to R.D. 126 was divided into 2 halves approx. i.e. (i) R.D. 10 to R.D. 68 (ii) R.D. 68 to R.D. 126 and tenders were invited for the reach R.D. 10 to R.D. 68 on 18-1-1964 for dry excavation only. Afterwards it was decided by the Tender Negotiating Committee that the opportunity should be given to all the tenderers to quote for rate for full section of canal excavation. Accordingly the tenderers were requested to requote the rates in August 1964. On receipt of the tenders, the Committee negotiated with the contractors and recommended allotment of work to contractor 'A'. Accordingly, the work was allotted to the contractor 'A' in January, 1965.

(3) R.D. 68 to R.D. 126: Estimated quantity—70.44 crores cft.

I. The tenders for excavating remaining half of canal (i.e. in reach RD 68 to 126) were invited on 14-7-1966 and subsequently received on 12-10-1966. These were negotiated by the Tender Committee (at meetings held on 16th and 18th September, 1967), who had examined all the aspects of the tenders offered in respect of rates, requirement of advances, foreign exchange, firmness of rates, etc.

keeping in view the nature and magnitude of work involved, the organisation, management and the technical competence alongwith past experience and resourcefulness of the tenderers.

As only 3 contractors had offered tenders (even with several extension of last date for receipt of tenders) and the competence and capability of the lower most tenderers were not beyond question, the Negotiating Committee recommended allotment of part works of RD.68—97 (approximately 1/3rd of work tendered) and 103—126 (approximately 1/3rd of work tendered) to contractor 'B' and to contractor 'C' respectively, leaving a balance of 1/6th of the tendered work. It was recommended by the Committee that the balance work i.e. from R.D. 97—103 could be awarded to either of the above firms during the currency of their contract, depending upon the satisfactory progress of works and competence to complete the additional work within the initially stipulated period.

II. The performance of contractor 'B' and contractor 'S' since December 1967 when the contract was awarded was watched and found to be behind schedule.

Farakka Barrage Control Board reviewed the progress of work in Feeder Canal by the contractors at its 23rd meeting held on 29-11-1968 and found that contractor 'B' and contractor 'C' did not do as well as Contractor 'A'. Contractor 'A' was left with approximately 28 crores cft. of earthwork against the allotted quantity of 75 crores cft. Out of 28 crores cft. about 7 to 9 crores cft was in the gaps where the land could not be released as the canal structures were yet to be completed and diversion on existing Bandel-Barharwa loop line was to be effected.

Contractor 'A' had considerable earth moving equipment at site and had adequate resources to take up the additional quantities of work. Accordingly the Board decided to entrust this work viz. RD. 97—103 to contractor 'A' on the same rates and conditions as had been agreed to in the case of Contractor 'C' for the work in RD 103—126. The additional work together with the balance work in RD. 10—68 including the gaps was scheduled to be completed by June, 1970.

Accordingly, Contractor 'A' was awarded this work on 28-4-1969 through a supplementary contract incorporating the same terms and conditions as per the existing contract for RD. 10—68 and at the rate of Rs. 11.30 plus 10 per cent per 100 cft. i.e. 12.43 per 100 cft.

Thus the whole canal reach stood finally divided into following five parts for the purpose of excavation by different agencies:

(i) 0 to 10	. . .	14.82 crores cft.
(ii) 10 to 68	. . .	70.17 crores cft.
(iii) 68 to 97	. . .	37.58 crores cft.
(iv) 97 to 103	. . .	6.61 crores cft.
(v) 103 to 126	. . .	26.25 crores cft.

Delay in finalisation of tenders

4.4. As stated in the Audit Paragraph, there had been considerable delay in the finalisation of tenders and award of contracts for the execution of different reaches. The Committee desired to know the detailed reasons for such delay in respect of each of the tenders, and the information furnished by the Ministry is reproduced below:—

“Due to failure of the small contractors, it decided by the Control Board in its 8th Meeting held on 13-1-1964 that tenders upto a depth of 10 ft. below the ground level or upto which dry excavation is possible be called immediately Pursuant to this directive of Control Board, tenders were invited for the reach 10—68 constituting about 50 % of the whole work which were received in 5/1964. In 8/1964 it was decided that in the present context of getting full section work done through contractors using their own equipment, a fresh opportunity should be given to all the seven tenderers who had tendered in response to the original tender. This opportunity was given and the tenders were considered by the Tender Committee and the contract awarded to Contractor ‘A’ in January, 1965 on its recommendations.

As regards the work in the reach beyond RD 68 it was considered advisable that before inviting tenders for taking up the work in the remaining lower reach, we should get detailed bore hole data in this reach and also know by the performance in the first reach whether any difficulties are experienced in the excavation of the canal. Tenders were accordingly invited in August, 1966 and were received in October, 1966. Due to paucity of funds and reduced budget sanctions for the year 1966-67, and also inter alia, due

to necessity of collection bore hole data in the canal reach below RD 68 as directed by the Control Board in its 14th meeting held on 29-5-1965, the allotment of work to contractors for this reach had to be postponed. The Tender Committee had also to undergo protracted negotiations for obtaining clarifications from project authorities and the contracting firms taking into account the observations element of the Ministry of Finance and for settlement of the special terms and conditions such as sanction of advances, release of foreign exchange, escalation clauses etc. put forward by the contractors. It was in these unavoidable circumstances that the tenders could not be finalised before November, 1967.

The reach RD 68—126 was, divided in three reaches i.e. RD 68—97 constituting 50 % of the work allotted to contractor 'B' and reach 126 (tail end) upwards upto RD 103 constituting about one third of the entire work allotted to contractor 'C'. Both these awards were given in 12/1967.

While giving awards for the reaches RD 68-97 and RD 103—126, it was felt by the Control Board that the work in the reach RD 97—103 could be allotted subsequently to any one of the above firms (contractors 'B' or 'C') whoever proved more competent and whose programme of work was considered satisfactory.

Due to failure of the contractor 'C' who was allotted the work in the reach RD 103—126 in 12/1967 and also due to slow progress of work given by Contractor 'B' in the reach RD 68—97, it was considered in the 23rd Control Board meeting held on 29-11-1968 that as Contractor 'A' were the only firm who had considerable earthmoving equipment at site and who had necessary resources, could be entrusted with the work in this reach also on the same rates and terms and conditions as had been agreed with the lower of the two contractors i.e. Contractor 'C'. However as Contractor 'A' did not agree to take up this work on the same rates of Rs. 11.75 per 100 cft. sanctioned to the Contractor 'C' for the reach RD 103—126, the Control Board in its 24th meeting held on 14th March, 1969, after negotiations, awarded the contract for this reach to Contractor 'A' at the rate of Rs. 12.43 per 100 cft.

As explained above, all possible efforts were made to expedite finalisation of tenders without avoidable delay."

4.5. The following statement shows chronologically the steps taken by the Tender Committee before giving their recommendations on the Tenders for excavation work in the Reach R.D. 68—126:—

	<i>Dates</i>
1. Tenders invited	3-8-1966
2. Tenders opened	12-10-1966
3. Scrutiny of tenders by superintending Engineer, Design Circle, Farakka Barrage Project and sending them to FA&CAO of the Project	3-11-1966
4. FA&CAO's comments received	25-11-1966
5. Proposal forwarded by Chief Engineer to Secretary, Farakka Barrage Control Board	6-12-1966
6. Enquiries made by Secretary, FBCB from the C. E., F. B. Project	16-12-1966
7. Further comments received from FA&CAO	16-12-1966
8. Clarifications sought from FA&CAO by Secretary, F.B.C. Board	21-12-1966
9. Clarifications received from C.E., F.B. Project	24-12-1966
10. Further clarifications called by Secretary, FBCB from C.E., FBP	28-12-1966
11. Draft letter to be issued to the Contractors for clarifications from them was referred to Ministry of Law, Calcutta Branch Secretariat	9-1-1967
12. Opinion of Ministry of Law, Calcutta Branch obtained	21-1-1967
13. Letters issued to contractors for clarifications	28-1-1967
14. Clarifications received from Contractors	16-2-1967 and 25-2-1967
15. FA&CAO's comments received on clarifications given by Contractors	14-3-1967
16. Clarifications forwarded by the C.E., F.B. Project	16-3-1967
17. Discussions held with Contractors by J.S. (T&P) Ministry of Finance, J.S. (GB), the then Ministry of I&B C.E., FBP, FA&CAO, FBP and Director (FBD) Dte. C.W. & P. C.	27-3-1967
18. Revised offers of the contractors considered by the Tender Committee at its first meeting	25/26-4-1967
19. Letters issued to Contractors for supplying additional information as desired by the Tender Committee in its 1st meeting.	26-4-1967

	<i>Dates</i>
20. Views of C.E., FBP on the additional information supplied by Contractors received by Secretary, F.B.C.	18-5-1967 and 24-6-1967
21. Meeting of the Tender Committee to further consider the tenders.	24,25 and 26-7-1967
22. Letters issued to contractors for furnishing further information as a result of the above mentioned meeting of the Tender Committee	27-7-1967
23. Additional information supplied by Contractors and received from Chief Engineer, F.B. Project	16-8-1967 and 19-8-1967
24. Meeting of the Tender Committee fixed on 31-8-1967 but postponed.	31-8-1967
25. Further (final) meeting of the Tender Committee wherein the proposals were finalised and the Committee directed that on the basis of their findings the report of the Tender Committee may be prepared	16-9-1967 and 18-9-1967
26. The Report of Tender Committee referred to Ministry of Finance for clearance from the Department of Economic Affairs in regard to foreign exchange	4-10-1967
27. The Report of Tender Committee approved by Control Board under Emergency Procedure	3-11-1967
28. Letter of Intent issued to the Contractor.	4-12-1967

4.6. The Committee desired to know the reasons for leaving the reach RD 97—103 out of consideration at the time of considering the tenders in December, 1967. The reply of the Ministry in this regard is reproduced below:—

“Tenders for the portion RD 68—126, were invited in July, 1966.

Due to paucity of funds and reduced budget sanctions for the year 1966-67 non-availability of soil data along the canal alignment, delay in land acquisition and the prolonged discussions and negotiations the Tender Committee had to have with the different firms, the tender for this reach was accepted and work order given in December, 1967. Keeping in view the ability of the firms who had tendered for this reach, the Tender Committee decided to limit the awards in this reach to two Firms in the first instance instead of giving the award for full reach to one firm for the entire length. Accordingly, the work in the RD 68—97, i.e. 50 per cent of the whole was given to contractor ‘B’

and in the reach from tail end to 103 (RD 126—103) was given to Contractor 'C' constituting about 1/3rd of the total work, leaving the work in the balance portion from RD 97—103. It was intended that the balance work in this reach of 97—103 could later either be allotted to contractor 'B' or contractor 'C' depending upon the competence and their progress of work in the respective reaches.

The above explains the reasons of leaving the award of work in the reach RD 97—103 in the first instance when the tenders in the reaches RD 68—97 and RD 103—126 were accepted in the month of December 1967."

4.7. In reply to a question, the Committee have been informed during evidence that the Tender Committee consisted of the Secretary, Ministry of Irrigation & Power, the Chairman, Central Water & Power Commission, the Member (Designs) (C.W.&P.C.), the Joint Secretary, Ganga Basin, the Joint Secretary, Ministry of Finance, the General Manager, Farakka Barrage Project, the Financial Adviser, Farakka Barrage Project, and the Secretary, Farakka Barrage Control Board.

4.8. As for the delay in finalisation of tenders, the representative of the Ministry has stated in evidence:—

"The tenders (for the reach 68—126) were received on 10-10-1966 and the General Manager sent a letter to the F.A. requesting him to send further notes to the Board. The F.A. sent further Notes on the 16th December*** Nearly forty operations have taken place, ultimately in September, 1967, the Secretary of Irrigation & Power approved the report of the Tender Committee. The capability of the Contractors had to be ascertained, and the reach for which tenders were invited was a long one, and on receipt of the tenders, it was found that there was no contractor who could carry out this entire work. It was, therefore, decided to split this reach into smaller parts. The reach was suitably divided and then the tenders were given. It was a very special situation and it took some time."

4.9. The Committee note that tenders for the reach B.D. 10—68 were initially invited in January, 1964 and the contract was initially awarded in January, 1965. However, the tenders for the reach RD 68—126 were invited in July 1966 and finalised in two instalments. The first instalment, covering the contract for RD 68—97 and B.D.

103—126 was finalised after protracted shuttling of papers clarifications, meetings etc. from October, 1966 to December 1967. This clearly shows that the matter was processed somewhat desultorily, and essential clarifications were obtained piece-meal. The Committee understand that the Tender Committee was a high-powered Committee, consisting of the Secretary, Ministry of Irrigation & Power, the Chairman, Central Water & Power Commission, the Member (Designs) (C.W.&P.C.), the Joint Secretary, Ganga Basin, the Joint Secretary, Ministry of Finance, the General Manager, Farakka Barrage Project, the Financial Adviser, Farakka Barrage Project, and the Secretary, Farakka Barrage Control Board. They would have expected a Committee of this composition to function more positively in the matter and to make sure that all requisite clarifications were obtained from the relevant parties and in time. The Committee feel that an unhappy impression should not go out that 'high-powered' bodies comprise people whose status and preoccupations militate against speedy decision. Government should investigate the reasons for this delay, fix responsibility, and take suitable measures to see that in future such delays do not recur.

4.10. Apart from the aspect of delay, the Committee find that Contractor 'C', who was selected by the Tender Committee for completion of work between RD 103—126 stopped work in June, 1969, with the result that Government had to entrust this work to another, Contractor 'A', who had to be paid an additional sum of Rs. 2.08 crores. The Committee feel that if the antecedents of Contractor 'C', who did not have adequate experience of such large scale and intricate works had been properly assessed, Government would not have found themselves in this predicament. Since this happened in spite of a high powered body being very much in the picture, the Committee trust that Government will take steps to ensure that when such bodies are formed they should be in a position to function in a smooth, workmanlike and efficient manner.

Allotment of work to each Contractor

4.11. As mentioned in the Audit Paragraphs, after the experiment of having the excavation work through petty local contractors had failed and the Project authorities had decided to have the work done through resourceful Contractors, there were only four Contractors 'A', 'B', 'C' and 'D' who had responded to the call for tenders. Contractor 'D' was actually Contractor 'B' under another name.

The Committee called for the antecedents of the three Contractors 'A', 'B' and 'C' and their experience in irrigation projects. In

reply, the Ministry have supplied the following information as furnished by the Contractors themselves at the time of tendering the work:—

1. *Contractor A.*

Contractor A was considered to be an experienced firm of contractors with a standing of over three decades. They had completed very large earthwork contracts worth several crores of rupees at Hirakud, Rourkela, Shara-vathi and other projects to full satisfaction. They had 15 years experience in large earthmoving works by machines, and had a large fleet of heavy earthmoving equipment, worth about one crore of rupees.

Contractor B.

These contractors were stated to be doing construction work since 1956 and had since then executed works for the railways, Hindustan Steel, C.P.W.D. Upto 1966 they had done works totalling in cost of about Rs. 14.50 crores

Contractor C.

During negotiations with the Tender Committee, the representatives of the firm stated that they had started construction work from March 1963 by taking up works on the construction of high level road embankment, bridge approaches, guide bundhs etc. valued at about Rs. 1½ crores. Since then they had done work valued at Rs. 14 lakhs on the bridge near Darbhanga and some earthwork valued at Rs. 15 lakhs for Tanu Ghat Dam. The Tender Committee was further informed that the firm had also been allotted a sizeable work valued at about Rs. 2.91 crores on the Bokaro Steel Plant by the Hindustan Steel Construction Co. Ltd. immediately before they submitted the tender.

2. The balance sheets and profit and loss statements of the above firms were also examined by Tender Committee before recommending award of the work on the canal to them. The financial position and technical capability of Contractor A was considered to be the best among the three contractors."

4.12. The following procedure was followed by the Project authorities for ascertaining the antecedents of the Contractors:—

“While issuing N.I.T. (Notice Inviting Tenders) it has been mentioned that ‘the contractor must produce income tax clearance certificate before the tender can be sold to him. The contract shall be subject to Indian Laws, Indian Income Tax and Indian Arbitration Act’. Further firms submitting tenders were also to provide adequate information by way of publications and documents concerning their qualifications to perform the work of this magnitude. They were also required to give the details of work of similar type and magnitude carried out by them, a list of key management personnel, audited balance sheet and profit and loss documents along with references from their Bankers, list of construction equipment available with them etc.

While considering the tenders received, the relevant information supplied by these contractors was scrutinized to assess their capabilities technical as well financial, of completing the work in time and according to specifications by the Tender Committee before giving their recommendations. When the Committee was not satisfied with the information supplied, additional information was called for from these contractors as well as references were made to their Bankers and the Project Authorities where the contractors were already working/ or worked. Replies from the Banks as well as from Project Authorities were also kept in view by the Tender Committee while considering the tenders.”

4.13. The Committee had heard of certain accusations against the various contractors who had worked at Sharavati Project. As, Contractor ‘A’ had, according to information furnished, worked at Sharavati Project, the Committee desired to know whether Contractor ‘A’ was involved in any of the alleged scandals there. The information furnished by the Ministry is given below:

“The Government of Karnataka, who were apprised of the above observations of the Public Accounts Committee, have since informed as under:

“The records relating to the correspondence in respect of construction of earthen dam portion of the Linganamakki Dam entrusted to M/s. Tarapore and Company

and the works executed by them do not show any accusations against the firm, nor its involvement in any of the scandals indicated in the observations of the Public Accounts Committee.' "

4.14. While the details of the work allotted to each contractor at different times have been mentioned in the Audit Paragraph, the position at a glance in this regard is as follows:—

Name of Contractor	Reach	Quantity of earth-worked allotted as per tender (in crores cft.)
Contractor 'A'	(a) RD 10-68* (b) RD 97-103 (c) RD 103-126	75.00 6.61 22.355
Contractor 'B'	RD 68-97†	32.25
Contractor 'C'	RD 103-126@	21.50**

* The portion below water level in this reach was done departmentally.

† 10.44 lakhs cft. of earthwork below water level in this reach was done departmentally.

@ Work below water level in this reach was done departmentally.

** out of this figure 'C' executed only 1.26 crores cft.

4.15. Some peculiar features of the allotment of work to these Contractors are discussed below:—

Termination of work by Contractor 'C'

4.16. In the reach RD 103—126, Contractor 'C' was awarded in December, 1967, earthwork of an estimated quantity of 26.25 crores cft. with completion date of 3rd April, 1971. After executing only 1.26 crores cft., he stopped work in June, 1969.

In March, 1970, his contract was terminated. The penal provisions of the contract were not, however, invoked lest the contractor took legal recourse and thereby caused delay in the time-bound work.

Allotment to Contractor 'A' through negotiation only

4.17. At the time of inviting tenders for different portions in the reach RD 68—126, the reach RD 97—103 was left out of considera-

tion, and it was intended to allot this work either to Contractor 'B' or Contractor 'C' (to whom work in the other portions of the reach RD 68—126 had been allotted) depending upon the progress made by them in respect of the other work allotted to them.

4.18. In November, 1968, when the matter was considered by the Board, the work (of RD 97—103) was not allotted to 'B' or 'C' but was awarded to Contractor 'A' and that too through negotiations only. The rate paid to Contractor 'A' for this reach was also higher than the rate at which work in other portions of the reach RD 68—126 had been given to Contractor 'C' on the basis of tender.

4.19. The Committee desired to know the reasons for allotment of work through negotiation and for payment of higher rates to 'A' and whether work through negotiation had been allotted to 'B' and 'C' also. The reply furnished by the Ministry is reproduced below:—

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• The Control Board in their 23rd meeting held on 29-11-1968 after considering the progress of work by these two firms ('B' and 'C') stated that as the matter stood then, neither Contractor 'B' nor Contractor 'C' had shown any sign of satisfactory progress and in fact there was apprehension whether they would be able to complete the work allotted to them.

Contractor 'C' after completing 1.26 crores cft. of work out of 21.5 crores cft. of earthwork stopped further work in June, 1969, The progress of works by Contractor 'B' was also not satisfactory by then.

In the circumstances the Board in the abovementioned meeting considered that as Contractor 'A' was the only firm who had considerable earthmoving equipment at site and who had necessary resources to take up this additional quantum of work, it would be in the interest of the Project to entrust this work (RD 97-103) to them only.

The question of negotiations with Contractor 'C' could not arise as their progress in the reach 103—126 was very poor (they later on stopped further work *** after completing only 1.26 crores cft. out of 21.5 crores

cft.) As regards Contractor 'B' their progress was also not satisfactory and the question of allotting further work to them would not arise as stated above.

Originally the Control Board in the 23rd meeting held on 29-11-68, after discussions with the representatives of the firm of Contractor 'A' proposed to allot this work at the same rates (Rs. 11.75|100 cft.) and terms and conditions as had been agreed with Contractor 'C' for their work in the reach 103—126. However, Contractor 'A' replied that they were not agreeable for this rate of Rs. 11.75 per 100 cft. In the 24th meeting of the Control Board held on 14-3-69 Contractor 'A' explained that while he was prepared to take up the additional work, he could not do it on the same rates and terms and conditions as of Contractor 'C' which were not workable particularly for the lower reaches where the sub-soil water level was high. He agreed to take up this work at the rate of Rs. 11.3 per 100 cft. which corresponded to the rate for the reach 10—68 awarded to them plus an increase of 10 per cent. They explained that the existing rate of Rs. 11.3 was four to five years old and in the intervening period the value of machinery and spare parts had gone up due to general increase in the price of material and labour and also due to devaluation and it was on this account he was asking for an increase of 10 per cent over the earlier rate of Rs. 11.3 i.e. Rs. 12.43.

After consideration the Board agreed that the excavation in the lower portions was more difficult as the soil was clayey and slushy due to higher sub-soil water level. Further, the rate of Rs. 12.43 was close to the rate of Rs. 12.5 per 100 cft. at which the Contractor 'B' was working. It was considered reasonable to agree to this increase in the rate. Accordingly, the work in this reach was allotted to Contractor 'A' at the agreed rate of Rs. 12.43 per 100 cft."

Refusal of Contractor 'A' to take up additional work at old rate inspite of agreement to do so

4.20. On the basis of tenders, Contractor 'A' was allotted excavation work in the reach RD 10—68 in January, 1965.

In April, 1969, Contractor 'A', under supplementary extension of the subsisting contract for the R.D. mentioned above, was allotted, through negotiation contract for the reach R.D. 97—103. The due completion date for this latter work was fixed as June 1970, and the right to allot further additional work of 15 crores cft. after June, 1970, to contractor 'A' (in continuation of the work in the reach RD 97—103) at the same rate was reserved by Government.

Subsequently, when the contract (for the reach RD 103—126) with contractor 'C' was terminated in March, 1970, as he had stopped work after completing only a fraction thereof, Contractor 'A' was asked to take up this work at the old rate as per his agreement in April, 1969, when he was awarded work for the reach RD 97—103. Contractor 'A' expressed his inability to take up this extra work in the light of the situation prevailing at Farakka and because he was undergoing huge financial loss on the existing contract (for reach RD 97—103) for which he had already asked for enhancement of rates in March, 1970.

4.21. During evidence, the representative of the Ministry has stated that in respect of the Project authorities right to allot extra work upto 15 crores cft. no written agreement was entered into with Contractor 'A' in April, 1969.

4.22. The Committee, however, find that after the original agreement with 'A' of 28th April, 1969, there is on record a letter to Contractor 'A', in which one term is to the following effect:—

"You have further agreed that, after June 1970, you shall be in a position to execute 15 crores cft. of earth work per season if no further work is allotted to you in continuation of the above new reach and you shall undertake it under the same rates and terms and conditions as now agreed for the reach RD 97 to RD 103. The Department reserves the right to allot you further work to the extent of 15 crores cft. under the above terms and conditions."

4.23. There is also on record a letter of the same date from Contractor 'A' to the President of India, saying:—

"We hereby accept the terms and conditions mentioned in the above letter."

4.24. The proceedings of the 26th meeting of the Control Board held on the 14th May, 1970, read as follows:—

"The Board also noted that, at the 24th meeting of the Board held at Farakka, Contractor 'A' had agreed to take up additional work to the extent of about 15 crores cft. in Arvind's reach under the same rates and terms and conditions as for their contract in the reach RD 97 to 103. But subsequently they had expressed that, in the light of the situation obtaining at Farakka, they would not be able to take up this work as even on their existing contract they were undergoing huge financial losses. The Board then considered the possible alternatives for getting this balance work* of 20 crores cft. executed, viz., (a) by inviting open tenders for the work; (b) by doing the work departmentally, and (c) by negotiating with the existing canal contractors for taking up additional work. After considering the various aspects of each alternative, the Board decided that tenders should be invited for this balance work on the canal; the gap portions which were located at different reaches might have to be done departmentally."

Allotment of work to Contractor 'A' after ignoring the lowest tender of 'D'

4.25. As stated above, after Contractor 'C' had stopped work in the reach RD 103—126 (after completing only a very small fraction of the work awarded to him), it was decided to invite tenders in respect of the work left undone by Contractor 'C'. Out of the tenders received, the lowest tender was of Contractor 'D' (viz., Contractor 'B' in another name). However, this lowest tender was ignored and the work was allotted to Contractor 'A', the second lowest tenderer, in January, 1971. The reasons given are considerations of expeditious completion of work.

The additional expenditure involved in the process was Rs. 2.03 crores.

4.26. The Committee are distressed over the manner in which work was allotted to different contractors. It appears that the project authorities, in spite of the confidence and self-assurance

*Left undone by Contractor 'C'

they should have felt on successful construction of the Farakka Barrage, found themselves virtually at the mercy of the contractors in the matter of work relating to excavation of the canal. Even where the contractors' default was established, the project authorities appeared helpless in taking action against them. Two main grounds, viz. concern regarding the progress of work and the possibility of court action by the allegedly aggrieved contractors, have been put forward by the Government. The Committee are unable to accept the soundness of this argument and feel that the Project authorities should not have allowed the contractors to hold them, as it were, to ransom. Surprisingly, contractor 'C', who was awarded the contract of earth-work of the quantity of 26.25 crores cft. in the Reach RD 103—126, with completion date of 3rd April, 1971, stopped work in June, 1969, by which time only 1.26 crores cft. out of 26.25 crores cft. had been completed. There was a penal clause in the contract with him but no valid reasons have been produced before the Committee for not invoking the penal clause.

4.27. Again, in the whole process of the award of tenders, there appears to be a kind of leniency, even favouritism, towards contractor 'A'. It is on record that in terms of the supplementary extension in April, 1969, of the contract with contractor 'A' for the reach RD 97—103, Government had reserved the right to allot additional earthwork to the contractor after June, 1970, to the extent of 15 crores cft. in continuation of the said reach at the same rate. In violation of this obligation, the contractor expressed his inability to take up the said extra work and the Government reconciled themselves to this refusal.

4.28. The Committee are not able to comprehend the logic in leaving out RD 97—103 from being awarded on a firm basis to the contractors, along with other parts in the Reach RD 68—126. RD 97—103 was taken up in November 1968 and awarded on an ad hoc basis to Contractor 'A'. Since Contractor 'C' was no longer active in the field and the performance of Contractor 'B' was judged by the authorities to be not satisfactory, this made Government dependent again on Contractor 'A' who had already proved refractory. The net result of this was that Contractor 'A' found himself to be the only one in the field and he took full advantage of his monopoly position by refusing to execute the job at the rates at which he had contracted the execution of work in RD—1068. The Government then agreed to give him a higher rate than that at which work in other parts of the Reach 68—126 had been given to Contractor 'C'.

4.29. The Committee regret that in the matter of award of contracts for excavation work of the Farakka Feeder Canal, the authorities concerned have been lacking in financial prudence and the care and concern reasonably expected of them in safeguarding the interests of the public exchequer.

CHAPTER V

CONCESSIONS TO CONTRACTORS

Audit Paragraph

5.1. The contract with the defaulting contractor 'C' had provided that in case of unfinished work payment would be made at part rate, at the discretion of the engineer-in-charge, taking into account extra expenditure to be incurred in getting the remaining work completed. As the contractor failed to execute the allotted work up to the required depth and specifications payment for work done was made at Rs. 10 per 100 cft.

However, in June 1969, the Control Board decided to enhance the rate to Rs. 10.88 per 100 cft. by allowing the contractor additional 50 per cent of the difference between the tendered and determined rates of Rs. 11.75 and Rs. 10 respectively, on the following considerations:—

- (a) the expenditure incurred by the contractor on initial organisation and management was in excess of the proportion of the volume of work actually done by him, and might mean some loss for him because of the termination of the contract at that stage; and
- (b) the rate for excavation of bottom section by dredgers was less than that for top excavation by conventional method and, therefore, the rate for the latter in the average rate quoted by the contractor for excavation of the full section of the canal could not have been less than Rs. 11.75.

A further payment of Rs. 1.11 lakhs was thus made to contractor 'C' although his progress of work had been slow and additional expenditure of Rs 2.03 crores had to be incurred to get the work completed by contractor 'A'.

The progress of work of contractors 'A' and 'B' was consistently slow in spite of substantial financial and material help, within and outside the contracts, extended to them such as (i) advance of Rs. 2.04 crores to contractor 'A' and Rs. 1.05 crores to contractor 'B' (including Rs. 20 lakhs and Rs. 40 lakhs respectively outside the terms of the contracts), (ii) supply of departmental equipment

(value Rs. 91 lakhs in case of contractor 'A') on hire basis, outside the contracts and (iii) issue of materials and spare parts (value Rs. 46.50 lakhs and Rs. 34.33 lakhs upto June, 1974 in respect of contractors 'A' and 'B' respectively) from departmental stores without provision in the contracts—they were supplied to the contractors at the departmental issue rates, (procurement price plus departmental supervisory charges) without ascertaining the market rates prevailing at the time of supply to the contractors, and (iv) deferred recovery of the cost of materials etc., at contractors' requests.

In the working season of 1970-71, contractors 'A' and 'B' did not start the work on the plea of radical change in the attitude of their labour, as a consequence of which they had, according to them been incurring heavy expenditure on labour, repairs and maintenance of equipment etc. and represented that it was no longer possible for them to carry on the work, unless they were compensated for the losses already suffered by them and the rates were enhanced suitably for the works still remaining to be done. The escalation clause included in the contracts provided for variations in the prices of petrol, oil and lubricants etc. and higher amounts were paid by the project on account of the escalation clause relating to variations in prices of petrol, oil and lubricants. In the hope of expeditious completion of the canal and to create conditions in which the contractors could resume, continue and complete the work, Government sanctioned in March 1971, *ad hoc* and *ex-gratia* enhancement of rates (per 100 cft.) up to Rs. 16.50 for work done during 1969-70 and Rs. 20.65 thereafter up to the dates of completion extended till then, against the contracted rates of Rs. 11.30 and Rs. 12.43 in case of contractor 'A' and Rs. 12.50 in case of contractor 'B' subject to the contractors' agreement in writing that these payments would be in full and final settlement of their claims. Representations for compensation for work done upto September 1969 were, however, rejected. It was also agreed that the enhanced rates could be further extended if necessary, upto March 1972, March 1973. Subsequently enhanced rates were further extended upto 30th June 1974 in case of contractor 'A' and upto 31st August 1974, in case of contractor 'B'. Upto October 1974, total extra amount of Rs. 2.90 crores was paid to the two contractors on account of such subsequent enhancement of contracted rates.

So far, rates have not been revised in case of any other contractor on similar grounds of labour troubles, law and order situation etc.

From the commencement of 1973-74 working season contractor 'A' declined to resume excavation of the left-out gaps in his reaches, from RD 10 to 68 and RD 103 to 126, unless the rates were further increased. He was, however, agreeable to excavate only the portions above water level in these gaps at the existing rates. Considering the huge dewatering required from the excavated portions of the feeder canal, if these gaps were to be excavated to the full section, it was decided in January 1974 to have the portions above water level excavated through contractor 'A', on the existing rates and the portions below water surface by dredging departmentally. The contractor was thus relieved of the more difficult portion of the work in the lower layer, involving more lead and lift, besides the element of dewatering, without any reduction in rate.

[Para 28, Audit Report (Civil) for the year 1973-74]

5.2. It will be seen from the Audit para reproduced at the beginning of this chapter and Chapter IV that the following types of concessions were given to various contractors in the matter of execution of the works allotted to them:

- (i) rates of contractor 'C' were enhanced to Rs. 10.88 per 100 cft. by allowing the contractor additional 50 per cent of the difference between the tendered and determined rates of Rs. 11.75 and Rs. 10 respectively.
- (ii) substantial financial and material help within and outside the contracts were extended to contractors 'A' and 'B' such as:
 - (a) advance of Rs. 2.04 crores to Contractor 'A' and Rs. 1.04 crores to 'B' (including Rs. 20 lakh and 40 lakh respectively outside the terms of the contract).
 - (b) supplying departmental equipment (value Rs. 91 lakhs in the case of Contractor A) on hire basis outside the contract.
 - (c) Issue of material and spare parts (value Rs. 46.50 lakhs and Rs. 34.33 lakhs up to June 1974 in respect of contractors 'A' and 'B' respectively) from Departmental Stores without provision in the contracts; and
 - (d) Deferred recovery of the cost of material at contractors' request.

(iii) *Ad hoc* and *ex-gratia* enhancement of rates (per 100 cft) upto Rs. 16.50 for work done during 1969-70 and Rs. 20.65 thereafter upto the dates of completion extended till then against the contracted rates of Rs. 11.30 and Rs. 12.43 in the case of Contractor 'A' and Rs. 12.50 in the case of Contractor 'B'. Subsequently enhanced rates were further extended upto 30th June 1974 in the case of contractor 'A' and upto 31st August 1974 in the case of contractor 'B'.

(iv) Relief to contractor 'A' in the matter of more difficult portion of work of the lower layer involving more lead and lift besides the element of de-watering without any reduction in rate.

5.3. The Committee have discussed below some of the more important concessions given to the contractors.

Grant of Extensions to Contractors

5.4. Contractors 'A' & 'B', who were the main contractors to carry out the excavation work of the canal could not complete the work on the dates stipulated in their original contracts. Requests for extension of time were received from them on various occasions and acceded to by the Project authorities. The following table shows the position about extensions granted to the contractors:

Name of the Reach	Name of Contractor	Date of award of tender	Scheduled date of completion	Extensions granted	
				S.No.	upto
RD 10-68	'A'	15-1-65	30-6-68	1	30-6-69
				2	30-6-70
				3	30-6-71
				4	30-8-73
				5	30-6-74
RD 68-97	'B'	4-12-67	30-11-70	1	3-1-72
				2	30-6-73
				3	30-6-74
				4	31-8-74
RD 97-103	'A'	April, 1969	June, 1970	Two extensions upto August, 1973	
RD 103-126 (after 'C' failed to do it and his contract was terminated.)	'A'	January, 1971	May, 1972	Eleven extensions' last one upto June, 1974.	

5.5. Among the reasons that have been furnished to the Committee for grant of extensions are late arrival of earthmoving machinery, government's failure to supply electricity as per contract, dislocation of work due to heavy rains, government's failure to make land available in time, labour troubles, opposition from residents of certain areas, unprecedented floods, shortage of P.O.L., difficulties in timely import of spare parts for machines etc.

5.6. On no occasion was any penalty imposed on the contractors for non-completion of work in time. The reasons for non-imposition of penalties have been stated to be as follows:—

"The imposition of penalties, on the contractors would have led to prolonged litigation which in turn would have impeded progress of work. The grant of extension itself was due to certain conditions which were beyond the control of contractors and the question of imposition of a penalty does not arise."

5.7. Asked as to why the penalty clause could not be operated upon when the contractor(s) did not complete the work in time, the representative of the Ministry has stated in evidence:—

"If the Department is satisfied that the delay for which the contractor is seeking extension is not within the terms of the contract, that is, the contractor is not hindered by reasons beyond control, then the Central Board or the Department can refuse giving extension and levy penalty. In each case the fact is that the contractor was hindered because the land could not be given and there were many troubles etc. which hindered the work though the contractor would have liked to complete his work in accordance with the terms of the contract."

The representative of the Ministry has also stated:—

"They (the contractors) were told that certain facilities would not be given to them if they did not give a particular progress. In fact a lot of exacting was done but the circumstances were such that the contractors could not give the desired progress and therefore the work was inevitably delayed. The delay, of course, would not be the choice of the contractors. The Committee would be aware that the contractors have to spend much more as the time passes due to escalation of the material etc. In fact it was most difficult to persuade the contractors

to work in 1974 because of rise in the cost. We threatened them that we would go to the court and we shall take strict action against them. By pressurising them they could do some work."

5.8. It had come to the notice of the Committee that in the reach RD 10—68, the Chief Engineer, Farakka Barrage Project, had recommended that no extension should be granted to contractor 'A' after June, 1968. but the Control Board all the same decided to grant extension upto June 1969 without recording any reasons therefor. The Committee, therefore, called for the minutes of the relevant meeting of the Farakka Barrage Control Board and the reply furnished by the Ministry is reproduced below:—

"Due to slow progress achieved on the work of excavation in the reach 10—68 during the working seasons 1964-65 (Part) and 1965-66 (date of award of work 1/65 and stipulated date of completion 6/68), the contractor 'A' applied in April, 1966 to the Chief Engineer, Farakka Barrage Project for granting extension for completion of the work by one more season. Though the Chief Engineer was competent to grant or refuse extension of time, he forwarded the request of the Contractor to the Secretary, Control Board stating "I would request you to place the matter before the Board as 'A' has intimated that they would not be able to adhere to the contract of 30 crores cft. of earthwork in the next working season and they would do 20 crores cft. only. As the tender has been accepted by the Board, it may also be decided by the Board whether extension of time should be granted and if so to what extent."

The matter was accordingly placed before the Control Board at its 18th meeting held on 14-11-1966 and after discussions it was decided by the Board that the extension of time asked for may be granted in view of the difficulties explained by the Contractor from time to time.

In this connection, it may be stated that the contractor had been informing regularly after starting work in reach 10—68 that the progress achieved by him during the first and second seasons was not very satisfactory due to various reasons viz. non-receipt of imported machinery, failure of some machinery brought by him at the site of work, non-supply of electricity by the

Department, difficult nature of the soil, heavy winter rains during the working season, non-availability of spare parts of the imported machinery, etc. In July, 1965, Contractor 'A' had informed that the progress/programme of work was subject to receiving the machinery from the U.S.S.R. and Poland at the commencement of the working season in 1965. In September, 1965, they had also informed about the difficulties in the supply of electric power and had stated that if the Project did not supply power by October 1965, they would not be able to work the 2nd shift. The Contractor had further stated in January, 1966 about the little progress on account of slushy conditions of the ground and suspension of work due to heavy rains in October, 1965. Again, in May 1966, they informed the Chief Engineer about the various clauses of shortfall in the progress achieved during the working seasons of 1964-65 and 1965-66.

As regards the supply of electric power, the Government, as per the Contract Agreement, was to arrange supply of power at different locations as mentioned therein. The lines were to be drawn up to the sub-station by the Government to be extended beyond the sub-station by the Contractor at his own cost. As informed by the Chief Engineer, Farakka Barrage Project in October 1966, the high tension line along the canal had been drawn and erection of sub-station completed but the line had not yet been energised by the State Electricity Board.

The above facts were considered and discussed in the Control Board meeting and as stated above, the Control Board [including Chief Engineer (Member) who was present] decided that the extension may be granted as requested by the Contractor. The causes of shortfall in the progress were considered beyond the control of the Contractor."

The relevant paragraph in the minutes of the 18th meeting of the Board held on 14th November, 1966 read as follows:—

"Feeder Canal:

The Board considered the request of Contractor 'A' for the extension of the period of their contract by one working season i.e. upto June 1969, and keeping in view the diffi-

culties explained by the firm as reported in the agenda notes, it was decided that the extension may be granted."

5.9. The Committee find that in the papers relating to the meeting of the Board held on the 14th November, 1966, there are the following comments made by the Chief Engineer of the Farakka Projects:—

- "(a) No further advances outside the scope of the contract, and the work should not be made conditional on Government assistance outside the contract.
- (b) Procurement and selection of machinery etc. is entirely the concern of the contractor and the Government had nothing to do in the matter. Notwithstanding this, equipment worth about Rs. 37.5 lakhs had been given to the firm on loan in the interest of work.
- (c) Two generating sets of 100 KW each have been made available on hire for arranging construction power. Power from North Calcutta—Farakka Grid—is expected to be available for the current year's programme of work.
- (d) An extension from March to June 1968 had already been granted to the firm in consideration of their difficulties in arranging the machinery. Hence, no further extension can be given."

5.10. The Committee are surprised that in spite of the clear recommendation of the Chief Engineer against the grant of extension beyond June, 1968 to contractor 'A' in respect of the excavation work in the Reach RD 10-68, the said contractor was granted extension upto June, 1969 by the Control Board, and the only reasons left on record are "difficulties explained by the firm as reported in the agenda papers." The papers relating to the relevant meeting of the Control Board reveal that the Chief Engineer of the Project had specifically mentioned that "an extension from March to June 1968, had already been granted to the firm in consideration of their difficulties in arranging the machinery," and "hence no further extension can be given". The Chief Engineer had also recorded that procurement and selection of machinery was entirely the concern of the contractor, adding that notwithstanding this position the contractor had been given equipment worth about Rs. 37.5 lakhs in the interests of the work. The Chief Engineer had also referred to two generating sets having been made available on hire to the contractor. In

the absence of any recorded reasons, it has not been possible for the Committee to examine the justification for the Control Board departing from the specific recommendation of the Chief Engineer. The Committee take a serious view of the matter and recommend that it should be probed into thoroughly, and responsibility fixed for such apparently anomalous conduct.

5.11. The Committee would also suggest that a procedure should be evolved in order to ensure that in all cases where the advice of the competent authority (the Chief Engineer in the present case) is not accepted by a Committee/Board, detailed reasons for the same should be recorded in the minutes of the relevant meeting of the Committee/Board.

Ex-gratia payment of higher rates to Contractors

5.12. The following statement indicates the rates at which contracts for excavation work were awarded to contractors for different reaches at different time:

Reach	10-68	Rate 11.30/100 cft.	awarded in 1/65
Reach	68-97	Rate 12.50/100 cft.	awarded in 12/67
Reach	103-126	Rate 11.75/100 cft.	awarded in 12/67
Reach	97-103	Rate 12.43/100 cft.	awarded in 4/69
Reach	103-126	Rate 21.50/100 cft.	awarded in 1/71

5.13. After the working season of 1969-70, contractors 'A' and 'B' stopped the work and representations were received from them that since the contract rates had proved unworkable for them and they had suffered high losses due to radical changes in the attitude of labourers and large scale increase in repairs and maintenance of equipment etc., it was not possible for them to resume work at the contract rates. Accordingly higher rates were paid to the contractors and the following statement indicates the rates contracted and actually paid from time to time:—

Name of Reach and contractor	Original rate accepted by the contractor	Higher rate paid <i>ex-gratia</i> for work done during 1969-70	Higher rate paid <i>ex-gratia</i> for work done during 1970-71 ¹¹ and thereafter
1	2	3	4
R.D. 10-68 Contractors	Rs. 11.30 per 'A' 100 cft. (in January, 1965)	Rs. 16 50	Rs. 20 65
R.D. 68-97 Contractors	Rs. 12.60 per 100 cft. in Dec, 1967)	Rs. 16 50	Rs. 20 65

1	2	3	4
R. D. 97-103 Contractor	Rs. 12.43 per 100 cft. (in April, 1969)	Rs. 16.50	Rs. 20.65
R.D. 103-126 Contractor 'C' }	Rs. 11.75 100 cft. (in Dec. 1967)	Left work after completing only 1.26 crores cft. out of 21.50 crores cft. Actually paid a rate of Rs. 10.88 per 100 cft.	
Contractor 'A'	Rs. 21.50 per per cft. (in January, 1971)	(Paid at the original rate contracted).	

5.14. The reasons for grant of higher rates ex-gratia to 'A' and 'B' have been stated to be as follows:

"As regards the increase of rates, ex-gratia to Rs. 16.50 and Rs. 20.65 per 100 cft. for the work done during periods 1969-70 and 1970-71 and thereafter respectively, a Committee comprising Joint Secretary (GB), Ministry of Irrigation and Power, Joint Secretary (T&P), Ministry of Finance, Member (D&R), CW&PC, General Manager and F.A. & C.A.O. Farakka Barrage Project was constituted in 1970 and they went into the representations of Contractors 'A' and 'B' for enhancement of their rates originally awarded to them. The contractors had represented that since the contract rates had proved unworkable and they had already suffered huge losses due to radical change in the attitude of labourers and large scale increase on repairs and maintenance of equipment, etc., it was not possible for them to resume work at the existing rate. After considering the pros and cons of their representations the Committee felt that there were only two alternatives open for the department to meet the resultant situation:—

- Terminate the contracts of the two Contractors invite tenders and allot the balance work;
- Create circumstances in which the existing contractors would be able to continue and complete the balance works by the target date.

As terminating the contract and inviting fresh tenders would have retarded the work and as the fresh tenders would certainly have been at higher rates as could be seen from the tenders awarded in the reach R.D. 103-126 at the rate

of Rs. 21.50 per 100 cft. in January 1971, the Committee awarded in March, 1971 the *ex-gratia* enhanced rate of Rs. 16.50 for the working season 1969-70 and Rs. 20.65 for the working season 1970-71 onwards."

5.15. The Committee called for a copy of the report of the inter-departmental committee who had considered the demand of the contractors for grant of rates higher than those originally accepted by them. On a perusal of the same, the Committee find that the relevant clause, providing for exalation of rates, in the contract agreement reads as follows:—

"Clause 10C

If during the progress of the works, the price of any material incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores in accordance with clause 10 thereof) and/or wages of labour increases as a direct result of the coming into force of any fresh law, or statutory rule or order (but not due to any changes in sales tax) and such increase exceeds ten per cent of the price and/or wages prevailing at the time of acceptance of the tender for the work and the contractor thereupon necessarily and properly pays in respect of that material (incorporated in the works) such increased price and/or in respect of labour engaged on the execution of the work such increased wages, then the amount of the contract shall accordingly be varied, provided always that any increase so payable is not, in the opinion of the Superintending Engineer (whose decision shall be final and binding) attributable to delay in the execution of the contract within the control of the contractor.

If during the progress of the works, the price of any material incorporated in the work (not being a material supplied from the Engineer-in-Charge's stores in accordance with clause 10 hereby) and/or wages of labour is decreased as a result of the coming into force of any fresh law or statutory rule or order (but not due to any changes in sales tax) and such decrease exceeds ten per cent of the prices and/or wages prevailing at the time of acceptance of the tender for the work, Government shall in respect of materials incorporated in the works (not being materials supplied from the Engineer-in-Charge's stores in accordance with Clause 10 hereby) and/or labour engaged on the execution of the work after the date of coming into force of

such law, statutory rule or order be entitled to deduct from the dues of the contractor such amount as shall be equivalent to difference between the prices of materials and/or wages as they prevailed at the time of acceptance of tender for the work minus ten per cent thereof and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order.

The contractor shall, for the purpose of this condition, keep such books of account and other documents as are necessary to show the amount of any increase claimed or reduction available and shall allow inspection of the same by a duly authorised representative of Government and further shall at the request of the Engineer-in-Charge furnish, verified in such a manner as the Engineer-in-Charge may require.

The Contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such material and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in a position to supply."

5.16. Also under the additional terms and conditions of contract with contractor 'A' the following provisions existed for payment on account of escalation in prices of P.O.L.

"Clause 25: Escalation on account of additional levy or taxes as a result of order of the Central or State Government.

Such escalation shall be restricted to fuel, oil and lubricants and every 1 per cent increase in the prices of fuel, oil and lubricants shall raise the rate per 100 cft. by one paise."

5.17. The above clauses were duly considered by the inter-departmental Committee who noted that as had been observed by the General Manager and F.A. & C.A.O. of the Project, the claims of the contractors did not come within the provisions of the contract agreement and could only be considered on ex-gratia basis if considered necessary in the interest of work.

5.18. The Inter-departmental Committee noted that both the contractors were emphatic in their assertion that the existing (contracted) rates were unworkable and had categorically stated that if they are not compensated to a reasonable degree, they cannot proceed with the work. They came to the conclusion that the Department had

only two alternatives, viz., to terminate the contracts and invite tender for the unfinished work or to create conditions in which the existing contractors would be able to continue and complete the work. The Inter-Departmental Committee felt that it was doubtful if any new agency, with adequate resources and requisite capabilities for handling the work would tender and even if such an agency were forthcoming, the rate could not be expected to be less than that obtained after negotiation for the reach RD 103-126 (viz. Rs. 21.50 per 100 cft.). The Inter-Departmental Committee also felt that any new agency would take a longer period for completing the work which would delay the commissioning of the project. The Inter-Departmental Committee accordingly preferred the alternative of creating conditions under which the existing contractors could resume and complete the work and proceeded with the consideration of their claims.

5.19. The conditions at work site and their effect on progress of works and working cost were analysed by the Inter-Departmental Committee in their report as follows:

“The Committee noted that the working conditions at various work sites of the Project started deteriorating from the working season 1967-68 and they became acute from the beginning of working season of 1969-70 when not only contractors’ workers, but also departmental employees raised demand after demand and started agitations in various forms viz. staging demonstrations, go-slow tactics, gheraos, strikes, intimidation of supervisory staff etc. Law and order situation deteriorated badly. There was not enough protection for the contractors to carry on the works smoothly. All this could not but reduce out-put and retard the progress of work considerably. The resultant delay in completion of work should have itself thrown extra financial burden on the Contractors. The situation was further accentuated by persistent demand by labour periodically for increase in wages, incentives etc. which had to be conceded. In this context the Committee noted that in February, 1970 the District Magistrate, Murshidabad, who was approached by Contractor ‘A’ for adequate security arrangements had advised them to allow concessions to labour to facilitate negotiations. There had also been several bilateral discussions between the Department and the employees of the Project on demands pressed by them. The Ministry of Irrigation and Power were fully seized of the whole situation which was also brought to the notice of the Ministry of Home Affairs etc. There were.

discussions at the highest levels to explore ways and means of getting the Project work done. It was even thought at one stage that under such adverse conditions no new works of the Project should be taken up since not only the rates would be high but their execution would also be difficult. These two contractors however continued to work, ploughing in whatever finances they could manage.

In the light of the above, the Committee felt that there was sufficient evidence to show that these two contractors had had to work in extraordinary circumstances beyond their control (and in fact even beyond the control of the Department). The prevailing conditions almost partook of the character of Force Majeure. The Committee noted that tender inquiries issued by the project during the period 1969-70 fetched rates far in excess of the estimated cost. No new contractors were coming forward to take up any work on the project. Single tender response to the tender enquiries was not uncommon. Tenders had to be invited twice or thrice in some cases.

Such conditions could not but affect working costs, especially in canal excavation work which depended entirely on deployment of machinery on large scale and employment of huge number of manual labour. It was therefore reasonable to expect that adverse conditions resulting from go-slow tactics etc. and deterioration of law and order situation would have been directly reflected in the cost of working. The Committee felt that in the circumstances the contractors had a justifiable case for ex-gratia compensation to meet the increased cost resulting from such adverse conditions."

5.20. After examining the claims of the contractors in detail, the Inter-Departmental Committee came to the conclusion that for the period upto June, 1969 the claim for higher rates was not found acceptable. As regards the period after June, 1969, the findings of the said Committee were recorded in para 8 of their report as follows:—

"8 (ii) Regarding the working season 1969-70, the Committee appreciated that the site conditions prevailing during the period were adverse and had a direct impact on the working costs, which was beyond the control of the contractors. There was, therefore, a case for allowing them an enhanced rate for this period, on ex-gratia considerations. The

Committee noted from the General Manager that the departmental rate for the excavation of the Feeder Canal from RD 0 to 10 during 1969-70 was of the order of Rs. 16.00 per 100 cft. without taking into account departmental and supervisory charges; the work done during the period was also not to full depth at all places. Allowing for these factors, the Committee felt that there was justification for granting enhanced rate of Rs. 16.50 per 100 cft. to both contractors for work done during the 1969-70 season. The Committee considered that the rates claimed by the contractors viz. Rs. 17.72 (Contractor 'A') and Rs. 18.83 (Contractor 'B') were therefore on the high side and should not be accepted.

- (iii) As regards the balance work to be done by the two contractors during 1970-71 working season and thereafter, the Committee felt that, having accepted recently a rate of Rs. 21.50 per 100 cft. (with P.O.L. escalation) for the work in reach 103 to 126, it would be unrealistic to expect that the balance of work in the existing contracts could be got done at a lower rate. However, since enhancement of the existing contract rate was on ex-gratia basis, the profit element could not be allowed in full; it had to be restricted to that included by the contractors in their existing rates. After making due deductions in this respect, the Committee recommended a rate of Rs. 20.65 per 100 cft. with P.O.L. escalation, for the work to be done during 1970-71 season and onwards by both the contractors."

5.21. By way of safeguards to achieve the objectives the Inter-Departmental Committee recommended certain formulae to adjust the actual payments to be made to the contractors on account of ex-gratia higher rates, against their outstanding advances. The Committee also recommended that the ex-gratia rate of Rs. 20.65 per 100 cft. should be admissible only upto the present extended dates of completion of respective works. If, however, further extensions of time were granted by the General Manager for reasons considered valid by him the enhanced rate would be extended to such periods also, but, in any case, not beyond March, 1972 in respect of Contractor 'A' and March, 1973 in the case of Contractor 'B'. In spite of this clear stipulation by the Inter-departmental committee, the enhanced rates were subsequently further extended upto 30th June, 1974 in the case of Contractor 'A' and upto 31st August, 1974, in case of contractor 'B'. Upto October, 1974, a total of Rs. 2.90 crores was paid as an

extra amount to the two contractors on account of such subsequent enhancement of contracted rates.

5.22. During evidence, the Committee desired to know whether the contractors' rates in Farakka Project had been compared with the rates in West Bengal Government works and whether the former were almost 100 per cent more than the later. In reply, the representative of the Ministry has stated:—

“In the West Bengal Government, we are not aware that such a big canal work has been taken up. The nature of work there is quite different. It would not be realistic to compare the rates of small works there. For example, the earth work for road could be done for Rs. 5/-, it cannot be done at the same rate for canal works like ours. We can compare only comparables. If there is a canal of this magnitude or even half a magnitude, we can do that.”

As far higher rates being paid to the contractors at Farakka, the witness has stated:—

“If we were paying higher rate, then certainly when we invited tenders, we would have got more competitive offers. The very fact that we could not get adequate number of resourceful agencies shows that the rates were not excessive. In one case even global tenders were invited but we did not get competitive rates. There were hardly any contractors coming forward.”

Equipment and materials supplied to contractors

5.23. As stated in the Audit Paragraph departmental equipment valued at Rs. 91 lakhs was supplied to contractor 'A' on hire basis, outside the contracts. Also, material and spare parts of the following values were issued to the contractors from departmental stores, without provisions in the contracts, at departmental issue rates without ascertaining the market price at the time of issue:—

Contractor 'A'—Rs. 46.50 lakhs (upto June, 1974).

Contractor 'B'—Rs. 34.33 lakhs (upto June, 1974).

5.24. Regarding issue of the machinery on hire basis, the Ministry have stated in reply to the Audit Paragraphs:—

“The departmental equipment depending upon the availability, barring those required by the Project for coffer dam and

Barrage works had been issued to the contractors on hire basis for which hire charges had been recovered. If these equipments had not been issued to them, the progress of excavation of the Feeder Canal would have been further delayed."

5.25. As regards the issue of materials and spare parts, the Ministry have stated as follows:

"Spares and materials were supplied to contractors at departmental issue rates which include storage and departmental charges. The rates at which these items are issued to the contractors are revised as and when there is an enhancement in the purchase rates. The issue rates are fixed by adding 20 per cent on the purchase price of materials and then a charge of 3 per cent on account of storage and 10 per cent on account of departmental charge is added.

According to the rules, issues of stock materials to contractors for bona fide use on works are exempt from usual charge of 10 per cent on account of supervision etc., which is otherwise recoverable when the materials are sold to the public. In spite of this provision, the contractors have been charged 10 per cent departmental charges. It may be mentioned that it is difficult to fix the market price at the time of issue of materials, spare parts etc., every time. If market rates are to be determined precisely this would involve considerable time and consequently, the progress on the works would suffer. It was, therefore, in the larger interest of the project that the materials and spare parts were issued to the contractors by charging 10 per cent higher rates to keep a safe margin. Further, issue of materials and spares to the contractors also helped to some extent in disposing of certain surplus stock."

5.26. The recovery of the cost of material etc. was deferred at the requests of the contractors and the following reason for the same were furnished to the Committee:

"The ex-gratia enhanced rates for the works to be done during 1970-71 and thereafter were granted to the contractors considering the genuine financial difficulties of the contractors,

yet the enhanced amount was payable only after the contractors completed and handed over reaches of not less than 5 R.Ds. and till such time they were being paid at the existing rates of their agreement i.e. @ Rs. 11.30 per 100 cft. for RD 10—68 and Rs. 12.43 per 100 cft. for RD 97-103 in case of Contractor 'A' and @ Rs. 12.50 per 100 cft. for RD 68-97 in case of Contractor 'B'. Hence to keep the tempo of progress of the works and in larger interest of completion of the Feeder Canal, recovery of cost of the materials etc. was postponed for a short period only at the request of the contractors.

So far as contractor 'B' is concerned, recoveries yet to be effected amount to Rs. 2.63 lakhs only on account of P.O.L. (upto May '75). All amounts due on account of issues to Contractor 'A' have been recovered."

5.27. During evidence, the representative of the Ministry has stated:

"When we submitted the information to you we did not have full details regarding break up of the materials which were issued to the contractors. We sent a message overnight to the Farakka Barrage authorities and we found that bulk of the materials which were issued comprised the POL. We also found that the method of striking rate was such that the contractor has been charged somewhat higher rate all through consistently. I will be able to give details as compared to the rate of diesel oil or the petrol at the nearby petroleum station. So far as fuel oil is concerned he has been charged more. So far as other materials are concerned the contractors are charged 10 per cent more than the normal rate. This would provide a safe margin. As we have clarified it was not possible to evaluate the market rate for each and every article, but I understand quite a bulk of the articles were purchased by the Department in the recent past and when 10 per cent and 20 per cent was added, the price really came to more than 34 or 35 per cent as compared to the price quoted by the firm. This would provide sufficient margin. It would not be correct to say that the Department incurred any loss.

There was a large inventory of the spare parts and the Department had to dispose that of. When that was utilised by the contractor, it is in the interest of the project to issue

as many spare parts as possible otherwise those would have become obsolete."

Asked as to whether the issue of the materials and spare parts at departmental rate plus 10 per cent (and not at the market rate) was still not a concession to the contractors, the witness added:

"The issue of spare parts or the machine given by the Government was in the interest of the Government. As I said, the spare parts inventory of the Government could be reduced and secondly Government would at least be sure that the genuine parts are used by the contractor. The department will purchase genuine parts and the contractor is not able to purchase genuine parts from the market. The use of non-genuine parts may damage the equipment."

5.28. The Committee find that when the question of grant of extension to contractor 'A' beyond June, 1969, was placed before the Farakka Control Board at their 18th meeting held on the 14th November, 1966, the Chief Engineer, while opposing the grant of extension had *inter-alia* recorded as follows:—

"Procurement and selection of machinery etc. is entirely the concern of the contractor and the Government had nothing to do in the matter. Notwithstanding this, equipment worth about Rs. 37.5 lakhs had been given to the firm on loan in the interest of work."

5.29. The Committee find that as against the contracted rates of Rs. 11.30, Rs. 12.50 and Rs. 12.43 per 100 cft. for excavation work in the Reaches RD 10—68, RD 68—97 and RD 97—103 respectively, contractors 'A' and 'B' were paid, 'ex-gratia', higher rates of Rs. 16.50 per 100 cft. for work done during 1969-70 and Rs. 20.65 per 100 cft. for work done during 1970-71 and thereafter. Such higher rates were paid inspite of the fact that they were clearly outside the terms of the relevant contracts.

5.30. It is to be noted further that the 'ex-gratia' higher rates had been recommended by the Inter-Departmental Committee on the clear stipulation that the same would be 'admissible' only upto the present extended dates of completion of the respective works and that if further extensions of time were granted by the General Manager for reasons considered valid by him, (the enhanced rates would be extended to such periods also, but in any case, not beyond March, 1972 in respect of Contractor 'A' and March, 1973 in the case

of Contractor 'B'. In spite of this directive, the enhanced rates were subsequently further extended upto 30th June, 1974 in the case of Contractor 'A' and upto 31st August, 1974, in the case of contractor 'B'. Upto October, 1974, the total extra amount paid to the two contractors on account of such subsequent enhancement of contracted rates was Rs. 2.90 crores.

5.31. The Committee fear that from the very beginning the Inter-Departmental Committee which sanctioned the 'ex-gratia' higher rates ignored the obligation of safeguarding the financial interests of Government by adherence to the terms of the contracts. It has been pleaded in extenuation that there was the need for 'creating circumstances in which the existing contractors would continue and complete the balance works by the target date.' This sounds almost panicky; besides, the contractors did not, in actual practice, adhere to the extended target date. The effect of the leniency showed by the Inter-Departmental Committee was further aggravated by the action of the Project authorities in that the enhanced rates were extended upto the 30th June, 1974 in the case of contractor 'A' and upto 31st August, 1974 in the case of contractor 'B' necessitating an extra payment of no less than Rs. 2.90 crores, which the Committee feel should have been avoided.

5.32. In this connection, the Committee would like to mention that stores and materials worth lakhs of rupees were issued to the contractors at Departmental issue rates which are stated to include storage and departmental charges. During evidence, the representative of the Ministry explained that the bulk of such materials comprised POL and that the contractors were charged rates higher than the rates of diesel oil or petrol at the nearby petrol stations. In respect of other materials supplied to the contractors, the representative of the Ministry stated that the contractors were charged 10 per cent more than the normal rate. Asked as to whether the issue of materials and spare parts at departmental rates plus 10 per cent was not a concession to the contractors as compared to the rates in the market, the representative of the Ministry, instead of confirming or denying the position, stated that this issue of spare parts or machines was in the interest of Government, as by such issue Government were assured of the use of genuine material by the contractors, thus avoiding the use of fake stuff which might damage the equipment. The Committee are perturbed that Government chose to deal with apparently unprincipled businessmen

even in the case of national projects of paramount value to the country.

5.33. Since, as pointed out by the Chief Engineer of the Project himself, the procurement and selection of machinery etc. was entirely the concern of the contractors themselves, it is evident that the issue to the contractors of materials and stores from the Stores of the Department was in itself a big concession to the contractors. Even so, this concession to the contractors was not taken into account by the Inter-Departmental Committee while examining their claims for rates higher than the contracted rates outside the terms of their contracts. The Committee are of the view that the Inter-Departmental Committee have, by a series of decisions, invited, on themselves, a suspicion of dereliction of duty which should be cleared by Government with a view to suitable action, if called for, in the matter.

CHAPTER VI

Reference to Arbitration

Audit Paragraph

6.1. Although contractor 'A' accepted payment at the enhanced rates in full and final settlement of his claim, he sought in June 1971, reference to arbitration of his claims for compensation, amounting to Rs. 252.10 lakhs for the work done by him during January 1966 to September, 1969. The ground for his doing so was that the rejection of his claim for that period constituted a dispute between him and the project authority. The project sought legal opinion on whether the above dispute was referable to arbitration under the arbitration clause of the contract, in view of the fact that the contract did not contain any condition for enhancement of the unit rate (for excavation) on the grounds (mentioned subsequently) advanced by the contractor. The legal opinion obtained was that the arbitration clause (standard clause included in C.P.W.D. contracts) appeared to be very widely worded and it seemed difficult to contend that such a dispute was outside the scope of the arbitration clause. Accordingly, in November 1971, the claim was referred to the sole arbitration of a Superintending Engineer of the project. In December, 1972, the arbitrator gave his award whereby the contractor's claim for compensation for work executed from January to December 1966 was rejected but for the work done in RD 10—68, during January 1967 to September 1969, an amount of Rs. 121.88 lakhs was awarded to him, the net amount payable after deduction of payment already made on account of increase in the cost of petrol, oil and lubricants for this being Rs. 97.95 lakhs. In addition, the contractor was allowed interest, at 5 per cent per year, on this amount from the date of the award till the date of payment or decree, whichever be earlier. Thus, the arbitrator awarded higher rates even for the period up to June 1968 when, according to the contract, he was originally to complete the work.

The claims of the contractor were mainly based on the following two grounds:—

- (i) there was radical change in the working conditions in the project area due to deterioration in the law and order

situation and this resulted in increase in costs of execution of the work, and

- (ii) there was an alleged assurance given to the contractor that he would in due course, be compensated for the loss sustained by him.

The contractor had been raising the first grievance since March 1966. There were several letters, where he had stated that the contract had become impossible of performance because of total breakdown of law and order.

The contractor pleaded before the arbitrator that the change in the circumstances (law and order situation) had given him the right to throw off the contract, but he had continued the work, because the project had asked him to continue the work and had assured him that he would be suitably compensated. The assurance was referred to in three letters written by the contractor to the project, in March 1970, June 1970 and January 1971. The assurance had not been denied in writing by the project authorities but were denied by them before the arbitrator.

According to the opinion of the Ministry of Law and Justice, Branch Secretariat at Calcutta, given in February 1973, the contractors' claim for payment of increased rates on account of altered working condition, was not sustainable in law, in view of the principles of law, relevant to the present case, laid down in the Supreme Court case of *M/s. Alopi Prasad and Sons Ltd. vs. Union of India* reported in AIR 1960—which the arbitrator was bound to follow.

As regards the second ground, namely, that assurances were given to compensate the contractor for the loss sustained, it was observed by the Branch Secretariat that such an assurance, even if it was given, was not binding on the Government as an agreement for the reason that it did not comply with the provision of Article 299 of the Constitution, according to the aforesaid judgement of the Supreme Court. But these decisions of the Supreme Court, on similar issues, had not been pointed out to the arbitrator.

In February, 1971 when the question of *ex-gratia* increase of contracted rate was till under consideration of Government the contractor had confirmed that the minimum which could be acceptable to him would be Rs. 12.33 per 100 cft. for 1967-68 and 1968-69. Again, in March 1971, when the claim prior to October 1969 was rejected by Government, the contractor had requested for payment

at Rs. 12.50 per 100 cft., for work done in 1967-68 and 1968-69, i.e. the rate at which the work in RD 68—97 had been allotted to contractor 'B' in December, 1967. At these stages, contractor 'A' had not claimed compensation for work done by him prior to October 1967. These however, were not pointed out by the project before the arbitrator. Besides, in April, 1969 work in excavation of the canal, in RD 97—103 had been awarded to contractor 'A' at the negotiated rate of Rs. 12.43 for 100 cft. This point was also not placed before the arbitrator.

In fact, the project had contended itself with general denial of the claim before the arbitrator, without going into the quantum which might be payable in the event of upholding of the claim of the contractor by the arbitrator.

Under the award increased rates (per 100 cft.) of Rs. 13.10 for 1967 (full year), Rs. 16.05 for 1968 and Rs. 15.55 for the period January 1969 to September 1969 were allowed against the contracted rate of Rs. 11.30.

Law Ministry was of the view, that there was remote possibility of the court interfering and setting aside the award but advised the project to take the risk and file a petition for setting aside the award instead of accepting it without contest.

An objection petition was accordingly filed in the Court of Subordinate Judge, Murshidabad. But in June, 1973, in consultation with the Ministries of Law and Finance, it was decided not to pursue the case and the Ministry of Irrigation and Power directed the Project to persuade the court to proceed to pronounce judgement according to the award, followed by a decree, as early as possible to avoid payment of further interest to the contractor. The suit was decreed in terms of the award, in June 1973, and payment of Rs. 100.31 lakhs including interest of Rs. 2.36 lakhs from 30th December 1972 to 23rd June, 1973, was made to the contractor in July, 1973.

[Paragraph 28 of the Report of C & AG of India for 1973-74, Union Government (Civil)]

6.2. The Inter Departmental Committee referred to in the earlier Chapter had recommended ex-gratia enhancement of rates for the work done by the contractors only during the season 1969-70 and thereafter, but rejected the contractors' claim for the enhanced rate for the period from January, 1966 to September, 1969.

6.3. After the decision of the Committee was communicated to the contractors, the contractor 'A' sent in his acceptance of the en-

hancement in letter No. 3/632/71, dated 25-3-71 addressed to the General Manager in the following terms:—

“Sub:—Excavation of Feeder Canal from RD. 10 to RD. 68 and RD 97 to RD 103—Representation for enhancement of rate.

Sir,

This is to inform you that we are accepting in full and final settlement, payment in respect of our claim for the enhancement of rate for earthwork done during 1969-70 season and work to be done till completion from 1970-71 onwards in the reaches RD. 10 to RD 68 and RD 97 to RD 103.”

6.4. In June, 1971, the contractor 'A' intimated to the General Manager, Farakka Project that total rejection of their claims for compensation for the period between January 1966 and September, 1969, was not justified and that they were entitled to the compensation in respect of that period amounting to Rs. 2.521 crores less such amount as had already been paid for increase in prices of P.O.L. The contractor contended that a dispute had arisen between him and the Union of India and requested for reference of the dispute to the sole arbitrator to be appointed by the General Manager, Farakka Barrage Project in accordance with clause 25 of the conditions of contract.

Clause 25 of the Contract, read as follows:—

“Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein-before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever, in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same, whether arising out of the progress of the work or after the completion or abandonment thereof, shall be referred to the sole arbitration of the person appointed by the Chief Engineer, Farakka Barrage Project in charge of the work at the time of the dispute or if there be no Chief Engineer..”

6.5. Ministry of Law and Justice, Branch Secretariat, Calcutta, was consulted by the project as to the arbitrability of the claim put forward by the contractor. The Law Ministry was of the opinion that the arbitration clause in the contract was very widely worded and it seemed difficult to contend that such a dispute was outside the scope of arbitration clause. After discussing the consequences that might follow in the event of Government's refusal to accede to the request of the contractor for arbitration, Law Ministry advised the project authorities that the better course would be to appoint an arbitrator reserving at the same time the Government's right to raise objection as to the arbitrability of the dispute. It was further advised by the Law Ministry that as the decision of the dispute referred to arbitrator would be mainly dependent upon the interpretation of the terms and conditions of the contract which was a question of Law, the Department should, at the earliest opportunity, make an application in writing to the arbitrator to state a case for the opinion of the courts as to the question of law involved under Section 13(b) of the Arbitration Act, 1940.

6.6. According to the opinion given by the Ministry of Law and Justice (Calcutta Branch Secretariat), if the Department did not make such a prayer to the arbitrator and left the decision on the above question of law with the arbitrator, the arbitrator's decision as to the point of law, even if erroneous, would be final and binding in view of the decision of the Supreme Court in Thawerdas Vs. Union of India (AIR—1955—S.C.408) and subsequent decisions of the Supreme Court. A copy of the U.O. Notes sent by the Calcutta Branch Secretariat of the Ministry of Law and Justice to the Superintending Engineer, Canal Circle, Farakka Barrage Project containing the aforesaid opinion is at Appendix II.

The dispute with the contractor was thereafter referred by the General Manager to the sole arbitration of Shri D. N. Rao, then a Superintending Engineer of the Project on 6-11-1971.

6.7. In regard to the wisdom of referring the dispute to arbitration, the representative of the Ministry of Law and Justice has stated during evidence:

"Shri Kar, the Joint Secretary advised that in view of the fact that clause 25 is sufficiently wide, one cannot say that the dispute does not fall within the arbitration clause. Secondly, the consequence is that if the Government does not appoint an arbitrator according to the terms of the contract, this clause empowers the General

Manager of the Farakka Barrage project to appoint a sole arbitrator and not an arbitrator with the consent of both the parties. Shri Kar stated that if the Government holds the view that the clause is not sufficiently wide to include this type of dispute, then the contractor will get the advantage of making an application to the Court in which the contractor is likely to succeed and in that event an arbitrator may be appointed either by the Court, or the Court may direct that the arbitrator will be appointed not by the Government but with the consent of both the parties. In the second alternative, if the court comes to the conclusion that the arbitration clause is not sufficiently wide, then the contractor will get the advantage by filing a suit in the court and in that event it will be determined by the court instead of by the sole arbitrator to be appointed by the general manager of the Farakka Barrage. In that context Shri Kar felt that it would be better if the matter went to the sole arbitrator to be appointed by the General Manager."

6.8. Asked whether it was the practice to appoint arbitrators where crores of rupees were involved, from among officers of the grade of Superintending Engineer, as in the case under consideration, the representative of the Ministry of Agriculture and Irrigation has stated in evidence:—

"This was the practice that was prevailing then. After this incident in which the contractor was paid a crore of rupees by way of arbitration, the matter was reviewed by the Ministry and certain rules* had been laid down for appointment of arbitrators."

The representative of the Ministry has added:—

"The General Manager could appoint a departmental officer and he did appoint Mr. Rao as an Arbitrator. But when the matter was subsequently reviewed and it was thought that a very high level person should be appointed when the claims were more, certain rules were made by the Ministry of Irrigation and Power."

*Vide appendix III.

Asked whether the Superintending Engineer appointed as arbitrator was in any way connected with the work of the Project, the representative of the Ministry has stated—

“The work was being executed by Superintending Engineer (Civil). He was Superintending Engineer (Mechanical). He was incharge of the machinery.”

6.9. The then Superintending Engineer, Canal Circle (Shri A. B. Ghosal) and Executive Engineer, Feeder Canal Division, Farakka Barrage Project, who were the officers connected with the work were entrusted with the defence of the case on behalf of the Government before the Sole Arbitrator. The services of Shri L. N. Mukherjee, Advocate and Government Pleader, Jangipur, whose name was sponsored by the District Government Pleader, Berhampore through the District Magistrate, Mushidabad was engaged by the project in October, 1968, to conduct the arbitration case as and when necessary.

6.10. The Arbitrator entered into reference on 24-11-1971, when he directed the parties by a letter to submit statement of facts and other relevant documents etc. Statement of facts was submitted by the contractor on 14-12-71 and counter statement by the Project authorities on 12-5-72. As advised by the Law Ministry, a written application was filed by the respondent before the Arbitrator on 14-8-72 U/s. 13(b) of the Arbitration Act, 1940, contending therein that the alleged dispute was not preferable to arbitration under Clause 25 of the terms and conditions of the contract in view of the fact that it did not provide for any enhancement of the rate except under Clause 10C of the conditions of contract and Clause 25 of the additional terms and conditions thereof which did not apply to the alleged claim of the opposite party and praying that as the contractor's claim was mainly dependent upon the interpretations of the terms and conditions of the contract and this was a question of Law, the case may be stated as a special case, for the opinion of the court as to the question of law involved and in the meantime to stay the hearing of the case. The application was opposed by the claimants. The application was heard by the Arbitrator who rejected the petition filed by the respondent U/s 13(b), as in his opinion there was no need to refer any question for the opinion of the court and that the point of dispute could be decided by him as arbitrator. The arbitrator gave his ruling, on a point of Law without directing the parties to have the issue decided by Court.

6.11. The arbitration sittings were held on 22-8-72, 26-10-72 and 27-10-72. The contractor's claim was founded mainly on the following grounds in brief:—

That from the middle of 1966, there was a radical change in the working conditions in the project area and the cost of execution of the work increased abnormally due to various reasons wholly beyond the control of the claimants which reasons neither party could have anticipated and that the labour started making totally unexpected and unreasonable demand and also indulged in various acts calculated to reduce output, damage the machinery of the claimants with the result that the cost of work executed by the claimants rose so much that the contract became unrealistic, thus rendering the contract commercially impossible of performance. The claimants submitted that the major factor which was responsible for such increased cost was the serious deterioration in the law and order situation in the Project area for which the claimants were in no way responsible as that they reasonably expected that law and order would be maintained in the project area but this was not the case. The claimants further submitted that they would have been justified in stopping the work but did not do so and continued the work at the request of the Department and on the assurance of various officers of the Department that they would be compensated, in due course, for the loss sustained by them. The claimants also submitted that due to the said circumstances they were prevented from achieving the planned out turn and completing the work within the scheduled time. This increased by more than 50 per cent both the effective cost of work actually executed between January, 1966 to September, 1969 and also that of the work remaining to be executed thereafter and the project was bound to compensate the claimants for the losses sustained.

6.12. The Respondent (Union of India through project representatives and counsel) denied the alleged claim of the contractor by evidence and arguments and submitted that the contractor failed to produce any documentary evidence to substantiate their claim that they continued to work in spite of heavy losses incurred during execution of work, on the alleged assurances given by project authorities to compensate their losses. It was pleaded that the contractor's claim was not tenable as per terms and conditions of contract and that contractor was not entitled to any relief or compensation for

the work done between January, 1966 and September, 1969. It was clearly stressed that the contractor's representation for compensation for the alleged loss sustained by him owing to the alleged deterioration in the law and order situation in the project area for the work done by him from January, 1966 onwards was only considered by the Government and *ex-gratia* payment for the work done during the working season 1969-70 and thereafter was granted, rejecting his prayer for compensation for the earlier period between January 1966 and September 1969 and having once accepted the said payments in full and final settlement of his claims the contractor could not re-open the issue for the said period and was stopped by his own conduct from agitating in the matter and that their claim was not tenable. It was argued from project's side that the then Chief Engineer had made Department's position amply clear by intimating to the contractor that Government officers charged with the responsibility of executing the work were not authorised to deviate from the contract conditions and as such it was not possible for them to make good the loss that contractor might incur in executing the work according to the terms of contract. The respondent refused to admit and argued that the claimant did not suffer any loss as stated by them during January, 1966 to September 1969 and that in the eyes of law, the claimants by accepting the *ex-gratia* payment had been stopped from making claim, if there be any, prior to October, 1969.

During arguments before the Arbitrator, the counsel for the respondent *inter-alia* stressed the following points:—

- (i) That the arbitrator derives his power under the agreement itself. We should examine whether the agreement empowers the Arbitrator to embark on any case where the contract has become void under Section 56 of the Indian Contract Act. Conceding for arguments' sake that circumstances existed which frustrated the contract, or made the contract void, then thereafter the matter is not arbitrable.
- (ii) The contractor by accepting the *ex-gratia* payment in full and final settlement, cannot now claim for the period from January, 1966 to September, 1969. The contractor made composite claim for the entire period. The respondent divided this in two parts namely January, 1966 to September, 1969 and from October, 1969 onwards, the claim for compensation for January, 1966 to September, 1969, was rejected and the claim for payment for period from October 1969 onwards was allowed, that the cardi-

nal principle of interpretation of a document is that it should be taken as a whole and should not be interpreted in parts, taking isolated portion; (page 773 of Sarkar on evidence was read out). In this context Ext. C-26 (letter of General Manager communicating Government decision to the contractor) is a complete document and by Ext. C-34 the contractor accepted the same as a whole. The contractor correctly understood this position and has given an unconditional acceptance in the first paragraph. After the acceptance, he has given some representation but no reservation.

- (iii) Section 56 of the Indian Contract Act does not contemplate commercial impossibility due to labour strike.
- (iv) Law and Order is not in the hands of the Department so that it could come forward to the party's rescue.
- (v) The claimant referred to radical change in the project area, damage of machinery, deterioration of law and order in the project area for which the respondent was not responsible.
- (vi) That it was not established by claimant either through evidence or record that the project authority assured the contractor that they would compensate the losses sustained by him. It was argued that more pleading by claimant is not a proof.
- (vii) The respondents counsel during argument supported by evidence, completely denied any responsibility for payment of compensation to the contractor for the work done during period January, 1966 to September, 1969, and thus main stress in the defence by the respondent was to secure total rejection of the claim of the contractor.

6.13. The award of the arbitrator was announced on 30th December, 1972 and a copy thereof was furnished to the Committee by the Ministry, which is reproduced in Appendix IV.

In terms of the award, whereas the contractor's claim for compensation in respect of work executed from 1-1-66 to 31-12-66, was rejected his claim in respect of the work done during the period from 1-1-67 to 30-9-69, had been partially accepted. Against the contractor's claim of Rs. 222.28 lakhs for the period from January, 1967, to September, 1969, the amount awarded for the corresponding period was to the extent of Rs. 121.87 lakhs. The net sum payable by the department after deduction of the amount already paid to

the contractor towards increase in P.O.L. was to the tune of Rs. 97.95 lakhs. In addition the respondent was also directed by the arbitrator to pay to the claimants interest at the rate of 5 per cent on the aggregate amount of Rs. 97.95 lakhs from the date of the award till date of payment or decree whichever is earlier. The award was non-speaking. The arbitrator did not give any reasons for the award.

6.14. The Committee, therefore, desired to know whether, against the claim of the contractor for compensation, any counterclaim was made by the project authorities on account of the various extensions granted to him. In reply the representative of the Ministry of Agriculture and Irrigation has stated:—

“The contractor was given extensions from time to time. It means that the Control Board of the authorities did not consider it necessary to impose any penalty. They thought that in the circumstances in which the contractor was working, he was not at fault. After all, the Project authorities were working under very difficult circumstances. There were two alternatives. The first was that the contractor could have been removed, in which case he might have gone to the court. The other alternative of taking harsh action against him was much worse. Any harsh action on him, if taken, would have reflected on the progress of the project.”

6.15. On receipt of the award, opinion of the Law Ministry (Branch Secretariat, Calcutta) was sought by the Project authorities.

Shri A. A. Choudhury, Joint Secretary and Legal Adviser in the Calcutta Branch Secretariat of the Ministry of Law and Justice expressed the view that the award of the arbitrator seemed to be a “flagrant case where the arbitrator had misapplied the law to give a perverse award”. However, since the arbitrator had given no reasons in the award and the award itself did not show any error or mistake on the part of the arbitrator and did not disclose that the arbitrator had tied himself down by any particular proposition of law so as to enable a court of law to examine the correctness thereof, it would be difficult to make out a case for interference by the court of law on the ground that there was an error on the face of the award. However, there was an outside chance that the court, on the fact and circumstances of the case and considering that the arbitrator had apparently misapplied the law in making the award, might set aside the award. He, therefore, sug-

gested that the Department may take a risk and file a petition for setting aside the award instead of accepting the award without contest. He advised that the petition should be got drafted by a competent counsel from the High Court Panel, but if there was no time for the same, the petition drafted by the Government Pleader might be filed to save limitation. He also suggested incorporation of the following two additional points in the petition:—

- (a) In view of the fact that though the points were taken before the arbitrator that there was no arbitration agreement for determination of the disputes in question and that the Arbitrator had no jurisdiction to decide them, the Arbitrator instead of directing the parties to have this question decided by the court himself decided his own jurisdiction constituting a legal misconduct on his part.
- (b) The Arbitrator ought not have relied solely on the statements furnished by the contractor in support of his claims in the absence of any oral evidence affirming the correctness of the contents of such statements.

A copy of the Ministry of Law (Branch Secretariat) U.O. note dated 16-2-1973 addressed to General Manager, Farakka Barrage Project containing Shri Chowdhury's advice is given at Appendix V.

6.16. Accordingly an objection petition drafted by an Advocate and vetted by his senior (both engaged by the Law Ministry for the purpose) was filed in the court of subordinate judge, Murshidabad, on the 20th March, 1973. Counter petition was filed by the claimants on 13-4-1973 and counter reply to claimants' petition was filed by the respondent in the court on 16-5-1973 and the hearing was fixed for 23-6-1973.

6.17. Meanwhile the case was referred to the Ministry of Law and Justice main Secretariat, New Delhi. As regards the question of legal misconduct the Secretary, Ministry of Law and Justice in his note dated 22-5-73 (Appendix VI), expressed the view that "It is well settled under the Arbitration Act, 1940, that it is entirely optional to the arbitrator to state a special case for the opinion of the court. Section 13(b) which uses the expression 'the arbitrator shall have power to state a special case' is merely permissive and not obligatory. Refusal to state a special case to a Court of Law on a question of Law cannot, therefore, amount to misconduct on the part of the Arbitrator". The Law Secretary also expressed the opinion that the chances of setting aside the award by the court were very remote and in view of the heavy

amount of interest involved (Rs. 40,000 per month), it would be advisable not to pursue the matter further in the court and pay off the awarded amount to the claimants. Accordingly payment of Rs. 100.81 lakhs (including interest of Rs. 23.36 lakhs) from the 30th December, 1972, till 23rd June, 1973, was made to contractor 'A' in July, 1973, after the award was decreed by the Court.

6.18. As already mentioned, one of the grounds for the claim of the contractor was that there was a radical change in the working conditions in the project area due to deterioration of the law and order situations and that resulted in increase in the cost of execution of the work. The Committee, therefore, discussed this aspect during evidence with reference to the ruling by the Supreme Court that if there is any change in the working conditions the contractors are not entitled to extra payment. The representative of the Ministry of Law and Justice has stated in evidence:

"That is the Supreme Court judgement which was delivered in 1960 in a particular case. The fact of the case was this that there was a contract in 1937 where an agent was appointed for the purpose of procurement of ghee and supply of ghee on certain conditions. Thereafter in 1942, after the outbreak of world war, the contract was actually modified to some extent. Thereafter the agent claimed a certain amount, and stated that he was not bound by the modification of the terms of the contract made in 1942. So, the matter was referred to arbitration. There were two arbitrators and the arbitrators did not agree. Then the matter was referred to an umpire. The umpire did not accept the contention of the contractor and on his application the award was set aside. Then there was a fresh reference. In the fresh reference what happened ultimately was that some amount was awarded in favour of the contractor. Then an application was made by the Government for setting aside the award on the ground that there was error on the face of the award since the amount which was granted in favour of the agent on the ground of changed circumstances were not justified. So, this is the position.

Now, in this particular case there are two aspects of the matter. One is the question of merits, namely, whether in the facts and circumstances of the case, the judgement of the Supreme Court applied or not; secondly, assuming that it does apply and assuming therefore that

the arbitrator came to a wrong conclusion whether the award can be set aside on the ground that the arbitrator had arrived at a wrong conclusion. Both these aspects were examined. The matter was referred to the Ministry of Law. We came to the conclusion that one aspect of the matter was more important than the other aspect, namely, whether there was any error on the face of the award, and if not, whether the award can be set aside and an application should be made for setting aside the award and there is a reasonable chance of success on the ground that there is error apparently on the face of the award. At the outset our Joint Secretary, Shri Choudhury advised that the award of the arbitrator was not likely to be correct but at the same time, he also advised that although the award of the arbitrator might not be correct, in view of judgements of the Supreme Court, there was nothing to show on the face of the award that there was an error apparent on the face of the award and, therefore, the chance of success, if an application is made for setting aside the award, is very remote but as the amount involved is very large the Government may take a chance for setting aside the award by making an application. An application was made for setting aside the award. But the award itself not only provided for a large sum actually Rs. 1.21 crores less the amount already paid and the net amount is about Rs. 97.1 lakhs—but it also provided for payment of interest at the rate of 5 per cent annum on the entire amount of award, from the date of award upto the date of payment or decree. So, the interest was accruing from day-to-day on the entire amount of the award and if the award is not set aside the Government will have to pay 5 per cent interest on the entire amount of the award.

Therefore, the matter was again referred to the main Secretariat of Ministry of Law. Our Secretary examined the matter and he again came to the conclusion that "irrespective of the basic question as to whether the conclusion of the arbitrator was correct or not, on the face of the award there is nothing to show that any error was apparent on the part of the arbitrator and therefore the chance of success in the pending application are very very remote. Therefore, taking this chance and thereby taking further task of paying interest at the rate of 5 per cent is not worth taking."

6.19. The Committee find from paragraph 4.03 of the Arbitrators' award (copy forwarded to the parties under his letter No. Con. 4(3), dated the 1st January, 1973) that "Both parties stated that they are not leading any oral evidence."

During evidence, the Committee desired to know whether there was any justification for not leading any oral evidence from the Project side. In reply, the representative of the Ministry of Agriculture and Irrigation stated:—

"That was the intention of the Government or the General Manager. Nobody prevented oral evidence. The case of the Government before the arbitrator was fought with the best of ability. There cannot be any doubt about that and that is why the pleader was appointed. In fact it was the duty of the pleader and I am sure he must have argued. We do not have any written record on what was argued actually. I made enquiries. I find they do not have any record of what was argued."

The Committee, however, find from the information furnished to them after the evidence that there does exist a brief record, point by point, of all the arguments made before the Arbitrator by the Counsels for both the parties, *vide* the arbitration proceedings dated 22-8-72, 26-10-72 and 27-10-72.

6.20. In a paragraph of the said proceedings relating to arguments made by the Counsel for the respondent, the position has been summarised as follows:

"3.26—At last the Counsel for the respondent enumerated the whole case and summarised as under:—

1. Arbitrator's appointment does not arise, when the contract dissolves itself due to law and order situation.
2. When the contract dissolves itself, the question of compensation does not arise.
3. What was the necessity to load Government with increased expenditure?
4. Silence is the estoppel; Nowhere in the letter the Government gave assurance for compensation. You did the work at your own risk.
5. Terms and conditions of the contract are the guiding principle to continue the contract or not.

6. Extension of time was granted on representation. One opportunity is granted, it does not mean that the other opportunities are to be granted.
7. When the contract dissolve itself, the Government is not bound to reply all and each letter. Letter writing from one side is not document to prove the case.
8. Government clearly stated in letter that final settlement has already been made for 66-67. If contractor accept the final settlement, the compensation for the next three years will be taken up. Contractor accepted the bill as final settlement. So no further demand is justifiable for the years accepted the final settlement. But contractor had represented for the compensation for the whole five years which does not arise at all."

6.21. The Committee disapprove of the leisurely and lukewarm manner in which the whole case of arbitration of the so-called dispute between the contractor 'A' and the Project authorities was handled by Government. In March 1971, when the contractor conveyed his acceptance of enhancement of rates (as decided by the Special Committee), for earthwork done during 1969-70 and thereafter, and his letter was conspicuously silent about his reaction to the rejection by the said Committee of his claim for the period January, 1966 to September 1969, the situation required that before making any payment Government should have secured from him clear written confirmation of the position in respect of the period January, 1966 to September, 1969.

6.22. Again, when it was decided that there was no escape from referring the matter to arbitration and it was open to the General Manager to appoint an arbitrator of his choice, the appointment of an officer of the standing of a Superintending Engineer working on the Project, and therefore by no means a detached personality, to arbitrate on a claim of more than Rs. 2 crores, and that too on a case decided by a high level Committee consisting of some officers of the level of a Joint Secretaries, would prima facie appear to be inappropriate. This is fully borne out by the fact that Government themselves became wise after the event, and have, since then, as the Committee were informed, issued revised instructions linking the status of officers to be appointed as Arbitrators with the cases before them.

The Committee hope that subsequent to the issue of instructions in 1973 there has been no recurrence of such cases in any

project. Nevertheless, Government should review the working of the instructions in the light of experience since gained and revise instructions, if necessary, to protect Government's interest. The Committee have no doubt that in the present case much harm has been done.

6.23. In so far as the pleadings before the arbitrator are concerned, it is surprising that the reasonableness or otherwise of the quantum of compensation demanded by the contractor was not posed into by the government side at all. No oral evidence was led before the arbitrator, and no reasons seem to have been recorded in justification of such an omission. Also, no counter-claims were made by Government on account of the concessions extended to the contractor in spite of his failure to adhere to the time schedule. There were other facilities, like use of government machinery etc., given to the contractor which too should have been put forward before the Arbitrator, in order to have the amount of award suitably reduced if not completely negated. The loss suffered by government on account of the contractor arbitrarily stopping work and causing delay and cost escalation was another point that should have been pressed strongly before the arbitrator by way of a counter claim, but it was not done. The contractual obligation of the contractor to take up additional excavation work at old rates, which the contractor failed to fulfil and Government did not enforce, gave another valuable advantage to the contractor. No counter-claim on this account also was made before the Arbitrator. The Committee feel strongly that Government's defence was not resolutely or even properly conducted.

6.24. As far as the award of the arbitrator is concerned, the Committee would draw attention to the opinion expressed by the Joint Secretary and Legal Adviser in the Calcutta Branch Secretariat of the Ministry of Law, namely that "the arbitrator ought not to have relied solely on the statements furnished by the contractor in support of these claims in the absence of any oral evidence affirming the correctness of the contents of such statements." The same official has also referred to the judgement reported in A.I.R. 1955, Supreme Court, Page 468 and stated that "the present award seems to be a flagrant case where the arbitrator has misapplied the law to give a perverse award."

6.25. In spite of the position as stated above, government decided not to pursue the objection petition against the award of the arbitrator filed by them in the Court of the Subordinate Judge, Murshidabad, but preferred to pay off the awarded amount to the claimant. The Committee are of the view that the conduct of the

case was entirely mismanaged. Government should review the whole matter and fix responsibility for lapses made in course of the reference of the so-called dispute to arbitration and the presentation of Government's case before the arbitrator, with a view to suitable action against those found guilty of dereliction of duty at various levels. Reference to arbitration without careful examination of the implications and indifferent organisation of Government's defence in cases involving the financial interests and also the reputation of the State must not be allowed to recur. Since, on the evidence before the Committee, the services of the law officers of Government do not appear to have been available efficiently and expeditiously in this unfortunate case, the Committee wish Government to look into this aspect of the matter and take all appropriate action.

CHAPTER VII

EFFECTS OF FARAKKA ON CALCUTTA PORT

Progressive Deterioration of Calcutta Port

7.1. Towards the end of the 17th Century, while the Great Mughals were holding the reins at Delhi, a band of British traders, among them the celebrated Job Charnock, set up their business centre at Kalikata, Sutanuti and Gobindpur, unknown hamlets on the eastern bank of what they called the river Hooghly, about 126 miles inland from its estuary (1690 A.D.). This was the genesis of Calcutta.

7.2. This small, semi-marshy, apparently unpronituous spot had few attractions except for its proximity to the site hallowed in the eyes of the devotees of the goddess Kali ("Kalighat") and its situation on a river which, howsoever distorted was the name given it by the alien, was in reality the Bhagirathi or to give it the more famous name, Ganga, "the river of India". From time immemorial, this river, revered by the pious as sacred, has been witness to the tremendous history of India. World renowned centres of religious, cultural, political and economic importance have dotted its shores along the 1500 and more miles of its flow from the holy source in the Himalayas to where it joins the sea in the Bay of Bengal. Among the cities alongside this majestic and magnificent river, Calcutta is an upstart—a very latecomer, sponsored and set up by the alien, who made it the centre of their domination in India, for a long time the premier port in the country, the city second only to London, in the British empire. After the British left, it has continued in its role of 'India's city', but for reasons that cannot be gone into in this report, Calcutta and especially its port, has come down from its 'high estate', involving problems and tasks that the country have now to tackle earnestly.

7.3. The first period in the history of Calcutta Port was that of sailing ships moored in the river with picturesque leisureliness, the business of loading and unloading going on with the help of country boats jostling along them. The second, more bustling period was marked by the construction of four screw-pile jetties on what was called the Strand bank in 1860. A newer phase came with four

more jetties being built and with steam cranes replaced by hydraulic ones. The construction of a 'wet' dock at Kidderpore, two miles down stream of Calcutta jetties in 1893, and the provision of a separate oil wharf in 1886 at Budge Budge, 13 miles below Kidderpore, were the principal phases of development in the fourth period. The fifth period in the history of the port was highlighted by the construction of four river side jetties and a coaling jetty at Garden Reach in 1925 and the completion of the second dock system known as King George's Dock (now Netaji Subhas Dock) below Kidderpore in 1928.

7.4. Even as Calcutta had risen to be the first port in the country, there appeared evil omens for its future. A process had begun whereby silt and sand from the sea was choking up the channel of the Bhagirathi. A major portion of the Ganga waters found itself diverted, near what is now Farakka, into the other mighty channel, the Padma, the Ganga's wide-bodied and wayward half-sister. The Bhagirathi-Hooghly came more and more to be deprived of adequate sustenance by the Ganga's life-giving waters. This process has gone on from the middle of the last century till today.

7.5. Rivers are known to change their natural course, sometimes suddenly and conspicuously, but most often it is a slow process, hardly noticed even for a long period. The Ganga was changing her course slowly, but surely, towards the alternative channel. This has gone on, for a hundred years and more, till in recent decades fears for the future of Calcutta port have mounted. The life of this port, not to speak of its growth, depends on the Bhagirathi-Hooghly system being adequately flushed by headwaters so that the Shipping channel could be kept clear of the masses of silt and sand coming in from the Bay of Bengal.

7.6. Great trading centres on this great river, like Patna (ancient Pataliputra) and in the reaches downstream, the Murshidabad towns, still lower, Hooghly-Chinswah, Chandernagore and Serampore, where the Portugues, the Danes, the Dutch and the French sought, like the British, their plunder of India's treasure, had ceased to become ports of any importance long ago, both for political reasons and on account of the river's hydrological decline. The Calcutta port, built and exploited by the British has been facing, as just steadily growing danger to its viability. A stage has been reached when the river alongside Calcutta is little more than a tidal creek which receives little, if any, fresh water from upstream for more than half the year. Naturally, owing to this lack of headwater supply, the navigability of the Bhagirathi-Hooghly has drastically de-

teriorated—a deterioration reflected in the shipping figures of the Calcutta Port. In 1938, ships of 26 ft. draught could use the port for nearly 300 days in a year. During subsequent years, it has not been possible for the port to cater to such vessels for so many days. In 1961, for instance, the port could not be opened to 26 ft. draught vessels for a single day. In recent years vessels of only 20-21 ft. draught have been permitted to come in and 18-19 ft. draught vessels to go out. At this rate, vessels with not more than 15-16 ft. draught only may be able to navigate to Calcutta in the near future, but ocean navigation is not carried out with vessels of this draught. In 1928, on an average, about 134 ships used to carry a million tons of cargo to the port of Calcutta as against 177 ships in 1971 for the same tonnage. This was also adversely affecting transportation cost of cargo at a time when the world trend was to reduce it by deployment of few but larger vessels.

7.7. Calcutta has thus lost its position as the premier port of India. At present, oil traffic as an import item and bulk cargo ore as export are the two important sources of revenue for Indian Ports, as they lead to large revenue surpluses and thereby act as rate stabilizers. But, unfortunately, on account of limitations on the draught of ships that can be allowed to enter the port, Calcutta cannot share in these earnings.

7.8. The cargo handled by the port (both import and export and Inland wharves) came down from 85 lakh metric tonnes in 1968-69 (Calcutta alone) to about 72 lakh metric tonnes in 1972-73 (both Calcutta and Haldia). When the Public Accounts Committee examined the functioning of the Calcutta Port in detail in 1974-75, the Chairman of the Calcutta Port had described the trend of traffic at Calcutta as follows:—

“...the trend in India since independence for shipping traffic is on the bulk cargo. Indian traffic has one up from 18 million tonnes at the time of independence to 65 million tonnes today. When it was 18 million tonnes, Calcutta handled about 9 to 10 million tonnes. When it is now 65 million tonnes, Calcutta is handling roughly 7 million tonnes.”

7.9. Two of the more important commodities exported through the Calcutta Port are jute and tea, and the dwindling trend in the

value of their exports is evident from the following table:—

Commodities	Value of exports		
	(In crores of Rupees)		
	1970-71	1973-74	1974-75 (April to Sept.)
Jute Yarn and manufactures	250	227	169.4
Tea	147	145	88.1

7.10. The trends during the last 15 years in the total traffic at the major ports in India show that from the second position in the year 1960-61, the Calcutta Port came down to the fifth position in the year 1970-71. Thereafter, with Haldia as an auxiliary, there has been some improvement, but even by taking up the figures of cargo handled at Calcutta and Haldia together, the all India position of Calcutta Port in 1974-75 (upto October, 1974) was fourth.

7.11. The following table shows the total traffic in principal bulk and other commodities at the major ports of India:

(In lakh tonnes)

Ports	Commodities (Total)								74-75 (upto Oct. 1974)
	1960-61	65-66	67-68	68-69	69-70	70-71	72-73	73-74	
<i>West Coast</i>									
Kandla	16	25	25	20	21	16	24.2	31.2	19.0
Bombay	143	179	169	190	152	144	155.4	184.6	101.8
Marmugao	64	79	81	88	90	110	128.4	143.3	60.8
Cochin	20	29	54	52	48	48	42.0	37.2	28.4
<i>East Coast</i>									
Madras	30	49	59	54	65	69	68.1	77.4	44.8
Visakhapatnam	28	44	64	81	83	87	73.8	79.5	37.6
Paradip	..	..	9	12	17	22	20.2	22.8	9.3
Calcu	94	97	89	79	68	60	66.7*	63.2*	43.0*
TOTAL	395	502	550	576	544	556	579	630	344

*Including Haldi.

It is evident from these figures how Calcutta Port which commands a vast hinterland comprising the States of West Bengal, Assam, Orissa, Bihar, almost the whole of Uttar Pradesh and also the neighbouring countries like Nepal and Bhutan, has lost its position among the major Ports in India.

Farakka as the Panacea

7.12. The ill effects of the hydrological situation had begun to be felt by as early as the Nineteenth Century. In 1907 dredging operations were introduced in order to keep at least the shipping channel somewhat clear. In the beginning, dredging was done largely as an aid to nature. The fleet of dredgers was gradually increased, but even then the navigable depths in the approach channel continued to deteriorate. Dredging, being no more than a palliative, could not attack the root cause of the trouble. By the late 'fifties, it had been established that dredging alone was incapable of restoring the position but had to be continued, as an indispensable but by no means decisive operation. With the progressive fall in the headwater supply, the dredging commitments further increased and are now at a point when only interim results, but no long-term benefit, can be obtained from the process.

7.13. Between 1853 and 15th August, 1947, as many as 13 committees and experts were consulted by the Government on the measures for improving the navigability of the river Hooghly. These Committees and experts often differed on the measures to be adopted for such improvement but there was one common consensus among them and that was that "the Hooghly needed more headwater supply" as the supply from the Ganga had been progressively decreasing.

7.14. In 1946, a proposal was drawn up to by-pass, as it were, the 42-mile deep-water reach of the Hooghly by constructing a navigational channel of 26 miles from Calcutta to Diamond Harbour. The project was not pursued because:

"The difficulties in negotiating the bars between Diamond Harbour and the sea still remain after the execution of the scheme. Moreover, the experiments carried out in Poona clearly showed that the purpose would neither be effective nor lasting for if the river is left to itself the Hooghly in the reach of Calcutta would deteriorate and the deterioration would travel downstream until the Hooghly beyond Diamond Harbour was also adversely affected."

This process did actually take place. The deterioration in the flow of the river at Diamond Harbour has now become serious and extensive. Worse still, deterioration has become noticeable at Haldia too.

7.15. With the port authorities constantly clamouring for adequate headwater supplies, the partition of India and of Bengal came about in 1947 with the transfer of power. The importance of the issue and of a barrage on the Ganga for preservation of the port of Calcutta and its industrial life was one of the major factors before the Boundary Commission set up to delimit frontiers. Sir Cyril Radcliffe, (the Chairman of the Commission, recognised the special importance of the Port of Calcutta, and he posed the basic question:

"If the city of Calcutta must be assigned as a whole to one or other of the States, what were its indispensable claims to the control of territory, such as all or part of the Nadia river system or the Kulti rivers, upon which the life of Calcutta as a city and port depended?"

7.16. The requirement of headwater supply to the Bhagirathi-Hooghly was found to be so paramount that in spite of slight Muslim majority the district of Murshidabad was awarded to West Bengal in order that the barrage (on the Ganga—to divert Ganga waters into the Hooghly) and the canal required for the purpose would fall entirely within the Indian Union. Pakistan received its *quid pro quo* through the district of Khulna with a similar slight majority of Hindus in its population. That such an arrangement became inescapable underlines the importance of Farakka to Calcutta port and to the economy of the Union of India.

7.17. Free India soon drew up a scheme to construct a Barrage across the Ganga to divert some of its flow and feed the Bhagirathi with 40,000 cusecs. Farakka, in Murshidabad district of West Bengal, was thus selected as the ideal place for the Barrage from the technical and other points of view.

7.18. From the outset the Farakka Project has been conceived and designed as the answer to the problems of Calcutta Port. Reference has already been made to the observations of Dr. Hansen, according to whom the Farakka Project was the most purposeful measure by which the long term deterioration of the Bhagirathi Hooghly could be arrested and possibly also converted into "gradual improvement". Reference has also been made earlier to the reiteration of this purpose in this Parliament by the Deputy Minister of Irrigation and Power on 2nd December, 1958, and on 16th August,

1961 by the Prime Minister, Shri Jawahar Lal Nehru. On 28th February 1963, the Irrigation and Power Minister, Dr. Hafiz Ibrahim, again informed the House that—

“But as far as the position of Farakka Barrage is concerned, I assured this House that it can never be given up. There are very strong reasons behind that. One reason is that the Port of Calcutta at Hooghly has been suffering from silting for a century and the seaborne trade of India has been very badly affected now. Besides that, there are so many other reasons on the basis of which we are determined that we shall complete it by 1967.” (*Italics added*)

7.19. Dr. V. K. R. V. Rao, Minister for Shipping and Transport while stating in Lok Sabha on 23rd August, 1968 added the benefits to Haldia also in the objectives of Farakka:

“The early completion of the Farakka Barrage will help to revitalise the River Hooghly and pave the way for better depths and cessation of bore tides which now prevent free use being made of the moorings and jetties in the River. The construction of a subsidiary Dock system at Haldia will help the handling of deep-drafted vessels used for the transport of bulk cargo, like ore, coal, oil, foodgrains, etc., which at present cannot enter the Port of Calcutta on account of the restriction in draft and lengths. The new Dock System at Haldia will also increase the capacity of Calcutta Port and thus facilitate expansion of traffic.”

7.20. Farakka, thus, has been repeatedly and authoritatively proclaimed to be the remedy for the drastic disease with which the port of Calcutta has long been afflicted. Hopes have been held out, again repeatedly and authoritatively, of its construction at as early a date as possible. Deferment of such hopes gravely endangers the economy of the entire north-eastern segment of our country.

Expenses on Dredgers

7.21. In the absence of sufficient head-water supply, Calcutta Port authorities have to employ a big fleet of Dredgers in order to maintain the navigability of the river for the ships of even reduced drafts.

There are 12 Dredgers in Calcutta Port. Of these, six are River Dredgers, acquired between 1950-51 and 1966-67 at costs varying from Rs. one to four crores. The other six are Port Dredgers acquir-

ed between 1928-29 and 1967-68 at costs varying from Rs. 9 lakhs to Rs. 1.5 crores.

7.22. The annual cost of Dredging has been going up from year to year, with the result that from Rs. 168.98 lakhs in 1964-65, it rose up to Rs. 388.01 lakhs in 1973-74.

During the years 1973-74 and 1974-75 the Port paid also a sum of Rs. 1275.00 lakhs to private companies as hire charges for dredging the Approach Channel leading to Haldia, out of which Rs. 637.66 lakhs were paid in foreign currency. In addition, a sum of Rs. 198.79 lakhs was paid to a Yugoslav firm to carry out dredging in the Dock Basin at Haldia during the said two years.

7.23. The utilisation of dredgers in Calcutta port which has come in for criticism by the Public Accounts Committee (175th Report—5th Lok Sabha) is another story, but the fact remains that the maintenance of a dredger fleet and the heavy expenditure thereon becomes inevitable because the river in Calcutta now is virtually a tidal creek fed by and almost entirely dependent on the sea tide from the Bay of Bengal. The long stretch of 125 miles is at the mercy of the flow conditions of his tide. Numerous sharp and tortuous bends have developed within the port's life-line to the sea, and have made it difficult for ships with a length of more than 565 feet to negotiate the approaches to the port. At the same time, the almost total absence during most of the year of fresh water supply and the continuous deposit of sand and rocks brought in by the sea-tide have led to alarming losses of draft and also to very significant increase in the incidence of the bore-tide in the port. The river Ganga, besides, draining a basin of 47,000 square miles, brings down such large quantities of sediments in its water that notwithstanding the existence of a tidal rise in front of its mouth, it has formed a delta having as a face of about 250 miles through which it flows to the sea along a number of branches. The river thus exhibits the peculiar conjunction of conditions of being tidal for many miles above the outlet and terminating into a delta like most tideless rivers. This is one of the conditions which have promoted the growth of as many as 16 bars between Calcutta and Sandheads and without the most accurate pilotage, it is practically impossible to bring large liners safely to Calcutta.

Minimum requirement of headwater supply to save the Calcutta Port

7.24. In January 1962 the Calcutta Port Commissioner set up a specialised Hydraulic Department with special instruments, equip-

ment, vessels, etc., and carried on further collection of data as well as model experiments. They assessed the water requirements by the following methods:—

- (a) Examination of low water crossings
- (b) Loss of ebb discharge due to siltation
- (c) High speed digital computer studies
- (d) Hydraulic model studies
- (e) Discharge requirement by salinity intrusion
- (f) Analysis with electric analogue model and harmonic analysis
- (g) Physical model based on observed and prototype data.

All the studies, some of which were done with the help of the Central Water and Power Research Station at Poona, showed that the minimum requirement during the critical months of March to May is 40,000 cfs.

7.25. In June 1967 and December 1967 Dr. Walter Hensen visited Calcutta again and opined that the minimum requirement is 40,000 cfs.

7.26. On 22nd January, 1968 Dr. D. V. Joglekar, Director, Central Water & Power Research Station, Poona (Retd.), reviewed the position and advised that:

"Though the assessment of the requirement of discharge is of the order of 46,000 cfs. against 40,000 cfs. expected from Farakka Barrage, I do not consider that the small reduction in the available discharge will have any harmful effect as the head water supply will be relatively silt-free."

7.27. On 7th December, 1968 Dr. J. J. Dronkers, Chief Hydraulic Research, Government of Netherlands and consultant to RAND Corporation, U.S.A., who is considered to be an international expert in tidal hydraulics, advised that:

"the lower limit would be 1150 m³/sec., i.e. 40.606 cfs."

7.28. On 6th March, 1969 the Director, River Research Institute, West Bengal Government, submitted a report to Government clearly

mentioning that a minimum discharge of the order of 40,000 cfs. is required to obtain stability in the port reach.

7.29. On 13th September, 1969 Shri A. C. Mitra, Chairman, Technical Advisory Committee, Farakka Barrage Project, formerly Chief Engineer Government of U.P., gave a report in which he held the view that 40,000 cfs. is the minimum discharge necessary at Farakka point.

7.30. On 15th November, 1971 Dr. Walter Hensen who was again consulted by a team of officers of Calcutta Port gave a report in which he stated as follows:--

"From these I came to the conclusion that a supply of the order of somewhat higher than 40,000 cfs. is needed throughout the year to reverse the process of sanding up ship route to Calcutta Harbour."

Doubts about Farakka being a solution to the ills of Calcutta Port

7.31. While the experts agreed on the necessity of augmenting the head water supplies and about the minimum additional discharge in the river Hooghly in order to save Calcutta Port and also Haldia Port from the not very remote prospect of irreversible deterioration, the Committee came across some divergent opinion. A well-known engineer, Shri Kapil Bhattacharya has challenged the views of the majority of his colleagues, and in a typical statement, opined:

x

x

x

x

"I am pained to see that an intensive propaganda has been let loose that by building the Ganga Barrage at Farakka XX and injecting fresh head water of 20 to 30 thousand cusecs only into the Bhagirathi, the navigability of the lower Hooghly can be improved. I cannot reconcile my humble knowledge of laws of river hydraulics with this claim. If the entire Ganga-Brahmaputra water cannot cut a navigable channel at the estuary of the Padma for sea going vessels in East Pakistan, how can a few thousand cusecs of water help the lower Hooghly to improve the navigability.

The opposing flood tides are of the magnitude of 14 to 20 lakh cusecs near Calcutta Port. They bring an immense quantity of silt from the continental shelf of the Bay of Bengal. How can a few thousand cusecs of additional

Bhagirathi water contend with this opposition specially as the Balari Bar is now acting as a strong lock which even the floods of 1956 and 1959 and subsequent freshlets failed to open up.

* * * *

As for improving the navigability of the Lower Hooghly, the Farakka Barrage can be of no use. On the other hand silts from Upper Bhagirathi will choke up the Hooghly at its tide-locked reach near Calcutta Port."

[Pamphlet on "Siltling of Calcutta Port" by Shri Kapil Bhattacharya, dt. 24-8-61].

7.32. In a paper read by him at the Annual General meeting of the Association of Engineers on the 24th February, 1965, Shri Kapil Bhattacharya observed:—

"Prior to the D.V.C. dams withholding Damodar floods, the ebb flow used to be swifter and continuous during the monsoon months of June to September and there used to be little flood flow upwards in those months. Thus the bars, especially in the lower reach of the river (Hooghly), were scoured and the navigable channels were naturally maintained with occasional help of dredgers at required points. With D.V.C. dams, this natural hydraulic operation has been practically stopped with progressive deterioration of channels; and the bores have become dangerously stronger. As a result, the Port of Calcutta is facing the fate of extinction."

7.33. The Committee also came across fears in certain quarters that 40,000 cusecs of water would have no effect beyond Mayapur, twelve miles downstream from Calcutta port as the river is too wide beyond that point, because of the gradient factor. As such, beyond Mayapur, the water from Farakka would become rather a stagnant factor and the result would be that the flow tide from the sea would cause greater trouble downstream.

The Committee have discussed the matter at length during evidence with representatives of the Ministries concerned, in order to satisfy themselves as to the fulfilment of the objectives of putting up the Farakka Project. The Chief Hydraulic Engineer of the Calcutta Port Trust (Dr. S. K. Bhattacharya) has stated during evidence:

"I shall try to explain the points which are bearing heavily on the Committee. Farakka is essentially for the preser-

vation of the entire Hooghly, that is, the Port of Calcutta and the new dock system is now being set up at Haldia. The deterioration and decay that now occurs for nine months of the year is due to the sand that comes roughly from a distance of about 40 miles from Calcutta. This is very near about Diamond Harbour. It is not a static point. If, for example, Farakka was commissioned some years ago, then, this sand which, at that point, of time, was coming from a distance of about 28 miles, would have stopped. Now, this sand is coming from the sea-ward side. Calcutta Port Commissioners in conjunction with the Central Water and Power Research Station, have carried out experiments on the outer estuary and on the continental shelf. These experiments are based particularly on actual observations, on occasions by radio tracers and on occasions by fluorescent tracers and we are satisfied completely that there is no ingress of sand from the continental shelf into the Hooghly estuary. As a matter of fact, even in the dry season, when there is no upland water flow from the Hooghly, the sand travels downwards from Haldia. At Sagar or at Haldia, the flood that comes to the land-ward side in six hours or so goes out in the same period of time. But, if we go to Calcutta, at a distance roughly of about 80 miles or so, from sea face, the flow that comes from the sea takes four hours to come and it takes eight hours to go away. Naturally, due to the disparity, it deposits sand and silt inside. The sand stay; this is controlled by two factors. One is the sun and the moon, the astronomical factor; and another is the fresh water flow that comes there in certain seasons of the year. If adequate quantities of water are added, then, the duration of flow that occurs at the place mentioned by the Chairman, namely, Mayapur, would be more than balanced and the entire movement of sand and sediment will be on the sea-ward side. It is possibly on that specific note that Mayapur has been mentioned. A discharge of 40,000 cusecs in certain periods of the year, when the tides are most adverse and most severe, ensures that the sediment is pushed towards the sea and that there is no accumulation and deterioration of the entire river system that is progressing now."

Dr. Bhattacharya in his evidence has further stated:

"In the river Hooghly, in the outer river, there is no slope. From Calcutta, right upto the sea, a distance of 80 miles,

there is no slope. Comparison with a one way river like the Ganga is erroneous from purely technical point of view. At Garden Reach, Calcutta and at Mayapur, the duration of the time for which the floods come from the sea is different. Naturally, if we have a discharge of 40,000 cusecs that comes from Farakka, during the time when the sea is flooded, that quantity of water is held up for that duration of time and when the river starts flowing sea-wards, that quantity together with the quantity that has been held up, goes to Mayapur. It becomes self-sustaining due to the shorter duration of the flow. Hooghly has one advantage, in spite of many adversities. Hooghly behaves as a model in the sense that in three months of the year, we have a discharge from zero going upto 1,20,000 or more. That gives an opportunity to experiment and see what actually occurs in the river system. These experiments and observations have been carried on year after year and they have confirmed that once this discharge of 40,000 cusecs comes in, there is no question of accumulation of any sediment either at Mayapur or in the reaches below."

7.34. Asked whether it was not a fact that at Nabadwip, the river was so shallow that one could almost walk across the river, Dr. Bhattacharya has stated:

"I should have mentioned this earlier. It is correct that at Nabadwip and at some places down-stream or a few miles upstream it is possible in the dry season to walk across the river without wetting your feet. Shri Patel mentioned that 40,000 cusecs were left day before yesterday. I was there four days ago and when 16,000 cusecs were left the water level at Nabadwip had risen to about five feet. That completely agrees with the computation. As water comes down because of the huge accumulation of sand we thought sand would be pushed into the navigable reaches of the Hooghly. As part of the Farakka Project, sand traps had been built up immediately before Nabadwip; three dredgers are already working and with 40,000 cusecs the others also would be pushed into service. Their function is to deepen the place and prevent any entry of sand and silt that will come from upstream side and ingress into the lower Hooghly or affect its navigability."

7.35. In reply to a question relating to the development of a tidal lock between Triveni and Geokali, causing silting up of Hooghly near Calcutta, the witness has stated:—

“There is no such thing as a tidal lock in a tidal river. When the tide comes from the sea it travels upstream. At the same time fresh water is also coming down. There are tidal periods in tidal rivers. In the case of Hooghly the period is 12 hours and 24 minutes. When it is high water in the sea face, it is low water at Calcutta. The entire region is all the time changing. At a particular place the water may be satisfactory; but ten miles downwards the water may be moving down. The whole physical process oscillates right from the sea up to the tidal reach, Nabadwip, 80 miles upstream Calcutta. When Farakka water comes, the tidal limit or the tidal rise at Nabadwip which is of the order of one foot will be pushed down by a distance of roughly about 18 miles or so. The effect of that would be to add to the strength of ebb tide, that is the tide that flushes out the sand and sediment to the sea.”

7.36. In a written note subsequently furnished to the Committee by the Ministry, it has been stated:

“A number of articles of general nature with somewhat vague hydraulic hypotheses unrelated to well-established and accepted behaviour of tidal rivers have appeared in the papers in India and on occasions abroad. Those papers which appeared abroad sought to emphasise the adverse effect in a tidal river due to introduction of fresh water flow due to “density current.” Some of the Indian writers visualised ingress of sand and sediment from the continental shelf of the Bay of Bengal originating from the east coast of India. The “density current” group of articles in the context of the Farakka had been aired regularly by Pakistan to misinterpret internationally India’s intention regarding the Farakka Barrage Project. The example of “density current” was quoted as an analogy from a few U.S. tidal rivers with low tidal range and relatively high fresh water discharge whereas the Hooghly estuary has a high tidal range with low fresh water discharge. This postulate of absence of density current was fully established by systematic analysis and

observation. The phenomenon is explained in the paragraphs below:

2. The density current occurs in an estuary which is either stratified or partly mixed and not in well-mixed estuaries. This stratification, complete or otherwise if occurred, consequent density currents cause the flood current to predominate in the bottom denser layers over the ebb currents by increasing the velocity and duration of the former while decreasing the velocity and duration of the latter. The resultant net up stream-movement of the bottom currents within the saline wedge of the estuary constitutes a trap for sediments on and near the bottom, preventing their movement towards the sea and causing the bottom to be shoaled and unstable.

3. It has been established through theoretical investigation as well as by systematic field observation that the Hooghly estuary is well-mixed type and there is absolutely no reason to suspect that an up land discharge of 40,000 cusecs will change its character.

4. The littoral behaviour of the coast line of the Hooghly mouth has been a matter of extensive investigations. These have conclusively shown that the Hooghly is *not* affected by any littoral drift.

5. The view that prior to D.V.C. dams, in the monsoon months from June to September there used to be little flood flow upward of the mouth is not supported either by historical or present data. As explained at the outset, the main problem of the Hooghly is the silting that occurs in the upper tidal reaches (from Calcutta to Nabadwip) during the dry months.

6. Not only Damodar had non-dry-season discharge in these days, the main outflow of Damodar water was through Rupnarain, whose outfall is 15 miles downstream of Mayapur.

7. During the freshet months when Damodar had an average discharge of the order of 17,000 cusecs with one or the flashy floods with peak discharges of the order of 300,000 cusecs lasting one or two days at the most, its contribution could not have been much to the flow pattern at the shoals and bars, like Balari, Jellingham or Auckland, when at the former site the average discharge during ebb is of the order of 10,04,000 cusecs and maximum ebb flow is about 16,60,000 cusecs, and much more at the later two sites, for a tide of an average range.

8. Thus, it appears very unlikely that the Damodar flow directly contributed much to the improvement of lower-reach bars; like Balari, Jellingam and Auckland, even during freshets."

Reaction of Port authorities after the completion of Farakka Project

7.37. Commissioning of the Farakka Project was welcomed by the entire nation and more so by the Calcutta Port Authorities. The Committee, however, learnt that soon after the release of waters to the Feeder Canal, doubts were expressed that 40,000 cusecs of water might not be available during the lean period. In a note furnished to the Committee, the Calcutta Port Trust have stated as follows:

"The Farakka Barrage Project was commissioned on 21st April, 1975 when a discharge of 10,000 cusecs was allowed to flow through the Feeder Canal into the Bhagirathi-Hooghly. Upto 31st May, 1975, the amount of diversion through the Feeder Canal was increased to about 16,000 cusecs. From the beginning of June to mid-July the discharges through the Feeder Canal into the Bhagirathi-Hooghly were further increased from 16,000 cusecs to about 40,000 cusecs. During the monsoon months from August to October discharges varying from 30,000 to 40,000 cusecs were maintained through the Feeder Canal though the total monsoon supply into the Hooghly which included the discharges of Rivers Jalengi, Churni, Ajoy, Babla, Bans, etc. and drainage of local catchment exceeded 100,000 cusecs at times.

During the post freshet period, the discharge through the Feeder Canal was of the order of 40,000 cusecs though, for operational reasons, there were occasions when the supply was less than 40,000 cusecs and varied between 30,000 and 35,000 cusecs."

7.38. The Committee find that in a note prepared by the Chairman, Calcutta Port Trust and which was considered by the Commissioners at their meeting held on 30-10-1972, the Chairman, Port Trust had also referred to the doubts about continued supply of 40,000 cusecs, as follows:

"It was apprehended that after the Farakka Barrage project was sanctioned and started, a large number of projects had been, as far as could be gathered, taken up for dry

weather irrigation in the upper valley of Bihar and U.P. The Project "Assist" in U.P., including Sharda and Sorju, the Kosi and Gandak in Bihar, are a few such instances. Naturally enough, the Commissioners have been worried about the quantum of water that would be ultimately available from Farakka to the Bhagirathi-Hooghly system, if these projects are executed and utilised to the fullest capacity."

7.39. The most authoritative statement on the question of discharge of adequate quantum of Ganga water to fight the deterioration mentioned above has been found by the Committee in a Statement laid on the Table of the Lok Sabha by the then Minister of Irrigation and Power on the 16th August, 1972. The paragraphs in the said Statement relevant to the issue read as follows:—

" * * * *

4. The only question that remained was with regard to the quantum of water that should be let down and its duration. Shri Man Singh's Expert Committee Report on the River Hooghly and the improvement of its headwater supply submitted in October, 1952 fixed the discharge of the feeder canal from the Ganga at 20,000 cusecs. They observed further 'Different opinions have been expressed regarding the quantity of water which should be introduced into the Hooghly. That there is an optimum quantity cannot be gain said. Larger quantities will tend to erode the banks, bring down a heavy charges of silt which would tend to create difficulties in the tidal reaches, *while too little would not reinforce the ebb current in the tidal reaches to the extent which would enable it to carry back the silt brought up by the tidal inflow.* Smallness of the scale of the models made it difficult for the Research Station at Khadakvasla to determine the minimum dry weather discharge required to maintain the river in regime'.

5. * * * *

The Ganga Barrage Project, which was sanctioned by Government of India in April 1960 took note of the various view points with regard to duration of head discharge and

made provision for the operation cycle of moderated discharges at Kalna as follows:

Period	Proposed flow at Kalna (Cusecs)
Jan. to 15th March . . .	40,000 to 20,000 cusecs.
15th March to 15th May . .	Upto 20,000 as available
15th May to 20th June . . .	20,000 to 40,000
20th June to 30th June . . .	40,000 to 60,000
July to September	Steady rise from 60,000 upto any say, 1,40,000 and to 80,000 towards the end of September.
October, November and December	80,000 to 40,000 40,000

It was also further observed that 'the suggested operational programme, based on the available hydrological data, will have to be further examined and improved with the help of more data that will be subsequently collected* and will be tested

6. * * * * *

It may be noted from the operational programme that it was proposed to run the Feeder Canal at 40,000 cusecs, practically for 10 months and for two months Mid-March to Mid-May with lesser discharges upto 20,000 cusecs.

7. In the last few years, controversy regarding the quantum of water to be let down into the Feeder Canal during the lean months of mid-March to mid-May started. There are two distinct schools of thought. One group of engineers feel that even for the two lean months, full discharge of 40,000 cusecs should be allowed to flow as otherwise the deterioration of the Port cannot be checked. Another group feel that in the two months the discharge in the canal can be reduced without affecting the health of the Port. They argue that in view of drainage congestion, the need to flush Bhagirathi head by reversing the flow at Jangipur and possibility of excess bed sediment move-

*A Study Team under the Ministry of Shipping and Transport has been collecting such data since 1973.

ment going down to Port area, the flow in the lean months should be reduced as envisaged at the time of sanction.

The best way of settling the controversy would be to make observations on the prototype that is, field observation.

8. Ganga carries a flow of 50,000 to 60,000 cusecs during lean months of mid-March to mid-May, the quantity varying from year to year. This water is contributed mostly by Ghagra, Gandak and Kosi, as other rivers have little discharge during the lean months. Even main Ganga and Yamuna do not contribute as irrigation projects on those rivers as at Hardwar, Narora and Tajewala and Okhla (Delhi) developed several decades ago utilise the waters of these tributaries. Ghagra has two tributaries, Sarda and Karnali. Extensive irrigation has been developed on Sarda since 1927. * * * a scheme was sanctioned in 1968 which supplies water from the other tributary of the same river and the project was named as Sarda 'Assist'. No new canal system is to be constructed but only a feeder canal to supply water to the various canals constructed several years ago.

On Gandak, as a result of several representations and investigations, as irrigation project, 'Gandak Project' was approved in principle in 1958 to provide irrigation in Bihar, Nepal and U.P. and is under construction.

Similarly, on Kosi, an irrigation project was sanctioned in 1966, to irrigate 15 lakh acres on Eastern Canal. This is besides Western Kosi Canal, which was under discussion with Nepal all along and undertaken only recently.

As other tributaries of Ganga do not contribute much to Ganga flow in lean months of mid-March to mid-May, development of irrigation projects on these will not have any impact on the flow in Ganga during the two months.* *

Thus, it is to be noted that prior to sanction of Farakka Barrage Project, some projects were approved to supply irrigation waters during the lean months. As these projects have not yet gone into full use, the flow in lean months in Ganga is not affected."

7.40. Without, in so many words, assuring a flow of 40,000 cusecs of water during the lean months, the above mentioned Statement went on to say—

“9. Having regard to the doubts expressed by some people, Government of India wish to reiterate that Calcutta Port will not be allowed to deteriorate and all the modern techniques of adequate supply of headwater discharge and optimum dredging of tidal prism, where necessary, river training measures, etc. will be fully utilised to ensure the health of the great Port of Calcutta”.

7.41. Two Study Groups of the Committee have visited the Port of Calcutta and discussed at some depth the question of the quantum of water supplies required during the lean months with the Port authorities. The Port Trust have again emphasised that on the basis of their detailed prototype observations, model, analytical studies and actual observations of the River Hooghly, the Calcutta Port Trust have arrived at a minimum requirement of 40,000 cusecs to arrest the present character of silt movement in the river and to reverse the entire process of deterioration into gradual improvement.

If the abovementioned discharge of 40,000 cusecs through the Farakka net work into Bhagirathi-Hooghly can be ensured for seven years, particularly during the lean months, the deterioration in the Calcutta Port could be effectively stopped. If this discharge, even at the rate of 32,000 cusecs, was continued for a further period of seven years, it was hoped that the draught of 28 ft. may become available in Calcutta Port for major portion of the year, as was the position in 1938.

7.42. The Committee also asked the Ministry of Agriculture and Irrigation to state the present position in regard to the supply of additional water of the river Hooghly for improving the navigability conditions therein. The relevant portion from the reply furnished by the Ministry are reproduced below:—

“* * * * *

3. * * * * *

The various estimates by analysis as well as by field tests in regard to the quantum show that the order of 40,000 cusecs over the non-freshet months of the year (9 months) with higher discharges during freshet, including a flushing discharge of 1,20,000 cusecs for a week or so, would bring about a net improvement.

4. Such head water flow will arrest the deterioration trend unaided by sequential training works and selective dredging will bring about improvements in navigable depths."

River Training Works

7.43. In order to optimise the benefits from the inflow of water, Calcutta Port have drawn up a comprehensive improvement plan for the entire Bhagirathi-Hooghly river system consisting of various types of river training works.

7.44. In the Bhagirathi, training works in the first 20 miles below the outfall of the canal under the plan mentioned above, designed to reduce sand inflow, has already been completed. At the tail end of the Bhagirathi upper tidal limit of the Hooghly, sand and silt is being dredged and pumped on to the land.

7.45. Broadly, the other training measures that have been envisaged under the comprehensive improvement plan of the Hooghly may be divided into two groups, viz:

- (i) Upper Tidal Compartment—Swarupganj to Cossipore;
- (ii) Lower Hooghly—Cossipore to Diamond Harbour.

7.46. The reach Cossipore to Swarupganj is important for free tidal flow. The training measures in this reach incorporate removal of obstructions, etc., canalisation of flow, dredging and protection of eroding banks. Some of the works have already been completed.

7.47. The reach between Cossipore to Diamond Harbour is most important for sea navigation. There are a number of shallow and unstable bars and crossings in this reach which impede the navigation. The purpose of training works in this reach is to concentrate both the flows (flood tide and ebb tide) over the bars and crossings so as to make the crossings and bars stable and deeper with a discharge of 40,000 cusecs throughout the year. Some of these works could be carried out before the Farakka Barrage Project was commissioned, and provided temporary relief to navigation. Others could only be taken up when the Farakka canal has been commissioned. This is in order to avoid any adverse effect on the river regime on account of training works in the absence of continuous supply from Farakka. These works are proposed to be taken up in a phased manner and when the availability of headwater supply for the crucial months is fully established.

7.48. The Committee recall the Government of India's repeated and unequivocal concern for the long deteriorating navigability of the Bhagirathi-Hooghly and its determination to arrest the deterioration and save Calcutta Port from the menace of virtual extinction. This was stated categorically in 1972 when the country was assured from its highest forum that "Calcutta Port will not be allowed to deteriorate, and all the modern techniques of adequate supply of headwater discharge and optimum dredging of tidal prism, where necessary, river training measures, etc. will be fully utilised to ensure the health of the great Port of Calcutta."

7.49. The Committee have already dealt at length with the delay in the completion of the Farakka Barrage Project, constructed mainly for the purpose of improving the port of Calcutta, particularly the long gap of over three years between the completion of the Barrage and the completion of the excavation of the feeder canal without which the water intended to be diverted by the Barrage could not be carried to the Bhagirathi-Hooghly. This delay which in the Committee's view was avoidable has accentuated the process of deterioration. A statement during evidence by the Chief Hydraulic Engineer of the Calcutta Port is highly significant: "The deterioration and decay that now occurs for nine months of the year is due to the sand that comes roughly from a distance of about 40 miles from Calcutta. This is very near about Diamond Harbour. It is not a static point. If, for example, Farakka was commissioned some years ago, this sand which, at that point of time, was coming from a distance of about 28 miles, would have stopped." It is clear to the Committee that the additional deterioration in the conditions of the river caused by delay in excavating and operating the Farakka Feeder canal would have inevitably a detrimental effect on the length of time which the headwater flow from Farakka would now require to achieve a halt in further deterioration of the sand and silt conditions in the Hooghly.

7.50. In regard to the quantum of additional headwater supply essential for the sustenance and improvement of the life of Calcutta Port, the Committee have studied the evidence closely and are positive that without 40,000 cusecs being made available, especially during the lean months, the Ports' survival—let alone its growth—would remain precarious. Since any damage or detriment to Calcutta Port will inevitably and immediately involve Haldia also, the gravity of the danger will be aggravated. If on this issue, dependable scientific-technical advice can offer alternative solutions, the Committee have found so far no indications thereof. Thus the

Committee stress that, difficulties notwithstanding, this quantum of 40,000 cusecs should, as repeatedly assured, be made available in order that Calcutta Port might live and serve the country. In case there are insuperable difficulties, of which the Committee have had no more than some vague hints, the situation has to be properly explained to the Committee, and all possible ameliorative measures adopted without delay.

7.51. In so far as the river training works for improving the health and the behaviour of the Hooghly are concerned, the Committee are glad that the Port authorities have already made a beginning in that direction. All necessary assistance, by way of funds and equipment, should be provided to the Port by the Central Government so that the effect of the flow of water from Farakka is supplemented by other positive steps and the removal of natural obstructions, which the river training works seek to achieve.

7.52. In the matter of the operation of dredgers at Calcutta Port, the Public Accounts Committee had only last year, in their 175th Report on Calcutta Port Trust, made their comments on the low utilisation of Dredgers owned by the Port. Drawing attention to the reports of two Expert Committees on the subject, the Committee had pointed out that within the Dock system the hours worked by Dredgers during 1965-66 totalled only 6,788 as against the total time of 60,000 hours available for dredging if the dredgers worked round the clock, and 20,000 hours on an eight-hour shift basis. Further, it was not at all a happy situation that against a norm of 5,200 hours of working per annum by a dredger, as suggested by the Dredger Utilisation Committee (1972-73), the time worked by the River Dredgers at Calcutta Port ranged between 600 and 2,151 hours in 1973-74, the actual dredging time being between only 300 and 1,203 hours. Now that, as a result of improvement on account of Farakka waters flowing in, ships of bigger draughts are expected to be handled at Calcutta, with better provision of deep water near the docks, the Committee trust that substantially better, if not full, utilisation will be made of the Dredgers operated by the Calcutta Port. The Committee desire that all the dredging requirements of not only Calcutta but also Haldia will be met by the existing fleet of Dredgers without requiring any addition to their number. Between Calcutta and Haldia the entire port complex, rejuvenated and renovated by the Farakka construction, should play the dynamic role expected of it in the context of our developing economy.

CHAPTER VIII

OTHER BENEFITS FROM THE FARAKKA PROJECT

8.1. As already discussed in Chapter I of this Report, the main object of the Farakka Project is to divert a part of the water from the Ganges river into the Bhagirathi-Hooghly, with a view to improving the navigational facilities in the river Hooghly.

Apart from this objective, certain other benefits expected to accrue from the Farakka Barrage Project are:—

- (i) improvement in the quality of water supply (by eliminating salinity) to the city of Calcutta, Haldia and other industrial areas;
- (ii) Provision of direct perennial inland navigational route in Bengal, Bihar and U.P.; and
- (iii) Easing the flood problems at critical junctures, the Bhagirathi-Hooghly representing the most important branch system in West Bengal.

The above mentioned items of benefit accruing from Farakka are discussed below:—

Elimination of Salinity

8.2. Apart from the increasing navigational constraints developed due to the deterioration of the river, the sanitary condition of the river water, specially during the dry season period had reached a limit well below the permissible standard required for the industrial complex. Therefore, not only the existence of the Port of Calcutta but the health, sanitation and industrial life on both sides of the river Hooghly-Bhagirathi is threatened. It is understood that in the thirties, the river water at Falta 15.5 n. miles (28.6 km) above Calcutta from where the Calcutta Corporation draws water for city supply was potable throughout the year. As against this, the high level of salinity during the dry months at the same place badly affected potability during the seventies. A rise in salinity beyond

potable limits has obviously occurred on account of the considerable shrinkage of the river capacity during the last few decades.

8.3. In a note on "Restoration of Upland supply for Preservation of the Port of Calcutta" the Calcutta Port Trust has claimed:

"The introduction of an optimum quantity of the head water supply would restore the hydraulic balance of the tidal system in progressively flushing out the sand and silt that has been accumulating in the river over years.* * * Other incidental benefits due to the Project are to render the river water fresh throughout the year and thus help in the supply of fresh water to the metropolitan city of Calcutta and Haldia complex."

8.4. The representative of the Ministry has stated during evidence that after the flow of 40,000 cusecs of water, "the salinity of the water has gone down very considerably; in fact it is undistinguishable."

8.5. The Committee are happy that the increase in the head water supply in the Hooghly has already reduced the salinity of the drinking water available to Calcutta. The Committee trust that these supplies would continue to be adequate during the lean months.

Improvement in Inland Navigation

8.6. Country boats of varying sizes and shapes are known to be plying on our waterways from time immemorial. In ancient times propulsion used to be by oars, sail or towing line. Mechanical propulsion was introduced in the country in the early part of the 19th century. The first steam propelled vessel sailed with passengers from Kulpi Road to Calcutta, a distance of 80 kms. on the Hooghly in 1823. A regular monthly steamer service for carrying the East India Company's officials and stores between Calcutta and Ganga stations was established by 1834. In 1842 a regular fortnightly service was introduced between Calcutta and Agra on the Yamuna. Although inland water transport particularly in the eastern region flourished thereafter till the beginning of this century, it fell for various reasons into disuse. In the case of Ganga-Bhagirathi-Hooghly, important reason of the decline was loss of navigability.

8.7. When the Farakka Barrage Project was contemplated expectations grew once again about the reutilization of the navigability of the river from Calcutta upstream to Allahabad. The inland

Water Transport Committee (Bhagwati Committee) which submitted its report in 1970 had observed as follows:

"The completion of Farakka project is expected to open a new era for the development of inland water transport. It is expected that the pattern of traffic between Assam and Calcutta in the post Farakka period may under go change. Export tea which comes to Calcutta at present by rail or by road from Assam and north Bengal may move by rail or road to Farakka and from there by river for direct loading into deep sea vessels thus getting over the problems of multiple handling and warehousing which face the industry at Calcutta in the peak season between September and December each year. Farakka may thus become an important rail and road-cum-river transshipment point and should be developed into a modern inland port. Suitable godowns will have to be built at Farakka for storage of tea in transit and necessary mechanical handling equipment also provided. Apart from tea, the cargo in the downward direction may consist of foodgrains, jute, potato, onions, tobacco, sugar and stone."

"The completion of the Farakka Barrage will open up a perennial all-India river route between Calcutta-Farakka and upstream in Bihar and U.P. and will help development of inland water transport in that region. This will no doubt provide low cost transport. The concept of containerisation and floating containers (LASH or lighters abroad ship) is likely to come up steadily and the Calcutta/Haldia complex with such a through long navigable waterway would thus provide economics in the overall transportation which no other part in the country will be able to do for the cargo of its hinterland. Facilities for berthing of inland craft, construction of modern jetty with necessary cargo handling equipment like floating and mobile cranes, well-lighted parking space for trucks, transit ware-houses etc. should therefore, be provided at Farakka to facilitate smooth handling and necessary transshipment."

From their findings of the probabilities of inland river naviga-

tion in Bihar and Uttar Pradesh, the Committee notice the following observations:

"In Bihar, the rivers Ganga and Ghaghara provide magnificent navigable waterways. These gifts of nature should not be neglected but must be considered a national asset and a valuable supplement to existing modes of transport. The State Government should take vigorous steps for revival and development of inland water transport. The commissioning of the Farakka Project would bring into existence an inland navigation route falling entirely within Indian territory, from Haldia/Calcutta upto Buxar. This will provide enormous scope for development of water-borne traffic in the region especially by powered vessels. We have considered the various aspects of running services on the Ganga and the need to ensure reliability, regularity and high frequency to attract traffic to the river route. In view of the traffic potential between the two banks of the Ganga and other riverine districts, we reiterate our interim recommendation that regular and well organised services between Buxar and Farakka should be started as a forerunner to a direct service between Buxar and Calcutta on completion of the Farakka Project. We have already recommended the inclusion of a provision of Rs. 60 lakhs for running the service including night navigation and pick up and delivery services and some augmentation of fleet in the Fourth Plan."

* * * * *

"A scheme for operating commercial service on the Ganga from Allahabad in U.P. to Rankahal in Bihar was examined by the State Government. In order to make inland water transport a success, its adjustment to the present day requirements of providing an integrated service is a prime necessity. The river stations should be well connected with the command areas by feeder roads to allow for effective coordination between river and road transport services. The completion of Farakka Project is expected to bring about a considerable increase in the water-borne traffic along the Ganga and this could be carried right upto Calcutta by introducing an efficient service. This will usher in a new era of economic activity and prosperity from Allahabad to Calcutta and the Ganga

would once again become an active highway connecting a number of small cities and towns on its banks which have so far remained undeveloped."

Thus the benefit of Farakka Project to inland navigation from Calcutta to Allahabad appears to have been established beyond doubt.

8.8. The Inland Water Transport Advisory Committee which was constituted in pursuance of the recommendations of the Gokhale Committee on Inland Water Transport (1959) had recommended certain waterways to be declared as National Waterways. This recommendation was subsequently endorsed by the Transport Development Council. That Council also at its meeting held in July 1965 recommended that with the completion of the Farakka Barrage the question of diverting the Ganga and the Bhagirathi from Calcutta to Allahabad as a National Waterways might be considered.

8.9. The Study Group of the Public Accounts Committee who visited Farakka Barrage in October, 1975 were informed by the representatives of the West Bengal Government that the NCAER was currently studying the problem at the instance of the Ministry of Shipping and Transport. Their teams had visited the area and at various points they were ascertaining the amount of traffic passenger and goods—that could be carried. They also considered the feasibility of establishing an inland harbour board at Farakka. Work on the project was started in August, 1975 and is still stated to be in progress. The NCAER in their letter, dated the 17th November, 1975, informed the Committee as follows:—

"Analysis/evaluation of the data collected is underway:

- (i) Infrastructural facilities over a 200 km. belt on either bank of the river between Allahabad and Calcutta to determine the effective traffic catchment for the waterway.
- (ii) hydrographic data to ascertain navigability and type of craft/vessels to be used, their cost of operation and infrastructural facilities to serve these.
- (iii) a survey of industrial units in the catchment area to assess traffic potential.
- (iv) data on existing traffic on the railways—northern, eastern and north-eastern—pertaining to this area.

(v) Origination and Destination Survey to estimate road traffic in one Survey was conducted in July/August a Second such Survey is being conducted now (end of November, 1975).

(vi) A survey of existing river traffic conducted in October/ November, 1975.

The Origination and Destination Survey had to be delayed on account of floods. Yet it is hoped to complete the report by April 1976 against the earlier commitment of March, 1976."

8.10. The Study Group were also informed by the representative of the State Government that the State Government of West Bengal had requested the Institute of Port Management, Calcutta, under the Calcutta Port Trust to examine the techno-economic feasibility of the development of water transport. The Institute of Port Management in its Report had suggested development of certain intermediary ports between Calcutta and Farakka. The Report of the Institute had been examined by the State Government who had written to the Central Government to enquire whether the Ministry of Shipping and Transport would agree to have a coordinated approach to the river transport, as both State and Central agencies were involved. The State Government had also taken up the matter with the Railways.

8.11. During evidence the Committee were informed by the representative of the Ministry of Agriculture & Irrigation that:

"navigation would come first from Calcutta Port upto Farakka. And, when navigation works would be completed, then, this navigation channel would be extended right upto Allahabad. Today it is not possible but when the works are completed it will be possible."

8.12. In a note furnished by the Chairman, Calcutta Port Trust, the position in respect of inland water transport has been stated as follows:—

"Inland Water Transport

The Feeder Canal has since been commissioned in April, 1975, rendering the Bhagirathi-Upper Hooghly navigable for inland craft upto Farakka. However, the navigation lock necessary to link the Ganga with the Feeder Canal has not been constructed so far. With the completion of this lock in the next two years, a 'through' water route

will be established between the port of Calcutta/Haldia and stations up river, like Patna, Varanasi and Allahabad. A unique river transportation system can be developed on this waterway with rail and road feeding it at selected points. The Ganga-Bhagirathi-Hoogly will provide the longest navigable inland water route in the country—the distance between Allahabad and Haldia being 1500 Kms. Pending completion of the navigation lock and allied works at Farakka, segmented IWT services can be operated between Calcutta and Farakka and also between Farakka and Varanasi.

Technical Feasibility

The minimum channel depth in the different stretches of the Ganga-Bhagirathi-Hooghly rivers ascertained from the available survey data as well as the actual experience of operating experimental services on the Ganga is as follows:—

Stretch	Distance (Kms.)	Minimum navigable depth (In Feet)
Calcutta—Farakka	400	Over 6'—0"
Farakka—Patna	455	4'—6"
Patna—Buxar	185	4'—0"
Buxar—Varanasi	180	3'—6"
Varanasi—Allahabad	200	3'—0"

It has been further indicated by the Inland Water Transport Directorate under whom the experimental service has been run that a minimum depth of 5 ft. is available in the channel between Patna and Varanasi for 8 months in the year. There is no difficulty about the availability of this depth downstream of Patna. Past experience has shown that the navigable depth can be improved to 6 ft. by developing the preferred channel through bandalling. Thus, shallow draft barges having a maximum draft of 4 ft. can safely ply in this river system between Calcutta/Haldia and Farakka through the year and further up to Varanasi for 8 months in the year. Such barges can be designed to carry 250 tonnes of cargo. Partial load-

ing may be resorted to during the lean months. The river system can, however, be used for commercial navigation in its existing natural state with normal bandalling at shoals and proper marking of the navigable route.

Type of craft—method of towage

Modern technology has advanced sufficiently to permit designing of shallow draft tugs and barges suitable for operation on the Ganga-Bhagirathi-Hooghly rivers. Push-towing is the most efficient technique developed so far and its application has been successfully tried out on the Ganga. It requires about 20 per cent less power than pulltowing for comparable loads. Based on the experience of running experimental service on the Ganga, it is considered that the optimum flotilla for operation on the Ganga-Bhagirathi-Hooghly waterway would be the pusher trains; each push-tow unit consisting of a pusher tug of about 500 B.H.P. with draft under 3 ft. pushing 1000 tonnes in four barges each of 250 tonnes cargo carrying capacity, having a loaded draft of not more than 4 ft.

Economic Potential

The Ganga-Bhagirathi-Hooghly rivers traversing the three States of U.P., Bihar and West Bengal, have the potential of serving a vast hinterland. 22 districts have a waterfront on the Ganga between Allahabad and Calcutta. Eastern U.P. and parts of Bihar and West Bengal which constitute the hinterland of the Ganga-Bhagirathi-Hooghly rivers for considering the economic potential if I.W.T. services have a population of about 80 million people.

A number of studies have been carried out in the past to assess the volume of traffic for I.W.T. in the Ganga-Bhagirathi-Hooghly rivers. The Transport Research Division of the Ministry of Shipping and Transport estimated a traffic of over 2 million tonnes between Allahabad and Calcutta in the post-Farakka project period. Agreeing with this study, the State Government of U.P., Bihar and West Bengal have indicated that the traffic is likely to increase with further development of industries along the water way. The Ministry of Shipping and Transport have entrusted the work of detailed traffic survey to the National Council of Applied Economic Research. The

study is in progress and is expected to give an up-to-date assessment of traffic in different commodities that may be carried by I.W.T. in preference to rail and road. It seems that once the direct water link is established between the Port of Calcutta/Haldia and up-country, the traffic in bulk commodities, such as sand and stone, coal, foodgrains, P.O.L. products, heavy and outsized machinery, etc. will move to the waterway. The requirement of building materials like sand and stone is of the order of 2 million tonnes annually for the Calcutta industrial region alone. The source of stone chips is Pakur and Rajmahal."

8.13. The Committee note that the Central Government, the State Government and the Calcutta Port Authorities appreciate the importance of improving the inland navigational facilities along the Ganga-Bhagrathi from as far up stream as Patna or even Allahabad down to Calcutta. There is a very close link between the Farakka Project and the development of this major channel of inland navigation. Among the objectives of the Project, improvement in inland water transport has an important place. A sum of Rs. 130 crores has already (till May 1975) been spent on the Project, which is now near completion. Every effort should thus be made to complete also the studies being carried out about the river traffic position and draw up concrete programmes for an improved inland water transport service.

8.14. The Committee find from the note furnished by the Calcutta Port Trust that so far as the technical feasibilities about the minimum navigational depths, the type of crafts to be used and the methods of towage are concerned, no special difficulty is anticipated. Even so, the Committee recommend that the relevant reports be studied seriously and steps taken to work the inland transport service, along as much of the river as possible, to begin with.

8.15. When the Study Group of the Committee visited Farakka they were given to understand that the navigational locks at Farakka are yet to be completed. According to the audit report the major expenditure on account of navigational facilities (Rs. 13.00 crores out of Rs. 19.06 crores) is yet to be incurred as part of the Farakka Project. From the experience of the construction of the Feeder canal, the Committee fear that unless the Government of India and the Project authorities are vigilant, this work may also get unduly delayed and the benefit to the nation of heavy investments already made may be jeopardised. The Committee recommend that a pro-

programme for the completion of the construction programme not only at Farakka but also upstream to Patna and Allahabad should be drawn up in consultation with all relevant authorities.

8.15. For the development of an inland transport service from Calcutta upstream towards Allahabad, some additional river port amenities would be necessary. The Inland Water Transport Committee has referred, among other things to the need of warehousing and container facilities. These problems should be examined expeditiously.

8.16. To make the inland water transport service economic, it is essential that the type of craft used is suited to the requirements. The Committee note that modern technology has advanced sufficiently to permit designing of shallow draft tugs and barges suitable for operation on the Ganga-Bhagirathi-Hooghly rivers. As pointed out earlier by the Estimates Committee in paragraph 5.45 of their 75th Report (Fifth Lok Sabha) on Transport Coordination, Government should take concerted measures to develop on a priority basis such craft as would be suited for inland water transport. In devising such craft, the Committee would like special attention to be paid to the requirements of designing and the providing of shallow draft tugs and barges suitable for operation on the Ganga-Bhagirathi-Hooghly stretch of water. The Committee would like to be informed of the concrete action taken in the matter.

Flood Problem

8.17. A Bengali Magazine (The Compass Weekly), in its editorial of Saturday the 26th July, 1975, had stated:—

"It is not time to discuss how far the problems of Calcutta Port have been solved as to what extent navigability of the river Bhagirathi has improved as a result of the discharge of 40,000 cusecs of water from the Farakka Barrage.

* * * * *

On an on-the-spot inspection, I found that 20 sq. miles of cultivated and village land have been submerged by the waters of the rivers Pagla and Banshloyee. These two rivers rising from the high lands of Santhal Pargana flow through Birbhum and inundate the *Rash* area of Murshidabad. All along, the waters of these two rivers used to flow through the river Bhagirathi but this time Bhagirathi is not able to absorb the waters of Pagla and Banshloyee because it is full to its own brim as a result of the flow

of 40,000 cusecs of water. Moreover, as a result of this, vast areas of the low lying lands of Raghunathganj (Block No. 1) and Suti (Block No. 2) have been converted into lakes and pools. * * * The water level of Pagla and Banshloyee rivers will not come down as long as Bhagirathi carried 40,000 cusecs of water and only a very small percentage can be reduced as may be absorbed by the land or evaporated by the sun's rays. Therefore, the cultivators feel heart-broken as their cultivated land is likely to remain converted into a big pon permanently. Crops worth Rs. 1½ crores, covering an area of 7,000 acres, have been lost and there is not possibility of raising fresh crops anew. Not only this, the cultivators feel panicky when they visualise a situation when these hilly rivers will come down with their full compliment of water, as a result of which the distant habitants in the area will be inundated and people will be forced to leave their homes with their cattle; but they do not know where to go and what to feed themselves with. Of course, Government have taken in hand relief measures, but it is not a question of giving relief for one year; the problem calls for a permanent solution."

8.18. The Study Group of the Committee who visited Farakka Project in October 1975 were informed that the State Government of West Bengal had undertaken measures to check floods in the area. References were made to the projects already completed, viz., DVC and Mayurakshi. About Damodar, which was the main cause of the floods in West Bengal, the Study Group were informed that once the required land was acquired by the DVC, the flooding in West Bengal due to Damodar would be eliminated. The State Government had taken up another project in north Bihar, viz., Teesta Project.

8.19. The Study Group were informed that previously the Bhagirathi river could take flood waters of the low lying areas into it but now on account of Bhagirathi river level going up due to Farakka canal, some areas would be permanently inundated. The extent of this area was assessed to be about 17 sq. miles. The State Government were, however, working out shemes to avoid flooding in the area. The Study Group were also informed that previously the entire water used to flow down the river Ganges beyond Farakka and it used to cause floods in those areas, but now since 40,000 cusecs of water were being taken away for feeder canals, the floods in the

reaches beyond the Farakka Barrage would be somewhat controlled. The Study Group were, however, informed during discussions at Farakka, that as a result of the Barrage, the water level had risen up only one foot at the most. The effect of this rise could adversely be felt in Malda district, but the same could certainly not effect Munghyr. Even in Malda district, the Government of West Bengal had constructed embankments along the banks of Ganga in the upstream of the Barrage, whereby the danger of flooding had been avoided.

8.20. The Committee gave thought to certain alarming press reports about floods in the Farakka region after construction of the canal. Flood Control is one of the objectives of the total Project. It goes without saying that such problems require to be taken care of as soon as they emerge, apart from all reasonable precautionary steps in the matter. The Committee understand that the State Government of West Bengal are seized of the flood problems in the area and trust that measures would be taken at all relevant levels towards a permanent solution of the difficulties involved.

Development of Tourism

8.21. The Murshidabad District where Farakka is situated is a place of historic interest in itself. There are various monuments of tourist interest near Farakka. Not very far from Farakka are the historical medieval relics of Malda and Gaur, the capital of ancient Bengal. Added to this old attraction, the 7363 ft. long Barrage is itself a thing of beauty which could be of considerable interest and attraction to domestic and even foreign tourists.

8.22. The Study Group of the Committee, visiting Farakka in October, 1975, were informed by the Director of Tourism, West Bengal Government that his Department had initiated a proposal to establish a motel at Farakka. The State Government had also written to the Project authorities to give them a camping site but in 1973, on account of financial stringency the proposal had been shelved. A note sent by the Government of West Bengal subsequently is reproduced below:—

“In April, 1972, State Government proposed to take up construction of a camping site at Farakka as a Central Sector scheme in the fourth Plan. In their letter No. 2ACC dated 27th May, 1972 Government of India set out the conditions under which the scheme might be taken up

and requested the State Government to confirm acceptance of the conditions and send the detailed estimates with necessary certificate from the Public Work Department. The conditions were that the expenditure on the construction of the camping site would be borne by the Government of India and the site would remain the property of the Government of India while the State Government should provide about 2 acres of developed land and equipment to be given on hire and that the State Government would be entrusted with the management and maintenance of the lodge and would be responsible for profits/losses. Acceptance of the conditions was communicated to Government of India through teleprinter message No. 6049—TW dated 23rd August, 1972. In August 1972 the State Government requested Farakka Barrage Authorities to make available suitable land for the purpose. Rough cost estimate amounting to Rs. 1,96,100 with the requisite certificate was sent to Government of India under State Tourism Department Memo No. 7174-TW dated 18th September, 1972. In their letter No. 3ACC-IV dated 16th October, 1972, the Government of India requested the State Government to revise the estimates in the light of the comments made by their Architect. The estimates were accordingly reviewed by the Public Works Department of the State Government and necessary reply was sent to Government of India in State Tourism Department letter No. 9116-TW dated 28th December, 1972, requesting Government of India to accord administrative approval early. In November 1972 Farakka Barrage Authorities agreed to make available 2 acres of land as suggested by State Tourism Department. In May, 1973, an Assistant Director from the Department of Tourism, Government of India inspected the proposed site. State Tourism Department in subsequent reminders requested Government of India to accord administrative approval early. In their letter No. 3-ACC-IV dated 30th June, 1973, the Government of India informed the State Government that the scheme had been deferred for the time being because of severe constraints on resources. In reply to reminders from the State Government requesting execution of the scheme in the fifth Plan the Government of India in their letter No. 3-ACC-IV dated 8th September, 1975, stated that the

project had to be abandoned as no progress had been possible and no expenditure had been incurred during the period the scheme was current. Government of India is being requested to reconsider the matter.

West Bengal Tourism Development Corporation has a plan for construction of a 30 bedded motel at Farakka at an estimated cost of Rs. 10 lakhs for providing cheaper accommodation and garaging facilities to motoring tourists.

8.23. When the Study Group asked the Director of Tourism, West Bengal, for the State Government's view of the prospects of tourism at Farakka, the answer was that there were certainly good prospects in view of the tourist lodges already built at Malda and Murshidabad, and Farakka being 'en route' could certainly be developed as a tourist spot. Asked whether the Department was considering organising any water sports at Farakka, he replied in the negative. The Study Group, however, found no visible evidence of the development of tourism at present. In fact on the contrary during the drive from Jangipur Barrage to Farakka the study Group observed that the National Highway was in a very bad condition and the repair work was going on at a very slow place.

8.24. The Committee feel that the magnificance of the Barrage construction, the fascinating sight of water flowing through the Feeder Canal, and the enchanting greenery all around the area, provide the natural as well as manmade background for the development of the area into an attractive tourist resort which could, in due course, grow into a sizeable source of earnings even of foreign exchange through tourists from other countries. The Committee desire that the schemes already made by the State Government in this regard should be examined and all essential assistance should be given to them by the Central Government also.

Industrial Development of the area

8.25. The Study Group of the Committee who visited Farakka in October, 1975, held detailed discussions about the development of industries in the region and the development of Farakka as a growth centre. The representative of the State Government stated that the industrial development of the State had been mainly concentrated in an area about 50 miles of Calcutta in the past. The dispersal of industry was started only from the 3rd Plan. In 1971, 18 specified sites had been selected for balanced development of

the State. Farakka was one of them as a potential Growth Centre. In 1972 the Government of India introduced a special 15 per cent subsidy scheme, for the development of industries in backward areas. But having regard to limited resource the subsidy scheme was granted for only one district, viz., Purulia. Later on two more districts were selected but in that selection also Farakka was not included. The districts selected were Midnapur and Nadia where infrastructure had already taken place during Shri B. C. Roy's time. The prospect of adding a further district for subsidy scheme being bleak, the State Government later on thought of developing two mother industries in Farakka District viz., Hindustan Latex Ltd., and a Joint Sector Spinning Mills at Farakka. The Hindustan Latex factory proposal had made considerable headway. 30 acres of land had been offered by the project authority to the H.L. Ltd., The company had negotiated the Jesop's buildings which they had vacated on completion of their works at the barrage. But in the meanwhile due to the proposed Super Thermal Power Plant the project authorities had gone back on their promise and all land had been frozen for the Super Thermal Power Plant. The Joint Sector Spinning Mills which had been thought of taking into account the presence of the traditional craftsmen in the area on both the sides of the Farakka Barrage had also languished for want of site. The representative of the State Government urged the Study Group to ask the Department of Energy to assess their requirement for Super Thermal Power Plant and release the surplus land for the development of the aforesaid industries. Asked whether the State Government would consider Farakka district for the 4th backward district entitled for subsidy scheme if and when such additional district is sanctioned, the representative of the State Government said that it was difficult for him to make a commitment. But he suggested a via media viz., that if the 4th Growth Centre is not sanctioned the facilities extended to Purulia could be diverted to Farakka.

8.26. As regards establishment of the Super Thermal Plant, the Study Group learnt from the Farakka Project authorities that the Central Government was considering establishment of Super Thermal Power Plant of 100 mega watts. A team of officers of the Department of Energy had visited the sites and it appeared that the Power plant was going to be established though little could be known about the time schedule and when the construction was to commence. The representative of the State Government and the project authorities welcomed the proposed establishment of Super Thermal Power Plant at Farakka. It was learnt that the Super

Thermal Power Plant needed large supplies of coal and of water, and while coal could come from the Raj Mahal Coal Fields, water supply could be assured on account of the construction of Farakka Barrage. Once the power plant was set up, many industries would, it is certain, come up in the area.

8.27. In a note furnish to the Committee by the Ministry of Energy (Department of Power) it has been stated:

"A feasibility report for the establishment of a Super Thermal Power Station at Farakka was prepared by the Department of Power, Ministry of Energy, and was submitted to the World Bank early this year. This was one of the five such reports submitted to the World Bank, seeking loans for establishing super thermal power stations. Subsequently a representative of the World Bank had discussions with us here, and there was a request for the supply of some supplementary information. This information has also been sent to the World Bank, and recently there have been preliminary discussions on this subject in Washington.

We have now been informed that the World Bank would be sending an Appraisal Mission to India about the end of January to examine the project for a super thermal power station at Singrauli. The intention is to start four super thermal power stations, within the Fifth Plan period, but in a phased manner. There would be a super thermal power station in each of the Northern, Southern, Western and Eastern Regions of the country. Priorities among the projects have been fixed and the start of these projects would depend upon the availability of funds, either from the World Bank, or from the normal plan funds latter in the course of the Fifth Plan. At the moment, it does not appear that the Farakka Project would be started during 1976-77."

8.28. Since then (November, 1975) the Committee have noticed a press report about the Minister of Power (Shri K. C. Pant) reiterating the assurance that a super thermal power plant would be put up at Farakka, but the time schedule remains to be announced.

8.29. Now that Farakka is well connected by rail and the development of navigational facilities from Calcutta via Farakka to Allahabad is also being contemplated, the Committee feel that there is a strong case for the setting up of more industries at Farakka. The

Committee have learnt that a Super Thermal Power Plant might in the near future be set up at Farakka. This would greatly help in an expeditious development of the entire region around Farakka. The Committee hope that work in relation to the said plant will proceed on a priority basis. Land and other requirements should be calculated urgently, and the availability of the area so long frozen for the purposes of Farakka construction should be a fillip to the comprehensive economic development of the region.

CHAPTER IX

ANCILLARY MATTERS

Certain problems connected with the Farakka Project are discussed below:—

(a) Scouring of the Barrage

9.1. There were news about scours having developed in one of the gates of the Farakka Barrage. The Committee, therefore, desired to know the factual position in this regard and about government's satisfaction as to the safety of the Barrage. In reply, the Ministry of Agriculture and Irrigation (Department of Irrigation) have informed the Committee as follows:—

“(a) Scours downstream of the pucca floor of the Farakka Barrage were noticed between bays 14 to 20 when survey was carried out in December 1974. The matter was reviewed by the Technical Advisory Committee of the Farakka Barrage Project in February, 1975 and remedial measures consisting of backfilling of sand, placement of loose stones and stone in crates in scoured zones were recommended by the Committee. These have since been attended to by the project authorities.

As the downstream pile line was exposed, inspection of the pile line by divers was also carried out to see whether there has been any disturbance to the sheet pile line. During the process of examination by the divers in March 1975, the sheet pile line was seen to have a gap at one location. The Technical Advisory Committee of the project was apprised of this problem and possible remedial measures which could be carried out immediately were suggested and this has since been done.

This matter was again reviewed by the Technical Advisory Committee at the meeting held between 11-7-1975 and 13-7-1975. The advice was that a careful watch of the work is to be continuously maintained and steps taken to replenish protection works whenever there is a scour. This should ensure the safety of the structures.

- (b) After the repairs were carried out, the barrage is quite safe. However the necessary dynamic maintenance and periodical check to measure the extent of scour by systematic sounding to the upstream and downstream of the barrage, as suggested by the Technical Advisory Committee, will have to be carried out."

9.3. The Study Group of the Committee who visited Farakka in October, 1975, were informed that as a part of their maintenance job, the Project authorities were regularly undertaking inspection of the extent of scouring as recommended by the Technical Advisory Committee. The Study Group were also informed that in a river like Ganga with alluvial soil, this was a regular phenomenon and there was nothing to worry about it.

9.4. The Committee trust that regular and adequate watch would be kept by the maintenance staff of the Project on the various technical aspects, particularly scours, etc., and timely action will be taken to rectify loopholes if any, in the construction.

Development of an Island near the Barrage

9.5. During their visit to Farakka in October, 1975, the Study Group of the Committee noticed on the downstream side of the Barrage a big island of sand on the left bank of the river. The island had appeared recently and it was stated by the Project authorities that the development of such islands in the river bed were a common phenomenon, but the present island was a dangerous development because of its closeness to the Barrage. If unchecked, the particular island could divert the current of the river running parallel to the barrage which in turn would scour the foundation of the barrage. In order to prevent the menace, the Technical Advisory Committee had been consulted and they had given a programme of operation of the barrage gates so that the island could be washed away from its present vicinity. The Study Group were given to understand that as a result of this island there was heavy soil erosion on the right bank of the river downstream and this year considerable lands in Farakka village including its mango groves had been washed away.

Erosion Problems

9.6. The Study Group of the Committee who visited Farakka in October, 1975, were informed that at certain points south of Jangipur Barrage the river Ganga had been heavily eroding and coming closer to Bhagirathi. As a result, the distance between Ganga and Bhagirathi had been gradually vanishing. If no drastic

measures were taken to control the situation, Ganga may join Bhagirathi at Jangipur and the result of that would be that during the lean months the discharge into Bhagirathi through the Feeder Canal would all flow back into the river Ganga and onward to Padma. This will render the entire Farakka Project and the Farakka Canal infructuous.

9.7. The matter being a serious one, the Study Group asked the representatives of the West Bengal Government to furnish a detailed note on the subject. The note so furnished by the Chief Engineer, Irrigation & Waterways Directorate, West Bengal Government, is reproduced below:—

“Below the Farakka Barrage, the river Ganga widens considerably with an island in between dividing the river into two main channels. The right bank is within Indian Union passing through the thickly populated areas of the Murshidabad district where the important towns like Dhulian, Nimitita, Aurangabad etc. are situated. The Jangipur Barrage complex and the Feeder Canal are also located on the right bank. The left bank from some distance downstream is within Bangladesh.

Erosion in the left bank of the Ganga upstream of the Farakka Barrage as well as on the right bank below the barrage has been continuing since a long time past. From quite a long the mainflow is on the left bank near Panchandpur in Malda district and after a sharp turn is hitting the right bank just upstream of the barrage. It then used to take a left turn near the barrage site. The main flow below the barrage was therefore along the left channel previously. As such erosion on the right bank below the barrage was within reasonal limits. Of late, the Ganga has completely abandoned the downstream left bank channel and the bulk of the flow is through the right channel, with the result that erosion on the right bank has been most severely escalated affecting the important towns like Dhulian, Nimitita, Aurangabad and Khandua seriously; in fact the very existence of these towns have been threatened. Almost the entire bank covering a stretch of about 40 miles is under erosion at rates varying from 200/- to 800/- in width affecting important twons, orchards as well as large areas of agricultural lands. Earlier, vast areas had to be acquired in the neighbourhood for construction of the Farakka Barrage, Feeder Canals etc. The present erosion has now been displacing

a large number of families annually and the land that is now being lost to the river would not be restored in future. The West Bengal Government was, therefore, faced with a most serious problem due to the erosion and immediate preventive measures were called for.

Another very important aspect has also to be considered. Below the Jangipur barrage, the rate of erosion is extremely severe. Between 1962 and 1974 the right bank has eroded by about a mile and the Ganga is now within 1 (one) mile from the Bhagirathi at the nearest point below the Jangipur Barrage. If erosion is not prevented, the offtake of the Bhagirathi would shift down stream of the Jangipur Barrage and the latter complex would be completely bypassed thereby rendering the whole Farakka Barrage Project as infructuous. A very grave risk is thus involved.

Similar problem was also being faced upstream of the Farakka Barrage where erosion has become most severe on the left bank. Until a few years back, the apex of erosion was near the Panchanandapur village a few miles upstream of the barrage. The apex is gradually shifting downstream and may in course of a few years affect the left afflux bund and guide bank of the Farakka Barrage. The flow pattern in the barrage may also change. Some training measures are, therefore, necessary in this reach also.

The Government of India is aware of these problems. After a tragic spell of erosion the area was visited by Dr. K. L. Rao, the then Union Minister for Irrigation & Power and the Chief Minister and Irrigation Minister of the State. According to the advice of Dr. Rao, the Irrigation and Waterways Department drew up a comprehensive scheme for checking erosion of this bank by construction of submersible boulder spurs. The estimated cost of the scheme was Rs. 63 crores and was duly forwarded to the Government of India in accordance with Dr. Rao's advice. The Union Government however advised the State Government to take up some emergent anti-erosion work at the vulnerable reaches. It appeared from the trend of Dr. Rao's letter that Central funds would be available for this purpose specially as the safety of the Farakka Barrage Project was involved. The State Government could not afford to wait for the actual receipt of Central Funds. Works at vulnerable areas had to be

taken up in all earnestness by the State Government from 1972-73 and a large number of short spurs approximately 73 in number were constructed. But the resources of the State Government are extremely limited and the problem was too big to be tackled by the State from its limited resources."

9.8. Earlier, during evidence, the Chief Engineer of the Farakka Project had informed the Committee that:—

"This subject (of erosion) was brought up by the West Bengal Government sometime in 1972-73. After 1973 floods the West Bengal Government had prepared a scheme for protection of the right bank of Ganga downstream of the barrage for about Rs. 63 crores and it was also alleged that the main cause for these erosions was due to the Farakka barrage. It has been proved by our hydraulic experiments that the Farakka barrage had nothing to do with the erosion that was taking place. The erosion would have taken place even if the barrage was not there."

9.9. The Additional Secretary, Ministry of Agriculture and Irrigation, had stated during evidence—

"In fact, we had the information that the erosion was taking place for two or three decades as Ganga meanders and it carries a lot of silt. This phenomenon cannot be effectively checked unless very effective measures such as storages and afforestation are taken up over the entire catchment area."

9.10. The Committee find that erosion on the left bank of the Ganga, upstream of the Farakka Barrage as well as on the right bank below the Barrage, is not a new development but has been continuing for a long time. Not only is valuable land being lost on the right bank of the Ganga as a result of this erosion, but in recent times the erosion has also been displacing a large number of families every year. The situation has now assumed dangerous proportions affecting important towns in the region like Dhulian, Nimita, Aurangabad and Khandua, whose very existence is said to have been threatened.

9.11. During evidence, the Chief Engineer of the Farakka Barrage Project informed the Committee that "it has been proved by hydraulic experiments that the Farakka Barage had nothing to do with the erosion that was taking place. The erosion would have taken place even if the barrage was not there." The Committee are concerned with the view that whatever the causes of erosion and

the role of the Barrage in the larger hydrological situation, the whole area, including the Farakka Project complex itself, appear to be in some danger, which must be countered by suitable and timely measures. The Committee are of the view that the Central and State Government should move in close coordination in this task and ensure the allocation of adequate funds to forestal and eliminate the menace.

9.12. The Committee's view, just stated, is reinforced by a statement before it from the Ministry of Agriculture and Irrigation that the Ministry 'had the information that the erosion was taking place for two or three decades.... and the phenomenon cannot be effectively checked unless very effective measures such as storages and afforestation are taken up over the entire catchment area.' If this is a correct evaluation, the entire position should have been examined carefully much before the selection of the site for the Barrage, the Canal and other concomitant constructions. If however, there is any real substance in the fear that the Ganga joining the Bhagirathi at Jangipur, on account of the erosion of the right bank of the river, endangers the entire Project as constructed, the Committee would expect the scientific-technical ingenuity at the disposal of Government at all levels to be employed, with the utmost urgency, for tackling a problem which cannot, in the technological situation to-day, be too difficult of solution.

H N. MUKERJEE,
Chairman,
Public Accounts Committee.

NEW DELHI;
January 21, 1976.

Magha 1, 1897 (Saka).

APPENDICES

APPENDIX I

Paragraph 28 of the Report of the Comptroller and Auditor General of India for the year 1973-74—Union Government (Civil)

Excavation of the Feeder Canal of Farakka Project

For controlled diversion throughout the year of adequate flow of water from the Ganga into the Hooghly through the Bhagirathi, essential to preserve the viability of the Calcutta Port and the navigability of the Ganga-Bhagirathi-Hooghly complex, the Farakka Barrage Project was conceived with the following three principal components:—

- (a) A barrage across the Ganga at Farakka, with rail-cum-road bridge over it;
- (b) a feeder canal, taking-off from the head regulator on the right bank just upstream of Farakka Barrage, running more or less parallel to the Ganga, and having its out-fall into the Bhagirathi below Jangipur barrage; and
- (c) a barrage across the Bhagirathi, at Jangipur above the canal outfall, to prevent the canal water flowing back into the Ganga.

Estimates and Expenditure

Unit	1959 Estimate	1962 Estimate	1966 Estimate	1968 Estimate	Actual (net expendi- ture upto October, 1974)
(Crores of rupees)					
Farakka Barrage (completed in June, 1971)	29.10	36.26	79.38	89.83	84.64
Feeder canal (in progress)	25.39	27.28	60.30	61.61	37.42
Jangipur barrage (completed in June, 1971)	1.91	2.41	4.23	4.86	3.96
Miscellaneous expenditure	..	..	..	..	0.67
	56.40	65.95	143.91	156.30	126.69

The break-up of the 1968 estimate of Rs. 61.61 crores for the feeder canal by its major components is as below:—

(Crores of rupees)

	Unit	Unit II	Unit III	Total
1. Preliminary, land, buildings, miscellaneous and contingencies	5.24	0.61	0.53	6.38
2. Earthwork	18.77	..	..	18.77
3. Cross drainage works	1.97	..	..	1.97
4. Regulator	1.71	3.62	..	5.33
5. Bridges	5.50	1.00	0.68	7.18
6. Navigation	6.18	..	13.08	19.26
	39.37	5.23	14.29	58.89
7. Establishment, tools and plant and indirect charges	2.03	0.12	0.57	2.72
TOTAL	41.40	5.35	14.86	61.61

Against an estimate of Rs. 18.77 crores for excavation of the feeder canal, expenditure booked up to October, 1974 was Rs. 25.54 crores.

In October 1961, an eight-year construction programme for the project, from 1962 to 1970 with a small spillover into 1970-71, was approved. However, in December 1962, "accelerate" or "crash" (seven year) programme was adopted, reducing the period of construction by one year, i.e., from 1962 to 1969. Subsequently, the construction schedule was extended to 1970-71.

Having regard to the essentiality and benefits to be derived from the various works, in October 1965, execution of the project was split into three units. The revised construction programme envisaged efforts to be concentrated, primarily, on completing such essential works with least possible delay as would secure fulfilment of the most important functions of the project, viz., diversion of the flow of the Ganga, to feed the Bhagirathi-Hooghly system for improvement of Calcutta Port. The first two units taken up together in phase I, comprise the two barrages, the canal including bridges, and certain appurtenant works. Unit III, in phase II, would embrace navigational works excepting upstream navigation locks, at Farakka and Jangipur, to be constructed in phase I, to maintain *status quo* in river traffic.

The 24 miles long canal (485 feet wide at bottom, 20 feet deep and designed to carry maximum discharge of 40,000 cusecs) runs

parallel to the Ganga. Five bridges (including one approved by the Project Control Board in November 1973) and nine ferry crossings, are provided across the canal.

The estimate for excavation of the canal (at the average rate of Rs. 11.17 per 100 cft.) based on the reports of foreign and Indian experts envisaged:

- (a) Dry excavation up to about 8 feet depth by tractor-drawn scraper and dragline dumper combination; and
- (b) wet excavation by dredging in the bottom layer.

The easier dry excavation, was to be got done by contractors while the difficult wet excavation was to be done departmentally.

Excavation below subsoil water level, by dredging, was considered economical, since under Indian climatic conditions, it was possible to carry on dredging operations reasonably steadily and uninterruptedly, for almost 300 days in the year, whereas, any other arrangement could work satisfactorily only during the seven non-monsoon months. However, to avoid the trouble and expenses of procuring a battery of dredgers, involving foreign exchange (Rs. 103 lakhs), and maintenance of an elaborate marine organisation, it was decided, in August 1964, to abandon the idea of departmental dredging and to execute the composite work, dry as well as wet, through contractors using their own equipment.

Excavation of the top layer of the canal, in the reaches between RD 8-48, involving 9.52 crores cft. earthwork, was awarded, in two stages, between October 1963 and February 1964 (against the scheduled date of commencement of September 1962), to 9 small contractors, with dates of completion varying between June 1964 and February 1965. Excepting one, none of these contractors completed the work within the stipulated time, and all these contracts were ultimately terminated with or without penalty. These contractors excavated only 2.23 crores cft. of earthwork in all. Ministry of Irrigation and Power stated (September 1974) that no penalty could be imposed on the contractors as either full stretch of land could not be made available at the allotted reaches or small contracts, where the work was lingering, had to be terminated in the larger interest of the project.

On the expectation that execution of the work through resourceful contractors, having adequate earthmoving equipment, would have better prospects of timely completion, it was decided to resort to this approach. For this purpose, the 24 miles length of the canal

was divided into five portions, viz., RDs 0—10 (estimated earth-work quantity: 14.82 crores cft.) 10—68 (76.62 crores cft.), 68—97 (31.14 crores cft.), 97—103 (6.61 crores cft.) and 103—126 (26.25 crores cft.).

RD 0—10 (14.82 crores cft.)

This reach, constituting less than ten per cent of the aggregate quantity, was executed departmentally. The work was commenced in May 1965 and was completed after 8 years—by the middle of 1973. The progress in the working seasons 1967-68 and 1968-69 was negligible. During the same working seasons contractors 'A' and 'B' entrusted with similar works in other reaches, made much more progress (cf. Enclosure). The Ministry of Irrigation and Power stated (September 1974) that the departmental excavation suffered since the departmental machines could not be engaged fully in feeder canal before 1969-70 as these were also required for barrage works.

RD 10—68 (76.62 crores cft.)

Tenders for excavation of the top layer with option to bid for underwater layer also were invited in January 1964 and were received in May 1964. Since it was decided, in the meantime, to get the entire work, dry as well as wet, done through contractors, the tenderers were asked, in August 1964 to requote for the composite work of 75.00 crores cft., which was allotted in January, 1965, to contractor 'A', with June 1968 as the target date of completion. By then, the contractor had excavated 46.95 crores cft. only. Since then 9 extensions were given; the last one up to June 1974. According to Government (September 1974) at the end of November 1973, the balance of earthwork was 1.85 crores cft. and pertained to three gaps at (i) RD 34.06-34.30, (ii) RD 47.50-48.50 and (iii) RD 61.30-62.40. The work in the first two gaps was suspended on demand of the local population, for a bridge in place of the contemplated ferry service. The Project Control Board has approved in November 1973 construction of the additional bridge. The entire third gap can be excavated, only after completion of the road bridge on the Pakur-Dhulian State Highway and diverting traffic through it. In January 1974, it was decided to have the portions above water level excavated through the contractor, and the portions below water level by dredging departmentally. There after the contractor resumed work from February 1974 and completed the portions above water level in the first two gaps and full section in middle portion of the third gap at RD 62 where the full stretch of land could not be made available due to non-completion of the road bridge (Sep-

tember 1974). The road bridge is expected to be completed in December 1974. Out of the total allotted quantity of 75.00 crores cft. the contractor had executed 67.00 crores cft. during the five-working seasons 1965-66 to 1969-70. His progress in the 1970-71 and 1972-73 seasons was small and no work was done in 1971-72 (cft-Appendix V).

RD 68—97 (31.14 crores cft.)

In view of the scheduled completion of the Farakka barrage by 1970-71, the project had proposed, in November 1964, that tenders for the remaining portion, viz., RD 68—126, should be called immediately so that the work could be started by the selected contractor during the next working seasons. Tenders were invited in July 1966 for the three reaches RDs 68—97, 97—103 and 103—126. Although tenders were received in October 1966, earthwork involving 32.26 crores cft. was awarded, after a delay of one year, in December 1967, to contractor 'B', with 3rd November 1970 as the target date of completion. By November 1970, the contractor had executed 11.73 crores cft. only. Since then 15 extensions were granted; the last one up to August 1974. Till November 1973 the total quantity of 29.08 crores cft. of earthwork had been completed. By August 1974 the contractor completed a further quantity of 1.02 crores cft. Certain portions of the work were also taken up departmentally from March 1974. About 0.08 crore cft. of earthwork remain yet to be dredged departmentally (October 1974) in this portion.

RD 97—103 (6.61 crores cft.)

Although tenders had been received in October 1966 this reach was left out of consideration in December 1967, and it was decided that it would be awarded subsequently to either contractor 'B' or 'C' depending upon his competence and satisfactory progress of work. Even though the progress of any of the three contractors 'A', 'B' and 'C' against their respective contracts was anything but satisfactory, this portion was allotted in April 1969, by negotiation, to contractor 'A', under supplementary extensions of the subsisting contract for RD 10—68, on the consideration that he had considerable earthmoving equipment at site and had developed the necessary resources to take up this additional quantum of work. The due completion date was fixed as June 1970. The right to allot further additional work of 15 crores cft. after June 1970, in continuation of this portion at the same rate, was also reserved. By the agreed target date, however, contractor 'A' executed 1.55 crores cft. only. The second of two extensions was upto August 1973, by when 6.49

crores cft. had been excavated. The balance quantity was 8.08 crore cft. (as subsequently reassessed); the earthwork for this quantity was allotted to a small contractor, and was stated to be almost complete (August 1974).

RD 103—126 (26.25 crores cft.)

Tenders were received in October 1966. Out of the estimated quantity of 26.25 crores cft., earthwork involving 21.50 crores cft. (excluding two gaps not expected to be available for excavation within the contract period) was awarded in December 1967 to contractor 'C' with scheduled date of completion set for 3rd April 1971. After executing 1.26 crores cft., this contractor stopped further work in June 1969.

In June 1969, the Project Control Board decided to determine this contract mutually, without invoking penal provisions of the contract, lest the contractor took legal recourse, causing delay in the time-bound work. The contract was finally terminated in March 1970, without any penalty.

On ground of labour unrest, contractor 'A' refused to take up the balance work, although in April 1969, he had agreed to accept additional work upto 15 crores cft. after June 1970.

Tenders for the remaining earthwork in this reach, involving 22.35 crores cft., were opened in August 1970. The lowest tender of contractor 'D' (contractor 'B' under another name) was ignored on consideration of expeditious completion of the canal, and the work was entrusted in January 1971 to contractor 'A'—the second lowest tendered with the completion date mutually agreed upon as May 1972.

By June 1972 and June 1973, contractor 'A' could execute 10.84 and 20.64 crores cft., respectively, against the allotted quantity of 22.35 crores cft. Eleven extensions were sanctioned; the last one stipulated completion by June 1974. The remaining quantity (re-assessed subsequently as 1.45 crores cft.) mostly pertained to three gaps, viz., existing national highway 34 crossing, present railway crossing and length of about 160 feet at the tail end of the canal. The gaps left were programmed to be removed by March 1974 after diversion of the railway line and the national highway by the Railway and the State Public Works Department respectively. After it was decided in January 1974 to have the portions above water level excavated through the contractor, the excavation was resumed by him in February 1974 and excavation above water level was resumed by

him in February 1974 and excavation above water level was completed in August 1974. The underwater excavation by dredging departmentally is in progress (October 1974). It would be seen that although for expeditious completion of the canal this reach was awarded (at higher cost) to contractor 'A', that contractor substantially defaulted. As a matter of fact, till the award of this work to him, his default was more than that of contractor 'B' and yet, this work was awarded to him, in preference to contractor 'D' at extra cost of Rs. 90.66 lakhs (as compared with the tendered amount of contractor 'D'). Leaving aside 21.61 crores cft., undertaken departmentally etc., the quantity awarded to contractor 'A' (103.96 crores cft.) constituted nearly 76 per cent of the remaining total volume of work. Whether, for expeditious completion of the canal, so much work should have been awarded to him is doubtful. It is to be added that the Farakka project continued to carry surplus equipment, labour and operators and still additional work was awarded to the contractors whose progress was patently slow and departmental execution (save a minor portion) was not undertaken.

Additional expenditure in getting done by contractor 'A' the work left incomplete in RD 103—126 by contractor 'C' works out to Rs. 2.03 crores.

The contract with the defaulting contractor 'C' had provided that in case of unfinished work payment would be made at part rate, at the discretion of the engineer-in-charge, taking into account extra expenditure to be incurred in getting the remaining work completed. As the contractor failed to execute the allotted work up to the required depth and specifications, payment for work done was made at Rs. 10 per 100 cft.

However, in June 1969, the Control Board decided to enhance the rate to Rs. 10.88 per 100 cft., by allowing the contractor additional 50 per cent of the difference between the tendered and determined rates of Rs. 11.75 and Rs. 10 respectively, on the following considerations:—

- (a) the expenditure incurred by the contractor on initial organisation and management was in excess of the proportion of the volume of work actually done by him, and might mean some loss for him because of the termination of the contract at that stage; and
- (b) the rate for excavation of bottom section by dredgers was less than that for top excavation by conventional method and, therefore, the rate for the latter in the average rate quoted by the contractor for excavation of the full section of the canal could not have been less than Rs. 11.75.

A further payment of Rs. 1.11 lakhs was thus made to contractor 'C', although his progress of work had been slow and additional expenditure of Rs. 2.03 crores had to be incurred to get the work completed by contractor 'A'.

The progress of work of contractors 'A' and 'B', was consistently slow in spite of substantial financial and material help, within and outside the contracts, extended to them such as (i) advance of Rs. 2.04 crores to contractor 'A' and Rs. 1.05 crores to contractor 'B' (including Rs. 20 lakhs and Rs. 40 lakhs respectively outside the terms of the contracts), (ii) supply of departmental equipment (value Rs. 91 lakhs in case of contractor 'A') on hire basis, outside the contracts and (iii) issue of materials and spare parts (value Rs. 46.50 lakhs and Rs. 34.33 lakhs up to June 1974 in respect of contractors 'A' and 'B' respectively) from departmental stores without provision in the contracts—they were supplied to the contractors at the departmental issue rates, (procurement price plus departmental supervisory charges) without ascertaining the market rates prevailing at the time of supply to the contractors, and (iv) deferred recovery of the cost of materials etc., at contractors' requests.

In the working season of 1970-71, contractors 'A' and 'B' did not start the work on the plea of radical change in the attitude of their labour, as a consequence of which they had, according to them, been incurring heavy expenditure on labour, repairs and maintenance of equipment etc. and represented that it was no longer possible for them to carry on the work, unless they were compensated for the losses already suffered by them and the rates were enhanced suitably for the works still remaining to be done. The escalation clause included in the contracts provided for variations in the prices of petrol, oil and lubricants etc. and higher amounts were paid by the project on account of the escalation clause relating to variations in the prices of petrol, oil and lubricants. In the hope of expeditious completion of the canal and to create conditions in which the contractors could resume, continue and complete the work, Government sanctioned, in March 1971, *ad hoc* and *ex-gratia* enhancement of rates (per 10 cft) up to Rs. 16.50 for work done during 1969-70 and Rs. 20.65 thereafter up to the dates of completion extended till then, against the contracted rates of Rs. 11.30 and Rs. 12.43 in case of contractor 'A' and Rs. 12.50 in case of contractor 'B' subject to the contractors' agreement in writing that these payments would be in full and final settlement of their claims. Representations for compensation for work done up to September 1969 were, however, rejected. It was also agreed that the enhanced rates could be further extended, if necessary, upto March 1972/March 1973. Subsequently, enhanced rates were further exten-

ded upto 30th June 1974, in case of contractor 'A' and upto 31st August 1974, in case of contractor 'B'. Upto October 1974, total extra amount of Rs. 2.90 crores was paid to the two contractors on account of such subsequent enhancement of contracted rates.

So far, rates have not been revised in case of any other contractor on similar grounds of labour troubles, law and order situation etc.

From the commencement of 1973-74 working season contractor 'A' declined to resume excavation of the left-out gaps in his reaches, from RD 10 to 68 and RD 103 to 126, unless the rates were further increased. He was, however, agreeable to excavate only the portions above water level in these gaps at the existing rates. Considering the huge dewatering required from the excavated portions of the feeder canal, if these gaps were to be excavated to the full section, it was decided in January 1974 to have the portions above water level excavated through contractor 'A' on the existing rates and the portions below water surface by dredging departmentally. The Contractor was thus relieved of the more difficult portion of the work in the lower layer, involving more lead and lift, besides the element of dewatering, without any reduction in rate.

Although contractor 'A' accepted payment at the enhanced rates in full and final settlement of his claim, he sought in June 1971, reference to arbitration of his claims for compensation, amounting to Rs. 252.10 lakhs for the work done by him during January 1966 to September 1969. The ground for his doing so was that the rejection of his claim for that period constituted a dispute between him and the project authority. The project sought legal opinion on whether the above dispute was referable to arbitration under the arbitration clause of the contract, in view of the fact that the contract did not contain any condition for enhancement of the unit rate (for excavation) on the grounds (mentioned subsequently) advanced by the contractor. The legal opinion obtained was that the arbitration clause (standard clause included in C.P.W.D. contracts) appeared to be very widely worded and it seemed difficult to contend that such a dispute was outside the scope of the arbitration clause. Accordingly, in November 1971, the claim was referred to the sole arbitration of a Superintending Engineer of the project. In December 1972, the arbitrator gave his award whereby the contractor's claim for compensation for work executed from January to December 1966 was rejected but for the work done in RD 10-68, during January 1967 to September 1969, an amount of Rs. 121.88 lakhs was awarded to him the net amount payable after deduction of payment already made on account of increase in the cost of petrol, oil and lubricants for this being Rs. 97.95 lakhs. In addition, the contractor was allowed interest, at

5 per cent per year, on this amount from the date of the award till the date of payment or decree, whichever be earlier. Thus, the arbitrator awarded higher rates even for the period up to June 1968 when, according to the contract, he was originally to complete the work.

The claims of the contractor were mainly based on the following two grounds:—

- (i) there was radical change in the working conditions in the project area due to deterioration in the law and order situation and this resulted in increase in costs of execution of the work, and
- (ii) there was an alleged assurance given to the contractor that he would in due course be compensated for the loss sustained by him.

The contractor had been raising the first grievance since March 1966. There were several letters, where he had stated that the contract had become impossible of performance because of total breakdown of law and order.

The contractor pleaded before the arbitrator that the change in the circumstances (law and order situation) had given him the right to throw of the contract, but he had continued the work, because the project had asked him to continue the work and had assured him that he would be suitably compensated. The assurance was referred to in three letters written by the contractor to the project, in March 1970, June 1970 and January 1971. The assurances had not been denied in writing by the project authorities but were denied by them before the arbitrator.

According to the opinion of the Ministry of Law and Justice, Branch Secretariat at Calcutta, given in February 1973, the contractor's claim for payment of increased rates on account of altered working condition, was not sustainable in law, in view of the principles of law, relevant to the present case, laid down in the Supreme Court case of *M/s. Alopi Prasad and Sons Ltd. vs. Union of India* reported in AIR 1960—which the arbitrator was bound to follow.

As regards the second ground namely, that assurances were given to compensate the contractor for the losses sustained, it was observed by the Branch Secretariat that such an assurance, even if it was given, was not binding on the Government as an agreement for the

reason that it did not comply with the provision of Article 299 of the Constitution according to the aforesaid judgement of the Supreme Court. But these decisions of the Supreme Court, on similar issues, had not been pointed out to the arbitrator.

In February 1971, when the question of *ex-gratia* increase of contracted rate was still under consideration of Government the contractor had confirmed that the minimum which could be acceptable to him would be Rs. 12.33 per 100 cft. for 1967-68 and 1968-69. Again, in March 1971, when the claim prior to October 1969 was rejected by Government, the contractor had requested for payment at Rs. 12.50 per 100 cft., for work done in 1967-68 and 1968-69, i.e. the rate at which the work in RD 68—97 had been allotted to contractor 'B' in December 1967. At these stages, contractor 'A' had not claimed compensation for work done by him prior to October 1967. These, however, were not pointed out by the project before the arbitrator. Besides, in April 1969 work in excavation of the canal, in RD 97—103 had been awarded to contractor 'A' at the negotiated rate of Rs. 12.43 for 100 cft. The point was also not placed before the arbitrator.

In fact, the project had contented itself with general denial of the claim before the arbitrator, without going into the quantum which might be payable, in the event of upholding of the claim of the contractor by the arbitrator.

Under the award increased rates (per 100 cft.) of Rs. 13.10 for 1967 (full year), Rs. 16.05 for 1968 and Rs. 15.55 for the period January 1969 to September 1969, were allowed against the contracted rate of Rs. 11.30.

Law Ministry was of the view, that there was remote possibility of the court interfering and setting aside the award but advised the project to take the risk and file a petition for setting aside the award instead of accepting it without contest.

An objection petition was accordingly filed in the Court of Subordinate Judge, Murshidabad. But in June 1973, in consultation with the Ministries of Law and Finance, it was decided not to pursue the case and the Ministry of Irrigation and Power directed the Project to persuade the court to proceed to pronounce judgement according to the award, followed by a decree, as early as possible to avoid payment of further interest to the contractor. The suit was decreed in terms of the award, in June 1973 and payment of Rs. 100.31 lakhs including interest of Rs. 2.36 lakhs from 30th December 1972 to 23rd June 1973, was made to contractor in July 1973.

For execution of the works of the project there is a General Manager on the project site with powers more or less of a Chief Engineer of the C.P.W.D. Over him there is a Control Board in Delhi, set up in April 1961, to ensure efficient, economical and early execution of the Project. The Board, however, has not been meeting frequently. For instance, it met in June 1969, May 1970, April 1971, December 1972 and has not met thereafter (August 1974). Government stated (September 1974) that "according to the Rules of the Business of the Control Board, it transacts its business, either through holding regular meetings or through processing of the cases under the Emergency procedure. In the latter case, the concurrence of Finance is also taken and thereafter the decisions taken are ratified by the Board" and that "infrequent meetings of the Board have not, in any way, affected the execution of the works on the project".

The two barrages at Farakka and Jangipur and the feeder canal are indivisible parts of the project, from which the expected benefits cannot be derived, unless all the three inter-related components are completed. In the scheme of this project, the canal providing the vital link between the Ganga and the Bhagirathi through the Farakka and the Jangipur barrages, holds the key. Although the most difficult and complicated parts of the project, viz., the two barrages, were completed by June 1971, (except the erection of gates and hoisting arrangements of the barrage at Jangipur which was also completed by the end of Monsoon of 1973) the link canal is not yet ready. Upto November 1973 out of 157.83 crores cft. of earthwork allotted to the contractors (in September 1974 the total quantity was intimated by Government as 154.47 crores cft. on re-assessment) 149.47 crores cft. had been executed. By June 1974, 152.52 crores cft. of earthwork were completed. Counting from 1962, it has taken about twelve years to excavate the canal. Owing to the delay in completion of the canal the capital investment of Rs. 127 crores on the project, upto October 1974 remains mostly unproductive. and Calcutta port, not yet deriving the benefits from the project, continues to spend Rs. 8-9 crores every year, on dredging operations. The only benefit so far provided by the project is the improvement of communication facilities in the region by the contractor of the rail-cum-road bridge over Farakka Barrage.

(Vide Audit Paragraph 28)
 Earth work done in different years by different Agencies

(Quantities in crores cft).

Item of work	When allotted	Estimated quantity	Allotted quantity	Upto working season 1965-66	Upto working season 1966-67	Upto working season 1967-68	Upto working season 1968-69	Upto working season 1969-70	Upto working season 1970-71	Upto working season 1971-72	Upto Working season 1972-73	Total quantity done upto working season 1972-73	Balance quantity remaining to be done beyond 1972-73 working season with reference to allotted quantity	Balance quantity remaining to be done beyond 1972-73 working season as assessed quarterly (April 1974) by the Project
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Working season normally from middle of November to middle of June (7 months)														
Departmental RD 0 to 10		14.82	14.82	3.59	3.28	0.59	0.43	2.45	1.20	3.18	0.10	14.82	..	..
Contractor A RD 13 to 68	January 1965	76.62	75.00	14.69	18.15	14.11	11.09	8.96	1.95	..	2.70	71.65	3.35	1.62*
RD 97 to 103	April 1969	6.61	6.61	..	..	..	0.01	1.54	0.25	4.69	..	6.49	0.12	0.08
RD 103 to 126	January 1971	26.25	22.35	..	..	..	..	..	5.10	5.74	9.80	20.64	1.71	1.45
Total Contractor A			103.96	14.69	18.15	14.11	11.10	10.50	7.30	10.43	12.50	98.78	5.18	3.15

*1.85 According to the Ministry (December 1974).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<i>Contractor B</i>														
RD 68 to 97	December 1967	31.14	32.26	..	..	0.80	4.90	6.03	1.69	7.38	8.28	29.08	3.18	1.5**
<i>Contractor C</i>														
RD 103 to 126	December 1967	26.25	21.50	..	..	0.42	0.84	..	..	..	..	1.26	(Contract terminated and remaining work allotted to contractor A)	
Other petty contractors RD 8 to 48 (Works closed)		9.23	2.23	..	..	..	..	..	..	..	..	2.23	(Work closed)	(Work closed)

**0.28 According to the Ministry (December 1974).

APPENDIX II

(Vide Para 6.6)

Notes in the Ministry of Law Branch Sectt. Calcutta

SUBJECT:—*Excavation of feeder canal by Messrs. Tarapore and Co. claims for enhancement of rates—arbitrator for dispute.*

REF.—*Letter No. 3W-54/2537, dated 9/16-9-71 from SE, Canal Circle F.B. Project.*

It appears that the contractors claim for increase in the units rates has been agreed to on an *ex-gratia* basis with regard to works done by the contractor from September 1969 and that the contractor's claim with regard to increase in the unit rate for works done prior to that period has been rejected. Due to the rejection of the contractors claim for enhancement of the rate for the work done prior to September 1969, the contractor has requested that as there is a dispute between the contractor and the Government arising as a result of the rejection, the same should be referred to arbitration under clause 25 of the contract conditions.

2 The Department has posed the question whether the above dispute is referable to arbitration under clause 25 of the conditions of contract in view of the fact that the contract does not contain any condition for enhancement in the unit rate on the grounds mentioned by the contractor. From the terms and conditions governing the contract under consideration, it appears that the contract envisages increase in the rate only in two contingencies, namely:

- (i) those mentioned in clause 10(c) of the conditions of contract at page 11; and
- (ii) those mentioned in item No. 25 of the additional terms and conditions in chapter III at page 38.

The Departments' contention is that the contractor's claim for increase in the rate is not covered by the above provisions and as such he is not entitled to the increase in accordance with the terms and conditions of the contract. Such being the position the Department has sought our opinion whether the dispute arising as

a result of rejection of the contractor's claim for increase the unit rate is outside the scope of the contract and as such no referable to arbitration.

3. Clause 25 of the conditions of contract which deals with arbitration appears to be very widely worded and it seems difficult to contend that such a dispute is outside the scope of arbitration clause. Further on reference to the terms and conditions of the contract there appears nothing to indicate that it is one of those excepted matters referred to in the arbitration clause. In the above circumstances, if the contractor's claim for reference of the above disputes to arbitration is not acceded to, it will be open to the contractor to file an application under sec. 20 of the Arbitration Act, 1940, in which event if the court grants the application, the court may appoint an arbitrator of its own choice, who may not be a Government servant, if there is no agreement between the parties upon the arbitrator. Again, if the request for arbitration made by the contractor is rejected, the contractor may also file a suit and in the above circumstances it may not be possible for the Government to make an application for stay of the suit under Sec. 34 of the Arbitration Act, 1940. In the above circumstances, the better course to follow seems to be to accede to the request of the contractor for reference of the dispute to arbitration under clause 25 and appoint an arbitrator, reserving at the same time the Government's right to raise objection as the arbitrability of the dispute sought to be referred by the contractor. As the decision of the dispute referred to the arbitrator will be mainly dependent upon the interpretation of the terms and conditions of the contract which is a question of law, at the earliest possible opportunity the Department should make application in writing to the arbitrator to state a case for the opinion of the court as to the question of law involved under Sec. 13(b) of the Arbitration Act, 1940. If the Department does not make such a prayer to the arbitrator and leaves the decision of the above question of law with the arbitrator, the arbitrator's decision as to the point of law even if erroneous would be final and binding in view of the decision of the Supreme Court in *Thawerdas Vs. Union of India* (AIR 1955 S.C. 408) and subsequent decisions of the Supreme Court.

Sd/- (S. S. KAR),

Joint Secretary and Legal Adviser.

S.E., Canal Circle, F.B.P.

M. of Law UO No. 2423/71-Adv (Cal) dt. 22-9-1971.

APPENDIX III

(Vide Para 6.8)

No. 7(20)/73-IF

BHARAT SARKAR

GOVERNMENT OF INDIA

(Sinchai Aur Vidyut Mantralaya)

Ministry of Irrigation and Power

New Delhi, the 14th August, 1973

(As amended vide corrigendum No. 7(20)/73-IF dated 20-8-1973)

OFFICE MEMORANDUM

It has come to the notice of this Ministry that in a Central Project the Chief Engineer appointed the Superintending Engineer as arbitrator under the relevant clause of the contract agreement to arbitrate over the contractors claims which had been examined by a highpowered Committee appointed by the Ministry and that Committee had rejected certain claims of the contractor. The Ministry of Finance took a strong exception to the appointment of the Superintending Engineer as arbitrator in the said case to arbitrate and sit in judgment on the recommendations of the Committee. That Ministry held the view that in such cases a more senior officer should have been appointed as arbitrator considering both the magnitude of the claims of the contractor, and the level of the Committee which had already gone into these claims.

The matter has been carefully examined in the Ministry and the following instructions are issued for the guidance of the Chief Engineers and other authorities concerned with the appointment of arbitrator and dealing with arbitration cases.

1. Contracts costing upto Rs. 100 lacs.

- (a) The Chief Engineer shall appoint an arbitrator, where the aggregate claims of the contractor do not exceed Rs. 5 lacs, from the panel of arbitrators, approved by the Central Water and Power Commission or the Ministry of Irrigation and Power. In case no panel has been drawn an officer of the rank of Director/Superintending Engineer with known integrity having previous experience

and not connected with the execution of the work in question may be appointed as arbitrator.

- (b) The Chief Engineer shall obtain prior approval of the Ministry of Irrigation and Power, where the aggregate claims, of the contractor exceed Rs. 5 lacs.

2. Contract costing more than Rs. 100 lacs.

The Chief Engineer shall obtain prior approval of the Ministry of Irrigation and Power to the appointment of arbitrator irrespective of the amount involved of the claims of the contractor.

3. Notwithstanding item 1(a) above, where a Committee constituted by the Ministry of Irrigation and Power has gone into the claims of the contractor and has made recommendations thereon, the appointment of arbitrator shall, in such cases, be made with the prior approval of the Ministry of Irrigation and Power. Further, if a representative of the Ministry of Finance was a member of the Committee, that Ministry's concurrence would also be obtained.

The receipt of this O.M. may please be acknowledged.

(Sd/-

(D. RAJAGOPALAN)

Director (Internal Financial Adviser).

Copy forwarded to:—

1. Chief Engineer, Salal Hydro Electric Project, Riasi (J&K).
2. Chief Engineer, Loktak Hydro Electric Project, P.O. Bishenpur (Manipur) Imphal.
3. Chief Engineer, Baira Suil Hydro Electric Project, P.O. Chamba (Himachal Pradesh).
4. Financial Adviser & Chief Accounts Officer, Central Hydro Electric Project Control Board, New Delhi.
5. Secretary, Central Hydro Electric Projects Control Board, New Delhi.
6. General Manager, Farakka Barrage Project, P.O. Farakka Barrage, District Murshidabad, West Bengal.
7. Financial Adviser and Chief Accounts Officer, Farakka Barrage Project, P.O. Farakka Barrage, District Murshidabad, West Bengal.

8. Secretary, Farakka Barrage Control Board, Shastri Bhavan, New Delhi.
9. Chief Project Engineer, Badarpur Project, New Delhi.
10. Financial Adviser & Chief Accounts Officer, Badarpur Project, Badarpur, New Delhi.
11. Secretary, Badarpur Power Project Control Board, New Delhi.
12. Central Water and Power Commission (Water Wing), New Delhi.
13. Central Water and Power Commission (Power Wing), New Delhi.
14. JS(I), JS(GB), JS(P), JS(A), Ministry of I. & P.
15. P.S. to Addl. Secretary, Irrigation and Power, New Delhi.
16. P.S. to Secretary, Irrigation and Power.
17. D.S. (P) | DS(E) | US(P) | US(EL), DD(GB), Min. of I & P.
18. FBP & E.L. III Sections Ministry of I & P.

Sd/- (D. RAJAGOPALAN)

Director (Internal Financial Adviser).

APPENDIX IV
(Vide Para 6.13)
GOVERNMENT OF INDIA
MINISTRY OF IRRIGATION AND POWER
PLANT MACHINERY CIRCLE, F.B.P.

No. Con-4(3)

Dated, the 1st Jan., 1973.

From:—Shri D. N. Rao,
Arbitrator & Superintending Engineer,
Plant & Machinery Circle, Farakka
Barrage Project, P.O. Farakka Barrage.

To,

1. Messrs. Tarapore & Co.
175/1, Mount Road, Madras.
2. The Superintending Engineer,
Canal Circle,
Farakka Barrage Project.
P.O. Farakka Barrage.

Dear Sirs,

SUBJECT:—*Arbitration in the matter of disputes between M s. Tarapore and Co. and the Union of India, in respect of excavation of Feeder Canal from RD-10.00 to RD-68.00 on the Farakka Barrage Project under tender No. EE (FCD)-1 1966-67.*

With reference to the above, I hereby give you notice that I have made and published my award in the matters referred to me and a copy thereof is forwarded herewith for your information.

Yours faithfully,

Enclo:—As stated.

Sd/-
(D. N. RAO)
Arbitrator and Superintending Engineer,
Plant and Machinery Circle,
Farakka Barrage Project.

Copy to the General Manager, Farakka Barrage Project, P.O. Farakka Barrage, with a copy of the award.

Sd/-

(D. N. RAO)

Arbitrator and S.E., P and M,
Circle, FBP.

AWARD

In the matter of arbitration regarding disputes and differences arising out of and in connection with the contract for excavation of Feeder Canal on the Farakka Barrage Project, between R.D. 10.00 and R.D. 68.00 under tender No. EE(FCD)-1/1966-67 between the contractors, Messrs. Tarapore & Co., Engineers and Contractors, 175/1, Mount Road, Madras-2, herein after called "the claimant" and the Union of India, hereinafter "the Respondent".

1.00. By his communication No. DB/Con/1/12207(6) dated the 6th Nov. 1971, the General Manager, Farakka Barrage Project, acting on for and on behalf of the President of India, appointed me as the sole Arbitrator to decide the disputes that had arisen between the President of India and the Claimant, Messrs. Tarapore & Co. under or in connection with the contract between the Union of India and the claimant for excavation of the Feeder Canal on the Farakka Barrage Project between R.D. 10.00 and R.D. 68.00 the value of the contract being Rs. 8,47,54,400.00.

1.01. The said appointment was made pursuant to the provisions in the said contract providing for disputes between the parties being referred to Arbitration of person to be appointed by the General Manager of the Farakka Barrage Project.

2.00. Pursuant to the said appointment, I entered upon the reference on the 24th November, 1971 and called upon the claimant to submit the statement of case and also provide a copy thereof to the Superintending Engineer, Canal Circle, Farakka Barrage Project, who represented the Union of India. The respondent was also called upon to furnish their counter-statement to the contractor's claim

and both parties were also required to submit all documents on which they intended to reply and provide copies of the same to the other side.

2.01. The claimant submitted their statement of claim under cover of their letter No. Ab/3295/71 dated the 14th December, 1971, wherein they claimed an aggregate compensation of Rs. 2,52,10,385.33, for the period from January, 1966 to September, 1959, less such amount as had already been paid for increase in prices of petrol, H.S.D. and lubricants for the relevant period, together with interest at nine per cent on the net amount of compensation from 14th December 1971 till date of payment. The respondents furnished their counter-statement under cover of their letter No. 3W-54/1326(4) dated the 12th May, 1972 denying the said claim. The claimant also submitted with their statement of claim, copies of documents, on which they intended to rely.

3.00. Due to various pre-occupations, the hearing of the case could not be taken up till the 22nd August, 1972.

3.01. After due notice to both parties, the hearing was taken up on 22-8-72. Both parties were present and were also represented by counsel. The hearing was commenced on 22-8-72 and the counsel for the claimant stated the case and exhibits C to C 27(a) were marked by consent to both parties on behalf of the claimant.

3.02. The hearing was adjourned and in the meanwhile the parties were directed to obtain the necessary orders of Court extending the time for making of the award by a further period of four months.

3.03. In compliance with my directions, the parties instituted miscellaneous case No. 66 of 1972 on the file of the sub-ordinate Judge, Murshidabad, praying for an extension of time for making of the award. By order dated the 1st September, 1972, the learned sub-ordinate Judge of Murshidabad, allowed the prayer in the petition and extended the time for making of the award to 2nd January, 1973.

4.00 Notice of the further hearing to be held on the 7th and 8th October, 1972 was given to both parties and at the request of the claimant, the hearing was adjourned to the 26th and 27th October, 1972.

4.01. The hearing was resumed on the 26th and 27th Oct. '72 and the marking of the documents of the claimant was completed with the consent of both parties. The claimant submitted two additional sets of documents and also furnished copies of the same to the other

party. The said documents were received and marked with consent of parties as Exhibits C 28 to C 42.

4.02. The Respondent also produced certain documents called for by the claimant and also submitted their set of documents. These were received and marked by consent of parties as Exhibits D to D-6-Y.

4.03. Both parties stated that they are not leading any oral evidence.

4.04. Counsel for the claimant made his submissions on behalf of the claimant, and referred to various documents in support of his contentions. Thereafter the counsel for the respondent made his submissions on behalf of the Union of India and the claimants counsel replied to the same.

4.05. Both parties agreed that the quantities of earth work executed in the different periods from 1-1-1966 to 30-9-1969 as furnished by the respondent in their counter-statement may be accepted as correct.

5.00. After carefully going through the statement of claim and the counter statement and after carefully considering the documentary evidence placed before me and after carefully considering the legal arguments advanced on behalf of each party, I, Shri D. N. Rao, proceed now to make and publish my award, to-day, the 30th day of December, 1972 at my office at the Farakka Barrage Project, P. O. Farakka Barrage, Distt. Murshidabad, West Bengal.

1. I reject the claim of Messrs. Tarapore & Co. for compensation in respect of the work executed from 1-1-1966 to 31-12-1966.

2. I award that the Union of India, the respondent herein, do pay to Messrs. Tarapore & Co., the claimant herein, in respect of the work executed by the claimant during the period from 1-1-1967 to 30-9-1969, the following amounts:

(a) For work done from 1-1-1967 to 31-12-1967	Rs. 31,85,170.20
(b) For work done from 1-1-1968 to 31-12-1968	Rs. 49,19,218.75
(c) For work done from 1-1-1969 to 30-9-1969	Rs. 40,83,170.50
TOTAL	Rs. 1,21,87,559.45

I further direct that the Union of India, the respondent, will be entitled to deduct from the amount of Rs. 1,21,87,559.45, the sum of

Rs. 23,92,610.00 (Rupees Twenty three lakhs ninety two thousands six hundred and ten) only being the amount paid to the claimant, Messrs. Tarapore & Co. towards increase in cost of petrol, H.S.D. oil and lubricants for the above period.

In the result, I award that the respondent do pay to the claimant, the net sum of Rs. 97,94,949.45 (Rupees Ninety seven lakhs ninety four thousand nine hundred forty nine and paise forty five) only. This will be in addition to what has been already paid or payable to them under the said contract for the works executed during the said period.

This does not cover the claim resulting from the devaluation of the Indian rupee, since the claimant had state that such claim is being separately considered.

3. The claim of the contractor for payment of interest on the amount claimed by them upto the date of this award is rejected.

4. I direct the Union of India, to pay the claimant, Messrs. Tarapore & Co. interest at five percent on the aggregate amount of Rs. 97,94,949.45 (Rupees Ninety seven lakhs ninety four thousands nine hundred forty nine and paise forty five) only awarded by me to the claimant herein above, from the date of this award till date of payment or decree whichever is earlier.

5. I direct that such of the parties to the reference shall bear his or their costs in these proceedings.

6.00. Made and pronounced by me this 30th day of December, 1972 at my office at the Farakka Barrage Project, P. O. Farakka Barrage, Distt. Murshidabad, West Bengal.

Sd/- D. N. RAO,

Arbitrator and
Superintending Engineer,
P and M, Sircle, F. B. Project.

APPENDIX V

(Vide Para 6.15)

Notes in the Ministry of Law Branch Sectt. Calcutta

The Claims of the contractor are mainly based on the following grounds;

- (i) that there was radical change in the working conditions in the project area due to deterioration in the law and order situation and this resulted in increase in costs of execution of the work; and
- (ii) that there was an alleged assurance given to the contractor that it would in due course be compensated for the loss sustained by it.

2. As regards the first contention, reference may be made to the case of *Messrs. Alopi Prosad & Sons Ltd., vs. Union of India* reported in AIR 1960, SC 588, in which the following principles of Law relevant to the present case have been laid down:—

- (1) a contract is not frustrated merely because the circumstances in which the contract was made are altered.
- (2) the contract does not enable a party to a contract to ignore the express covenants thereof and to claim payment of consideration for performance of the contract at rates different from the stipulated rates on some plea of equity.
- (3) Compensation quantum merit is awarded for work done, cannot be awarded for work done or services rendered pursuant to the terms of a contract where the contract provides for consideration payable in that behalf and an express stipulation governing the relations to the parties under a contract cannot be displaced by assuming that the stipulation is not reasonable.

3. In my view, the judgment in *Alopi Prosad's* case is a complete answer to the contractors claims for payment at increased rates on account of altered working conditions and the arbitrator was bound to follow the principles laid down in the said Supreme

Court case. In this connection, it may also be pointed out that an arbitrator is not a conciliator and cannot ignore the law or misapply it in order to do what he thinks as just and reasonable. He is a tribunal selected by the parties to decide their disputes according to law and so, he is bound to follow and apply the law and if he does not, he can be set right by the court provided his error appears on the face of the award. Parties who make a reference to arbitration have the right to insist that the tribunal of their choice shall decide their dispute according to law (AIR, 1955, Supreme Court, page 468). There is however one exception to the above proposition and exception is that when the Parties choose specifically to refer a question of Law as a separate and distinct matter the parties will be bound by the decision of the Arbitrator even if it is based on wrong interpretation of law. It seems that in the present case no question of law as a separate and distinct matter has been specifically referred to the Arbitrator for his decision so as to oust the jurisdiction of the court to set it right. As regards, the other ground namely that assurances were given to compensate the contractor for the losses sustained it may be stated that this ground does not seem to carry much force as such an assurance even if it was given is not binding on the Government of India as an agreement for the reasons that it does not comply with the provisions of Article 299 of the Constitution of India. Para 25 of the Judgment reported in A.I.R. 1955, S.C. at page 468 may be seen in this connection. The present award seems to be a flagrant case where Arbitrator has misapplied the mistake (please see A.I.R. 1971 S.C. page 696).

4. The law relating to party's right to have the award set aside or remitted seems to be that when an arbitrator commits a mistake either in law or in fact in determining the matters referred to him but such mistakes do not appear on the face of the award or in a document appended to or incorporated in it so as to form part of it, the award will neither be remitted nor set aside notwithstanding the mistake (please see A.I.R. 1971 S. C. page 696).

5. The arbitrator in the present case has been no reasons in the award nor does the said award itself show any error or mistake on the part of the arbitrator. It is however true that unless the first ground on which the contractor based its claims were accepted by the Arbitrator, the Arbitrator could not have made the award in favour of the contractor. It have stated earlier in this note that the contractor's said claims cannot be sustained in law. Can it then be said that it is apparent on the face of the award that the Arbitrator has committed a mistake by misapplying the law? The award does not disclose that the Arbitrator has tied himself down by any parti-

cular proposition of law so as to enable the court to examine the correctness thereof which the court can do as explained earlier, only when the mistake is apparent on the face of the award. I, therefore, feel that it will be difficult to make out a case for interference by the court on the ground that there is an error on the face of the award. However, there is an outside chance that the court, on the facts and circumstances of the case and considering that the arbitrator apparently has misapplied the law in making the award, may set aside the award. It may be pointed out that perversity is misconduct within the meaning of section 30 of the Arbitration Act, 1940. A very heavy amount has been awarded in favour of the contractor with interest at the rate of 5 per cent per annum which is to accrue from the date of the award. In case, therefore the petition for setting aside the award, if any filed, is dismissed by the court the project will have to pay interest for the period that may be taken in prosecuting the petition. The risk of paying interest for the said period is, therefore, involved in filing a petition for setting aside the award. I have given indications in the earlier portion of this note the difficulties which the project will have to face on account of the Award being a non-speaking one. However, considering the amount involved and the fact that the award could not have been given by the Arbitrator unless he misapplied the law, though this fact is not apparent from the face of the award, there is a remote possibility that the court may interfere and set aside the award. Under the circumstances, the department may take risk and file a petition for setting aside the award instead of accepting the award without contest. I, however, feel that in the present case the project should get the petition drafted by a competent counsel from the Central Government High Court Panel and engage him to argue the petition for setting aside the award. If however, there is no time to get the petition drafted by a counsel from the High Court Panel, the petition drafted by the G.P. may be filed to save limitation. In the Petition, the following two additional points may be taken.

(a) In view of the facts that though the points were taken before the Arbitrator that there was no arbitration agreement for determination of the disputes in question and that the Arbitrator had no jurisdiction to decide them the Arbitrator instead of directing the parties to have this question decided by the court himself decided his own jurisdiction constituting a legal misconduct on his part. [Please see first 6, lines at page 656 of (1962) I.S.C.I., *Jawaharlal Burman vs. Union of India*].

(b) The Arbitrator ought not have relied solely on the statements furnished by the contractor in support of its claims in the absence

of any oral evidence affirming the correctness of the contents of such statements.

6. In order to minimise the liability on account of interest in case the court does not grant the petition all possible steps should be taken to ensure that the petition for setting aside the award is disposed of with utmost expedition.

Sd/-

A. A. CHOUDHURY,

Joint Secretary and Legal Adviser.

Ministry of Law and Justice (Branch Secretariat)

Calcutta-1.

General Manager,

Farakka Barrage Project, Farakka.

Ministry of Law U.O. No. 389/73-Adv(Cal) dt. 16-2-1973

APPENDIX VI

(Vide Para 6.17)

MINISTRY OF LAW, JUSTICE AND COMPANY AFFAIRS

(DEPARTMENT OF LEGAL AFFAIRS)

New Delhi.

The dispute in the present case relates to work done in connection with the excavation of the Feeder Canal between R.D. 10 and R.D. 68 on the Farakka Barrage Project. The claim made by M/s Tarapore and Co. (hereinafter referred to as the Claimants) relates to the aforesaid work executed by them from January, 1966 onwards.

2. The Claimants were granted enhanced rates as per their claims from 1969-70 onwards. Their claim for the period prior to 1969-70 was rejected by the Government authorities. The dispute relates to the rejected portion of the claim for the period January 1966 to September, 1969. The disputed claim, arrived at on the basis of the difference between the rate derived from the cost on actual working and the rate paid under the terms of the contract, amounts to Rs. 2,52,10,385.33.

3. By its letter dated November 6, 1971 the Government at the request of the Claimants appointed Shri D. N. Rao as sole arbitrator to hear and determine the aforesaid dispute, reserving at the same time the right to contend regarding the validity, competence and authority of the Claimants for initiating the reference. The reference was made in pursuance of clause 25 of the Conditions of Contract and the arbitrator accordingly entered upon the reference. This clause provides for the reference of the disputes arising out of the contract to the sole arbitration of the person appointed by the Chief Engineer, (now designated as General Manager), Farakka Barrage Project.

4. On August 14, 1972 the Government filed a petition under Section 13(b) of the Arbitration Act, 1940 contending that the dispute was not referable to arbitration under clause 25 of the Conditions of Contract on the ground that the contract contained no provision for enhancement of rates except on matters stipulated in clause 10C of the Conditions of Contract and item 25 of the Additional Terms

and Conditions, which did not cover the present claim of the Claimants. It was therefore urged that the matter involved the interpretation of the terms and conditions of the contract, especially as regards the scope and extent of the arbitration clause, and hence the arbitrator should state a special case for the opinion of the Court on the question of law involved in the matter.

5. By his Order dated December 28, 1972 the arbitrator directed that there was no need to refer the question for the opinion of the Court of law since the points in dispute could be decided by him as arbitrator. He accordingly rejected the Government's petition (under section 13(b) of the Arbitration Act, 1940) dated August 14, 1972.

6. On December 30, 1972 the arbitrator made an award in relation to the dispute under which an amount of Rs. 97,94,949.45 became payable by the Government to the Claimants for the period 1-1-1967 to 30-9-1969 alongwith interest thereon at five per cent from the date of the award till the date of payment or the date of decree whichever is earlier. The Claim in respect of the period 1-1-1966 to 31-12-1966 was rejected by the arbitrator.

7. The Government now seeks to challenge the award under sections 30 and 33 of the Arbitration Act, 1940 on two grounds, namely, (a) that the arbitration had no jurisdiction to decide the dispute since the enhancement in rates claimed by the Claimants was not provided for under the terms of the contract and (b) that when the arbitrator rejected the Government's petition under section 13(b) of the Arbitration Act, 1940, that virtually amounted to misconduct on the part of the arbitrator.

8. On the question regarding the jurisdiction of the arbitrator clause 25 of the Conditions of Contract providing for settlement of disputes by arbitration is relevant. According to this clause except where otherwise provided in the contract, all questions and disputes relating to any question, claim, right, matter or thing whatsoever, in any way arising out of or relating to the contract, or otherwise concerning the works, or the execution or failure to execute the same, whether arising during the progress of the work or after the completion or abandonment thereof, shall be referred to the sole arbitration of the person appointed by the Chief Engineer, Farakka Barrange Project. The present dispute does not relate to a matter specifically excepted under the contract. As pointed out by the Branch Secretariat of this Ministry at Calcutta in its note dated 22-9-1971 (pp. 15-16/c) clause 25 of the Conditions of Contract is

very widely worked and it is difficult to contend that a dispute as in the present case is outside the scope of the arbitration clause. Hence the first ground for challenging the award has no substance in law.

9. As regards the Government's contention that the contract contains no provision for enhancement of rates other than those specifically mentioned in clause IOC of the Conditions of Contract and item 25 of the Additional Terms and Conditions, it is significant to note that the claim made by the Claimants is not a claim for enhancement of rates pure and simple but a claim for compensation for loss sustained while executing the work. This seems to have been brought out by the Claimants' letter dated June 7, 1971 to the General Manager, Farakka Barrage Project.

10. In view of the above considerations namely, that the arbitration clause is very widely worded and that the Claimants' claim is not essentially one relating to enhancement of rates, it is really difficult to sustain the contention advanced by the Department that the arbitrator has no jurisdiction under the arbitration clause (being clause 25 of the Conditions of Contract) to decide the present dispute. Further on the facts and circumstances of the present case and specially the Government's petition under section 13(b) of the Arbitration Act, 1940, it would be now too late for the Government to contend that the arbitrator has no jurisdiction to decide the dispute.

11. As regards the contention relating to misconduct on the part of the arbitrator it is well settled under the Arbitration Act, 1940 that it is entirely optional to the arbitrator to state a special case for the opinion of the Court. Section 13(b) which uses the expression "the arbitrator shall... have power to state a special case", is merely permissive and not obligatory. Refusal to state a special case to a Court of law on a question of law cannot therefore amount to misconduct on the part of the arbitrator. [Russell on Arbitration Eighteenth Edition (1970), p. 389].

12. In this connection the further question arises whether the award can be said to be vitiated by an error apparent on the face of the award, attracting thereby the provisions of section 30 of the Arbitration Act, 1940. If an award is challenged on the ground of contravention of the terms of the contract (which depends upon the construction of the terms of agreement between the parties) and if it does not contain any reference to the construction of the terms embodied therein, the question of illegality apparent on the face of the award does not arise. In *Allen Berry and Co. v. Union of India*

(1971) 3 S.C.R. 282 at 288-9, the Supreme Court had to examine what is error apparent on the face of the award in relation to section 30 of the Act. The Court held that when parties choose their own arbitrator to be the judge in the dispute between them, they cannot, when the award is good on the face of it, object to the decision either upon the law or the facts. Therefore, even when an arbitrator commits a mistake either in law or in fact in determining the matters referred to him, but such mistake does not appear on the face of the award or in a document appended to or incorporated in it so as to form part of it, the award will neither be remitted nor set aside.

13. There is no reason why an arbitrator who has not been asked to state an award in the form of a special case should on the face of his award give any reasons for any part thereof. Simply because he does not give any reasons for the award that does not mean that there is an error of law apparent on the face of the award. [See *Russell on Arbitration*, Eighteenth Edition (1970) p. 366]. An arbitration award must be set aside on the ground of an error on the face of it when the reasons given for the decision either in the award or in any document incorporated with it are based upon a legal proposition which is erroneous, [*Alopi Parshad and Sons v. Union of India*, (1960) 2 S.C.R. 793 at 803]. However, this question does not arise when no reasons are given by the arbitrator for his decision in the award.

14. An arbitrator is justified in law in not giving a "reasoned" or speaking award. The award in the present case is a non-speaking award. That does not *ipso facto* mean that there is a mistake of law apparent on the face of the award. The award is good and cannot be remitted or set aside simply on the ground.

15. The Branch Secretariat of this Ministry at Calcutta has advised that there is only an "outside chance" that the Court may set aside the award and that the possibility of the Court interfering with the award is remote. However, it has suggested that the Department may take risk and initiate proceedings for setting aside the award. In this connection a reference has been made to the decision of the Supreme Court in *M/s. Alopi Parshad v. Union of India* [(1960) 2 S.C.R. 793 at 806], wherein it was held that a contract is not frustrated merely because the circumstances in which it was made are altered. The Court had in that case found as a matter of fact that the contract was modified by mutual consent after such alteration in circumstances had occurred. In the present case the facts are clearly distinguishable in the sense that there was no such modification by mutual consent. If on a consideration of the

terms of the contract, in the light of the circumstances existing when it was made, it appears that the parties never agreed to be bound in a fundamentally different situation which has unexpectedly emerged, it may be difficult to pin down the parties to the express terms of the contract. The claimant is not therefore prevented a claim on the ground of change in the circumstances. It cannot, therefore, be said that there is an error of law apparent on the face of the award.

16. In *Thawar Dass v. Union of India* [(1955) 2 S.C.R. 48] the Supreme Court held that when a specific type of loss is directly contemplated by the parties to a contract and they expressly stipulated that no damages will be payable in respect of it, they must be bound down to their agreement and any claim for damages in respect of such loss must be dismissed. The claim made by the party in that case related to a matter so excluded. In the present case the claim made by the Claimants does not related to a matter in respect of which claims have been expressly barred by the Conditions of Contract.

17. An objection has also been taken in the arbitration suit to the effect that the claim for interest was beyond the scope of reference and therefore untenable in law. The arbitrator has awarded interest from the date of the award to the date of payment or decree whichever is earlier. It has been held by the Supreme Court in *Union of India v. Bungo Furniture Pvt. Ltd.* [(1967) 1 S.C.R. 324 at 329] that the arbitrator has jurisdiction to grant interest on the amount of the award from the date of the award till date of the decree, since it is an implied term of the reference that the arbitrator will decide the dispute according to existing law and give such relief with regard to interest as a court could give if it decided the dispute. [See also Russel on *Arbitration*, Eighteenth Edition (1970), p. 292].

18. In view of the above I am of the opinion that on the facts and circumstances of the present case the chances of the Court interfering in the matter and setting aside the award dated 30-12-1972 are very remote. On the contrary, any such litigation may result in postponement of the actual date of payment of the amount awarded to the Claimants or of the award being made a decree of the Court, which would virtually result in an increase in the liability of the Government to pay interest at five per cent on Rs. 9794949.45, being the amount awarded by the arbitrator. As the case of the Department is weak, the risk of Government being required to pay a substantial amount by way of interest in addition to costs in the event of the Department losing the case (as it

appears very likely if the matter is proceeded with) is not worth taking.

19. In the end I would advise the Government not to pursue the matter further in respect of the application for setting aside the award filed before the Court. The claim of the Claimants as allowed by the arbitrator may be paid off along-with interest at five per cent as mentioned in the award, once the award is made a decree of the Court under section 17 of the Arbitration Act, 1940.

20. In the circumstances the Court may be persuaded to proceed to pronounce judgement according to award followed by a decree upon it *as early as possible*, more so when any delay in this behalf will involve Government in payment of a large sum by way of interest (about Rs. 40000 per month) to the Claimants, which should for obvious reasons be avoided. It is advisable that that the award is made a rule of the Court before it may be made enforceable.

Sd/- (R. S. GAE),

Secretary.

22-5-1973.

Ministry of Irrigation & Power (Shri R. V. Subrahmanian)

Min. of Law & Justice & C.A. (LA) u.o. No. 21800 73-Adv(F)
dated 24.5.1973.

APPENDIX VII

Summary of main Conclusions/Recommendations

S. No.	Para No.	Ministry/ Department	Conclusion/Recommendation
(1)	(2)	(3)	(4)
1	1.6	Agriculture & Irrigation	The Committee are glad that though belated, the Farakka Project has now been completed and the Bhagirathi—Hooghly has, according to reports, started receiving 40,000 cusecs of water. Audit has commented upon the long and expensive delay in the execution of the project which, according to experts, has already accentuated the forces adversely affecting the continued navigability of the river. If for any reason the discharge of an adequate volume of water, estimated by experts at 40,000 cusecs and repeatedly assured by the authorities, does not happen, the Committee fear it will be a grievous blow not only to Calcutta Port but to the entire economy of the wide, populous and productive region abutting on it, as also imperil Haldia's enormous potentialities. The Committee trust, however, that all difficulties will be overcome and the hopes, so long generated by Farakka, will to the extent possible, be fulfilled.
2	2.4	-do-	The Committee are greatly perturbed to find that while in 1961 and again in 1965, it was decided that in view of the character of

(1)

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(4)

the project, its essentiality and the benefits which were likely to be derived from the various works, it should be completed by 1970-71, in actual fact only the barrage was completed in 1971, but the essential canal work for taking the headwaters from the Ganga to feed the Bhagirathi-Hooghly system and save the deterioration in the Calcutta Port was completed only four years later in 1975. It appears that the requisite firmness and determination to see that the canal work was taken up in right earnest and completed as per schedule was lacking. The Committee see no reason why the canal work could not be initially started from September 1962 as per the original schedule. The delay of one year at that point is sought to be explained on the not very tenable ground that special details concerning finalisation of canal sections, disposition of spoil banks, proportion of manual labour to dredge excavation etc. had to be settled with the German expert. The Committee are unable to accept Government's plea that explorations and investigations with the soil properties also caused delay in finalising the detailed estimate for invitation of tenders. Since the scheme was envisaged many years earlier and there was a decision in October, 1961 to complete the project in eight years time from 1962 to 1970, the Committee see no reason why in 1961-62 itself Government could not consult experts, whether our own or from abroad, and settle all essential details.

The Committee cannot appreciate the delay in calling for tenders or in settling the rates for work. Government with its vast experience of excavation of canals should have been able to settle these details firmly and in time. The Committee are also not prepared to accept the plea of helplessness when the contractors to whom the work was awarded in 1963 did not proceed with it with the requisite speed. The Committee feel that it should have been possible for Government to give the widest publicity *ab initio* to these tenders so as to facilitate adequate response. Government should have ensured that the tenders were scrutinised and finalised with due promptitude and on a realistic basis, having regard to the prevalent rates. Another basic aspect where a clear decision was necessary, concerned the work to be done through contractors and the extent to which the dredgers were to be utilised. The Committee consider that there was avoidable delay in this crucial area. The Committee are also perturbed that on the plea of paucity of funds, tenders were not fixed till the end of 1967 for reaches beyond RD 68. This administrative inaptitude and lack of realization of the urgency of the project was responsible for the loss of nearly three years in the beginning and it is this 'original sin', as it were, which is responsible basically for the long delayed completion of project.

The Committee would like Government to investigate the matter thoroughly with a view to deducing lessons and fixing responsibility on those who did not show leadership and understanding in settling all the requisite details in time, in inviting and finalising

(1)

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the tenders and in effectively co-ordinating the execution of the works in the field with an upright adherence to the time schedule.

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2.7

Agriculture & Irrigation

The Committee are surprised at the plea put forward that as the local population insisted on the provision of alternative crossings in place of the existing ones, the excavation work was rendered more difficult. The Committee would have expected Government to have taken the initiative in the matter and by advance planning ensure that alternative crossings were provided for the local population and the question of any agitation being built up in that behalf was obviated. The Committee cannot help feeling that the problems of the local population were perhaps not sympathetically approached and understood, for otherwise it should have been possible to enthuse and involve them actively in the implementation, of a massive project in their own vicinity. A large and intricate work does require much sophistication in its execution, but to win local goodwill, it should have been possible to ensure employment of local labour for at least unskilled jobs and for excavation of the relatively easier portions of the canal. The benefit would then have been two-fold, viz., willing cooperation and involvement of the local population, which would have helped greatly in the development of a backward area as an avowed plan objective, and also largely, if not wholly, prevented labour unrest and troubles which are repeatedly

put forward by Government as an alibi for not completing the work in time.

The Committee would like Government to go into this matter in detail, learn from experience and evolve guidelines which would make for active participation and willing cooperation by the local population in the execution of national projects.

5 2.9 -do-

The Committee also feel that all those engaged at various levels in a national project should be clear in their minds about the objective as well as the time frame. The Committee are sanguine that if persons at all levels realised that each year's delay meant a severe set back to the navigational conditions for Calcutta Port with its consequential repercussions practically on the whole of the North-Eastern region and that the excavation of the canal and barrage were integral parts of the same scheme, there would have been a greater response and determination to overcome the difficulties and achieve the national objective in time.

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6 2.11 -do-

The Committee disapprove of the complacent and routine manner in which the entire work of acquisition of land required for the project has been handled. Most of the area in question was waste and arable land. It is reported that there was not much difficulty in acquiring this land. As for vested land, difficulty is stated to have arisen with the Railways, particularly for the portion required between RD 8 to 28, as the Railways had not agreed to shift their

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			<p>line and permit the project authorities to start the work before 1972. The Committee cannot comprehend how such a long delay could be allowed to occur when both the Railways and the entire Farakka Barrage scheme were being administered by the Central Government. It should have been possible by advance planning and a closer liaison and mutual accommodation to ensure that the Railways made available the requisite land in time by shifting the track.</p>
7	2.12	Agriculture & Irrigation	<p>As regards the delay of two to five years in the acquisition of the homestead land in both cases, the Committee feel that the matter was not handled with tact and firmness. The Committee feel that once the alignment of the land had been decided, it should have been possible to approach the Collectors through the Special Land Acquisition Officer etc. much ahead of the six months' period that was usually followed. In that case, the proceedings could have been completed in time and possession of the land taken over. The plea of time required for settling the oustees cannot also be accepted, as Government with their vast experience in this matter should have taken adequate measures to settle the oustees well in time and earn the goodwill of the local population as well as the State Government.</p>
8	2.13	Agriculture & Irrigation	<p>As regards cases being dragged to the court, the Committee feel that in a project of profound national urgency, such as Farakka,</p>

Government should have pursued the matter at all levels with a view to forestalling any delay in the excavation work.

2.14. The Committee recommend that Government should analyse in depth the extent to which this lag in land acquisition has been responsible for delaying the works and what measures should be taken to see that it does not recur in the execution of other national projects. The Committee would stress the need for close liaison between the Central authorities and the State Governments at all levels in order to ensure timely and successful execution of the project.

9 2.17

-do-

The Committee find that the chief cause of labour unrest in Farakka was the uncertainty in the minds of workers about their future employment. From figures supplied by Government as well as by the employees' Union, it appears that out of 2800 workers on the Project some 2000 are either expected to be or have already been absorbed in maintenance duties. In view of the usual Government policy of accommodating the maximum possible number in alternative employment, the Committee expect that ways and means of allaying the anxiety of all the workers will be suitably worked out. The Committee consider that it should have been possible for Government to work out in advance its requirements for maintenance and to make them known so that the employees could be reassured and have an additional incentive to show good work and ensure absorption after the Project was completed.

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10	2.18	Agriculture & Irrigation	<p>It is significant that there was from time to time agitation not only by the workers with 'go slow' and other tactics, but also by deputationist engineers and doctors who ceased work from 11-3-74 to 2-4-74 a period when, from all accounts, labour conditions in West Bengal were by no means explosive. The Committee fear that personnel management on the part of the Project authorities has been often tactless and ineffective, and genuine grievances, even of the better placed employees like engineers and doctors, were not anticipated and resolved in time.</p>
11	2.19	-do-	<p>The Committee cannot appreciate that occurrences like pilferage of material and the attack on a procession during the immersion of the <i>Vishwakarma</i> image, should be categorised as labour trouble holding up execution of the barrage. As a matter of fact, the 'labour troubles' listed for a six year period (1968—74) do not appear to have been a serious factor in the delay. It appears that five work-days were lost during that period on account of "Bangla Bundh", two for "Farakka Bundh" and one for "Jangipur Bundh"; five work-days altogether were lost on account of some "protest" observed by the State Government employees; there was a 'goslow' by workers from 6th December, 1969 to 31st March, 1970; there was unspecified labour trouble in November and December 1973; twice in September 1973, the General Manager and senior officers were confined in their offices; once in 1969, the Financial Adviser and Chief Accounts Officer was gheraoed, and once, in September 1969, even</p>

the State Minister went through the same experience. The other instances of workers putting up their demands and waiting upon visiting Ministers are routine activities to which serious exception can not be taken. The Committee were interested to learn that the workers were often hostile to the role of the contractors, and their union, apparently defending Government's interests, opposed loaning of departmental machinery on a hire basis. It is difficult to appreciate why the Project authorities referred to the law and order situation in September 1971 and again in September-October 1972 as one of "deterioration", for from all accounts the situation in West Bengal steadily improved from the beginning of 1971 onwards. While, inevitably, in a big project like Farakka, problems had arisen from time to time and appeared, to a purely localised judgement, a serious phenomenon, the listed incidents do not, in the Committee's view, add up to a plausible explanation of the delayed execution of the Project.

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The Committee have recommended earlier an analysis of the factors impeding implementation of the project. A special effort needs to be made for putting an end to whatever strained relations with labour and field officers have persisted over the years. The Committee emphasise the urgency of efficient and thoughtful personnel management and welfare services with a view to ensuring at all levels the morale requisite to a successful national effort.

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The Committee note with dissatisfaction that on the earthwork part of the feeder canal estimated to cost Rs. 18.77 crores as per

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the 1968 estimates, the actual expenditure booked up to October, 1974, was Rs. 24.54 crores. The Committee feel that this aspect of the work was not so abstruse or complicate that realistic estimates of expenditure could not be drawn up. The variation of about 30 per cent (till October, 1974) between the estimated cost and actual expenditure would no doubt increase further with the booking of actual expenditure from October, 1974, to April 1975, when the canal was commissioned. The Committee consider that if the estimate for the earthwork had been prepared after collection of the relevant data, including bore hole data on a scientific basis, it would have been a more fruitful exercise.

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Agriculture
&
Irrigation

The Committee would reiterate that the delay of four years in the execution of the project has brought about serious escalation of the cost. Government and field authorities should have known that time is money. By execution of the project in a co-ordinated and expeditious manner costs could have been kept down and would not in any case exceed greatly those indicated in the original estimates. Besides, early completion means earlier productive utilization by the country of the national assets created. The Committee urge that this aspect should be always prominently kept in view in the execution of projects, and particularly those of national importance like Farakka Barrage.

15. 3.4 —do—

The Committee find that while the decision to associate small local contractors with the work of canal excavation was laudable, it was not followed up by any real help to contractors with meagre resources of their own. The work of excavation of dry layers of the land being not very technical or complicated, the local contractors could, with the necessary facilities and encouragement, have done it successfully. The representative of the Ministry stated during evidence that the authorities knew very well that "these agencies will not be able to complete the whole work". This bland assertion suggests that perhaps certain interests were intent on justifying the induction of big contractors, instead of small local contractors.

16. 3.5 —do—

It is surprising, and also a reflection of a lack of planning, that contracts were given for excavation work without ensuring in advance the availability of land for the purpose. This peculiar proceeding ensured the failure of the small contractors, and ironically enough, helped them also to escape the imposition of any penalty for non-completion of the stipulated work.

17. 3.14 —do—

The Committee regret that while certain difficult and risky works in the construction of the Farakka Barrage were successfully carried out departmentally with the help of public sector agencies like the National Projects Construction Corporation, the Farakka Project authorities persuaded themselves to change gear and allot the Feeder Canal excavation work to private contractors. There

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			<p>appear to have been a great deal of policy vacillation on the question of departmental excavation of the Canal, and the task was entrusted to contractors who were additionally favoured with special facilities like hire on easy terms of Government machinery, and supply of stores and spares parts from Government inventories to such an extent that the workers on the Project themselves sometimes objected. These contractors were also in some cases paid higher rates beyond the terms of their contract and given other concessions which have been discussed elsewhere in this report. Even so, excavation through big contractors involved, in the result, a delay of more than three years in the completion of the canal. The Committee are unhappy at the obviously inadequate realisation of the position by the Project authorities when they made their choice, somewhat mechanically, without careful thought, between 'departmental excavation' and 'excavation through contractors'.</p>
18.	3.15	Agriculture & Irrigation	<p>The Committee feel that a more meaningful utilisation of departmental resources for work relating to excavation of the canal would have produced, in the long run, better results for the country. In the absence of any record of a reasoned justification for preference being given to contractors, the Committee fear that certain vested interests might in their subterranean way, have worked for the induction of big contractors in the excavation of the Feeder Canal, which to make things worse, they could not also perform in time.</p>

19. 3.16 —do— The Project authorities had already got some cutter suction dredgers and the Committee cannot accept the contention of the Ministry during evidence that by giving the work of excavation of the canal to the contractors, Government was saved from the trouble and expense of procuring a battery of dredgers involving a large amount of foreign exchange and of maintaining an elaborate marine organisation required therefor.
20. 3.17 —do— It may be that in terms purely of the arithmetical cost of excavation, the departmental cost per unit in the reach RD 0—10 was slightly higher than the cost of excavation through contractors in other reaches of the canal. But if contractors can do at lesser cost after hiring machinery from Government, it is quite likely that if the excavation work in all the reaches had been done departmentally, the average rate of departmental excavation would have considerably come down.
21. 3.18 —do— If anything, the repeated demands of the contractors for extension of time and for payment of higher rates than the contracted rates (discussed in subsequent chapters) are indicative of the need, in the public interest, to expand the scope of departmental work in all big projects of national importance. It is quite apparent in the context of excavation work in the Farakka Feeder Canal that much of the delay was due to the failure of the private contractors who dallied over the job and put up demands for various concessions, including higher rates, outside the terms of their contracts.
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In the opinion of the Committee, such dependence on private contractors can only be avoided if the departmental agencies are encouraged to develop the necessary confidence and capability. Other things being equal, challenging jobs should be given to them, even if the cost may be a little higher at the initial stages, since the return, in terms of national advance, would be so much better.

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Agriculture &
Irrigation

The Committee note that tenders for the reach R.D. 10—68 were initially invited in January, 1964 and the contract was ultimately awarded in January, 1965. However, the tenders for the reach RD 68—126 were invited in July 1966 and finalised in two instalments. The first instalment, covering the contract for RD 68—97 and RD 103—126 was finalised after protracted shuttling of paper clarifications, meetings etc. from October, 1966 to December 1967. This clearly shows that the matter was processed somewhat desultorily, and essential clarifications were obtained piece-meal. The Committee understand that the Tender Committee was a high-powered Committee, consisting of the Secretary, Ministry of Irrigation & Power, the Chairman, Central Water & Power Commission, the Member (Designs) (C.W. & P.C.), the Joint Secretary, Ganga Basin, the Joint Secretary, Ministry of Finance, the General Manager, Farakka Barrage Project, the Financial Adviser, Farakka Barrage Project, and the Secretary, Farakka Barrage Control Board. They would have

expected a Committee of this composition to function more positively in the matter and to make sure that all requisite clarifications were obtained from the relevant parties and in time. The Committee feel that an unhappy impression should not go out that 'high-power' bodies comprise people whose status and preoccupations militate against speedy decision. Government should investigate the reasons for this delay, fix responsibility, and take suitable measures to see that in future such delays do not recur.

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Apart from the aspect of delay, the Committee find that Contractor 'C', who was selected by the Tender Committee for completion of work between RD 103—126 stopped work in June, 1969, with the result that Government had to entrust this work to another, Contractor 'A', who had to be paid an additional sum of Rs. 2.03 crores. The Committee feel that if the antecedents of Contractor 'C', who did not have adequate experience of such large scale and intricate works, had been properly assessed, Government would not have found themselves in this predicament. Since this happened in spite of a high-powered body being very much in the picture, the Committee trust that Government will take steps to ensure that when such bodies are formed they should be in a position to function in a smooth, workmanlike and efficient manner.

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The Committee are distressed over the manner in which work was allotted to different contractors. It appears that the project authorities, in spite of the confidence and self-assurance they should

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			<p>have felt on successful construction of the Farakka Barrage, found themselves virtually at the mercy of the contractors in the matter of work relating to excavation of the canal. Even where the contractors' default was established, the project authorities appeared helpless in taking action against them. Two main grounds, viz. concern regarding the progress of work and the possibility of court action by the allegedly aggrieved contractors, have been put forward by the Government. The Committee are unable to accept the soundness of this argument and feel that the Project authorities should not have allowed the contractors to hold them, as it were, to ransom. Surprisingly, contractor 'C', who was awarded the contract of earth-work of the quantity of 26.26 crores cft. in the Reach RD 103—126, with completion date of 3rd April, 1971, stopped work in June, 1969, by which time only 1.26 crores cft. out of 26.25 crores cft. had been completed. There was a penal clause in the contract with him, but no valid reasons have been produced before the Committee for not invoking the penal clause.</p>
25.	4.27	Agriculture & Irrigation	<p>Again, in the whole process of the award of tenders, there appears to be a kind of leniency, even favouritism, towards contractor 'A'. It is on record that in terms of the supplementary extension in April, 1969, of the contract with contractor 'A' for the reach R.D. 91—103, Government had reserved the right to allot additional earthwork to the contractor after June, 1970, to the extent of 15 crores cft. in con-</p>

tinuation of the said reach at the same rate. In violation of this obligation, the contractor expressed his inability to take up the said extra work and the Government reconciled themselves to this refusal.

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The Committee are not able to comprehend the logic in leaving out R.D. 97—103 from being awarded on a firm basis to the contractors, along with other parts in the Reach R.D. 68—126. R.D. 97—103 was taken up in November 1968 and awarded on an *ad hoc* basis to Contractor 'A'. Since Contractor 'C' was no longer active in the field and the performance of Contractor 'B' was judged by the authorities to be not satisfactory, this made Government dependent again on Contractor 'A' who had already proved refractory. The net result of this was that Contractor 'A' found himself to be the only one in the field and he took full advantage of his monopoly position by refusing to execute the job at the rates at which he had contracted the execution of work in R.D. 10—68. The Government then agreed to give him a higher rate than that at which work in other parts of the Reach 68—126 had been given to Contractor 'C'.

The Committee regret that in the matter of award of contracts for excavation work of the Farakka Feeder Canal, the authorities concerned have been lacking in financial prudence and the care and concern reasonably expected of them in safeguarding the interests of the public exchequer.

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The Committee are surprised that in spite of the clear recommendation of the Chief Engineer against the grant of extension beyond

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June, 1968 to contractor 'A' in respect of the excavation work in the Reach RD 10—68, the said contractor was granted extension upto June, 1969 by the Control Board, and the only reasons left on record are "difficulties explained by the firm as reported in the agenda papers." The papers relating to the relevant meeting of the Control Board reveal that the Chief Engineer of the Project had specifically mentioned that "an extension from March to June 1968, had already been granted to the firm in consideration of their difficulties in arranging the machinery," and "hence no further extension can be given". The Chief Engineer had also recorded that procurement and selection of machinery was entirely the concern of the contractor, adding that notwithstanding this position the contractor had been given equipment worth about Rs. 37.5 lakhs in the interests of the work. The Chief Engineer had also referred to two generating sets having been made available on hire to the contractor. In the absence of any recorded reasons, it has not been possible for the Committee to examine the justification for the Control Board departing from the specific recommendation of the Chief Engineer. The Committee take a serious view of the matter and recommend that it should be probed into thoroughly, and responsibility fixed for such apparently anomalous conduct.

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tent authority (the Chief Engineer in the present case) is not accepted by a Committee/Board, detailed reasons for the same should be recorded in the minutes of the relevant meeting of the Committee/Board.

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The Committee find that as against the contracted rates of Rs. 11.30, Rs. 12.50 and Rs. 12.43 per 100cft. for excavation work in the Reaches RD 10—68, RD 68—97 and RD 97—103 respectively, contractor 'A' and 'B' were paid, 'ex-gratia', higher rates of Rs. 16.50 per 100 cft. for work done during 1969-70 and Rs. 20.65 per 100 cft. for work done during 1970-71 and thereafter. Such higher rates were paid in spite of the fact that they were clearly outside the terms of the relevant contracts.

It is to be noted further that the 'ex-gratia' higher rates had been recommended by the Inter-Departmental Committee on the clear stipulation that the same would be 'admissible only upto the present extended dates of completion of the respective works and that if further extensions of time were granted by the General Manager for reasons considered valid by him, the enhanced rates would be extended to such periods also, but, in any case, not beyond March, 1972 in respect of Contractor 'A' and March, 1973 in the case of Contractor 'B'. In spite of this directive, the enhanced rates were subsequently further extended upto 30th June, 1974 in the case of Contractor 'A' and upto 31st August, 1974, in the case of contractor 'B'. Upto October, 1974, the total extra amount paid to the two

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			contractors on account of such subsequent enhancement of contracted rates was Rs. 2.90 crores.
			<p>The Committee fear that from the very beginning the Inter-Departmental Committee which sanctioned the 'ex-gratia' higher rates ignored the obligation of safeguarding the financial interests of Government by adherence to the terms of the contracts. It has been pleaded in extenuation that there was the need for 'creating circumstances in which the existing contractors would continue and complete the balance works by the target date.' This sounds almost panicky; besides, the contractors did not, in actual practice, adhere to the extended target date. The effect of the leniency showed by the Inter-Departmental Committee was further aggravated by the action of the Project authorities in that the enhanced rates were extended upto the 30th June, 1974 in the case of contractor 'A' and upto 31st August, 1974 in the case of contractor 'B' necessitating an extra payment of no less than Rs. 2.90 crores, which the Committee feel should have been avoided.</p>
30	5.32 & 5.33	Agriculture & Irrigation	<p>The Committee would like to mention that stores and materials worth lakhs of rupees were issued to the contractors at Departmental issue rates which are stated to include storage and departmental charges. During evidence, the representative of the Ministry explained that the bulk of such materials comprised POL and that the con-</p>

tractors were charged rates higher than the rates of diesel oil or petrol at the nearby petrol stations. In respect of other materials supplied to the contractors, the representative of the Ministry stated that the contractors were charged 10 per cent more than the normal rate. Asked as to whether the issue of materials and spare parts at departmental rates plus 10 per cent was not a concession to the contractors as compared to the rates in the market, the representative of the Ministry, instead of confirming or denying the position, stated that this issue of spare parts or machines was in the interest of Government, as by such issue Government were assured of the use of genuine material by the contractors, thus avoiding the use of fake stuff which might damage the equipment. The Committee are perturbed that Government chose to deal with apparently unprincipled businessmen even in the case of national projects of Paramount value to the country.

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Since, as pointed out by the Chief Engineer of the Project himself, the procurement and selection of machinery etc. was entirely the concern of the contractors themselves, it is evident that the issue to the contractors of materials and stores from the Stores of the Department was in itself a big concession to the contractors. Even so, this concession to the contractors was not taken into account by the Inter-Departmental Committee while examining their claims for rates higher than the contracted rates outside the terms of their contracts. The Committee are of the view that the Inter-Departmental Committee have, by a series of decisions, invited, on themselves, a suspicion of dereliction of duty which should be clear-

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			ed by Government with a view to suitable action, if called for, in the matter.
31	6.21	Agriculture & Irrigation	The Committee disapprove of the leisurely and lukewarm manner in which the whole case of arbitration of the so-called dispute between the contractor 'A' and the Project authorities was handled by Government. March 1971, when the contractor conveyed his acceptance of enhancement of rates (as decided by the Special Committee), for earthwork done during 1969-70 and thereafter, and his letter was conspicuously silent about his reaction to the rejection by the said Committee of his claim for the period January, 1966 to September 1969, the situation required that before making any payment Government should have secured from him clear written confirmation of the position in respect of the period January 1966 to September 1969.
32	6.22	—do—	Again, when it was decided that there was no escape from referring the matter to arbitration and it was open to the General Manager to appoint an arbitrator of his choice, the appointment of an officer of the standing of a Superintending Engineer working on the Project and therefore by no means a detached personality, to arbitrate on a claim of more than Rs. 2 crores, and that too on a case decided by a high level Committee consisting of some officers of the level of Joint Secretaries, would <i>prima facie</i> appear to be

inappropriate. This is fully borne out by the fact that Government themselves became wise after the event, and have, since then, as the Committee were informed, issued revised instructions linking the status of officers to be appointed as Arbitrators with the cases before them.

The Committee hope that subsequent to the issue of instructions in 1973 there has been no recurrence of such cases in any project. Nevertheless, Government should review the working of the instructions in the light of experience since gained and revise instructions if necessary, to protect Government's interest. The Committee have no doubt that in the present case much harm has been done.

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In so far as the leadings before the arbitrator are concerned, it is surprising that the reasonableness or otherwise of the quantum of compensation demanded by the contractor was not posed into by the government side at all. No oral evidence was led before the arbitrator, and no reasons seem to have been recorded in justification of such an omission. Also, no counter-claims were made by Government on account of the concessions extended to the contractor in spite of his failure to adhere to the time schedule. There were other facilities, like use of government machinery etc., given to the contractor which too should have been put forward before the Arbitrator, in order to have the amount of award suitably reduced if not completely negated. The loss suffered by government on account of the contractor arbitrarily stopping work and causing delay and cost escalation was another point that should have been pressed

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strongly before the arbitrator by way of counter-claim, but it was not done. The contractual obligation of the contractor to take up additional excavation work at old rates, which the contractor failed to fulfil and Government did not enforce, gave another valuable advantage to the contractor. No counter-claim on this account also was made before the Arbitrator. The Committee feel strongly that Government's defence was not resolutely, or even properly conducted.

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6.24

Agriculture &
Irrigation/
Law, Justice
& Company
Affairs

As far as the award of the arbitrator is concerned, the Committee would draw attention to the opinion expressed by the Joint Secretary and Legal Adviser in the Calcutta Branch Secretariat of the Ministry of Law, namely that "the arbitrator ought not to have relied solely on the statements furnished by the contractor in support of these claims in the absence of any oral evidence affirming the correctness of the contents of such statements." The same official has also referred to the judgement reported in A.I.R. 1955, Supreme Court, Page 468 and stated that "the present award seems to be a flagrant case where the arbitrator has misapplied the law to give a perverge award."

In spite of the position as stated above, government decided not to pursue the objection petition against the award of the arbitrator filed by them in the Court of the Subordinate Judge, Murshidabad,

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but preferred to pay off the awarded amount to the claimant. The Committee are of the view that the conduct of the case was entirely mismanaged. Government should review the whole matter and fix responsibility for lapses made in course of the reference of the so-called dispute to arbitration and the presentation of Government's case before the arbitrator, with a view to suitable action against those found guilty of dereliction of duty at various levels. Reference to arbitration without careful examination of the implications and indifferent organisation of Government's defence in cases involving the financial interests and also the reputation of the State must not be allowed to recur. Since, on the evidence before the Committee, the services of the law officers of Government do not appear to have been available efficiently and expeditiously in this unfortunate case, the Committee wish Government to look into this aspect of the matter and take all appropriate action.

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Agriculture & Irrigation/Shipping Transport

The Committee recall the Government of India's repeated and unequivocal concern for the long deteriorating navigability of the Bhagirathi-Hooghly and its determination to arrest the deterioration and save Calcutta Port from the menace of virtual extinction. This was stated categorically in 1972 when the country was assured from its highest forum that "Calcutta Port will not be allowed to deteriorate, and all the modern techniques of adequate supply of head-water discharge and optimum dredging of tidal prism, where necessary, river training measures, etc. will be fully utilised to ensure the health of the great Port of Calcutta."

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The Committee have already dealt at length with the delay in the completion of the Farakka Barrage Project, constructed mainly for the purpose of improving the port of Calcutta, particularly the long gap of over three years between the completion of the Barrage and the completion of the excavation of the feeder canal without which the water intended to be diverted by the Barrage could not be carried to the Bhagirathi-Hooghly. This delay which in the Committee's view was avoidable has accentuated the process of deterioration. A statement during evidence by the Chief Hydraulic Engineer of the Calcutta Port is highly significant: "The deterioration and decay that now occurs for nine months of the year is due to the sand that comes roughly from a distance of about 40 miles from Calcutta. This is very near about Diamond Harbour. It is not a static point. If, for example, Farakka was commissioned some years ago, this sand which, at that point of time, was coming from a distance of about 28 miles, would have stopped." It is clear to the Committee that the additional deterioration in the conditions of the river caused by delay in excavating and operating the Farakka Feeder canal would have inevitably a detrimental effect on the length of time which the headwater flow from Farakka would now require to achieve a halt in further deterioration of the sand and silt conditions in the Hooghly.

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36.	7.50	Agriculture & Irrigation/Shipping Transport
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In regard to the quantum of additional headwater supply essential for the sustenance and improvement of the life of Calcutta Port,

the Committee have studied the evidence closely and are positive that without 40,000 cusecs being made available, especially during the lean months, the Ports' survival—let alone its growth—would remain precarious. Since any damage or detriment to Calcutta Port will inevitably and immediately involve Haldia also, the gravity of the danger will be aggravated. If on this issue, dependable scientific-technical advice can offer alternative solutions, the Committee have found so far no indications thereof. Thus the Committee stress that, difficulties notwithstanding, this quantum of 40,000 cusecs should, as repeatedly assured, be made available in order that Calcutta Port might live and serve the country. In case there are insuperable difficulties, of which the Committee have had no more than some vague hints, the situation has to be properly explained to the Committee and all possible ameliorative measures adopted without delay.

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37 7.51 Shipping & Transport

In so far as the river training works for improving the health and the behaviour of the Hooghly are concerned, the Committee are glad that the Port authorities have already made a beginning in that direction. All necessary assistance, by way of funds and equipment, should be provided to the Port by the Central Government so that the effect of the flow of water from Farakka is supplemented by other positive steps and the removal of natural obstructions, which the river training works seek to achieve.

38 7.52 —do—

In the matter of the operation of Dredgers at Calcutta Port, the Public Accounts Committee had only last year, in their 175th Report

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on Calcutta Port Trust, made their comments on the low utilisation of Dredgers owned by the Port. Drawing attention to the reports of two Expert Committees on the subject, the Committee had pointed out that within the Dock system the hours worked by Dredgers during 1965-66 totalled only 6,788 as against the total time of 60,000 hours available for dredging if the dredgers worked round the clock, and 20,000 hours on an eight-hour shift basis. Further, it was not at all a happy situation that against a norm of 5,200 hours of working per annum by a dredger, as suggested by the Dredger Utilisation Committee, (1972-73), the time worked by the River Dredgers at Calcutta Port ranged between 600 and 2,151 hours in 1973-74, the actual dredging time being between only 300 and 1,203 hours. Now that, as a result of improvement on account of Farakka waters flowing in, ships of bigger draughts are expected to be handled at Calcutta, with better provision of deep water near the docks, the Committee trust that substantially better, if not full, utilisation will be made of the Dredgers operated by the Calcutta Port. The Committee desire that all the dredging requirements of not only Calcutta but also Haldia will be met by the existing fleet of Dredgers without requiring any addition to their number. Between Calcutta and Haldia the entire port complex, rejuvenated and renovated by the Farakka construction, should play the dynamic role expected of it in the context of our developing economy.

39. 8 5 Agriculture & Irrigation

The Committee are happy that the increase in the headwater supply in the Hooghly has already reduced the salinity of the drinking water available to Calcutta. The Committee trust that these supplies would continue to be adequate during the lean months.

40. 8 13 Agriculture & Irrigation,
Shipping and Transport

The Committee note that the Central Government, the State Government and the Calcutta Port Authorities appreciate the importance of improving the inland navigational facilities along the Ganga-Bhagirathi from as far upstream as Patna or even Allahabad down to Calcutta. There is a very close link between the Farakka Project and the development of this major channel of inland navigation. Among the objectives of the Project; improvement in inland water transport has an important place. A sum of Rs. 130 crores has already (till May 1975) been spent on the Project, which is now near completion. Every effort should thus be made to complete also the studies being carried out about the river traffic position and draw up concrete programmes for an improved inland water transport service.

41. 8 14 Shipping and Transport

The Committee find from the note furnished by the Calcutta Port Trust that so far as the technical feasibilities about the minimum navigational depths, the type of crafts to be used and the methods of towage are concerned, no special difficulty is anticipated. Even so, the Committee recommend that the relevant reports be studied seriously and steps taken to work the inland transport service, along as much of the river as possible, to begin with.

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42.	8.14	Agriculture & Irrigation/ Shipping and Transport	<p>When the Study Group of the Committee visited Farakka they were given to understand that the navigational locks at Farakka are yet to be completed. According to the audit report the major expenditure on account of navigational facilities (Rs. 13.00 crores out of Rs. 19.06 crores) is yet to be incurred as part of the Farakka Project. From the experience of the construction of the Feeder canal, the Committee fear that unless the Government of India and the Project authorities are vigilant, this work may also get unduly delayed and the benefit to the nation of heavy investments already made may be jeopardised. The Committee recommend that a programme for the completion of the construction programme not only at Farakka but also upstream to Patna and Allahabad should be drawn up in consultation with all relevant authorities.</p>
43.	8.15	-do-	<p>For the development of an inland transport service from Calcutta upstream towards Allahabad, some additional river port amenities would be necessary. The Inland Water Transport Committee has referred, among other things to the need of warehousing and container facilities. These problems should be examined expeditiously.</p>
44.	8.16	Shipping and Transport	<p>To make the inland water transport service economic, it is essential that the type of craft used is suited to the requirements. The</p>

Committee note that modern technology has advanced sufficiently to permit designing of a shallow draft tugs and barge suitable for operation on the Ganga-Bhagirathi-Hooghly rivers. As pointed out earlier by the Estimates Committee in paragraph 5.45 of their 75th Report (Fifth Lok Sabha) on Transport Coordination, Government should take concerted measures to develop on a priority basis such craft as would be suited for inland water transport. In devising such craft, the Committee would like special attention to be paid to the requirements of designing and the providing of shallow draft tugs and barges suitable for operation on the Ganga-Bhagirathi-Hooghly stretch of water. The Committee would like to be informed of the concrete action taken in the matter.

45. 8.20 -do-

The Committee gave thought to certain alarming press reports about floods in the Farakka region after construction of the canal. Flood Control is one of the objectives of the total Project. It goes without saying that such problems required to be taken care of as soon as they emerge, apart from all reasonable precautionary steps in the matter. The Committee understand that the State Government of West Bengal are seized of the flood problems in the area and trust that measures would be taken at all relevant levels towards a permanent solution of the difficulties involved.

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46. 8.24 Department of Tourism

The Committee feel that the magnificence of the Barrage construction, the fascinating sight of water flowing through the Feeder Canal and the enchanting greenery all around the area, provide the natural as well as manmade background for the development of the

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			<p>area into an attractive tourist resort which could, in due course, grow into a sizeable source of earnings even of foreign exchange through tourists from other countries. The Committee desire that the schemes already made by the State Government in this regard should be examined and all essential assistance should be given to them by the Central Government also.</p>
47.	8.29	<p>Ministry of Eenergy (Department of Power/Department of Industrial Development)</p>	<p>Now that Farakka is well connected by rail and the development of navigational facilities from Calcutta via Farakka to Allahabad is also being contemplated, the Committee fell that there is a strong case for the setting up of more industries at Farakka. The Committee have learnt that a Super Thermal Power Plant might in the near future be set up at Farakka. This would greatly help in an expeditious development of the entire region around Farakka. The Committee hope that work in relation to the said plant will proceed on a priority basis. Land and other requirements should be calculated urgently, and the availability of the area so long frozen for the purposes of Farakka construction should be a fillip to the comprehensive economic development of the region.</p>
48.	9.4	<p>Agricuilture and Irrigation</p>	<p>The Committee trust that regular and adequate watch would be kept by the maintenance staff of the Project on the various technical aspects, particularly scours, etc., and timely action will be taken to rectify loopholes if any, in the construction.</p>

The Committee find that erosion on the left bank of the Ganga, upstream of the Farakka Barrage as well as on the right bank below the Barrage, is not a new development but has been continuing for a long time. Not only is valuable land being lost on the right bank of the Ganga as a result of this erosion, but in recent times the erosion has also been displacing a large number of families every year. The situation has now assumed dangerous proportions affecting important towns in the region like Dhulian, Nimita, Auran-gabad and Khandua, whose very existence is said to have been threatened.

During evidence, the Chief Engineer of the Farakka Barrage Project informed the Committee that 'it has been proved by....hyd-raulic experiments that the Farakka Barrage had nothing to do with the erosion that was taking place. The erosion would have taken place even if the barrage was not there.' The Committee are concerned the visit that whatever the causes of erosion, and the role of the Barrage in the larger hydrological situation, the whole area, including the Farakka Project complex itself, appear to be in some danger which must be countered by suitable and timely measures. The Committee are of the view that the Central and State Governments should move in close coordination in this task and ensure the allocation adequate fund to forestal and eliminate the menace.

The Committee's view, just stated, is reinforced by a statement before it from the Ministry of Agriculture and Irrigation that the

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Ministry had the information that this erosion was taking place for two or three decades....and the phenomenon cannot be effectively checked unless very effective measures such as storages and afforestation are taken up over the entire catchment area. If this is a correct evaluation, the entire position should have been examined carefully much before the selection of the site for the Barrage, the Canal and other concomitant constructions. If however, there is any real substance in the fear that the Ganga joining the Bhagirathi at Jangipur, on account of the erosion of the right bank of the river, endangers the entire Project as constructed, the Committee would expect the scientific-technical ingenuity at the disposal of Government at all levels to be employed, with the utmost urgency, for tackling a problem which cannot in the technological situation today, be too difficult of solution.
