

LEGAL INSTRUMENTS

ON

RIVERS IN INDIA

(VOL.-II)

**AWARDS OF INTER-STATE WATER DISPUTES
TRIBUNALS**



CENTRAL WATER COMMISSION
INTER STATE MATTERS DIRECTORATE-1
NEW DELHI

JANUARY, 2018

FOREWORD

Central Water Commission during 1995-97 brought out publications titled “Legal Instruments on Rivers in India” in four volumes. These publications cover Constitutional Provisions and important notifications under Central laws, awards of the Water Disputes Tribunals, agreements on inter-State rivers and international agreements and treaties

Water resources development using surface water of rivers is guided by the legal framework both in its generalities and specifics. The knowledge of legal and constitutional provisions is therefore, an essential pre-requisite for planning, operation and management of water resources of the rivers. The awards and the proceedings of the inter-State water disputes tribunals set up by the Central Government are the basic legal instruments in this regard.

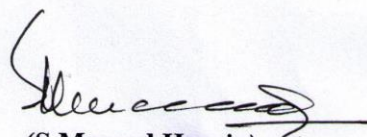
The volume II of aforesaid publications contains decisions of Inter State Water Disputes Tribunal which are published in Official Gazette and are in operation by concerned States. Subsequently, Cauvery Water Disputes Tribunal and Krishna Water Disputes Tribunal-II have submitted their reports and decisions to Central Government. Therefore, the said Vol II was revised and updated in 2013.

As on date, interim and final report and decision of Vansadhara Water Disputes Tribunal and Further Report and modified decision of Krishna Water Disputes Tribunal-II have also become available. Keeping above in view, “The Legal Instruments on Rivers in India”—Vol II, 2013 has been updated and revised. The updated version comprises of two parts. Part I contains decisions of various Tribunals which have at different points of time been published in the Official Gazette. Part II contains decisions of Tribunals which are yet to be published.

I sincerely hope that updated version will serve as ready reference to all users in Water Resources Planning, Development and Management within the framework of various provisions in Indian Constitution.

I wish to put on record my appreciation for the initiative of Irrigation Management Organization, CWC in updating this publication.

New Delhi,
January, 2018.



(S Masood Husain)
Chairman, CWC

PREFACE

India has been endowed with considerable water resources through numerous small and large rivers. Some of the larger Indian Rivers like the Indus or the Ganga-Brahmaputra-Meghna are international rivers. These and most of the other rivers are the inter-State rivers. Of the total geographical area of India, approximately 95% of the area is under international or inter-State rivers. The water resources development of these rivers takes place within the legal framework of development of the inter-State rivers. A sufficient familiarity with this legal framework (that is both its generalities and the specifics of a particular problem) is therefore, an essential pre-requisite for anyone interested in Planning, Development, Operation and Management of water resources of these rivers.

The basic legal instruments which need to be referred to in this context can be classified as:-

1. The Constitutional provisions relevant to inter-State rivers.
2. Treaties or agreements between India and other countries in regard to development of international rivers/ basins.
3. The Laws enacted by the Parliament in connection with the development, use and regulation of inter-State rivers.
4. The awards and the proceedings of the inter-State water disputes tribunals set up by the Central Government.
5. Notifications, Resolutions, Orders etc. issued by the Central Government in pursuance of the Laws or Tribunal awards, setting up agencies, machineries or procedures to deal with inter-State rivers, from time to time.
6. The various agreements, contract etc. reached by the State Govts., amongst or between themselves, in regard to inter-State rivers. This includes the various agreements amongst or between the princely States and Indian Provinces. Similarly, minutes of important inter-State meetings about the inter-State water problems, signed by the concerned parties which reflect agreed decisions.
7. Notifications, Resolutions, Orders etc. passed by Central Govt. or State Govts., in pursuance of inter-State agreements setting up agencies, machineries or procedures etc. to deal with inter-State rivers.

Of the above various types of documents, some would be of more general interest to a large group of persons dealing with similar problems; others may be of rather limited interest.

The Central Water Commission as the National Apex Body while appraising Water Resources Development projects has also to deal with the various aspects of inter-State water issues. CWC, therefore, with a view to make these documents more general and readily available to all users, during 1995-1997, brought series of publications titled "Legal instruments about interstate rivers" in the following form:

Vol I :	Constitutional provisions, Central Laws. Important notifications under Central Laws
Vol II :	Awards of inter-State water dispute Tribunal.
Vol III :	Agreements on Interstate rivers, Important notifications under these agreements.
Vol IV :	International agreements and treaties, important notifications under these agreements and treaties.

The volume II of aforesaid publications contains decisions of Inter State Water Disputes Tribunal which are published in Official Gazette and are in operation by concerned States. Subsequently, Cauvery Water Disputes Tribunal and Krishna Water Disputes Tribunal-II have submitted their reports and decisions to Central Government. Therefore, the said Vol II was revised and updated in 2013.

As on date, interim and final report and decision of Vansadhara Water Disputes Tribunal and Further Report and modified decision of Krishna Water Disputes Tribunal-II have also become available. The said Vol. II has been further updated keeping the above in view. In addition to this, interim order of 1991 of Cauvery Water Disputes Tribunal has been quiet often referred; therefore the interim order of 1991 of Cauvery Water Dispute Tribunal is also appended.

I compliment the staff of the ISM-I Directorate of CWC in particular Shri B.P. Pandey, Director and Smt. Preeti Choudhary, Deputy Director for making concerted efforts in bringing out this revised compilation.

नवीन कुमार

(Navin Kumar)

Chief Engineer (IMO), CWC

January, 2018

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PART-I

DECISION

OF

INTER STATE WATER DISPUTES TRIBUNAL

PUBLISHED

IN

THE OFFICIAL GAZETTE

GOVERNMENT OF INDIA

KRISHNA WATER DISPUTES TRIBUNAL

D-27, New Delhi South Extension, Part-II, New Delhi.

No. 18 (1)/76-KWDT.

Dated the 27th May, 1976.

To

The Secretary to the Government of India,
Ministry of Agriculture and Irrigation,
(Department of Irrigation),
NEW DELHI.

SIR,

The Krishna Water Disputes Tribunal investigated the matters referred to it under section 5(1) of the Inter-State Water Disputes Act, 1956 and forwarded its unanimous Report and decision under section 5 (2) of the said Act to the Government of India on the 24th December, 1973.

Within three months of the aforesaid decision, the Government of India and the States of Andhra Pradesh, Karnataka and Maharashtra filed four separate references before the Tribunal under section 5(3) of the said Act.

Vacancy in the office of a Member of the Tribunal was filled by fresh appointment made by the Government of India vide Notification No. S.O. 518(E), dated the 16th September, 1975.

The Tribunal has prepared its further Report giving such explanations or guidance as it has deemed fit on the matters referred to it under section 5(3) of the said Act.

The unanimous further Report of the Tribunal is forwarded herewith.

Yours faithfully,

(R. S. BACHAWAT).
Chairman.

(D. M. BHANDARI),
Member.

(D. M. SEN).
Member.

End: Report as above.

CHAPTER VII

The Final Order set forth in Chapter XVI of the Original Report Vol. II pages 226-233 modified in accordance with the explanations given by the Tribunal under section 5(3) of the Inter-State Water Disputes Act, 1956 is given below :—

Final Order of the Tribunal

The Tribunal hereby passes the following Order:—

Clause I

This Order shall come into operation on the date¹ of the publication of the decision of this Tribunal in the Official Gazette under section 6 of the Inter-State Water Disputes Act, 1956.

Clause II

The Tribunal hereby declares that the States of Maharashtra, Karnataka and Andhra Pradesh will be free to make use of underground water within their respective State territories in the Krishna river basin.

This declaration shall not be taken to alter in any way the rights, if any, under the law for the time being in force of private individuals, bodies or authorities.

Use of underground water by any State shall not be reckoned as use of the water of the river Krishna.

Clause III

The Tribunal hereby determines that, for the purpose of this case, the 75 per cent dependable flow of the river Krishna up to Vijayawada is 2060 T.M.C.

The Tribunal considers that the entire 2060 T.M.C. is available for distribution between the States of Maharashtra, Karnataka and Andhra Pradesh.

The Tribunal further considers that additional quantities of water as mentioned in sub-Clauses A(ii), A(iii), A(iv), B(ii), B(iii), B(iv), C(ii), C(iii) and C(iv) of Clause V will be added to the 75 per cent dependable flow of the river Krishna up to Vijayawada on account of return flows and will be available for distribution between the States of Maharashtra, Karnataka and Andhra Pradesh.

Clause IV

The Tribunal hereby orders that the waters of the river Krishna be allocated to the three States of Maharashtra, Karnataka and Andhra Pradesh for their beneficial use to the extent provided in Clause V and subject to such conditions and restrictions as are mentioned hereinafter.

¹ The order was Published in the Official Gazette on 31st May, 1976

Clause V

(A) The State of Maharashtra shall not use in any water year more than the quantity of water of the river Krishna specified hereunder:—

(i) as from the water year commencing on the 1st June next after the date of the publication of the decision of the Tribunal in the Official Gazette up to the water year 1982-83.

560 T.M.C.

(ii) as from the water year 1983-84 up to the water year 1989-90

560 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1975-76, 1976-77 and 1977-78 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(iii) as from the water year 1990-91 up to the water year 1997-98

560 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1982-83, 1983-84 and 1984-85 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(iv) as from the water year 1998-99 onwards

560 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisation for irrigation in the Krishna river basin during the water years 1990-91, 1991-92 and 1992-93 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(B) The State of Karnataka shall not use in any water year more than the quantity of water of the river Krishna specified hereunder:—

(i) as from the water year commencing on the 1st June next after the date of the publication of the decision of the Tribunal in the Official Gazette up to the water year 1982-83.

700 T.M.C.

(ii) as from the water year 1983-84 up to the water year 1989-90

700 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1975-76, 1976-77 and 1977-78 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(iii) as from the water year 1990-91 up to the water year 1997-98

700 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1982-83, 1983-84 and 1984-85 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(iv) as from the water year 1998-99 onwards

700 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisation for irrigation in the Krishna river basin during the water years 1990-91, 1991-92 and 1992-93 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(C) The State of Andhra Pradesh will be at liberty to use in any water year the remaining water that may be flowing in the river Krishna but thereby it shall not acquire any right whatsoever to use in any water year nor be deemed to have been allocated in any water year water of the river Krishna in excess of the quantity specified hereunder:—

(i) as from the water year commencing on the 1st June next after the date of the publication of the decision of the Tribunal in the Official Gazette up to the water year 1982-83.

800 T.M.C.

(ii) as from the water year 1983-84 up to the water year 1989-90

800 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1975-76, 1976-77 and 1977-78 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(iii) as from the water year 1990-91 up to the water year 1997-98

800 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1982-83, 1983-84 and 1984-85 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(iv) as from the water year 1998-99 onwards

800 T.M.C. plus

a quantity of water equivalent to 10 per cent of the excess of the average of the annual utilisation for irrigation in the Krishna river basin during the water years 1990-91, 1991-92 and 1992-93 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(D) For the limited purpose of this Clause, it is declared that—

(i) the utilisations for irrigation in the Krishna river basin in the water year 1968-69 from projects using 3 T.M.C. or more annually were as follows :—

From projects of the State of Maharashtra	61.45 T.M.C.
From projects of the State of Karnataka	176.05 T.M.C.
From projects of the State of Andhra Pradesh	170.00 T.M.C.

(ii) annual utilisations for irrigation in the Krishna river basin in each water year after this Order comes into operation from the projects of any State using 3 T.M.C. or more annually shall be computed on the basis of the records prepared and maintained by that State under Clause XIII.

(iii) evaporation losses from reservoirs of projects using 3 T.M.C. or more annually shall be excluded in computing the 10 per cent figure of the average annual utilisations mentioned in sub-Clauses A(ii), A(iii), A(iv), B(ii), B(iii), B(iv), C(ii), C(iii) and C(iv) of this Clause.

Clause VI

Beneficial use shall include any use made by any State of the waters of the river Krishna for domestic, municipal, irrigation, industrial, production of power, navigation, pisciculture, wild life protection and recreation purposes.

Clause VII

(A) Except as provided hereunder a use shall be measured by the extent of depletion of the waters of the river Krishna in any manner whatsoever including losses of water by evaporation and other natural causes from manmade reservoirs and other works without deducting in the case of use for irrigation the quantity of water that may return after such use to the river.

The water stored in any reservoir across any stream of the Krishna river system shall not of itself be reckoned as depletion of the water of the stream except to the extent of the losses of water from evaporation and other natural causes from such reservoir. The water diverted from such reservoir by any State for its own use in any water year shall be reckoned as use by that State in that water year.

The uses mentioned in column No. 1 below shall be measured in the manner indicated in column No. 2.

Use	Measurement
Domestic and municipal water supply	By 20 per cent of the quantity of water diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.
Industrial use	By 2.5 per cent of the quantity of water diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.

(B) Diversion of the waters of the river Krishna by one State for the benefit of another State shall be treated as diversion by the State for whose benefit the diversion is made.

Clause VIII

(A) If in any water year any State is not able to use any portion of the water allocated to it during that year on account of the non-development of its projects or damage to any of its projects or does not use it for any reason whatsoever, that State will not be entitled to claim the unutilised water in any subsequent water year.

(B) Failure of any State to make use of any portion of the water allocated to it during any water year shall not constitute forfeiture or abandonment of its share of water in any subsequent water year nor shall it increase the share of any other State in any subsequent water year even if such State may have used such water.

Clause IX

As from the 1st June next after the date of the publication of the decision of the Tribunal in the Official Gazette.

(A). Out of the water allowed to it, the State of Maharashtra shall not use in any water year —

(i) more than 7 T.M.C. from the Ghataprabha (K-3) sub-basin.

(ii) more than the quantity of water specified hereunder from the main stream of the river Bhima.

(a) as from the water year commencing on the 1st June next after the date of the publication of the decision of the Tribunal in the Official Gazette upto the water year 1989-90.

90 T.M.C.

(b) as from the water year 1990-91.

95 T.M.C.

(B). Out of the water allocated to it, the State of Karnataka shall not use in any water year—

(i) more than the quantity of water specified hereunder from the Tungabhadra (K-8) sub-basin

(a) as from the water year commencing on the 1st June next after the date of the publication of the decision of the Tribunal in the Official Gazette up to the water year 1982-83.

295 T.M.C.

(b) as from the water year 1983-84 up to the water year 1989-90

295 T.M.C. plus

a quantity of water equivalent to 7 ½ per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1975-76, 1976-77 and 1977-78 from its own projects using 3 T.M.C. or more annually over the utilisations from such irrigation in the water year 1968-69 from such projects.

(c) as from the water year 1990-91 up to the water year 1997-98

295 T.M.C.

a quantity of water equivalent to 7 ½ per cent of the excess of the average of the annual utilisations for irrigation in the Krishna river basin during the water years 1982-83, 1983-84 and 1984-85 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

(d) as from the water year 1998-99 onwards

295 T.M.C. plus

a quantity of water equivalent to 7 ½ per cent of the excess of the average of the annual utilisation for irrigation in the Krishna river basin during the water years 1990-91, 1991-92 and 1992-93 from its own projects using 3 T.M.C. or more annually over the utilisations for such irrigation in the water year 1968-69 from such projects.

For the limited purpose of this sub-Clause, it is declared that—

The utilisations for irrigation in the Krishna river basin in the water year 1968-69 from projects of the State of Karnataka using 3 T.M.C. or more annually shall be taken to be 176.05 T.M.C.

Annual utilisations for irrigation in the Krishna river basin in each water year after this Order comes into operation from the projects of the State of Karnataka using 3 T.M.C. or more annually shall be computed on the basis of the records prepared and maintained by that State under Clause XIII.

Evaporation losses from reservoirs of projects using 3 T.M.C. or more annually shall be excluded in computing the 7 ½ per cent figures of the average annual utilisations mentioned above.

(ii) more than 42 T.M.C. from the Vedavathi (K-9) sub-basin, and

(iii) more than 15 T.M.C. from the main stream of the river Bhima.

(C) Out of the water allocated to it, the State of Andhra Pradesh shall not use in any water year—

(i) more than 127 T.M.C. from the Tungabhadra (K-8) sub-basin and more than 12.5 T.M.C. from the Vedavathi (K-9) sub-basin.

(ii) more than 6 T.M.C. from the catchment of the river Kagna in the State of Andhra Pradesh.

(D) (i) The uses mentioned in sub-Clauses (A), (B) and (C) aforesaid include evaporation losses.

(ii) The use mentioned in sub-Clause (C) (i) does not include use of the water flowing from the Tungabhadra into the river Krishna.

(E) (1) The following directions shall be observed for use of the water available for utilisation in the Tungabhadra Dam in a water year—

(a) The water available for utilisation in a water year in the Tungabhadra dam shall be so utilised that the demands of water for the following Projects to the extent mentioned below may be met :—

(i) Tungabhadra Right Bank Low Level Canal 52.00 T.M.C.

Water available for Tungabhadra Right Bank Low Level Canal shall be shared by the States of Karnataka and Andhra Pradesh in the following proportion :

State of Karnataka	22.50
State of Andhra Pradesh	29.50

(ii) Tungabhadra Right Bank High Level Canal—Stages I and II 50.00 T.M.C.

Water available for Tungabhadra Right Bank High Level Canal shall be shared by the States of Karnataka and Andhra Pradesh in the following proportion :

State of Karnataka	17.50
State of Andhra Pradesh	32.50

(iii) Tungabhadra Left Bank Low Level and High Level Canals 102.00 T.M.C.

(iv) Raya and Basavanna Channels of the State of Karnataka 7.00 T.M.C.

(v) Assistance by way of regulated discharges to Vijayanagar Channels other than Raya and Basavanna Channels of the State of Karnataka 2.00 T.M.C.

(vi) Assistance by way of regulated discharges to the Rajolibunda Diversion Scheme for use by the States of Karnataka and Andhra Pradesh in the proportion mentioned in Clause XI (C) 7.00 T.M.C.

(vii) Assistance by way of regulated discharges to the Kurnool-Cuddapah Canal of the State of Andhra Pradesh 10.00 T.M.C.

230.00 T.M.C.

The utilisations of the Projects mentioned in sub-Clauses (a) (i), (ii) and (iii) above include the evaporation losses in the Tungabhadra Dam which will be shared in accordance with Clause XI (D).

(b) If, in any water year, water available for utilisation in the Tungabhadra Dam is less than the total quantity of water required for all the Projects as mentioned above, the

deficiency shall be shared by all the Projects proportionately. The proportions shall be worked out after excluding the evaporation losses.

(c) If, in any water year, water available for utilisation is more than the total quantity of water required for all the Projects as mentioned above, the requirements for all the Projects for the month of June in the succeeding water year as estimated by the Tungabhadra Board or any authority established in its place shall be kept in reserve and the State of Karnataka shall have the right to utilise the remaining water in excess of such reserve in the Tungabhadra Dam for its Projects mentioned in sub-Clauses (a) (i), (ii) and (iii) above drawing water from that dam even though thereby it may cross in any water year the limit on the utilisation of water from Tungabhadra (K-8) sub-basin placed under Clause IX(B) of the Final Order but in no case such utilisation shall exceed 320 T.M.C.

(d) The balance water, if any, shall be kept stored in the dam for use in the next year.

(2) The working tables for the utilisation of the water in the Tungabhadra Dam shall be prepared as hitherto by the Tungabhadra Board or any other authority established in its place so as to enable the States of Karnataka and Andhra Pradesh to utilise the water available for utilisation in the Tungabhadra Dam as aforesaid.

(3) If in any water year, either of the two States of Karnataka and Andhra Pradesh finds it expedient to divert the water available to it in the Tungabhadra Dam for any one of its Projects to any other of its Project or Projects mentioned above for use therein, it may give notice thereof to the Tungabhadra Board or any other authority established in its place and the said Board or authority may, if it is feasible to do so, prepare or modify the working table accordingly.

(4) The States of Karnataka and Andhra Pradesh may use the water available in the Tungabhadra Dam in accordance with the aforesaid provisions and nothing contained in Clause V shall be construed as overriding the provisions of Clause IX(E) in the matter of utilisation of the water available in the Tungabhadra Dam nor shall anything contained in Clause IX(E) be construed as enlarging the total allocation to the State of Karnataka or as enlarging the limit of acquisition of any right by the State of Andhra Pradesh in the waters of the river Krishna.

(5) The States of Karnataka and Andhra Pradesh may by agreement, without reference to the State of Maharashtra, alter or modify any of the provisions for the utilisation of the water available in the Tungabhadra Dam mentioned above in any manner.

Clause X

(1) The State of Maharashtra shall not out of the water allocated to it divert or permit the diversion of more than 67.5 T.M.C. of water outside the Krishna river basin in any water year from the river supplies in the Upper Krishna (K-1) sub-basin for the Koyna Hydel Project or any other project.

Provided that the State of Maharashtra will be at liberty to divert outside the Krishna river basin for the Koyna Hydel Project water to the extent of 97 T. M. C. annually during the period of 10 years commencing on the 1st June, 1974 and water to the extent of 87 T.M.C. annually during the next period of 5 years commencing on the 1st June, 1984 and water to the extent of 78 T.M.C. annually during the next succeeding period of 5 years commencing on the 1st June, 1989.

(2) The State of Maharashtra shall not out of the water allocated to it divert or permit diversion outside the Krishna river basin from the river supplies in the Upper Bhima (K-5) sub-basin for the Projects collectively known as the Tata Hydel Works or any other project of more than 54.5 T.M.C. annually in any one water year and more than 213 T.M.C. in any period of five consecutive water years commencing on the 1st June, 1974.

(3) Except to the extent mentioned above, the State of Maharashtra shall not divert or permit diversion of any water out of the Krishna river basin.

Clause XI

(A) This Order will supersede—

- (i) the agreement of 1892 between Madras and Mysore so far as it related to the Krishna system;
- (ii) the agreement of 1933 between Madras and Mysore so far as it related to the Krishna river system;
- (iii) the agreement of June, 1944 between Madras and Hyderabad;
- (iv) the agreement of July, 1944 between Madras and Mysore so far as it related to the Krishna river system;
- (v) the supplemental agreement of December, 1945 among Madras, Mysore and Hyderabad;
- (vi) the supplemental agreement of 1946 among Madras, Mysore and Hyderabad.

Copies of the aforesaid agreements are appended to the Report of the Tribunal.

(B) The regulations set forth in Annexure 'A'² to this Order regarding protection to the irrigation works in the respective territories of the States of Karnataka and Andhra Pradesh in the Vedavathi sub-basin be observed and carried out.

(C) The benefits of utilisations under the Rajolibunda Diversion Scheme be shared between the States of Karnataka and Andhra Pradesh as mentioned herein below :—

Karnataka 1.2 T.M.C.
Andhra Pradesh—15.9 T.M.C.

(D) The reservoir loss of Tungabhadra reservoir shall be shared equally by the works of the State of Karnataka on the left side and the works on the right side of the reservoir. The half share of the right side in the reservoir loss shall be shared by the States of Andhra Pradesh and Karnataka in the ratio of 5.5 to 3.5.

Clause XII

The regulations set forth in Annexure 'B'³ to this Order regarding gauging and gauging sites in the Krishna river system be observed and carried out.

² Annexure 'A' mentioned above is the same as Annexure 'A' to the Final Order appearing at pages 230 to 231 of Vol. II of the Report.

³ Annexure 'B' mentioned above is the same as Annexure 'B' to the Final Order appearing at pages 231 to 233 of Vol. II of the Report.

Clause XIII

(A) Each State shall prepare and maintain annually for each water year complete detailed and accurate records of—

- (a) annual water diversions outside the Krishna river basin.
- (b) annual uses for irrigation works using less than 1 T.M.C. annually.
- (c) annual uses for irrigation from all other projects and works.
- (d) annual uses for domestic and municipal water supply.
- (e) annual uses for industrial purposes.
- (f) annual uses for irrigation within the Krishna river basin from projects using 3 T.M.C. or more annually.
- (g) areas irrigated and duties adopted for irrigation from irrigation works using less than 1 T.M.C. annually.
- (h) estimated annual evaporation losses from reservoirs and storages using 1 T.M.C. or more annually.
- (i) formulae used and co-efficient adopted for measuring discharges at project sites.

Each State shall send annually to the other States a summary abstract of the said records.

The said records shall be open to inspection of the other States through their accredited representatives at all reasonable times and at a reasonable place or places.

(B) The records of gauging mentioned in Annexure 'B' to this Order shall be open to inspection of all the States through their accredited representatives at all reasonable times and at a reasonable place or places.

Clause XIV

(A) At any time after the 31st May, 2000, this Order may be reviewed or revised by a competent authority or Tribunal, but such review or revision shall not as far as possible disturb any utilisation that may have been undertaken by any State within the limits of the allocation made to it under the foregoing Clauses.

(B) In the event of the augmentation of the waters of the river Krishna by the diversion of the waters of any other river, no State shall be debarred from claiming before any authority or Tribunal even before the 31st May, 2000 that it is entitled to a greater share in the waters of the river Krishna on account of such augmentation nor shall any State be debarred from disputing such claim.

Clause XV

Nothing in the Order of this Tribunal shall impair the right or power or authority of any State to regulate within its boundaries the use of water, or to enjoy the benefit of waters within that State in a manner not inconsistent with the Order of this Tribunal.

Clause XVI

In this Order,

- (a) Use of the water of the river Krishna by any person or entity of any nature whatsoever within the territories of a State shall be reckoned as use by that State.
- (b) The expression "water year" shall mean the year commencing on 1st June and ending on 31st May.
- (c) The expression "Krishna river" includes the main stream of the Krishna river, all its tributaries and all other streams contributing water directly or indirectly to the Krishna river.
- (d) The expression " T M C " means thousand million cubic feet of water .

Clause XVII

Nothing contained herein shall prevent the alteration, amendment or modification of all or any of the foregoing clauses by agreement between the parties or by legislation by Parliament.

Clause XVIII

(A) The Governments of Maharashtra, Karnataka and Andhra Pradesh shall bear their own costs of appearing before the Tribunal. The expenses of the Tribunal shall be borne and paid by the Governments of Maharashtra, Karnataka and Andhra Pradesh in equal shares. These directions relate to the reference under Section 5(1) of the Inter-State Water Disputes Act, 1956.

(B) The Government of India and the Governments of Maharashtra, Karnataka and Andhra Pradesh shall bear their own costs of appearing before the Tribunal in the references under Section 5(3) of the said Act. The expenses of the Tribunal in respect of the aforesaid references shall be borne and paid by the Governments of Maharashtra, Karnataka and Andhra Pradesh in equal shares.

ANNEXURE A

Regulations regarding protection to irrigation works in the respective territories of the States of Karnataka and Andhra Pradesh in Vedavathy sub-basin.

The State of Karnataka will not put up any new work on the streams mentioned in Schedule (1) within the limits shown in the said Schedule and marked in the map* appended herewith, without the previous consent of Andhra Pradesh to protect the irrigation interests under the existing irrigation works in Andhra Pradesh and similarly the State of Andhra Pradesh will not put up any new work on the Streams mentioned in Schedule (2) within the limits shown in the said Schedule and marked in the map* appended herewith, without the previous consent of the State of Karnataka to protect the irrigation interests under the existing irrigation works in the State of Karnataka.

The State of Karnataka will not put up any new construction on Suvarnamukhi River so as to affect the supply of Agali tank in Andhra Pradesh for the irrigation of an ayacut of 884 acres, the supplies for which are drawn from the Agali Anicut in the State of Karnataka.

*See Map II in Volume IV of the Report.

SCHEDULE I

List of streams on which no new constructions should be undertaken by the State of Karnataka without the previous consent of Andhra Pradesh.

Sl. No.	Name of the Stream or Catchment	Location in the Map	Limits within which no new construction should be undertaken by Karnataka without the previous consent of Andhra Pradesh
1.	Hagari (Vedavathy).	A	From Vanivilas Sagar in Karnataka upto Bhairavanithippa Dam in Andhra Pradesh.
2.	Dodderi tank halla (Garanihalla).	B	4 1/2 miles upstream of confluence with Hagari.
3.	Talak tank halla (Garanihalla).	C	From the Salem-Bellary road bridge over this stream upto confluence with Hagari.
4.	Chinnahagari.	D	Upto 16 miles upstream from Karnataka-Andhra Pradesh boundary.
5.	Amarapuram tank catchment.	E	Catchment of Amarapuram tank in the State of Karnataka.
6.	Virapasamudram tank catchment	F	Catchment of Virapasamudram tank in the State of Karnataka.
7.	Yeradkere tank catchment	G	Catchment of Yeradkere tank in the State of Karnataka.
8.	Rangasamudram tank catchment	H	Catchment of Rangasamudram tank in the State of Karnataka.
9.	Nagalapuram tank catchment	I	Catchment of Nagalapuram tank in the State of Karnataka.

SCHEDULE 2

List of streams on which no new constructions should be undertaken by the State of Andhra Pradesh, without the previous consent of Karnataka.

S. No	Name of the Stream	Location in the Map	Limits within which no new construction should be undertaken by Andhra Pradesh without the previous consent of the State of Karnataka.
1	2	3	4
1.	Madalur Doddakere nala	J	Entire catchment of the nala in Andhra Pradesh.
2.	Madalur Gidaganahalli Kattenala	K	Entire catchment of the nala in Andhra Pradesh.
3.	Doddabanagere Doddakere nala	L	Entire catchment of the nala in Andhra Pradesh.
4.	Dharmapur tank nala	M	Entire catchment of the nala in Andhra Pradesh.
5.	Parasurampur Doddakere nala	N	Entire catchment of the nala in Andhra Pradesh.
6.	Kadehoda Achuvalikere nala	O	Entire catchment of the nala in Andhra Pradesh.
7.	Parasurampur a tank nala	P	Entire catchment of the nala in Andhra Pradesh.
8.	Gowripura Palydakere Nala	Q	Entire catchment of the nala in Andhra Pradesh.
9.	Jajur tank nala	R	Entire catchment of the nala in Andhra Pradesh.
10	Thippareddihally Kyatanakere nala	S	Entire catchment of the nala in Andhra Pradesh.
11.	Oblapur tank nala	T	Entire catchment of the nala in Andhra Pradesh.
12.	Hagari (Vedavathy)	U	Below Bhairavanithippa Dam up to Andhra Pradesh Karnataka border.
13.	Chinnahagari	V	From Karanataka-Andhra Pradesh border up to its confluence with Vedavathy (Hagari).

ANNEXURE B

Regulations regarding gaugings and gauging sites in the Krishna River System

The river Krishna and its tributaries should be gauged at the following sites:

I. At all the dam and weir sites—existing, under construction and future projects—utilising annually 1 T.M.C. or more:

At all such sites the following measurements will be made and recorded three times a day—6 A.M. in the morning, 12 Noon and 6 P.M. in the evening:—

- (a) Diversions into canals, penstocks, tunnels etc.
- (b) Water let down through the various sluices in the dam, weir or barrage.
- (c) Overflow over waste weir or spillways.
- (d) Estimated evaporation losses.
- (e) Water lifted from the river or reservoirs for irrigation, water supply and for any other purpose. These measurements will be made by the States in which the dams and weirs are situated.

The cost of such measurements will be borne by the States concerned.

II. Gauging on Inter-State Streams:

Three times daily at 6 A.M., 12 Noon and 6 P.M.

A. Inter-State streams between Karnataka and Andhra Pradesh:

- | | |
|---------------------------------|---|
| 1. The Krishna River near | Deosugar (at present a CW& PC gauging site) |
| 2. The Bhima River near | Yadgir (CW&PC gauging site). |
| 3. The Tungabhadra River near | Madhwaram bridge site. |
| 4. (a) The Vedavathy River near | Bhairavanithippa |
| (b) The Vedavathy River near | Rampur (at present a CW&PC site) |
| 5. The Kagna River near | Jiwargi |
| 6. The Chikkahagari River | near Amkundi Bridge or Aqueduct site on High Level Canal. |

The location of these stations may be changed from time to time as the river channels and flow conditions of the rivers may require. The river gauging at Deosugar, Yadgir, and Rampur will be continued to be done by the CW&PC as at present, the

States bearing the cost as being done now. The river gauging at Madhawaram, Bhairvanithippa, Jiwargi and Amkundi Bridge will be done jointly by the States of Karnataka and Andhra Pradesh or by the CW&PC if willing to do so, and the cost will be shared between all the three States equally.

B. Inter-State Streams between Maharashtra and Karnataka:

1. The Krishna river near	Shirti (at present a CW&PC gauging site)
2. The Bhima river near	Takali (do)
3. The Ghataprabha river near	Daddi
4. The Vedganga river near	Bastawad
5. The Dudhganga river near	Kagal at the bridge site on N. Highway.
6. The Panchaganga river near	Terwad (at present a CW&PC gauging site)
7. The Agrani river near	Pendagaon
8. The Hiranyakeshi river near	Gotur weir
9. The Bornala river near	Konkangaon
10. The Borinala near	Diksanga site or Railway bridge near Rudewadi
11. The Doddahalla river	near Shivadhan
12. The Benithora river near	Diggi

The location of the said stations may be changed from time to time as the river channels and water flow conditions of the rivers may require. The river gauging at Shirti, Takali and Terwad will be continued to be done by the CW&PC as at present the States bearing the cost as being done now. The river gauging at Daddi, Bastawad, Kagal, Pendagaon, Gotur, Konkangaon, Diksanga or Rudewadi, Shivadhan, and Diggi will be done jointly by the States of Maharashtra and Karnataka or the CW&PC if willing to do so, and the cost of gauging at these sites will be shared between all the three States equally.

C. CW&PC gauging sites:

In addition to the CW&PC gauging sites mentioned in A & B above, the CW&PC will continue to do the river gauging as at present at the following sites the cost being borne by the three States as at present.

(a) *On the Krishna river at*

(1) Karad (in Maharashtra)

- (2) Almatti (in Karnataka)
- (3) Dhannur (in Karnataka)
- (4) Yaparla (in Andhra Pradesh)
- (5) Moravakonda (in Andhra Pradesh)
- (6) Srisailam (in Andhra Pradesh)
- (7) Damerapadu (in Andhra Pradesh)
- (8) Wadenpalli (in Andhra Pradesh)
- (9) Vijayawada (in Andhra Pradesh)

(b) *On the Koyna river at*

- (10) Koyna dam (Maharashtra)
- (11) Warunji (-do-)

(c) *On the Warna river at*

- (12) Samdoli (Maharashtra)

(d) *On the Dudhganga river at*

- (13) Sadalgi (Maharashtra)

(e) *On the Ghatprabha river at*

- (14) Dhupdal weir (in Karnataka)
- (15) Bagalkot (-do-)

(f) *On the Malaprabha river at*

- (16) Huvanur (in Karnataka)

(g) *On the Bhima river at*

- (17) Dhond (in Maharashtra)
- (18) Narsingpur (-do-)

(h) *On the Nira river at*

- (19) Sarati (in Maharashtra)

(i) *On the Sina river at*

- (20) Wadakbal (in Maharashtra)

(j) *On the Tungabhadra river at*

- (21) Harlahalli (in Karnataka)
- (22) Manuru (-do-)

- (23) Mantralayam (-do-)
- (24) Bawapuram (in Andhra Pradesh)

(k) *On the Tunga river at*

- (25) Shimoga (in Karnataka)

(l) *On the Bhadra river at*

- (26) Lakkavali (in Karnataka)

(m) *On the Varada river at*

- (27) Marol (in Karnataka)

(n) *On the Musi river at*

- (28) Damercherla (in Andhra Pradesh)

(o) *On the Palleru river at*

- (29) Palleru bridge (in Andhra Pradesh)

(p) *On the Munneru river at*

- (30) Keesra (in Andhra Pradesh)

GOVERNMENT OF INDIA
NARMADA WATER DISPUTES TRIBUNAL

No. 69/1/78-NWDT

New Delhi, December 7, 1979

The Secretary to the
Government of India,
Ministry of Agriculture & Irrigation,
Department of Irrigation,
NEW DELHI.

SIR,

The Narmada Water Disputes Tribunal investigated the matters referred to it under Section 5(1) of the Inter-State Water Disputes Act 1956 and forwarded its Report with its Decision under Section 5(2) of the said Act to the Government of India on the 16th August, 1978.

Within three months of the aforesaid Decision, the Union of India and the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan filed five separate References before the Tribunal under Section 5(3) of the Inter-State Water Disputes Act 1956.

The Tribunal has prepared its Further Report giving such explanation/guidance as it has deemed fit on the matters referred to it under these five References. In Chapters I to VIII of its Further Report, Volume I, Shri V. Ramaswami the Chairman of the Tribunal and Shri M.R.A. Ansari, Member, have expressed their opinion on all the important points arising in these References. Shri A.K. Sinha, another Member, has expressed on a few of these points a somewhat different opinion which is reproduced in Volume II of this Further Report. In accordance with the majority opinion, the Tribunal has given its modified Decision in Chapter IX, Volume I of the Further Report under Section 5(3) of the Inter-State Water Disputes Act 1956 read with Section 5(4) of the same Act.

The Tribunal herewith forwards its Further Report to the Government of India under Section 5(3) of the Inter-State Water Disputes Act 1956.

Yours faithfully,
(Sd.) V. RAMASWAMI
Chairman
(Sd.) A.K. SINHA
Member
(Sd.) M.R.A. ANSARI
Member

Chapter IX

FINAL ORDER AND DECISION OF THE NARMADA WATER DISPUTES TRIBUNAL

In Chapters I to VIII of this Further Report, Volume I, the Chairman of the Tribunal Shri V. Ramaswami and Member, Shri M.R.A. Ansari have expressed their opinion on all the important points arising in these References. Shri A.K. Sinha, another Member has expressed on a few points a somewhat different opinion which is reproduced in Volume II of Further Report. In accordance with the majority opinion, the Tribunal gives the following modified revision under Section 5(3) of the Inter-State Water Disputes Act 1956 read with Section 5 (4) of the same Act.

Final Order and Decisions of the Tribunal

CLAUSE I - *Date of Coming into Operation of the Order*

This Order shall come into operation on the date ⁴ of publication of the Decision of this Tribunal in the Official Gazette under Section 6 of the Inter-State Water Disputes Act, 1956.

CLAUSE II - *Determination of the Utilisable Quantum Of Narmada Waters At Sardar Sarovar dam Site*

The Tribunal hereby determines that the utilisable quantum of waters of the Narmada at Sardar Sarovar Dam Site on the basis of 75 per cent dependability should be assessed at 28 Million Acre Feet (34,537.44 M.cu.m.)

CLAUSE III - *Apportionment of the Utilizable Quantum of Narmada Waters.*

(1) The Tribunal hereby orders that out of the utilisable quantum of Narmada waters, (a) Madhya Pradesh is entitled to a share of 18.25 Million Acre Feet (22,511.01 M.cu.m.), (b) Gujarat is entitled to a share of 9 Million Acre Feet (11,101.32 M.cu.m.), (c) Rajasthan is entitled to a share of 0.5 Million Acre Feet (616.74 M.cu.m.) and (d) Maharashtra is entitled to a share of 0.25 Million Acre Feet (308.37 M.cu.m.)⁵;

(2) Further, it is clarified that the apportionment relates to actual withdrawals and not consumptive use;

(3) Within its share of water, each party State is free to make such changes in the pattern of water use and in the areas to be benefited within or outside the Narmada basin in its territory as it may consider necessary.

⁴ The order was published in the Official Gazette on 12th December, 1979.

⁵ As per MoU between States of Gujarat and Maharashtra signed on 07.01.2015, the Maharashtra share is reduced to the extent of 140 MCM in Narmada basin in lieu of water utilization to the extent of 140 MCM by Maharashtra in Tapi basin from Ukai reservoir.

CLAUSE IV - *Order With Regard To Excess Waters and Sharing of Distress*

(1) The utilisable flow of Narmada in excess of the 28 Million Acre Feet (34,537.44 M.cu.m.) of utilisable flow in any water year, i.e., from 1st of July to 30th of June of next calendar year is apportioned in the following ratios of allocation i.e., 73 for Madhya Pradesh, 36 for Gujarat, 1 for Maharashtra and 2 for Rajasthan;

(2) In the event of the available utilisable waters for allocation in any water year from 1st of July to 30th June of the next calendar year falling short of 28 Million Acre Feet (34,537.44 M.cu.m.), the shortage should be shared between the various States in the ratio of 73 for Madhya Pradesh, 36 for Gujarat, 1 for Maharashtra and 2 for Rajasthan;

(3) The available utilisable waters in a water year will include the waters carried over from the previous water year as assessed on the 1st of July on the basis of stored waters available on that date;

(4) The available utilisable waters on any date will be inclusive of return flows and exclusive of losses due to evaporation of the various reservoirs;

(5) It may be mentioned that in many years there will be surplus water in the filling period after meeting the storage requirements and withdrawals during the period. This will flow down to sea. Only a portion of it will be utilisable for generating power at Sardar Sarovar river-bed power-house and the rest will go waste. It is desirable that water which would go waste without even generating power at the last river-bed power-house should be allowed to be utilised by the party States to the extent they can.

Gujarat is, therefore, directed that whenever water starts going waste to sea without generating power, or based on the information received from upstream gauging stations, it anticipates that water would so go waste, it shall inform the Narmada Control Authority (hereinafter referred to as the Authority) and designated representatives of all the concerned States. Gujarat shall also inform them when such flows cease. During the period of such flows, the party States, whose reservoirs are spilling and the spill water cannot be stored elsewhere, may utilise such flows from the said reservoirs as they like and such utilisation by the party States will not count towards allotment of supplies to them, but use of such water will not establish any prescriptive rights.

CLAUSE V - *Period of Operation of the Order of Apportionment.*

Our Orders with regard to the equitable allocation in Clauses III and IV are made subject to review at any time after a period of 45 years from the date of publication of the Decision of the Tribunal in the Official Gazette.

CLAUSE VI - *Full Supply Level of the Navagam Canal*

The Tribunal hereby determines that the Full Supply Level of Navagam Canal off-taking from Sardar Sarovar should be fixed at 91.44m, (+300') at its head regulator with a bed gradient of 1 in 12,000 from head to 290 km (mile 180), that is, upto the off-take of Saurashtra branch. From that point to Rajasthan border the bed gradient should be

1 in 10,000. These bed gradients may be changed by Gujarat and Rajasthan by mutual agreement. Gujarat and Rajasthan shall be at liberty to decide the canal capacity required by each in the light of water which would be expected to be available within their share.

CLAUSE VII - *Full Reservoir Level and Maximum Water Level of the Sardar Sarovar Dam*

The Tribunal hereby determines that the height of the Sardar Sarovar Dam should be fixed for Full Reservoir Level + 138.68 m., (+455') and Maximum Water Level at + 140.21 m., (+460'). Gujarat shall take up and complete the construction of the dam accordingly.

CLAUSE VIII - *Sharing of Costs and Benefits.*

(1) (i) The Tribunal hereby determines that out of the net power produced at Navagam at canal head and river bed power houses on any day the share of Madhya Pradesh will be 57 percent; Maharashtra's share will be 27 per cent and Gujarat's share will be 16 per cent.

(ii) The party States shall make available in annual instalments their share of funds required according to approved construction programme and take all the necessary steps to complete the Sardar Sarovar Dam within ten years of the date of publication of the Final Order and Decision of the Tribunal in the Official Gazette.

(2) The Tribunal makes the following further Orders:-

(i) The power generated in the River Bed and Canal Power Houses at Navagam will be integrated in a common switchyard.

(ii) Madhya Pradesh and Maharashtra will be entitled to get 57 per cent and 27 per cent respectively of the power available at bus bar in the switchyard after allowing for station auxiliaries.

(iii) The above entitlement applies both to availability of machine capacity for peak loads and to the total energy produced in any day.

(iv) The entitlement of power and energy for any day can be utilised fully or partly by the concerned States or sold to another participating State under mutual agreement. It cannot, however, be carried forward except under a separate agreement or working arrangement entered into among the effected parties.

(v) Gujarat will construct and maintain the transmission lines needed to supply the allotted quantum of power to Madhya Pradesh and Maharashtra upto Gujarat State border, along an alignment as agreed to between the parties and if there is no agreement along such alignment as may be decided by the Narmada Control Authority. The transmission lines beyond Gujarat State border shall be constructed and maintained by Madhya Pradesh and Maharashtra in their respective States.

(vi) The power houses and appurtenant works including the machinery and all installations as well as the transmission lines in Gujarat State will be constructed, maintained and operated by Gujarat State or an authority nominated by the State.

(vii) The authority in control of the Power Houses shall follow the directions of the Narmada Control Authority in so far as use of water is concerned.

(viii) The scheme of operation of the Power Houses including the power required and the load to be catered for the different party States during different parts of the day shall be settled between the States at least one week before the commencement of every month and shall not be altered during the month except under agreement among the States or under emergencies.

If and when Sardar Sarovar Power Complex gets linked with the Regional or National Power Grid, the operation of the Sardar Sarovar Power Complex will be governed by such altered system conditions. But in that event the Narmada Control Authority should arrange to take such steps as are necessary to enable the three States of Gujarat, Madhya Pradesh and Maharashtra to get their entitlement of power and energy from the Sardar Sarovar Power Complex according to these orders.

(ix) The capital cost of the power portion of Navagam Complex shall comprise the following:-

(a) Full cost of Unit III electrical works and control works pertaining thereto, upto and including the switchyard.

(b) Full cost of transmission lines in Gujarat State constructed for supplying power to Madhya Pradesh and Maharashtra.

(c) 56.1 per cent of the net cost of common facilities such as Dam and Appurtenant Works i.e. Unit I of Sardar Sarovar Project, after allowing for credits, if any;

(d) 56.1 per cent of the credit given to Madhya Pradesh for the downstream benefits derived from Narmada Sagar Dam.

(x) Madhya Pradesh and Maharashtra shall respectively pay to Gujarat 57 per cent and 27 percent of the capital cost of the power portion of the Sardar Sarovar headworks worked out vide (ix) above. This amount shall be paid in annual instalments until the capital works are completed. Each instalment will be worked out on the basis of the budgeted figures of the concerned works at the commencement of each financial year and shall be set off and adjusted against actual figures at the end of the financial year.

(xi) In addition to the payments vide (x) above, Madhya Pradesh and Maharashtra shall also pay to Gujarat 57 per cent and 27 per cent respectively of the operation and maintenance costs of the Sardar Sarovar Power Complex each year. These payments are also to be based on budgeted figures at the commencement of each financial year and adjusted against actual cost at the end of the year.

(xii) Notwithstanding the directions contained hereinabove, the party States may, by mutual agreement, alter, amend, or modify any of the directions in respect of sharing of power and payment for it.

CLAUSE IX - Regulated Releases to Be Made By Madhya Pradesh for the Requirement of Sardar Sarovar Project

With regard to the quantum and pattern of regulated releases, the Tribunal makes the following Order:-

It has been agreed by the party States and decided by the Tribunal in its Order dated 8th October, 1974, that the utilisable quantity of water of 75 per cent dependability in the Narmada at Sardar Sarovar Dam site should be assessed at 28 MAF (34,537.44 M.cu.m.). The actual inflow of 75 per cent dependability, however, is only 33,316.29 M.cu.m. (27.01 MAF) and this is brought up to utilisable quantity of 28 MAF (34,537.44 M.cu.m.) by means of carryover in various reservoirs allowing for evaporation losses and regeneration. Out of 28 MAF (34,537.44 M.cu.m.), 11,101.32 M.cu.m. (9MAF) has to be provided for Gujarat and 0.5 MAF (616.74 M.cu.m.) for Rajasthan at Sardar Sarovar. The requirements at Sardar Sarovar have to be met by releases by Madhya Pradesh and by inflows from the intermediate catchment, surplus to the requirements of Madhya Pradesh below Narmadasagar and Maharashtra. The releases from Maheshwar work out to 10,015.86 M.cu.m. (8.12 MAF). Making uniform monthly releases the amount of water to be released by Madhya Pradesh per month would be 834.65 M.cu.m. (0.677 MAF). The actual inflow in the river system, however, would vary from year to year and, therefore, the releases by Madhya Pradesh would also vary.

The inflow during the filling period, July to October, cannot be predicted at the beginning of the season. It is only in October that it would be fully known whether the particular year is a normal year or the extent to which it is a surplus or deficit year. Normally the releases by Madhya Pradesh during the filling period, therefore, would have to be more or less on the basis of the year yielding 28 MAF (34,537.44 M.cu.m.) utilisable quantity. The month of July and early part of August are crucial for Kharif sowing. It is important that during this period regulatory arrangements should ensure that due share of water is made available to all parties.

Having regard to the facts mentioned in the preceding two paragraphs, we order that detailed rules of regulation and water accounting shall be framed by Narmada Control Authority in accordance with the guidelines given below. These guidelines may, however, be altered, amended or modified by agreement between the States concerned.

(i) The 28 MAF (34,537.44 M.cu.m.) utilisable supplies of 75 per cent dependability in a water year (1st July to 30th June next year) shall be shared by the party States as under :-

Madhya Pradesh	18.25 MAF (22,511.01 M.cu.m.)
Gujarat	9.00 MAF (11,101.32 M.cu.m.)
Rajasthan	0.50 MAF (616.74 M.cu.m.)
Maharashtra	0.25 MAF (308.37 M.cu.m.)
	28.00 MAF (34,537.44 M.cu.m.)

(ii) Surplus or deficit utilisable supplies in a water year shall be shared to the extent feasible by the party States in the same proportion as their allotted shares in (i) above. The surplus water shall first be utilised for filling up the reservoirs to capacity and surplus water shall be utilised for irrigation and other purposes only after that has been ensured.

(iii) The water available in the live storages of the various reservoirs on 30th June shall be reckoned as an inflow to be shared in the next water year.

(iv) The releases necessary to ensure Gujarat and Rajasthan's share of water in a water year shall be let down by Madhya Pradesh at a reasonably uniform rate, permitting only such variation as the Authority may direct or approve and keeping in view the directions for regulated releases.

(v) The Authority shall ensure by so directing the releases by Madhya Pradesh that there is at all times sufficient utilisable water in Sardar Sarovar to meet the requirements of the next ten days subject to water being available in the storages in Madhya Pradesh after taking into account the proportionate requirements of Madhya Pradesh. For this purpose, Gujarat and Rajasthan would intimate their requirements of the 10 daily period well in advance.

(vi) Utilisation in a water year by each party State shall be figured out on the basis of actual daily discharge at canal head on every major and medium project. For minor works, it shall be on the basis of area irrigated under different crops, the delta for each crop being approved by the Authority. For pumping schemes, drawing directly from the river, its tributaries or reservoirs, whether for irrigation, domestic or industrial use, water drawn shall be reckoned on the basis of the rated capacity of pumps and the number of hours they run. For a cross check, the season wise and crop wise area irrigated by each pumping scheme shall also be recorded, and if the figures of water drawn as worked out by the two aforesaid methods differ, the decision of the Authority as regards water drawn shall be final.

(vii) Withdrawals from Sardar Sarovar for Navagam Canal for Gujarat and Rajasthan shall be measured at the head of Navagam Canal. The supply to Rajasthan shall be measured at Gujarat-Rajasthan border. The loss in the canal in carrying the supply for Rajasthan shall be determined by the Authority after the canal has been constructed and shall reckon against the share of Rajasthan.

Water let down into the river from Sardar Sarovar through power house turbines shall be measured on the basis of power generated by it and that escaped through the spillway by measurement at the spillway.

Gujarat may let down water from Sardar Sarovar for its downstream use by making specific indent for it and such releases shall reckon against its share. Such releases for downstream use shall be made through the turbines and the power so generated shared between Madhya Pradesh, Maharashtra and Gujarat in the prescribed ratio. Water let down into the river from Sardar Sarovar except at the specific indent of Gujarat shall not reckon against the share of Gujarat.

The water drawn from Sardar Sarovar for use in Madhya Pradesh and Maharashtra, as the case may be, shall reckon against the share of water of that State.

(viii) For major and medium projects, water account shall be kept by 10 daily period. The last 10 daily period of a month may have 11 days, 10 days or less, depending upon the number of days in the month. For minor schemes water accounts shall be kept by crop seasons, kharif (July to October), rabi (November to March) and hot weather (April to June). For pumping schemes and domestic and industrial uses it shall be monthly.

(ix) The water use by minor and pumping schemes in any ten daily period may provisionally be taken to be the same as in the corresponding period in the previous year on the basis of average use during the crop period. For final water account, however, it will be determined as in (vi) above.

(x) Each State shall furnish to the Authority and make available to any party State desiring the same, such data and information as the Authority may require and ask for.

(xi) The Authority shall arrange the review of the ten day releases made by Madhya Pradesh at least once a month and oftener as considered necessary for directing any change in the releases. It may designate a person for doing so.

(xii) The Authority shall direct final adjustment to be made in the following water year of the use in excess of the authorised use, if any, by any State or States during the preceding water year by curtailing the share(s) of the State or States concerned which have used water in excess and make over the same to the State or State which have received short supplies. Water supplied to Rajasthan on any day in excess of 10 per cent over and above its indent shall reckon against use by Gujarat.

(xiii) The Authority shall furnish the annual water account for the water year to the Governments of the party States by the end of August of the next water year. Each State may make any observation on the account and/or point out corrections in it, if any, within one month of its receipt. After making the necessary modifications, the Authority shall furnish to each party State the final annual water account for the water year by 31st October. The Authority shall cause the annual water account to be published each year.

CLAUSE X - *Payment to be made by Gujarat to Madhya Pradesh for such Regulated Releases*

(1) Madhya Pradesh shall take up and complete the construction of Narmada Sagar dam with FRL. 262.13 m (860 ft.) concurrently with or earlier than the construction of Sardar Sarovar Dam.

(2) The Tribunal further orders that Gujarat should credit to Madhya Pradesh each year 17.63 per cent of the expenditure on account of Narmada Sagar dam in the financial year commencing from the year of taking up of the construction of Narmada Sagar dam. This will be initially credited on the basis of budget allotment to be adjusted at the end of

the year on actual expenditure. The post construction expenditure on maintenance is not to be considered as cost of construction.

CLAUSE XI - *Directions Regarding Submergence Land Acquisition and Rehabilitation of Displaced Persons.*

SUB - CLAUSE I - *Definition*

1(1) : "Land" The expression "land" shall have the same meaning as defined in the Land Acquisition Act, 1894 (hereinafter referred to as the Act) which states "the expression 'land' includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth."

1(2) : "Oustee" An 'oustee' shall mean any person who since at least one year prior to the date of publication of the notification under Section 4 of the Act, has been ordinarily residing or cultivating land or carrying on any trade, occupation, or calling or working for gain in the area likely to be submerged permanently or temporarily.

1(3): "Family" (i) A family shall include husband, wife and minor children and other persons dependent on the head of the family, e.g., widowed mother.

(ii) Every major son will be treated as a separate family.

SUB-CLAUSE II - *Lands which are to be Compulsorily Acquired.*

II(1) : Madhya Pradesh and Maharashtra shall acquire for Sardar Sarovar Project under the provisions of the Land Acquisition Act, 1894, all lands of private ownership situated below the FRL + 138.68 m (455') of Sardar Sarovar and all interests therein not belonging to the respective States. If on the basis aforesaid, 75 per cent or more land of a contiguous holding of any person is required to be compulsorily acquired, such person shall have the option to compel compulsory acquisition of the entire contiguous holding.

II(2) : Madhya Pradesh and Maharashtra shall also acquire for Sardar Sarovar Project under the provisions of the Land Acquisition Act, 1894, all buildings with their appurtenant land situated between FRL + 138.68 m (455') and MWL + 141.21 m (460') as also those affected by the backwater effect resulting from MWL + 141.21 m (460').

II(3) : The backwater level at the highest flood level in Sardar Sarovar shall be worked out by the Central Water Commission in consultation with Madhya Pradesh and Gujarat.

SUB - CLAUSE III - *Liability of Gujarat to Pay Compensation for Land Acquisition and Rehabilitation etc.*

III (1): Gujarat shall pay to Madhya Pradesh and Maharashtra all costs including compensation, charges and expenses incurred by them for or in respect of the compulsory acquisition of lands required to be acquired as aforesaid.

III (2): Gujarat shall pay to Madhya Pradesh and Maharashtra and the Union of India compensation for the respective Government lands and structures on principles

similar to those underlying the Land Acquisition Act, 1894. Where any dispute or difference arises between Gujarat, Madhya Pradesh, Maharashtra and the Union of India with respect to the compensation payable as aforesaid any of the three States of Gujarat, Madhya Pradesh and Maharashtra or the Union of India may refer the matter in dispute to arbitration. The State of Gujarat on the one hand and the States of Madhya Pradesh, Maharashtra or the Union of India (as the case may be) on the other hand shall respectively nominate one Arbitrator each. In the event of disagreement between the Arbitrators, such dispute or difference shall be referred to an Umpire who shall be a person appointed in that behalf by the Chief Justice of India from among persons who are, or have been Judges of the Supreme Court. The decision of the Arbitrators, or, as the case may be, of the Umpire shall be final and binding on the parties and shall be given effect to by them.

III(3) : Gujarat shall pay to Madhya Pradesh and Maharashtra land revenue in accordance with the respective Land Revenue Codes of Madhya Pradesh and Maharashtra in respect of all lands in their respective territories acquired for Gujarat or conveyed to it.

III(4) : Gujarat shall pay to Madhya Pradesh and Maharashtra all costs, charges and expenses incurred by Madhya Pradesh and Maharashtra for the purpose of removal and reinstallation of any ancient or historical monuments archaeological remains, religious place of worship or idols likely to be affected by submergence under Sardar Sarovar and that in the event of such payment being made, no separate compensation as hereinbefore provided shall be required to be paid in respect of the same having been affected by the submergence.

III(5) : Gujarat shall pay to Madhya Pradesh and Maharashtra all costs, charges and expenses required to be incurred by them for rehabilitation of oustees and oustee families in their respective territories in accordance with the directions hereinafter contained.

III(6) : Gujarat shall pay to Madhya Pradesh and Maharashtra costs on account of establishment charges for land acquisition and rehabilitation and other departmental staff which Madhya Pradesh and Maharashtra may consider necessary for the purpose of such acquisition and rehabilitation.

SUB-CLAUSE IV - *Provision for Rehabilitation.*

IV(1) : According to the Present estimates the number of oustee families would be 6147 spread over 158 villages in Madhya Pradesh, 456 families spread over 27 villages in Maharashtra. Gujarat shall establish rehabilitation villages in Gujarat in the irrigation command of the Sardar Sarovar Project on the norms hereinafter mentioned for rehabilitation of the families who are willing to migrate to Gujarat. For oustee families who are unwilling to migrate to Gujarat, Gujarat shall pay to Madhya Pradesh and Maharashtra the cost, charges and expenses for establishment of such villages in their respective territories on the norms as hereinafter provided.

IV(2)(i) : According to the present estimates the number of oustee families below RL 106.68 metres (RL 350') would be 30 spread over 20 villages in Madhya Pradesh and 250 families spread over 20 villages in Maharashtra. Within six months of the

publication of the decision of the Tribunal in the Official Gazette, Gujarat, Madhya Pradesh and Maharashtra shall determine by mutual consultation the location of one or two rehabilitation villages in Gujarat to rehabilitate oustees from areas below RL 106.68 meters (RL 350). Gujarat shall acquire necessary lands for the rehabilitation villages and make available the same within two years of the decision of the Tribunal. Within six months of the decision of the location of the rehabilitation villages in Gujarat, Madhya Pradesh and Maharashtra shall intimate to Gujarat the number of oustee families from areas below RL 106.68 meters (RL 350') willing to migrate to Gujarat. For the remaining oustee families, Madhya Pradesh and Maharashtra shall arrange to acquire lands for rehabilitation within the respective States.

IV (2) (ii): Madhya Pradesh and Maharashtra shall set up adequate establishments for land acquisition and rehabilitation of oustee families. Gujarat shall deposit within three months of the decision of the Tribunal Rupees ten lakh each with Madhya Pradesh and Maharashtra in advance towards cost of establishment and rehabilitation in these States to be adjusted after actual costs are determined. Madhya Pradesh and Maharashtra shall start land acquisition proceedings for areas below RL 106.68 metres (RL + 350'), within six months of the decision of the Tribunal and convey the lands to Gujarat for project purposes within three years of the decision of the Tribunal. Within 18 months of the decision of the Tribunal, Gujarat shall make an advance payment of Rs. 70 lakhs to Madhya Pradesh and Rs. 100 lakhs to Maharashtra towards the compensation of land, to be adjusted after actual costs are determined.

IV(2) (iii) : Regarding the oustee families from areas above RL 106.68 metres (RL + 350'), Gujarat shall intimate to Madhya Pradesh and Maharashtra within six months of publication of the decision of the Tribunal in the official Gazette the number and general location of rehabilitation villages proposed to be established by Gujarat in accordance with the decision of the Tribunal. Within one year of the receipt of proposal of Gujarat, both Madhya Pradesh and Maharashtra shall intimate to Gujarat the number of oustee families willing to migrate to Gujarat. The three States by mutual consultation shall determine within two years of the decision of the Tribunal, the number and general location of rehabilitation villages required to be established by Gujarat in its own territory. Madhya Pradesh and Maharashtra shall intimate to Gujarat the number of such villages to be established in Madhya Pradesh and Maharashtra and for which Gujarat would be required to make payments to Madhya Pradesh and Maharashtra respectively.

IV(2)(iv) : Gujarat shall acquire and make available a year in advance of the submergence before each successive stage, irrigable lands and house sites for rehabilitation of the oustee families from Madhya Pradesh and Maharashtra who are willing to migrate to Gujarat. Gujarat shall in the first instance offer to rehabilitate the oustees in its own territory.

IV (3): Gujarat shall also provide the following grants and amenities to the oustees:-

(a) Resettlement Grants (Rehabilitation Grant) - Gujarat shall pay per family a sum of Rs. 750 inclusive of transportation charges as resettlement grant.

(b) Grant-in-aid

In addition, Gujarat shall pay per family grant-in-aid in the following scale:-

Where total compensation is received	Grant-in-aid
Above Rs. 2000/-	Nil
Between Rs. 2000/- and Rs. 500/-	Rs. 500/- less an amount equal to one-third of the compensation in excess of Rs. 500/-
Less than Rs. 500/-	Rs. 500/-

(c) Civic amenities

1. One primary school (3 rooms) for 100 families.
2. One Panchayat Ghar for every 500 families.
3. One Dispensary for every 500 families.
4. One seed store for every 500 families.
5. One Children's park for every 500 families.
6. One village pond for every 500 families.
7. Drinking water well with trough for every 50 families.
8. Each colony should be linked to main road by roads of appropriate standard.
9. One platform for every 50 families.
10. Every oustee family shall be entitled to and allotted a house site i.e. a plot of land measuring 18.29 x 27.43m. (60' x 90') free of cost. In addition, a provision of 30% additional area for roads, Government buildings, open space etc. shall be made by Gujarat under civic amenities.

11. The State of Gujarat shall make the following provision for rehabilitation in Madhya Pradesh and Maharashtra:-

- | | |
|---|----------------------|
| (a) Resettlement - - - - - | Rs. 750/- per family |
| (b) Grant-in-aid - - - - - | Rs. 500/- per family |
| (c) Acquisition of land for resettlement of families affected @ 0.40 hectares (one acre) for 6 families | Rs. 1500/- per acre. |

(d) Civic amenities

- | | | |
|----|--|--------------------------|
| 1 | One primary school @ 100 families | Rs. 30,000/- each |
| 2 | One Community Hall-cum-Panchayat Bhavan @ 500 families | Rs. 20,000/- each |
| 3 | One Dispensary @ 500 families | Rs. 25,000/- each |
| 4 | One seed store @ 500 families | Rs. 10,000/- each |
| 5 | One Children's Park @ 500 families | Rs. 6,000/- each |
| 6 | One well with trough @ 50 families | Rs. 10,000/- each |
| 7 | One pond @ 500 families | Rs. 20,000/- each |
| 8 | One tree platform @ 50 families | Rs. 1,500/- each |
| 9 | One religious place of worship @ 100 families | Rs. 1,000/- each |
| 10 | Construction of approach roads and link roads for Abadies 3 km.per every new Abadi. | Rs. 30,000/- per Km. |
| 11 | Electrical distribution lines and street lights 2 km. per 100 families | Rs. 11,000/- per km. |
| 12 | Social amenities for each municipal town going under submergence, viz, water supply and sanitary arrangements layout, levelling of site etc. | Rs. 5,00,000/- each town |

IV(4)(i) : Gujarat is directed to provide for rehabilitation and civic amenities as per directions contained hereinabove in Sub-clause IV(3) in its estimate for B-Land compensation and rehabilitation.

IV(4) (ii) : Notwithstanding the provisions hereinbefore contained, Gujarat shall not be liable to pay any compensation for the loss of public properties, facilities or amenities such as drinking water wells, primary school buildings, internal roads, village sites, approach roads, dispensaries, Panchayat buildings, rural electrification, highway, bridges, telegraph lines, power lines etc. if corresponding alternative properties, facilities or amenities are to be provided at the cost of the Sardar Sarovar Project. The party owning the facility shall have the option to accept compensation for utilities as existing or ask for their replacement or relocation at the cost of Gujarat.

IV(5) : It is made clear that the monetary values in Clause IV(3)(c) are liable to be changed at the time of actual rehabilitation. Where any dispute or difference arises as regards the changed valuation the matter shall be determined by Arbitration in the manner provided in Clause III(2) above and Gujarat's liability shall stand altered accordingly.

IV(6)(i) : In the event of Gujarat being unable to resettle the oustees or the oustees being unwilling to occupy the area offered by Gujarat, Madhya Pradesh and Maharashtra shall make such provisions for rehabilitation, civic amenities etc. on the lines mentioned in Clauses IV(1) to (4) above. Gujarat shall, in that event, be liable to pay all such expenses, costs etc., arising out of or in connection with rehabilitation and provision of civic amenities for the oustees including the cost of all acquisition proceedings and payment of compensation etc., as per the Land Acquisition Act, for the land allotted to oustees, for cultivation and habitation.

IV(6)(ii) : In no event shall any areas in Madhya Pradesh and Maharashtra be submerged under the Sardar Sarovar unless all payment of compensation, expenses and costs as aforesaid is made for acquisition of land and properties and arrangements are made for the rehabilitation of the oustees therefrom in accordance with these directions and intimated to the oustees.

IV (7): *Allotment of Agricultural Lands*: Every displaced family from whom more than 25% of its land holding is acquired shall be entitled to and be allotted irrigable land to the extent of land acquired from it subject to the prescribed ceiling in the state concerned and a minimum of 2 hectares (5 acres) per family, the irrigation facilities being provided by the State in whose territory the allotted land is situated. This land shall be transferred to the oustee family if it agrees to take it. The price charged for it would be as mutually agreed between Gujarat and the concerned State. Of the price to be paid for the land a sum equal to 50% of the compensation payable to the oustee family for the land acquired from it will be set off as an initial instalment of payment. The balance cost of the allotted land shall be recovered from the allottee in 20 yearly instalments free of interest. Where land is allotted in Madhya Pradesh or Maharashtra, Gujarat having paid for it vide Clause IV(6)(i) supra, all recoveries for the allotted land shall be credited to Gujarat.

IV(8) : Any dispute between the States in respect of Clauses IV(1) to (7) of these directions shall be referred to and determined by arbitration in the manner provided in Clause III(2) of these directions.

SUB CLAUSE V - Programme for Payment to Be Made by Gujarat to Madhya Pradesh and Maharashtra:

V (1) : As soon as practicable after the publication of the decision of the Tribunal in the Official Gazette, Gujarat shall prepare and furnish to the other party States, a fresh estimate of sub-head B-Land for the Sardar Sarovar Project as permitted by the Tribunal including in particular, costs of acquisition of lands in Madhya Pradesh and Maharashtra and of rehabilitation of oustee families in Madhya Pradesh and Maharashtra.

V (2) (i): As soon as practicable after the publication of the decision of the Tribunal in the Official Gazette and in any case before expiry of three months thereafter, both Madhya Pradesh and Maharashtra shall furnish to Gujarat three sets of Majmuli/Taluka maps of all talukas in their respective territories likely to be submerged wholly or partly under Sardar Sarovar. These maps shall indicate village boundaries. Within three months after the receipt of the Majmuli/Taluka maps Gujarat shall mark thereon the boundary of the area situated below the FRL as also that between FRL and MWL including the area affected by back water resulting from MWL and shall return one respective set so marked to Madhya Pradesh and Maharashtra.

V(2)(ii) : As soon as practicable after the receipt of one set of the Majmuli/Taluka maps marked as aforesaid and in any case within six months thereof, the Governments of Madhya Pradesh and Maharashtra shall publish notifications under Sub-section (1) of Section 4 of the Act notifying that the lands in their respective territories situated below the FRL and buildings with their appurtenant lands between FRL and MWL, as also those affected by the back water effect resulting from MWL (to be specified in the notifications) are likely to be needed for the Sardar Sarovar Project.

V(2)(iii) : As soon as practicable after publication of the decision of the Tribunal in the Official Gazette as hereinbefore referred to and in any case within one year thereof, Gujarat shall intimate to Madhya Pradesh and Maharashtra yearwise programme of construction of the dam.

V(2)(iv) : Objections, if any, received against the proposed acquisition of lands as notified under Section 4 of the Act shall be heard and disposed of and any reports to the State Governments as contemplated by Sub-section (2) of Section 5A of the Act shall be made with utmost expedition. The Governments of Madhya Pradesh and Maharashtra shall issue requisite notifications under Section 6 of the Act with utmost expedition and in any case before the expiry of three years from the dates of publication of the respective notifications under Sub-section (1) of Section 4 of the Act.

V (2) (v): As soon as practicable after receipt of the yearwise programme of construction of the Sardar Sarovar Dam from Gujarat both Madhya Pradesh and Maharashtra in consultation with Gujarat shall finalise their respective yearwise programme of completing the proceedings for compulsory acquisition of lands in their respective territories upto the stages of making awards under Section 11 of the Act and of taking possession of the lands under Section 16 of the Act.

V(3)(i) : Gujarat is required to pay to Madhya Pradesh and Maharashtra compensation for compulsory acquisition of lands, market value of Government lands to be conveyed to Gujarat and expenditure to be incurred in connection with the rehabilitation of oustee families to be rehabilitated in Madhya Pradesh and Maharashtra as hereinbefore provided. Madhya Pradesh and Maharashtra shall on or before 30th September of each year intimate to Gujarat the amounts required to be paid by Gujarat to Madhya Pradesh and Maharashtra respectively having regard to (a) the extent of lands in Madhya Pradesh and Maharashtra in respect of which awards are likely to be made under Section 11 of the Act (b) the extent of Government lands likely to be conveyed by Madhya Pradesh and Maharashtra to Gujarat during the next financial year and (c) the expenditure likely to be incurred by Madhya Pradesh and Maharashtra in connection with rehabilitation of oustee families in Madhya Pradesh and Maharashtra during the next financial year. In arriving at these estimates for the next financial year, Madhya Pradesh and Maharashtra shall also take into account the differences, if any, between the payments made by Gujarat in pursuance of this clause for the current financial year and the amount actually payable during the said financial year.

V(3)(ii) : On the basis of these estimates, Gujarat shall on or before the 31st May of the following financial year make payment to Madhya Pradesh and Maharashtra of the amounts estimated as provided in Clause V(3)(i) above.

V(3)(iii) : Gujarat shall at each successive stage of submergence intimate to Madhya Pradesh and Maharashtra the area coming under submergence at least 18 months in advance. The inhabitants of the area coming under the respective stages of submergence will be entitled to occupy or use their properties without being required to pay anything for such occupation and use till a date to be notified by the State concerned which date shall not be less than six months before submergence. They must vacate the area by the notified date.

V (4) (i): On payment of the amounts to be paid each year by Gujarat as compensation for compulsory acquisition of lands as aforesaid, Madhya Pradesh and Maharashtra shall, as expeditiously as possible, complete the acquisition and transfer such lands to Gujarat so as to vest the lands in Gujarat to be used only for the purpose of submergence and subject to Clauses V (5) to (8) of these directions.

V(4)(ii) : On payment of the market value of Government lands by Gujarat as hereinbefore provided Madhya Pradesh and Maharashtra and the Union of India shall convey such lands to Gujarat so as to vest in Gujarat to be used only for the purpose of submergence and subject to clauses V(5) to (8) of these directions.

V(5) : Gujarat shall pay to Madhya Pradesh and Maharashtra in accordance with the respective Land Revenue Codes, the amount of land revenue payable every year for the lands in their respective territories acquired for Gujarat or conveyed to it, at the rates prevailing in Madhya Pradesh and Maharashtra respectively from time to time.

V(6) : Madhya Pradesh and Maharashtra, as the case may be, shall remit, each year to Gujarat any revenue which they may derive from the cultivation of lands which get periodically exposed in Sardar Sarovar, after deducting collection charges for the same.

V (7): Notwithstanding vesting in Gujarat of the lands coming under submergence, Madhya Pradesh and Maharashtra shall continue to enjoy all rights of sovereignty intact over the submerged area in the respective States.

V (8): Madhya Pradesh and Maharashtra respectively shall be exclusively entitled to all rights of fishing, boating and water transportation over the part of lake over the submerged land within Madhya Pradesh and Maharashtra respectively, provided, however, that such right is not exercised to the prejudice of any utilities of the Sardar Sarovar Project or cause hindrance in the legitimate performance of their duties by the project personnel.

V (9): All residual rights not specifically transferred to Gujarat in respect of the lands coming under submergence shall continue to vest in the Government in whose territory they are situated.

V (10): In the event of the said lands not being used for the purpose of submergence for which it is acquired, the State of Gujarat shall retransfer such land to Madhya Pradesh or Maharashtra as the case may be, subject to the condition that Madhya Pradesh and Maharashtra refund to Gujarat the amount of compensation received from Gujarat in respect of such land.

V(11) : In the event of any land acquired for rehabilitation of oustee families is not used for the purpose, it shall be returned to the original owner on payment, where feasible or otherwise disposed of and due credit given to Gujarat.

V(12) : All costs incurred by Gujarat on acquisition of land and rehabilitation of oustees in respect of Sardar Sarovar shall be charged to Sardar Sarovar Project estimate, Unit I - Dam and Appurtenant Works.

SUB-CLAUSE VI:

Nothing contained in Clause XI shall prevent the alteration, amendment and modification of all or any of the foregoing clauses by agreement between all the party States.

CLAUSE XII: *Allocation of Cost of Sardar Sarovar Project between Irrigation and Power.*

We determine that the cost of Unit I - Dam and Appurtenant Works - should be apportioned between Irrigation and Power as follows:-

Irrigation -	43.9 per cent
Power -	56.1 per cent

CLAUSE XIII: *Allocation of Irrigation Component of Cost of Sardar Sarovar Project between Gujarat and Rajasthan*

(a)(i) The irrigation component of the cost of Unit I of Sardar Sarovar Project (Dam and Appurtenant Works) should be shared by Gujarat and Rajasthan in the ratio of 18:1.

(a)(ii) Madhya Pradesh and Maharashtra shall contribute a *pro rata* share to the irrigation component of the cost of Sardar Sarovar Dam as also towards its operation and annual maintenance, for water drawn from Sardar Sarovar for use in their territory. The pro rata share shall be in proportion of the quantity of water so drawn to 9.5 MAF. The amount so contributed shall be credited to Gujarat and Rajasthan in the ratio of 18:1.

(b) The cost of Navagam Canal with its design approved by Narmada Control Authority shall be shared by the two States as under:-

(i) The cost differential in respect of land, earth work and lining for the gradients proposed by Gujarat and that now prescribed, to be borne by Rajasthan in full.

(ii) The actual cost of the canal less (i) above to be shared on cusec mile basis.

The actual cost should be shared by Gujarat and Rajasthan on cusec-mile basis on the first instance and on completion of the work the share cost shall be adjusted as indicated above. Rajasthan shall credit its share cost each year initially on the basis of budget allotment. This should then be adjusted at the end of the year to actual expenditure. The post-construction expenditure on maintenance is not to be considered as cost of construction.

Should any difference arise between Rajasthan and Gujarat on figures of cost in respect of Navagam Main Canal for purpose of sharing the cost, the matter shall be referred to the Narmada Control Authority and on such a reference its decision shall be final and binding.

CLAUSE XIV: *Setting Up Of Machinery For Implementing The Decision Of The Tribunal.*

We make the following orders with regard to setting up of machinery for implementing the decision of the Tribunal:-

SUB-CLAUSE I: Constitution of the Authority.

1(1): An inter-State, administrative authority to be called Narmada Control Authority (hereinafter referred to as the 'Authority') shall be established for the purpose of securing compliance with and implementation of the decision and directions of the Narmada Water Disputes Tribunal (herein referred as the 'Orders').

1(2) : The Authority shall consist of seven high-ranking Engineer Members of whom one each shall be of the rank of Engineer-in-Chief, Chief Engineer, or Additional Chief Engineer of the Irrigation Department, Power Department or the State Electricity Board appointed by the Government of each of the States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan and three other eminent Engineers of a rank not less than that of a Chief Engineer to be appointed by the Central Government in consultation with the party States. One of the three Independent Members shall be nominated by the Central Government, as the Chairman of the Authority with a deliberative vote at meetings where decisions are taken on any matter affecting the interest of more than one State and he will be in charge of the administrative work of the Authority. The Central or State Government, as the case may be, shall have the power to remove or suspend from the Authority any Member who, in its opinion, is not suitable to continue as Member.

1(3): Each Independent Member shall be a full-time Member and be appointed for a term not exceeding five years. The Members appointed by the State Governments shall be part-time Members. The appointing authority for Independent Member or that for part-time Member, as the case may be, shall determine the terms and conditions of appointment in each case. As far as practicable, the first appointment of the seven members of the Authority shall be made within three months from the date of publication of the decision of the Tribunal in the Official Gazette.

1(4): *Vacancies of Members* - On any vacancy occurring in the offices of the three independent Members, the Central Government shall appoint a person to such vacant office, and on any vacancy occurring in the office of the four Members other than the independent Members, the State Government by whom the Member whose office falls vacant was appointed shall appoint a person to the vacant office.

In case of illness or absence for any cause whatever of a Member, the Central Government or State Government by whom he was appointed (as the case may be) may appoint a person as an acting Member during such illness or absence and such acting Member shall, while so acting have all the powers and perform all the duties and be entitled to the indemnities of the Member (vide Sub-clause 5) in whose stead he so acts, save and except that the next senior independent Member appointed by the Central Government and not the acting Member shall act as Chairman at business meeting of the Authority or as the Chairman of the Authority in the event of illness or absence of the Chairman of the Authority.

SUB-CLAUSE 2 - *Secretary of the Authority*

The Authority shall employ a Secretary, who shall be an Engineer. He shall not be a Member of the Authority.

SUB-CLAUSE 3 - *Quorum And Voting :*

Five Members shall be a quorum and the concurrence of the majority shall be necessary for the transaction of the business of the Authority except such business as the Authority may from time to time prescribe as routine. The Authority shall not prescribe as routine any business in which the interest of any two of the States are likely to be in conflict. For the transaction of routine business three Members shall be a quorum and in the absence of the Chairman of the Authority, the Chairman elected at the meeting shall have a deliberative vote and in the event of an equality of votes a casting vote also.

Subject as aforesaid the Members shall have equal powers.

SUB-CLAUSE 4 - *Disposal of Business By The Authority*

4(1) : Subject to the provisions of Sub-clause 4(2) below, the Authority may dispose of any matter before it either by circulation or by holding a meeting. However, it will be open to any Member of the Authority to require that a matter shall not be disposed of by circulation but at a meeting.

4(2) : On the following matters the Authority shall record its decision by a Resolution at a meeting in which the Chairman and all the Members from the party States are present :-

(i) Framing of Rules of Business;

(ii) Delegation of functions to a Member or Secretary or any official of the Authority;

(iii) Categorising any part of the business of the Authority as of a formal or routine nature;

(iv) Any other matter which any of the four party States require that it shall be decided at a meeting where all the members from the party States are present.

However, if any particular item under this Sub-clause cannot be disposed of at two successive meetings owing to the absence of one or more Members from the party States, it shall be disposed of under Sub-clause 3 of Clause XIV.

4(3) : Subject to the foregoing provisions, the Authority shall frame its own Rules for the conduct of its business.

4(4) : The Authority shall cause proper minutes or records of all its proceedings to be kept as a permanent record.

SUB-CLAUSE 5- Indemnity Of Member

No Member, officer or employee of the Authority shall be liable for loss, injury or damages resulting from (a) action taken by such Member, officer or employee in good faith and without malice under the apparent authority of the Orders, even though such action is later determined to be unauthorised, or (b) the negligent or wrongful act of omission of any other person, employed by the Authority and serving under such Member, officer or employee unless such Member, officer or employee failed to exercise due care in the appointment of such other person or the supervision of his work.

SUB-CLAUSE 6 - Officers and Servants of the Authority

The Authority may from time to time appoint or employ such and so many officers and servants as it thinks fit and remove or dismiss them, under the rules and regulations applicable to the appointment, removal and dismissal of the Central Government officers and servants. All such officers and servants shall as such be subject to the sole control of the Authority. The scales of pay and other service conditions shall be as applicable to Central Government employees. Persons employed in the services of the four States may be appointed or employed by the Authority in such proportions as the Authority may deem fit. The Authority shall arrange with the State Governments to spare the services of the persons employed in the State Governments for whole-time employment with the Authority, or for the performance of any work or services for the Authority. The Authority may also make direct recruitment of any personnel or obtain the same from the Centre or other source as considered appropriate.

SUB-CLAUSE 7 - Administrative & Field Organisation Costs

(1) All expenses of the Authority (including the salary and expenses of the independent Members) shall be borne by the State Governments of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan in equal shares. The expenses pertaining to a Member representing a State shall be borne by the State concerned. The cost of maintaining operating and controlling the gauging and other hydrological stations in each State and the telecommunication systems for communicating the data shall be borne by the State concerned.

(2) The costs of construction of the storages, power installations, diversion works, headworks and canal networks shall be borne wholly by the State Government in whose territory the work is located except for works whose cost has been ordered by the Tribunal to be shared between two or more party States. Where the capital cost is thus shared, the operation and maintenance cost shall also be shared in the same proportion.

SUB-CLAUSE 8 - Powers, Functions & Duties Of The Authority

8(1): The role of the Authority will mainly comprise co-ordination and directions. Normally all bilateral matters should be dealt with mutually by the States concerned and referred to the Authority only if there is a dispute.

8(2): The Authority shall be charged with the power and shall be under a duty to do any or all things necessary, sufficient and expedient for the implementation of the Orders with respect to :

- (i) the storages, apportionment, regulation and control of the Narmada waters;
- (ii) sharing of power benefits from Sardar Sarovar project;
- (iii) regulated releases by Madhya Pradesh;
- (iv) acquisition by the concerned State for Sardar Sarovar project of lands and properties likely to be submerged under Sardar Sarovar;
- (v) compensation and rehabilitation and settlement of oustees; and
- (vi) sharing of costs.

8(3): In particular and without prejudice to the generality of the foregoing functions, the Authority shall perform inter-alia the following functions :-

- (i) Madhya Pradesh or Gujarat, as the case may be, shall submit to the Authority the Sardar Sarovar Project Report, the Narmada Sagar Project Report, the Omkareshwar Project Report and the Maheshwar Project Report. The Authority shall point out to the States concerned, the Central Water Commission, the Central Electricity Authority and Planning Commission any features of these projects which may conflict with the implementation of the Orders of the Tribunal. Any subsequent changes in the salient features or substantial increase in cost in respect of dams, power houses and canal headworks shall be reported to the Authority for taking appropriate action in the matter.

(ii) The Authority shall decide the phasing and shall co-ordinate construction programmes of the Narmada Sagar project and Sardar Sarovar Unit II - Canals with a view to obtaining expeditiously optimum benefits during and after the completion of the construction of the projects, having due regard to the availability of funds.

(iii) The Authority shall obtain from the concerned States periodical progress reports both as to works and expenditure, and shall on receipt of such reports review the progress of construction of different units of the projects and whenever necessary advise the State concerned on the steps to be taken to expedite the work, except in respect of Unit - I Dam and Appurtenant Works and Unit III - Power Complex of Sardar Sarovar Project. The States shall submit, in respect of projects in Sub-clause 8(3)(i), completion reports to the Authority.

(iv) The Authority shall issue appropriate directions whenever necessary for timely and full compliance by the concerned States with the Orders of the Tribunal in the matter of acquisition for and making available to Gujarat lands and properties likely to be submerged under the Sardar Sarovar Project and in the matter of compensation and rehabilitation of oustees thereunder.

(v) The Authority shall cause to be established, maintained and operated by the State Governments concerned or any one or more of them, such stream and other gauging stations, equipped with automatic recorders where necessary, discharge, silt and evaporation observation stations and measuring devices as may be necessary from time to time for securing the records required for carrying out the provisions of the Orders. If deemed necessary, the Authority may require the installation, maintenance and operation by the State concerned of measuring devices of approved type at the head of main canals as also at the off take of the canal for Rajasthan for measuring amount of water diverted from Narmada river system.

(vi) Concurrent records shall be kept of the flow of the Narmada at all stations considered necessary by the Authority and the records correlated.

(vii) The Authority shall frame rules of regulation and water accounting as per guidelines given in Clause IX. It shall determine the share of water of each State for every ten-day period for purposes of regulation and water accounting.

(viii) The Authority shall ensure implementation of the Orders of the Tribunal in respect of

- (a) quantum and pattern of regulated releases by Madhya Pradesh;
- (b) payment for such regulated releases/sharing of costs.

(ix) The Authority shall collect from the State concerned data of the areas irrigated by Narmada waters in each season, of power generated at each hydro-electric power station at and downstream of Narmada Sagar, of withdrawals for domestic, municipal and industrial or any other purposes and of waters going down the river from Sardar Sarovar Project.

(x) The Authority shall determine the volume of water flowing in the river Narmada and its tributaries in a water year (1st July to 30th June next year).

(xi) The Authority shall determine from time to time the volume of water stored by each State in reservoirs and other storages and may for that purpose adopt any device or method.

(xii) The Authority shall determine at appropriate periodic intervals the use of Narmada waters made by the States, or such of them as necessary, at any place or in any area at any time and for that purpose it may take note of all diversions or obstructions, whether natural or artificial or partly natural and partly artificial, from the river Narmada and its Tributaries and measure such use by any method as it deems fit.

(xiii) The Authority or any of its duly authorised representative shall have power to enter upon any land and property upon which any project or development of any project, or any work of gauging evaporation or other hydrological station or measuring device has been or is being constructed, operated or maintained by any State for the use of Narmada water. Each State through its appropriate departments shall render all co-operation and assistance to the Authority and its authorised representatives in this behalf.

(xiv) The Authority shall meet as often as necessary and decide on a proper management of waters including in particular the manner and details of withdrawals of waters from the storages on the Narmada river system in accordance with the orders. In particular, the Authority shall meet at the end of filling season, and review the availability of waters in the storages on the Narmada river system and decide upon the pattern of their regulation for the next irrigation season, taking into account the carryover storages.

(xv) The Authority shall give directions for a phased programme of construction for generation and transmission of power in fulfilment of the shares of power allocated to the three States of Madhya Pradesh, Maharashtra and Gujarat from Sardar Sarovar and for payments therefor in accordance with the Orders of the Tribunal. The Authority shall also ensure that generation and transmission of power from Sardar Sarovar complex are in accordance with the Orders.

(xvi) The Authority shall issue appropriate directions for the establishment, maintenance and operation of an effective system of flood forecasting and flood control including reporting of heavy precipitation and telecommunication systems. The safety of a structure shall primarily be the responsibility of the Chief Engineer incharge of the structure and no decision or order shall be binding on him if in his opinion the safety of the structure will be endangered thereby. The Authority shall publish annually and make available to party States the data regarding operation of reservoirs during floods.

8(4): In the light of its experience, the Authority may modify or add to the functions enumerated hereinabove in Sub-clauses 8(3)(i) to (xvi) by a resolution.

8(5): All the concerned States shall submit to the Authority all the relevant information called for by the Authority in connection with the Narmada Valley Development expeditiously.

Sub-clause 9 - Annual Report of the Authority

The Authority shall prepare and transmit to each of the four States as early as possible and in any case before the end of the current Water Year (1st July to 30th June) an Annual Report covering the activities of the Authority for the preceding year and to make available to each State on its request any information within its possession any time and always provide access to its record to the States and their representatives.

Sub-clause 10 - Records of the Authority and their Location

The Authority shall keep a record of all meetings and proceedings, maintain regular accounts, and have a suitable office where documents, records, accounts and gauging data shall be kept open for inspection by the four States or their representatives at such times and under such regulations as the Authority may determine. The location of the Central, Regional and Sub-regional offices of the Narmada Control Authority shall be determined by the Authority. The headquarters of the Authority shall be at New Delhi till such time as it decides on its permanent location.

Sub-clause 11 - Contracts and Agreements

The Authority shall enter into such contracts and agreements as may be necessary and essential for the full and proper performance of the functions and duties conferred or imposed on it.

Sub-Clause 12 - Financial Provisions

(1) All the capital and revenue expenditure required to be incurred by the Authority shall be borne by the four States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan equally. The Governments of the four States shall provide the necessary funds to the Authority to meet all capital and revenue expenditure required to be incurred by the Authority for the discharge of its functions.

(2) On the constitution of the Authority each of the Governments of the four States shall contribute Rs. 5, 00,000 (Rupees five lakh) to the fund of the Authority in the first instance.

(3) The Authority shall in the month of September of each year prepare detailed estimate of the amounts of money required during the twelve months from the first day of April of the ensuing year, showing the manner in which it is proposed to expend such money. The Authority shall on or before the fifteenth of October forward a copy of such detailed estimate to the concerned Chief Secretaries of the four States and indicate the amount required to be contributed by each State for the ensuing financial year. Each of the State Governments shall pay to the Authority its contribution as indicated by the Authority on or before the 30th day of April of the ensuing year.

(4) The Authority shall maintain detailed and accurate accounts of all receipts and disbursements and shall after the close of each financial year prepare an Annual Statement of Accounts and send copies thereof to the Accountants General as well as the concerned Chief Secretaries of the four States. The form of the Annual Statement of Accounts shall be such as may be prescribed by rules. The Accounts maintained by the Authority shall be open for inspection at all reasonable times by the four States through their duly authorised representative or representatives.

(5) Disbursement shall be made from the fund of the Authority only in such manner as may be prescribed by the Authority. The Authority may incur such expenditure as it may think fit to meet any emergency in the discharge of its functions.

(6) The accounts maintained by the Authority shall be audited by the Comptroller & Auditor General of India or his nominee, who shall certify subject to such observations as he may wish to make on the annual accounts of the Authority. The Authority shall forward to the Accountants General and the concerned Chief Secretaries of the four States copies of the Report of the Comptroller & Auditor General of India and shall include the same in its Annual Report.

SUB-CLAUSE 13 - *Decision of the Authority*

The decisions of the Authority on all matters covered under Sub-clause 8 shall be final and binding on the four party States. However, there shall be a Review Committee which may suo motu or on the application of any party State review any decision of the Authority. In urgent cases the Chairman of the Review Committee may, on the application of the party State, grant stay of any order of the Authority pending final decision on review.

SUB-CLAUSE 14 - *Review Committee*

14(1) : The Review Committee shall consist of five members including a Chairman as under :-

(i) Union Minister for Irrigation as the :	Chairman
(ii) Chief Minister of Madhya Pradesh :	Member
(iii) Chief Minister of Gujarat :	Member
(iv) Chief Minister of Maharashtra :	Member
(v) Chief Minister of Rajasthan :	Member

The Secretary of the Union Ministry of Agriculture and Irrigation, Department of Irrigation shall be the Convenor of the Review Committee but shall not have any voting right. In case there is President's rule in any of the States, the Governor of that State or his authorised representative will act as Member of the Review Committee.

14(2): The Chief Ministers of the four States may nominate the respective Irrigation Ministers either generally or specially as the alternate Member with full powers of voting, taking decisions etc.

14(3): The Review Committee may review the decision of the Authority at a meeting at which the Chairman and all the Members of the Review Committee are present. It is expected that the decisions of the Review Committee will be by consensus. Failing consensus it shall be by majority of votes of Members including the Chairman.

14(4) : Advance notice of the proposed meeting of the Review Committee, its agenda and agenda notes will be forwarded by the Convenor to the party States.

14(5): The decision of the Review Committee shall be recorded in writing and shall be final and binding on all the States.

SUB-CLAUSE 15 - Construction Out-side Jurisdiction Of The Authority

The planning and construction of the projects will be carried out by each State through its own agencies, save and except to the extent prescribed in Sub- clause 16 of Clause XIV.

SUB-CLAUSE 16- Supervisory Function Of The Authority Over Construction of Sardar Sarovar Project.

(1) The four party States have financial commitment in respect of Unit I - Dam and Appurtenant Works of the Sardar Sarovar Project and three of them namely, Gujarat, Maharashtra and Madhya Pradesh have such commitment in respect of Unit III - Power Complex of the Project. With a view to ensuring efficient, economical and early execution of these Units of the Project, and taking into account the financial commitments of the party States, it is desirable and necessary that a Construction Advisory Committee should be constituted for the purpose. We, therefore, order that such an Advisory Committee to be called Sardar Sarovar Construction Advisory Committee should be set up within three months from the date of publication of the Decision of the Tribunal in the Official Gazette.

(2) The Construction Advisory Committee shall have a whole-time Secretary of the rank of Chief Engineer to be appointed by Union of India and such other staff as may be necessary.

(3) The Committee shall comprise –

- (i) The Secretary to the Government of India, in charge of Irrigation - Chairman.
- (ii) Chairman, Central Water Commission (CWC), or a Member of the CWC representing him in case the Chairman is unable to attend a meeting.
- (iii) Chairman, Central Electricity Authority (CEA), or a Member of the CEA representing him in case the Chairman is unable to attend a meeting.
- (iv) Chairman, Narmada Control Authority (NCA) or an Independent Member of NCA representing him in case the Chairman is unable to attend a meeting.
- (v) Joint Secretary (Financial Adviser) in the Union Ministry of Agriculture & Irrigation (Department of Irrigation).
- (vi) Secretaries in charge of Finance Department of Governments of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan.
- (vii) Secretaries in charge of Irrigation Department of Governments of Gujarat and Rajasthan
- (viii) Secretaries in charge of Power Department of Madhya Pradesh, Maharashtra and Gujarat.
- (ix) Secretaries in charge of Revenue Department or any other Department concerned with land acquisition of Madhya Pradesh, Maharashtra and Gujarat.

- (x) General Manager or Chief Engineers of Gujarat in charge of the project and Chief Engineers of Madhya Pradesh, Maharashtra and Rajasthan concerned with the Project.
- (xi) Chairman, State Electricity Boards of Madhya Pradesh, Maharashtra and Gujarat.
- (xii) Financial Adviser, Sardar Sarovar Project.

The Chairman may co-opt any other Member for any particular meeting.

(4) The Sardar Sarovar Construction Advisory Committee shall :-

- (i) scrutinise the project estimates prepared for these works, advise necessary modifications and recommend the estimates for the administrative approval of the concerned Governments;
- (ii) examine and make recommendation on all proposals pertaining to technical features and designs as may be referred to it by any of the party States and where necessary consult experts for the purpose.
- (iii) examine and make recommendation on the program of construction of different parts of the project in a co-ordinated manner, keeping in view the funds available, the economics of the project and the desirability of obtaining quick results;
- (iv) examine the requirement of funds for the construction of works and other purposes according to the approved programme and make necessary recommendations;
- (v) examine and recommend, from time to time, the delegation of such powers, both technical and financial, as it may deem necessary for the efficient execution of the project, to the General Manager/Chief Engineers, Superintending Engineers, Executive Engineers and Sub-Divisional Officers engaged in the execution of the project;
- (vi) examine and, where necessary, recommend specification for various classes of work;
- (vii) examine and make recommendation on all sub-estimates and contracts, the cost of which exceeds the powers of sanction of the General Manager/Chief Engineers ;
- (viii) review progress reports, both for works and expenditure from the General Manager/Chief Engineers and recommend, where necessary, steps to be taken to expedite the work.

(5) The headquarters of the Construction Advisory Committee will be fixed by the Committee.

(6) The Construction Advisory Committee will frame rules regarding procedure and delegation of power for the purpose of carrying out its business.

(7) The recommendations of the Construction Advisory Committee shall be conveyed to the Governments concerned by the Committee and copies sent to the Review Committee and Narmada Control Authority for information.

(8) The recommendations of the Construction Advisory Committee shall normally be accepted by the State Governments concerned. In the event of any disagreement, the matter shall be referred to the Review Committee and the decision of the Review Committee shall be final and binding on all the concerned States.

In all matters relating to the construction of the Sardar Sarovar Dam and appurtenant works (Unit I), Power House and generating machinery (Unit III) and Transmission lines to feed power to Madhya Pradesh, Maharashtra and Gujarat upto the next sub-station in each case, the Narmada Control Authority will carry out only such functions as do not specifically devolve upon the Construction Advisory Committee set up under Sub-clause 16, Clause XIV.

(9) The Construction Advisory Committee will be dissolved after three years of the completion of construction of Units I and III of the Sardar Sarovar Project. The post - construction management of Units I and III will be by Gujarat under the supervision of the Narmada Control Authority.

(10) The expenditure of the Construction Advisory committee will be borne by the four States of Madhya Pradesh, Gujarat, Maharashtra and Rajasthan equally.

SUB-CLAUSE 17

Nothing contained in this Order shall prevent the alteration, amendment or modification of all or any of the foregoing clauses by agreement between all the States concerned.

SUB-CLAUSE 18

The Union of India has consented to participate in the Machinery to be established by the Order of the Tribunal, if so directed and to do its best to implement the decision of the Tribunal.

Accordingly, we direct the Union of India to participate in the Machinery set up by the Order of the Tribunal to implement the directions of the Tribunal specifically under Clause 1 (2), 4, 12(6), 13,14 and generally to implement all the other directions so far as the Union of India is concerned.

CLAUSE XV - *Order as to Costs of Proceedings.*

(i) The States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan shall bear their own costs of appearing before the Tribunal. The expenses of the Tribunal shall be borne and paid by the aforesaid four States in equal shares. These directions relate to the references under Section 5(1) of the Inter-State Water Disputes Act, 1956.

(ii) The States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan shall bear their own costs of appearing before the Tribunal in the references under Section 5(3) of

the said Act. The expenses of the Tribunal in respect of the aforesaid references shall be borne and paid by the States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan in equal shares.

CLAUSE XVI - *Period of Operation of Certain Clauses of the Final Order*

In addition to Clauses III and IV (mentioned in Clauses V), our orders in Clause VII with regard to Full Reservoir Level and Maximum Water Level of the Sardar Sarovar Dam, Clause VIII with regard to Sharing of Costs and Benefits, Clause IX with regard to Regulated Releases to be made by Madhya Pradesh for the Requirement of Sardar Sarovar Project, Clause X with regard to payment to be made by Gujarat to Madhya Pradesh for such Regulated Releases, Clause XII with regard to Allocation of Costs of Sardar Sarovar Project between Irrigation and Power, Clause XIII with regard to Allocation of Irrigation Component of Cost of Sardar Sarovar Project between Gujarat and Rajasthan and Clause XIV as regards Machinery are all made subject to review at any time after a period of 45 years from the date of publication of the Decision of the Tribunal in the Official Gazette.

NEW DELHI
December 7, 1979

(Sd.) (V. RAMASWAMI)
Chairman

(Sd.) (A. K. SINHA)
Member

(Sd.) (M. R. A. ANSARI)
Member

GODAVARI WATER DISPUTES TRIBUNAL
D-27, NEW DELHI SOUTH EXTENSION, PART-II,
NEW DELHI – 110049

No. 19 (1)/80-GWDT

Dated the 7th July, 1980

To

The Secretary to the Government of India,
Ministry of Irrigation,
New Delhi.

Sir,

The Godavari Water Disputes Tribunal investigated the matters referred to it under section 5 (1) of the Inter –State Water Disputes Act, 1956 and forwarded its unanimous Report and decision under section 5 (2) of the said Act to the Government of India on the 27th November 1979.

Within three months of the aforesaid decision, the Government of India and the States of Maharashtra, Andhra Pradesh and Madhya Pradesh filed four separate references before the Tribunal under section 5(3) of the said Act.

The Tribunal has prepared its further Report giving such explanations or guidance as it has deemed fit on the matters referred to it under section 5 (3) of the said Act.

The unanimous further Report of the Tribunal is forwarded herewith.

Yours faithfully,

(R.S. BACHAWAT)

Chairman

Encl: Report as above.

(D.M. BHANDARI)

Member

(D. M. SEN)

Member

CHAPTER VII

The Final Order⁶ set forth in Chapter VII of Vol. I of the Original Report as modified in accordance with the explanations given by the Tribunal under section 5 (3) of the Inter-State Water Disputes Act, 1956 is give below.

FINAL ORDER OF THE TRIBUNAL

The Tribunal hereby passes the following Order:-

Clause I

All the States can make use of underground water within their respective State territories in the Godavari basin and such use shall not be reckoned as use of the water of the river Godavari.

Clause II

Use shall include any use, made by any State of the waters of the river Godavari and its tributaries for domestic, municipal, irrigation, industrial, production of power, navigation, pisciculture, wild life protection, recreation purposes and evaporation losses from the storages created for the above purposes.

Clause III

(A) The uses of water mentioned in column (1) below shall be measured in the manner indicated in column (2):

<i>Use</i> (1)	<i>Measurement</i> (2)
(i) Irrigation use	100 per cent of the quantity diverted or lifted from the river or any of the tributaries or from any reservoir, storage or canal and 100 per cent of evaporation losses in these storages.
(ii) Power use	100 per cent of evaporation losses in the storage.
(iii) Domestic and municipal water supply within the basin.	20 per cent of the quantity of water diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.
(iv) Industrial use within the basin.	2.5 per cent of the quantity of water diverted or lifted from the River or any of its tributaries or from any reservoir, storage or canal.
(v) All uses outside the basin	100 per cent of the quantity diverted or lifted from the river or any of the tributaries or from any reservoir, storage or canal.

⁶ The order was published in the Official Gazette in July, 1980.

(B) Except as provided in sub-Clause (A) or in the Agreements between the parties a use shall be measured by the extent of depletion of the waters of the river Godavari in any manner whatsoever including losses of water by evaporation and other natural causes from man-made reservoirs and other works without deducting in the case of use for irrigation the quantity of water that may return after such use to the river.

(C) The water stored in any reservoir across any stream of the Godavari river system shall not of itself be reckoned as depletion of the water of the stream except to the extent of the losses of water from evaporation and other natural causes from such reservoir. The water diverted from such reservoir by any State for its own use in any water year shall be reckoned as use by that State in that water year.

(D) If in any water year any State is not able to use any portion of the water allocated to it during that year on account of the non-development of its projects or damage to any of its projects or does not use it for any reason whatsoever, that State will not be entitled to claim the unutilized water in any subsequent water year.

(E) Failure of any State to make use of any portion of the water allocated to it during any water year shall not constitute forfeiture or abandonment of its share of water in any subsequent water year nor shall it increase the share of any other State in any subsequent water year even if such State may have used such water.

Clause IV

Each of the States concerned will be at liberty to divert any part of the share of the Godavari waters allocated to it from the Godavari basin to any other basin.

Clause V

The following Agreements so far as they relate to the Godavari river and Godavari river basin be observed and carried out :---

A. Agreement dated the 19th December, 1975 between the States of Karnataka, Maharashtra, Madhya Pradesh, Orissa and Andhra Pradesh annexed hereto and marked Annexure “A” agreeing to the clearance of projects for the utilization of waters of the Godavari river and its tributaries in accordance with :-

(a) Agreement between the States of Karnataka and Andhra Pradesh on the 17th September, 1975 – Annexure I.

(b) Agreement between the States of Maharashtra and Andhra Pradesh on the 6th October, 1975 – Annexure II.

(c) Agreement between the States of Madhya Pradesh and Andhra Pradesh on the 7th November, 1975 – Annexure III.

(d) Agreement between the States of Orissa and Madhya Pradesh on the 9th December, 1975 – Annexure IV.

(B) Agreement dated the 7th August, 1978 between the States of Maharashtra, Madhya Pradesh and Andhra Pradesh annexed hereto and marked Annexure “B”, subject to the provisions of the Agreement dated the 2nd April, 1980 mentioned below.

C. Agreement dated the 4th August, 1978 between the States of Andhra Pradesh and Karnataka annexed hereto and marked Annexure “C”.

D. Agreement dated the 15th December, 1978 between the States of Orissa and Andhra Pradesh annexed hereto and marked Annexure “D”, subject to the provisions of the Agreement dated the 2nd April, 1980 mentioned below.

E. Agreement between the States of Karnataka and Maharashtra evidenced by letters dated the 29th January, 1979, 30th January, 1979 and 31st January, 1979 annexed hereto and marked Annexure “E”.

F. Agreement dated the 11th July, 1979 between the States of Orissa and Madhya Pradesh annexed hereto and marked Annexure “F”.

G. Agreement dated the 2nd April, 1980 between the States of Andhra Pradesh, Madhya Pradesh and Orissa annexed hereto and marked Annexure “G”.

Clause –VI

(1) In accordance with the statement dated the 3rd April, 1980 submitted on-behalf of the Government of India, annexed hereto and marked Annexure “H”, we direct that ---

(i) The Polavaram Project shall be cleared by the Central Water Commission as expeditiously as possible for F.R.L./M.W.L. +150 feet;

(ii) the matter of design of the dam and its operation schedule is left to the Central Water Commission which it shall decide keeping in view all the Agreements between the parties, including the Agreement dated the 2nd April, 1980 as far as practicable; and

(iii) if there is to be any change in the operation schedule as indicated in the Agreement dated the 2nd April, 1980 it shall be made only after consultation with the States of Andhra Pradesh, Madhya Pradesh and Orissa. The design aspects shall, however, be left entirely to the Central Water Commission.

(2) The State of Andhra Pradesh shall observe all safeguards including the safeguards mentioned in sub-Clause (1) above, regarding the Polavaram Project, as directed by the Central Water Commission.

Clause VII

Nothing in the Order of this Tribunal shall impair the right or power or authority of any State to regulate within its boundaries the use of water or to enjoy the benefit of waters within that State in a manner not inconsistent with the Order of this Tribunal.

Clause VIII

In this Order:

- (a) Use of the water of the river Godavari by any person or entity of any nature whatsoever within the territories of a State shall be reckoned as use by that State.
- (b) The expression “Godavari waters” with its grammatical variations and cognate expressions includes water of the main stream of the Godavari River, all its tributaries and all other streams contributing water directly or indirectly to the Godavari River.
- (c) The sub-basins of the Godavari basin mean the sub-basins described in the statement annexed hereto and marked Annexure “I”.
- (d) Use of quantities of water specified in the Agreements is for a water year commencing on 1st June and ending on 31st May.

Clause IX

Nothing contained herein shall prevent the alteration, amendment or modification of all or any of the foregoing Clauses by agreement between the parties or by legislation by Parliament.

Clause X

(A). The Governments of Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh and Orissa shall bear their own costs of appearing before the Tribunal. The expenses of the Tribunal shall be apportioned and paid by the Governments of Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh and Orissa in equal shares. These directions relate to the reference under section 5 (1) of the Inter-State Water Disputes Act, 1956.

(B). The Government of India and the Governments of Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh and Orissa shall bear their own costs of appearing before the Tribunal in the references under section 5(3) of the said Act. The expenses of the Tribunal in respect of the aforesaid references shall be apportioned and paid by the Governments of Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh and Orissa in equal shares.

ANNEXURE “A”

GODAVARI RIVER BASIN AGREEMENT

WHEREAS certain discussions have taken place amongst the five States of Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra and Orissa, subsequent to meeting of 19th July, 1975 held at New Delhi on the use of the waters of the Godavari river and its tributaries, and

WHEREAS in pursuance thereof the following agreements have been entered into between the States hereinafter mentioned, viz :--

- (a) Agreement between the States of Karnataka and Andhra Pradesh on 17-9-1975 --- Annexure-I ;
- (b) Agreement between the States of Maharashtra and Andhra Pradesh on 6-10-1975 – Annexure-II;
- (c) Agreement between the States of Madhya Pradesh and Andhra Pradesh on 7-11-1975 – Annexure-III;
- (d) Agreement between the States of Orissa and Madhya Pradesh on 9-12-1975 – Annexure –IV;

WHEREAS the States of Karnataka, Andhra Pradesh, Maharashtra, Madhya Pradesh and Orissa have considered the said bilateral agreements in their meeting on 19-12-1975 at New Delhi.

NOW the States of Karnataka, Andhra Pradesh, Maharashtra, Madhya Pradesh and Orissa hereby agree to the sanction and clearance of projects for the utilization of waters of the Godavari river and its tributaries in accordance with the said agreements, provided that nothing in these agreements will be treated as a concession by any State in respect of any of its contentions in any other water disputes with any other State or with respect to the dispute regarding the sharing of the balance quantity of water in the Godavari and its tributaries. State in this agreement means any of the aforesaid five States.

The five basin States agree that this agreement will be filed before the Godavari Water Disputes Tribunal.

NOW as a testimony thereof, we the Chief Ministers of concerned States append our signatures.

New Delhi,

December 19, 1975.

(Sd.) 19-12
(J.VENGAL RAO)
*Chief Minister,
Andhra Pradesh.*

(Sd.) 19-12-1975
(D. DEVARAJ URS),
*Chief Minister,
Karnataka.*

(Sd.) 19-12-1975
(S.B.CHAVAN), Chief
Minister,
Maharashtra.

(Sd.) 19-12-1975
(P.C. SETHI),
*Chief Minister,
Madhya Pradesh*

(Sd.)
(NANDINI SATPATHY),
Chief Minister,
Orissa.

In presence of

(Sd.)
(K.N.SINGH),
*Deputy Minister, Ministry of Agriculture
and Irrigation, Government of India.*

(Sd.)
(JAGJIVAN RAM),
*Minister of Agriculture and Irrigation,
Government of India.*

**PROCEEDING OF A MEETING BETWEEN THE CHIEF MINISTERS OF
KARNATAKA AND ANDHRA PRADESH HELD AT BANGALORE ON THE
17TH SEPTEMBER, 1975**

The following were present:

Karnataka :

1. Shri D. Devaraj Urs, Chief Minister.
2. Shri Subash Asture, Minister of State for Major and Medium Irrigation.
3. Shri G.V.K. Rao, Chief Secretary.
4. Shri I.M. Magdum, Special Secretary to Government, P.W.D.
5. Shri J.C. Lynn, Secretary to Chief Minister.
6. Shri B. Subramanyam, Superintending Engineer, W.R.D.O
7. Shri A.V. Shanker Rao, Superintending Engineer, W.R.D.O.
8. Shri. S.K. Mohan,
Under Secretary to Government, P.W.D.

Andhra Pradesh :

1. Shri. J. Vengal Rao, Chief Minister.
2. Shri Ch. Subbarayudu, Minister for Municipal Administration.
3. Shri C.R. Krishnaswami Rao Saheb,
Secretary to Chief Minister.
4. Shri M. Gopalakrishnan, Secretary,
Irrigation & Power.
5. Shri B. Gopalakrishna Murthy, Special
Officer, Water Resources.
6. Shri G.K.S. Iyyengar, Superintending
Engineer, Inter-State-I, Water Resources.

1. The discussions related to the clearance of projects upstream of Nizamsagar in Karnataka and Andhra Pradesh States.

2. After full discussion, the following points were agreed to, as an interim measure :

(a) Karnataka may go ahead with the following two projects, and the utilization will be as indicated against each :

<i>Name of Project</i>		<i>Utilisation of Water</i>	
(i) Karanja Project	13.10 TMC ft.
(ii) Chulkinala Project	1.17 TMC ft.

(b) Andhra Pradesh may go ahead with the construction of a reservoir at Singur for the withdrawal of 4 (four) TMC ft. for purposes of drinking water for Hyderabad city.

3. Andhra Pradesh stated that they propose to construct the Reservoir at Singur with a capacity of 30 TMC ft. and that this may involve the submersion of some land in Karnataka State. In that event, the details regarding the project and of the submersible land in Karnataka will be furnished to the Government of Karnataka for their consideration. Karnataka stated that any evaporation loss from the Reservoir should come out of the share of Andhra Pradesh.

4. The Chief Minister of Andhra Pradesh is having discussions with the Chief Minister of

Maharashtra also about the construction of projects in the Manjira sub-basin. Details of any agreements arrived at will be made available to the Government of Karnataka, so that all the three State Governments could arrive at mutually consistent agreements.

5. The details of the interim agreement among the three States will be furnished to the Government of India, and also filed before the Tribunal, at the appropriate time.

D.DEVARAJ URS,
Chief Minister,
Karnataka.

J. VENGAL RAO,
18-9-1975
Chief Minister,
Andhra Pradesh

ANNEXURE – II

**PROCEEDINGS OF THE MEETING BETWEEN THE CHIEF MINISTERS OF
MAHARASHTRA AND ANDHRA PRADESH HELD AT HYDERABAD ON THE
6th OCTOBER 1975**

The following were present:

Andhra Pradesh

1. Sri J. Vengal Rao, Chief Minister.
2. J. Chokka Rao, Minister for Agriculture and Transport.
3. Sri. N. Bhagwandas, IAS, Chief Secretary.
4. Sri. P. Ramachandra Reddi, Advocate-General.
5. Sri. A. Krishnaswami, IAS, 1st Member, Board of Revenue.
6. Sri. C.R. Krishnaswamy Rao Sahib, IAS, Secretary to Chief Minister.
7. Sri. M. Gopalakrishnan, IAS, Secretary, Irrigation & Power.
8. Sri. P. Sitapati, IAS, Joint Secretary, Irrigation & Power.
9. Sri. B. Gopalakrishnamurthy, Special Officer, Water Resources.
10. Sri. M. Jaffer Ali, Adviser, Irrigation.
11. Sri. D.V. Sastry, Government Pleader.
12. Sri. G.K.S. Iyengar, SE, Inter – State Circle-I.

Maharashtra :

1. Sri S. B. Chavan, Chief Minister.
2. V. B. Patil, Minister, Irrigation.
3. Sri. M.N. Phadke, Barrister-at-Law.
4. Sri. V.R. Deuskar, Secretary, Irrigation Deptt.
5. Sri. M.G. Padhye, Chief Engineer (W.R) and Joint Secretary, Irrigation Deptt.
6. Sri. K .S. Shankar Rao, S.E. & Deputy Secretary, Irrigation Deptt.
7. Sri. Sridhara Rao Joshi, Spl. Officer, Irrigation Deptt.,

The discussions related to the clearance of the Projects on and the use of waters of Godavari River and its tributaries.

After full discussions the following points were agreed to:

I. Maharashtra can use for their beneficial use all waters upto Paithan dam site on the Godavari and upto Siddheswar dam site on the Purna.

II. (i) From the waters in the area of the Godavari basin below Paithan dam site on the Godavari and below Siddheswar dam site on the Purna and below Nizamsagar dam site on the Manjira and upto Pochampad dam site on the Godavari, Maharashtra can utilize waters not exceeding 60 TMC for new Projects including any additional use over and above the present sanctioned or cleared utilization, as the case may be.

(ii) Andhra Pradesh can go ahead with building its Pochampad Project with FRL 1091 and MWL 1093 and is free to utilize the entire balance waters upto Pochampad dam site in any manner it chooses for its beneficial use. Maharashtra will take necessary action to acquire any land or structures that may be submerged under Pochampad Project and Andhra Pradesh agrees to bear the cost of acquisition, the cost of rehabilitation of the displaced families and the cost of construction of some bridges and roads that may

become necessary. Maharashtra also agrees to the submergence of the river and stream beds.

III. (i) In the Manjira sub-basin above Nizamsagar dam site, Maharashtra can utilize waters not exceeding 22 TMC for new projects including any additional use over and above the present sanctioned or cleared utilisation as the case may be.

(ii) Andhra Pradesh can withdraw 4 TMC for drinking water supply to Hyderabad city from their proposed Singur Project on the Manjira.

(iii) Andhra Pradesh can construct Singur Project with a storage capacity of 30 TMC. Andhra Pradesh can also use 58 TMC under Nizamsagar Project.

IV. Maharashtra concurs with the agreement arrived at between the States of Andhra Pradesh and Karnataka in regard to the use proposed by Karnataka in the Manjira sub-basin upstream of Nizamsagar dam site.

V. Maharashtra and Andhra Pradesh will be free to use additional quantity of 300 TMC of water each below Pochampad dam site for new Projects.

VI. Maharashtra and Andhra Pradesh agree in principle to the taking up of the Inchampalli Project with FRL as commonly agreed to by the interested States, viz., Maharashtra, Andhra Pradesh and Madhya Pradesh.

VII. Maharashtra and Andhra Pradesh agree to take up the following joint projects at the appropriate time with agreed utilisations:

- a) Lendi Project
- b) Lower Penganga Project.
- c) Pranahita Project.

and to set up joint committees for this purpose.

VIII. The States of Maharashtra and Andhra Pradesh agree that this agreement will be furnished to the Government of India and also be filed before the Godavari Water Disputes Tribunal at the appropriate time.

Sd/-
J.VENGALA RAO,
6-10-1975,
Chief Minister, Andhra Pradesh.

Sd/-
S.B. CHAVAN,
6-10-1975,
Chief Minister, Maharashtra

ANNEXURE III

**PROCEEDINGS OF THE MEETING BETWEEN THE CHIEF MINISTERS OF
MADHYA PRADESH AND ANDHRA PRADESH HELD AT NEW DELHI ON
THE 7TH NOVEMBER 1975**

The following were present:

<i>Madhya Pradesh</i>	<i>Andhra Pradesh</i>
1. Sri P.C. Sethi, Chief Minister.	1. Shri. J. Vengal Rao, Chief Minister.
2. Shri. V.R. Uike, Minister for Irrigation and Electricity.	2. Shri P. Ramachandra Reddi, Advocate General.
3. Shri Manohar Keshav, Secretary, Irrigation & Electricity.	3. Shri C.R. Krishna Swamy Rao Saheb, Secretary to Chief Minister.
4. Shri Y.S. Chitale, Senior Advocate.	4. Shri C.M. Shastry, Special Commissioner, Govt. of Andhra Pradesh.
5. Shri R.C. Jain, Commissioner, Madhya Pradesh, Delhi.	5. Shri M. Gopalakrishnan, Secretary, Irrigation & Power.
6. Shri S. R. Bhatia, Secretary to Chief Minister.	6. Shri B. Gopalakrishnamurthy, Special Officer, Water Resources.
7. Shri V.M. Chitale, Deputy Secretary, Irrigation.	7. Shri D.V. Sastry, Govt. Pleader.
8. Shri H.V. Mahajani, Superintending Engineer, Godavari Basin Circle.	8. Shri G.K.S. Iyengar, Superintending Engineer, Inter-State Circle – I.

The discussions related to the clearance of the projects and the use of waters of Godavari River and its tributaries.

2. After full discussions the following points were agreed to ---

(I) Madhya Pradesh and Andhra Pradesh will be free to use an additional gross quantity of 300 TMC each out of the water in the Godavari River and its tributaries below Pochampad Dam site for new projects.

(II) Madhya Pradesh concurs generally with the agreement arrived at between Andhra Pradesh and Maharashtra on 6-10-1975. The quantity of 300 TMC mentioned in clause I above will not be in addition to 300 TMC agreed to between Andhra Pradesh and Maharashtra as per agreement dated 6-10-1975.

(III) In agreeing to 300 TMC referred to in clauses I and II above, for Andhra Pradesh, Madhya Pradesh on its part, has taken into account the estimated requirements within the basin only.

(IV) Madhya Pradesh and Andhra Pradesh agree in principle to the taking up of the Inchampalli project with F.R.L. as commonly agreed to by the interested States viz. Maharashtra, Andhra Pradesh and Madhya Pradesh.

(V) It is also agreed that Madhya Pradesh and Andhra Pradesh will consider the feasibility of taking up the Inchampalli Project as a Joint Project with costs and benefits equitably shared amongst the above 3 States in accordance with a common agreement.

(VI) Madhya Pradesh agrees to the taking up Taliperu project by Andhra Pradesh involving a use of 5 TMC (Gross) of water out of the 300 TMC agreed to in clause I and to the submersion of river bed only in Madhya Pradesh. Andhra Pradesh agrees to put up at its cost such protective measures as would be necessary in consultation with Madhya Pradesh to prevent submersion of other areas in Madhya Pradesh.

(VII) The States of Madhya Pradesh and Andhra Pradesh agree that nothing in this agreement will be treated as a concession by other State in respect of any of their contentions in any other water dispute with any other State or with respect to the dispute regarding the sharing of the balance of water in Godavari and its tributaries.

(VIII) The States of Madhya Pradesh and Andhra Pradesh agree that this agreement will be furnished to the Government of India and they would be requested to expedite the clearance of the projects.

This Agreement will also be jointly filed before the Godavari Water Disputes Tribunal at the appropriate time.

Sd/-
(P.C. SETHI)
Dt. 7-11-1975
Chief Minister, Madhya Pradesh

Sd/-
(J.VENGAL RAO)
Dt. 7-11-1975
Chief Minister, Andhra Pradesh

ANNEXURE IV

Agreement between the States of Orissa and Madhya Pradesh on 9-12-1975

PROCEEDINGS OF THE MEETING BETWEEN THE CHIEF MINISTERS OF ORISSA AND MADHYA PRADESH HELD AT NEW DELHI ON THE 9TH DECEMBER, 1975

The following were present

Orissa

1. Smt. Nandini Satpathy, Chief Minister.
2. Shri Dibya Lochan Shekhar Deo, Minister for Irrigation & Power.
3. Shri B.K. Mishra, Additional Development Commissioner.
4. Shri N.R. Hota, Secretary, Irrigation and Power.
5. Shri Suresh Chandra Tripathy, Chief Engineer, Irrigation.
6. Shri K.S.R. Chandran, Special Commissioner, Liaison.
7. Shri R.K. Rath, Secretary to Chief Minister.
8. Shri Govind Das, Senior Advocate.
9. Shri M. Lath, Executive Engineer.

Madhya Pradesh

1. Shri P.C. Sethi, Chief Minister.
2. Shri V.R. Uike, Minister for Irrigation and Electricity
3. Shri Aziz Qureshi, Minister for State for Irrigation and Electricity.
4. Shri Manish Bahl, Secretary, Irrigation and Electricity.
5. Shri. K.L. Handa, Irrigation Adviser.
6. Shri Y.S. Chitale, Senior Advocate.
7. Shri R.C. Jain, Commissioner, Madhya Pradesh.
8. Shri V.M. Chitale, Deputy Secretary, Irrigation.
9. Shri H.V. Mahajani, Superintending Engineer.

The discussions related to the use of water of the Godavari basin and the clearance of projects of Madhya Pradesh and Orissa.

2. After full discussions, the following agreement was arrived at :-

I. Pending final allocation of the Godavari water, Madhya Pradesh and Orissa will be free to use additional gross quantity of 300 TMC and 200 TMC respectively, out of the water of the Godavari basin below Pochampad Dam site for new projects in such manner as they deem fit.

II. In agreeing to 200 TMC referred to in Clause I for Orissa, Madhya Pradesh on its part has taken into account the estimated requirements within the basin only. All the utilization by Orissa and Madhya Pradesh contemplated in the various Clauses shall be only as a part of the 200 TMC and 300 TMC respectively agreed to in Clause I above. The States of Orissa and Madhya Pradesh will not be entitled on the basis of the subsequent Clauses to utilise in any way more than 200 TMC and 300 TMC respectively.

III. Below the dam sites of the Upper Indravati Project, as proposed by Orissa, there is a catchment area of about 1,855 sq. miles in the Indravathi Sub-basin upto Orissa border with Madhya Pradesh. From this catchment there is some natural flow across the Jaura Nallah to Sabari (Kolab) river. It was agreed that Orissa will ensure at its border with Madhya Pradesh a flow of 45 TMC in the Indravati and its tributaries at 75 per cent dependability for use by Madhya Pradesh. In the years of shortage, the shortage will be shared proportionately between the two States and the assurance of flow in the Indravati and its tributaries, referred to above, will stand proportionately reduced. Both the States agree to joint gauging at suitable points to ascertain the yield data and to ensure the flow

of 45 TMC at 75 per cent dependability or the proportionately reduced flow in years of shortage that has to flow below the common border. The figure of 45 TMC is on the assumption of total yield of 204 TMC from the Indravati sub-basin in Orissa and 91 TMC utilization for the Upper Indravati Project. If the assessment of 204 TMC is found to be high and the correct figure is lower than 204 TMC and the utilization for the Upper Indravati Project gets reduced from the figure of 91 TMC then the figure of 45 TMC will get reduced in the same proportion as the reduction in the figure of 91 TMC

IV. In view of the agreement incorporated in the above clauses, Madhya Pradesh agrees to the clearance and execution of Upper Indravati Project, as proposed and submitted by Orissa to the Government of India. Orissa also agrees to the clearance and execution of Bodghat Project, as may be modified by Madhya Pradesh taking into account the water availability specified in Clause III.

V. It is agreed that Madhya Pradesh and Orissa will consider the feasibility of taking up joint projects in the Sabari Sub-basin from the point Sabari (Kolab) river forms the common boundary between both the States upto the point where it joins the Sileru River, on the basis of common agreements to be drawn up at appropriate time. The hydel power and the cost debitable to generation of such power will be shared equally between the two States in these projects. The costs and benefits of irrigation, if any from these projects will also be equitably shared among both the States. Orissa will be free to make beneficial use of the water of this river above the common boundary point and lying in its territory in such manner as it deems fit.

VI. Notwithstanding the agreement on the joint projects on the river Sabari (Kolab) mentioned in Clause V, if there is any submersion of land and properties of either State by other projects sponsored by the other State or any other State in the Godavari basin, the question of submersion and the problems connected there with will have to be mutually settled before execution of such projects.

VII. Madhya Pradesh and Orissa agree that nothing in this agreement will be treated as a concession by either State in respect of any of their contentions in any other water dispute with any other State or with respect to the dispute regarding the sharing of the balance of water in Godavari and its tributaries.

VIII. Madhya Pradesh and Orissa agree that this agreement will be furnished to the Government of India and they would be requested to expedite the clearance of the new projects. This agreement will also be jointly filed before the Godavari Water Disputes Tribunal at the appropriate time.

Sd/-
Dt. 9-12-1975
(NANDINI SATPATHY)
Chief Minister, Orissa

Sd/-
Dt. 9-12-1975
(P.C. SETHI),
Chief Minister, Madhya Pradesh

(True copy as received from the Chief Minister, Orissa under D.O. Letter no. 7173 dated 9-12-1975 to the Union Minister of Agriculture & Irrigation.)

Sd/-
(H.J. DESAI),
Deputy Secretary (F)
Ministry of Agriculture & Irrigation
(Department of Irrigation)

**AGREEMENT ENTERED INTO BETWEEN THE STATES OF
MAHARASHTRA, MADHYAPRADESH AND ANDHRA PRADESH**

On the basis of series of discussions held between the representatives of the States of Maharashtra, Madhya Pradesh and Andhra Pradesh, the following Agreement is arrived at regarding the sub-basin wise allocations of the waters of the Godavari and its tributaries down-stream of the Pochampad Dam in the State of Andhra Pradesh, the projects therein and other allied matters, taking into consideration the allocations already agreed to under the Inter-State Agreement dated 19-12-1975 and in furtherance of the same and as a supplement thereto for final allocations of all the waters of the various sub-basins mentioned herein.

I. G-5 Middle Godavari sub-basin:

(1) Maharashtra.

The State of Maharashtra can use a quantity of 0.4 TMC of water in the Middle Godavari sub-basin for the existing, under construction and proposed projects/schemes downstream of the Pochampad Dam.

(2) Andhra Pradesh :

The State of Andhra Pradesh can use all the remaining waters in the Middle Godavari sub-basin downstream of the Pochampad Dam.

II. G-6 Manair Sub-basin :

Andhra Pradesh :

The State of Andhra Pradesh can use all the waters of the Manair sub-basin.

III. G-7 Penganga Sub-basin:

(1) Maharashtra

(A). The State of Maharashtra can use all the waters upto:

(i) Lower Penganga Project site near Chikal Wardha on Penganga river, Lat. 19°-55' N and Long. 75°-15' E subject to the condition that the Lower Penganga Project would be taken up as a joint Project. The details of the joint project will be negotiated separately by the States of Maharashtra and Andhra Pradesh.

(ii) Waghadi Project Dam site on the Waghadi river near village Yelbara, Lat. 20°-12'-30" N and Long. 78°-18'-10" E.

(iii) Saikheda Dam on Khuni river near village Lingti, Lat. 20°-06'-30" N and Long. 78°-28'-15" E.

(B). In addition to the use of all the waters of the Penganga sub-basin upto the points as specified in clause (III) (1) (A) (i) to (A) (iii) above, the State of Maharashtra can use from the waters of the rest of the Penganga sub-basin 9 TMC for its existing, under construction and proposed schemes/projects each of which individually will not exceed an annual use of 1.5 TMC.

(2) *Andhra Pradesh.*

The State of Andhra Pradesh can use all the remaining waters of the Penganga sub-basin.

IV. *G-8 Wardha Sub-basin:*

(1) *Madhya Pradesh.*

(a) The State of Madhya Pradesh in terms of the Agreement relating to certain Inter-State irrigation and hydel projects between Madhya Pradesh and Maharashtra dated 18th December, 1968 can use 9 TMC for its existing, under construction and proposed schemes/projects which are located upstream of the contemplated Upper Wardha Project of the State of Maharashtra.

(b) In addition to the use of the waters in clause (IV) (1) (a) above, the State of Madhya Pradesh can use a quantity of 1 TMC for its existing, under construction and proposed schemes/projects in the remaining portion of the sub-basin.

(2) *Maharashtra.*

(i) Subject to the use by the State of Madhya Pradesh as stipulated above, the State of Maharashtra can use all the waters of the river Wardha and/or its tributaries for its existing, under construction and proposed projects/schemes upto the following points:

(a) upto Tulana Project, Lat. 20°-12' N and Long. 78°-57' E on the Wardha river at Tulana village subject to Para (IV) (1) (a) and (b) above.

(b) On the tributaries of the Wardha river joining downstream of the Tulana Project site upto

(i) Chargaon Project (under construction) across Chargaon river Lat. 20°-23'-20" N and Long. 79°-10'-45" E;

(ii) Nirguda Project, Lat. 20°-03' N and Long 78°-53' E; and

(iii) Bandara Project Lat. 19°-40'-15" N Long. 79°-23'-55" E

(ii) In addition to the use of water upto the projects as specified in clauses (IV) (2) - (i) (a) & (b), the following uses are agreed to for the schemes existing, under construction and proposed in the Wardha sub-basin downstream of the project sites mentioned above.

(1)	Mudhali Project	2.80 TMC
(2)	Lift Irrigation from Dhanora weir	2.70 Do
(3)	Lift Irrigation from Mared weir	2.80 Do
(4)	Lift Irrigation from Kalmana weir	2.00 Do
(5)	Lift Irrigation from Tohegaon weir	1.60 Do
(6)	Lift Irrigation from Sonapur weir	2.00 Do
(7)	Usagaon Bulsani and Chandur Lift Irrigation Schemes	3.00 Do
(8)	Other Schemes each of which individually utilising not more than 1.5 TMC	9.10 Do
	Total:	26.00 TMC

Provided that in the event of full quantity of water agreed to be allocated for any of the items 1 to 7 above cannot be sanctioned for use at any of those projects, the balance of the quantity of water allocated hereinabove for projects at Items 1 to 7 above can be sanctioned for use by the State of Maharashtra in any of the other projects as specified in items 1 to 8 subject to the condition that the total uses of all such sanctions for the projects as specified in items 1 to 8 shall not exceed 26 TMC.

(3) Andhra Pradesh:

The State of Andhra Pradesh can use all the remaining waters of the Wardha sub-basin.

(V) G-9 Pranhita sub-basin:

(i) Madhya Pradesh.

(A) The State of Madhya Pradesh can use all the waters for the various existing, under construction and proposed projects/schemes in the Pranhita sub-basin upto the sites indicated below:

Kanhan sub-valley:

(i) Nandna Integrated Project

- (a) Nandna dam site across the tributary of river Kanhan, near village Nandna Lat. 22°-13'-0" N and Long. 78°-28'-48" E.
- (b) Chenkatwari dam site across the Kanhan near village Piparia Lat. 22°-12'-24" N and Long 78°-26'-48" E.

(ii) Amla Integrated Project

- (a) Amla dam site across Bel river near village Amla, Lat. 21°-55'- 0" N and Long. 78°-08'-50" E.
- (b) Parsadi dam site across the tributary of Bel river near village Parsadi. Lat. 21°-56'-55" N and Long. 78°-12'-0" E.
- (c) Dhutmur dam site across the tributary of Bel river near village Dhutmur. Lat. 21°-58'-0" N and Long. 78°-13'-0" E.
- (d) Mohali dam site across the tributary of Bel river near village Mohali. Lat. 21°-58'-0" N and Long. 78°-12'-0" E.

(iii) Dokdoh Integrated Project

- (a) Dokdoh dam site across the Dokdoh Nalla near Village Dokdoh. Lat. 21°-33'-50" N and Long. 78°-44'-15" E.
- (b) Chirkutagondi dam site across the tributary of the Jamnalla near village Chirkutagondi Lat. 21°-35'- 0" N and Long. 78°-41'-0" E.
- (c) Khairi dam site across the tributary of the Kanhan near village Khairi. Lat. 21°-31'-0" N and Long. 78°-50'-0" E.
- (d) Chhindwani dam site across the tributary of Dokdoh Nalla near village Chhindwani. Lat. 21°-34'- 0" N and Long. 78°-45'-40" E.

(iv) Mohgaon integrated project

- (a) Mohgaon dam site across the Sampna nala near village Mohgaon. Lat. 21°-38'-55" N and Long. 78°-43'-30" E.

(b) Jamalapani dam site across the Satki nala near village Jamalapani. Lat. 21°-40'-20" N and Long. 78°-43'-20" E.

(c) Khurpara dam site across the Khurpara nalla near village Ambakhapa. Lat. 21°-39'-0" N and Long. 78°-40'-0" E.

(d) Jam nalla dam site across the Jam nalla near village Kondar. Lat. 21°-38'-0" N and Long. 78°-38'-0" E.

(v) Sovana Nalla Project.

(a) Sovana Dam site across Sovana Nalla near village Badosa. Lat. 21°-41'-15" N and Long. 78°-53'-40" E.

(B) Downstream of the project sites as specified in clause (V) (1) (A) above, the State of Madhya Pradesh can use an additional quantity of 14 TMC for its existing, under construction and proposed projects/schemes each using not more than 1.5 TMC annually.

(C) (a) The State of Maharashtra has suggested the need of creating certain storages in the territory of the State of Madhya Pradesh to regulate water for use in the State of Maharashtra. In this particular situation as a special case the State of Madhya Pradesh has agreed to construct or augment storage/storages across the Kanhan at sites within its territory, location of which will be decided by the State of Madhya Pradesh, for regulation of 15 TMC of the Kanhan flows at 75 per cent dependability for use in the State of Maharashtra between 15th October to 30th June. As these storages will be created for the State of Maharashtra, the entire cost of these storages or augmentation as the case may be including the cost of compensation for lands, properties and rehabilitation etc., will be incurred as per the norms for such works in vogue in the Country at the time of the construction of the project and will be borne entirely by the State of Maharashtra. The details of provision of such storage/storages or augmentation would be mutually settled by the two State Governments at the appropriate time later.

(b) The State of Madhya Pradesh can generate power, by bearing the cost of power component only at the storage/storages as specified in clause (V) (1) (C) (a) above, without any power to be allocated to the State of Maharashtra. The power component is not to include any cost on account of the dam/storage.

(c) The State of Madhya Pradesh can construct at its cost a low dam/pick up weir or such other structures as may be necessary, below the storage/storages as mentioned in clause (V)(1)(C) (a) above, at any future date, in order to improve the peaking capability of the power system within the State.

(d) The State of Maharashtra for its use of 15 TMC as regulated by storage/storages as specified in clause (V) (1) (C) (a) above, agrees to construct pickup weir, downstream, in its territory with adequate pondage to cater for the fluctuating releases in consultation with the State of Madhya Pradesh.

(D) The State of Maharashtra has proposed a pick up weir at Temurdoh across the Kanhan, which will cause submergence in the State of Madhya Pradesh. The details of extent of submergence are not yet indicated. The State of Madhya Pradesh agrees to consider the proposal when the details of submergence are known, provided the submergence is kept to a minimum and is acceptable to the State of Madhya Pradesh.

The provision of compensation for lands, properties and rehabilitation etc., will be made as per the norms for such works being adopted in the Country at the time of the construction of the project and will be borne by the State of Maharashtra.

(E) The State of Madhya Pradesh can lift water from the river Kanhan and its tributaries within its territory and downstream of the storage/storages as specified in clause (V) (1) (A). The use will be within the use of 14 TMC as specified in clause (V) (1) (B) above, and without prejudice to the right of the State of Maharashtra for the flow of 15 TMC of regulated water as specified in clause (V) (1) (C) (d) above.

(F). *Rest of the Wainganga Sub-valley.*

The State of Madhya Pradesh can use all waters in the Wainganga sub-valley upto the sites mentioned below:

- (a) The Dhuti weir across the Wainganga near village Dhuti.
- (b) The following project sites on the tributaries of the Wainganga, joining downstream of the Dhuti weir.
 - (1) Mahakari dam site across the Mahakari River near village Lamata.
Lat. 22°-07'-55" N and Long. 80°-07'-45" E.
 - (2) Nahara Multipurpose Project.
 - (i) Nahara Dam site across Nahara River near village Warurgota.
Lat. 22°-05'-30" N and Long. 80°-19'-35" E.
 - (ii) Diversion site across Nahara River near village Khami.
Lat. 21°-32'-15" N and Long. 80°-38'-0" E.
 - (3) Son Multipurpose Project.
 - (i) Son dam site across river Son near village Baigatola.
Lat. 21°-32'-15" N and Long. 80°-38'-0" E.
 - (ii) Diversion site across Son river near village Sarra.
Lat. 21°-32'-15" N and Long. 80°-30'-0" E.
 - (4) Deo Ama Multipurpose Project
 - (i) Deo Dam site across Deo River near village Sukalpat.
Lat. 21°-47'-30" N and Long. 80°-33'-0" E.
 - (ii) Ama Dam site across Ama River near village Bithli.
Lat. 21°-32'-15" N and Long. 80°-38'-0" E.
 - (iii) Diversion site across Deo River near village Bhagatpur.
Lat. 21°-45'-35" N and Long. 80°-29'-0" E
 - (5) Karadi tank across Pandharipat Nalla near village Karadi.
Lat. 21°-25'-0" N and Long. 80°-35'-0" E
 - (6) Sarathi Tank across Sarathi nalla near village Tikari.
Lat. 21°-56'-0" N and Long. 79°-58'-50" E.
 - (7) Nahlesara tank across Chandan river near village Nahlesara.
Lat. 21°-49'-30" N and Long. 79°-47'-30" E.
 - (8) Daidburra tank across Katanga nalla near village Daidburra.
Lat. 21°-41'-24" N and Long. 79°-53'-0" E.

(G) The State of Madhya Pradesh can use the waters of the river Bagh upto the Pujaritola pick up weir and the waters of the river Bawanthadi upto Sitekasa dam site; and waters of the river Pench upto the Tatladoh Dam, in accordance with the Agreements already

entered into, or as may be agreed to in future, between the States of Madhya Pradesh and Maharashtra for use of waters upto these sites.

(H) Downstream of the project sites as specified in clauses (V) (1) (F) and (V) (1) (G) above, the State of Madhya Pradesh can use an additional quantity of 59 TMC for its existing, under construction and proposed projects/schemes each using not more than 1.5 TMC annually.

(I) (i) The State of Maharashtra has suggested the need of creating certain storages in the territory of the State of Madhya Pradesh to regulate water for use in the State of Maharashtra. In this particular situation as a special case, the State of Madhya Pradesh agrees to make provision of suitable additional storage at one or more than one project/projects out of those specified in clause (V) (1) (F) above to be decided by the State of Madhya Pradesh for the regulation of 15 TMC of water at 75 per cent dependability for use in the State of Maharashtra lower down during 15th October to 30th June. The entire cost of such additional storage / storages or augmentation for the above regulation, will be borne by the State of Maharashtra. The cost to be borne by the State of Maharashtra will also include the cost on account of compensation for land and properties and rehabilitation etc., as per the norms for such works in vogue in the Country at the time of the construction of the project. This quantum of 15 TMC would be made available out of the waters which the State of Madhya Pradesh can use as specified in clause (V) (1) (F) above. The details of provisions of the necessary storages for this regulation will be mutually settled by the two State Governments at the appropriate time later.

(ii) The State of Madhya Pradesh can generate power from such storage/storages by bearing the necessary costs of power component only at the storage/storages as specified in clause (V) (1) (F) above without any power to be allocated to the State of Maharashtra. The power component is not to include any cost on account of the dam/storage.

(iii) The State of Madhya Pradesh can provide at its cost a low dam/pickup weir or such other structure as may be necessary downstream of the Project sites as specified in clause (V) (1) (F) in order to improve the peaking capability of the power system within the State.

(iv) The State of Maharashtra for its use of 15 TMC as specified in clause (V) (1) (F) above agrees to construct a pick up weir downstream in its territory with adequate pondage to cater for the fluctuating releases, in consultation with the State of Madhya Pradesh.

(2) *Maharashtra.*

(A) Subject to what has been stated above regarding use of the Pranhita sub-basin waters by the State of Madhya Pradesh, the State of Maharashtra can use all waters of the river Wainganga and/or its tributaries upto the following points :

(i) Gasikhurd Project site on the Wainganga River near village Gosikhurd.

Lat. 20°-51'-0" N and Long. 79°-37'-20" E.

(ii) Lower Chulband Dam site on the Chulband River near village Bonde.

- Lat. 21°-02'-0" N and Long. 79°-57'-0" E.
- (iii) Itiadoh dam on the Garvi River near village Gothangaon.
Lat. 20°-47'-45" N and Long. 80°-10'-05" E.
 - (iv) Satti Project site on the Satti River near village Palasgad.
Lat. 20°-38'-0" N and Long. 80°-17'-0" E.
 - (v) Lower Tultuli dam site on the Khobragadi river near village Tultuli.
Lat. 20°-26'-0" N and Long. 80°-14'-0" E.
 - (vi) Lower Kathani dam site on the Kathani river near village Rajoli.
Lat. 20°-14'-30" N and Long. 80°-15'-30" E.
 - (vii) Karwappa Project dam site on Karwappa Nalla near village Nakkaponli.
Lat. 20°-07'-40" N and Long. 80°-13'-40" E.
 - (viii) Bhimkund dam site on the Pohar river near village Wakri.
Lat. 19°-55'-0" N and Long. 79°-58'-30" E.
 - (ix) Dina dam on the Dina river near village Regree.
Lat. 19°-45'-0" N and Long. 80°-07'-0" E.
 - (x) Buti nala dam site on the Buti nala near village Panoti.
Lat. 20°-39'-0" N and Long. 79°-48'-0" E.
 - (xi) Gardi Project dam site on the Gardi nalla near village Chandgaon Khurd.
Lat. 20°-35'-20" N and Long. 79°-50'-0" E.
 - (xii) Nimghat dam site on the Nimghat Dhoda nalla near village Mendki.
Lat. 20°-28'-15" N and Long. 79°-48'-50" E.
 - (xiii) Asolamendha dam on the Pathri river near village Asolamendha.
Lat. 20°-28'-15" N and Long. 79°-50'-0" E.
 - (xiv) Ghorajhari dam on the Bokardho nalla near village Ghorajhari.
Lat. 20°-32'-0" N and Long. 79°-38'-0" E.
 - (xv) Human nalla dam site on the Human nalla near village Chirkhada.
Lat. 20°-14'-0" N and Long. 79°-34'-35" E.
 - (xvi) Naleshwar dam on the Ursa nalla near village Naleshwar.
Lat. 20°-15'-0" N and Long. 79°-35'-35" E.
 - (xvii) Andhari dam site on the Andhari river near village Pahami.
Lat. 20°-06'-0" N and Long. 79°-28'-0" E.

(B) In addition to the use of all the waters of the river Wainganga and /or its tributaries upto the points as specified in clauses (V) (2) (A) (ii) to (V) (2) (A) (xvii) above, the State of Maharashtra can use, from the waters of rest of the Pranhita sub-basin 41 TMC for its existing, under construction and proposed schemes/projects using annually not more than 1.50 TMC individually.

(3) *Andhra Pradesh:*

(A) The State of Andhra Pradesh can use the remaining waters of the Pranhita sub-basin.

(B) It is also agreed that Pranhita Hydro-electric Project is not viable and therefore has to be given up. However, the States of Andhra Pradesh and Maharashtra agree to have barrage/barrages across the Pranhita river at suitable sites so that they may provide

irrigation facilities in their areas. The quantum of water that will be used by Maharashtra from these barrages will be reckoned against 41 TMC as specified in clause (V) (2) (B) above. The joint Project/Projects for such barrages are to be taken up after reaching separate Agreement/Agreements for them, between the States of Maharashtra and Andhra Pradesh, either for the benefit of both the States or one State.

(VI) G-10 *Lower Godavari sub-basin:*

(1) *Maharashtra:*

The State of Maharashtra can use upto 1 TMC for its existing, under construction and proposed schemes/projects in the Lower Godavari sub-basin.

(2) *Madhya Pradesh:*

(A) The State of Madhya Pradesh can use all the waters upto the following sites:

(a) Mukpara (Sankampalli) Project. Mukpara dam site across Talperu river near village Mallepalli.

Lat. 18°-36'-43" N and Long. 80°-56'-45" E.

(b) Tummal vagu dam site across Tummal vagu near village Junaguda.

Lat. 18°-25'-33" N and Long. 81°-03'-32" E.

(c) Joranvagu Integrated Project.

(i) Joranvagu dam site across Joranvagu near village Durma.

Lat. 18°-27'-26" N and Long. 81°-13'-36" E.

(ii) Dhondivagu dam site across Dhondivagu near village Kamaram.

Lat. 18°-24'-10" N and Long. 81°-13'-20" E.

(d) Malavagu Project. Malavagu dam site across Malavagu near village Chintalnar.

Lat. 18°-21'-35" N and Long. 81°-11'-48" E.

(e) Raspalle Project.

Raspalle dam site across tributary of Chinta river near village Raspalle.

Lat. 18°-12'-0" N and Long. 80°-58'-38" E.

(B) Downstream of the projects as specified in clause (VI) (2) (A) above, the State of Madhya Pradesh can use an additional quantum of 9 TMC for its existing, under construction and proposed schemes/projects each using not more than 1.5 TMC annually.

(C) The State of Madhya Pradesh agrees to the submersion of its river bed only due to the Taliperu project of the State of Andhra Pradesh. The State of Andhra Pradesh agrees to put up at its costs, such protective measures as would be necessary in consultation with the State of Madhya Pradesh, to prevent submergence of other areas in the State of Madhya Pradesh due to aforesaid project. The State of Andhra Pradesh agrees to forward the details of submergence in the State of Madhya Pradesh along with the Project Report. The construction of the project would be taken up in hand after mutual agreement to the submergence and measures to protect the flooding of the area of the State of Madhya Pradesh.

(D) (a) The States of Madhya Pradesh, Maharashtra and Andhra Pradesh agree to take up the Inchampalli Multi-purpose Project as a joint venture with an FRL and MWL

as may be agreed to by the three States. The project will be surveyed, planned, executed and subsequently operated and maintained under the directions of a Tripartite Interstate Control Board, duly constituted for this purpose by the three States concerned. The State of Andhra Pradesh cannot divert for its use more than 85 TMC directly from the Inchampalli reservoir. No part of the reservoir losses at Inchampalli shall be debitable to the shares of water agreed to for the States of Maharashtra and Madhya Pradesh herein above or hereunder in this Agreement. The balance available water shall be used for power generation at Inchampalli Power House. The compensation for the acquisition of lands and properties belonging to both the Government as well as private parties would be charged to the construction of storage. The provision for the rehabilitation of the oustees will be made as per the norms for such works in vogue in the Country at the time of the construction of the project and charged to the construction of storage.

(b) The State of Andhra Pradesh shall bear 78.10 per cent of the cost of Inchampalli storage, the State of Maharashtra shall bear 10.50 per cent and the State of Madhya Pradesh shall bear 11.40 per cent.

(c) The power generation at Inchampalli and the cost of power component, excluding the storage cost, shall be shared between the States of Madhya Pradesh, Maharashtra and Andhra Pradesh in the proportion of 38, 35, 27 per cent respectively. After generation of power the State of Andhra Pradesh can use the water released in any manner they like.

(d) The States of Madhya Pradesh, Maharashtra and Andhra Pradesh would be free to use 3 TMC, 4 TMC and 5 TMC, respectively, by lifting water from the Inchampalli reservoir for use in their own territory without bearing any cost of the storage. The quantum of this use will be accounted for against the provision under clauses (VI) (2) (B) and (VII) (C) for the State of Madhya Pradesh; and clauses (III) (1) (B), (IV) (2) (ii), (V) (2) (B), (VI) (1) and (VII) (E) for the State of Maharashtra; and out of 85 TMC specified in this clause for the State of Andhra Pradesh.

(e) The States of Madhya Pradesh, Maharashtra and Andhra Pradesh would be free to develop pisciculture and boating facilities in their own territories under submergence. The sovereign rights over the submerged lands upto their territorial limits shall continue to vest with the respective States.

(f) The three States agree that the FRL/MWL as may be agreed to for the Inchampalli reservoir shall be only on the express condition that any of the provisions, facilities given for utilisation of waters of the Godavari and its tributaries, to each other in this Agreement herein above or hereunder is not at all disturbed.

(g) Navigational facilities at the Inchampalli reservoir shall be allowed free to the States of Madhya Pradesh, Maharashtra and Andhra Pradesh.

(h) A pumped storage scheme may be introduced below the Inchampalli reservoir as part of the Inchampalli project Hydro-electric Component. Such a scheme may be constructed even by one or two of the three States and the other State or States

may later share the benefits of the said scheme by paying their share of the cost of the scheme as may be mutually agreed to.

(3) Andhra Pradesh:

The State of Andhra Pradesh can use the remaining waters of the Lower Godavari sub-basin.

(VII) G-11 Indravati sub-basin:

(A) (i) Subject to the provisions of the Inter-State Agreement, dated 19-12-1975 affirming the bilateral Agreement dated 9-12-1975 between the States of Orissa and Madhya Pradesh, and any equitable allocation that may be made to the State of Orissa by the Godavari Water Disputes Tribunal in the Indravati sub-basin, the State of Madhya Pradesh upto the Bhopalapatnam Hydro-electric project Lat. 19°-03'-45" N and Long. 80°-19'-05" E across the Indravati river (a joint project between the States of Madhya Pradesh and Maharashtra) can use 273 TMC for its various existing, under construction and proposed schemes/projects. This quantum includes the share of evaporation loss of the State of Madhya Pradesh at the Bhopalapatnam I Hydro-electric Project.

(ii) The State of Andhra Pradesh agrees that the States of Maharashtra and Madhya Pradesh may introduce Pumped Storage Scheme in their joint Bhopalapatnam Hydro-electric Project on the Indravati at any stage, making use of the Inchampalli reservoir on the downstream. No cost of Inchampalli storage will be debitable to Bhopalapatnam Hydro-electric Project on this account. However, there will be no obligation to maintain any specific level at any time at the Inchampalli reservoir to suit the above Pumped Storage Scheme.

(B) The State of Madhya Pradesh, in addition to the use as agreed to in clause (VII) (A) (i) above case use all the waters upto the following project sites on the tributaries joining the Indravati downstream of the Bhopalapatnam I Hydro-electric project site.

(i) Chintavagu Project site on Chintavagu near village Pavrel.

Lat. 18°-41'-25" N and Long. 80°-40'-47" E.

(ii) Jallavagu Project site on Jallavague near village Chillamarka.

Lat. 18°-56'-34" N and Long. 80°-21'-34" E.

(iii) Kothapalli Integrated Project across tributary of Chintavagu.

(a) Kothapalli Project site Lat. 18°-40'-54" N and Long. 80°-34'-54" E.

(b) Minur Project site Lat. 18°-45'-24" N and Long. 80°-28'-13" E.

(C) The State of Madhya Pradesh can use an additional quantity of 19 TMC downstream of the project sites as specified in clauses (VII) (A) (i) and (VII) (B) above for its existing, under construction and proposed projects/schemes each using not more than 1.5 TMC annually.

(D) The State of Maharashtra can use 34 TMC for its existing, under construction and proposed project/projects upstream of Bhopalapatnam I Hydro-electric Project. This

includes the share of evaporation losses of Maharashtra at the Bhopalapatnam I Hydro-electric Project.

(E) The State of Maharashtra can use an additional quantum of 7 TMC downstream of the Bhopalapatnam I Hydro-electric Project for its existing, under construction and proposed projects/schemes each using not more than 1.5 TMC annually.

(F) The above uses by the states of Madhya Pradesh and Maharashtra would be without prejudice to the Agreements concerning Kotri-Nibra Hydel Project, Bandia Hydel Project and Nagur II Hydel Project entered into between the two States and as ratified by both the Governments.

(G) The State of Andhra Pradesh can use the remaining waters of the Indravati sub-basin Downstream of the Bhopalapatnam I Hydro-electric Project site of the States of Madhya Pradesh and Maharashtra.

(H) The States of Madhya Pradesh and Maharashtra agree that regulated releases after generation of power from Bhopalapatnam I Hydro-electric Project, a joint project of the two States as per the finalised scope would be available for use lower down for the Inchampalli project another joint project of all the three States, viz., Madhya Pradesh, Andhra Pradesh and Maharashtra.

(VIII) *G-12 Sabari sub-basin:*

(A) Subject to the provisions of the Inter-State Agreement dated 19-12-1975 affirming the bilateral Agreement dated 9-12-1975 between the States of Orissa and Madhya Pradesh, and any equitable allocation that may be made to the State of Orissa by the Godavari Water Disputes Tribunal in the Sabari sub-basin, the allocation to the States of Madhya Pradesh and Andhra Pradesh shall be as agreed to hereunder. Downstream of the point where the Sabari forms the common boundary between the States of Orissa and Madhya Pradesh (at near about Lat. 18°-55'-04"N and Long. 82°-14'-53"E), the State of Madhya Pradesh can use all the waters upto the following project sites on the tributaries of river Sabari as indicated below:

(a) Baru Nadi Integrated Project.

(i) Barunadi site across Baru River near village Tankavada.

Lat. 18°-45'-33" N and Long. 81°-48"-50" E.

(ii) Bhimsen Storage site across Bhimsen near village Bodavada.

Lat. 18°-45'-0" N and Long. 81°-55'-46" E.

(iii) Kudripal Pickup weir site across Baru River near village Kudripal.

Lat. 18°-40'-42" N and Long. 81°-51'-30" E.

(b) Mupari Project site across Mupari (Jamair) river near village Jamair.

Lat. 18°-42'-30" N and Long. 81°-45'-0" E.

(c) Gorali Nadi Project.

(i) Gorali dam site across Gorali Nadi near village Kanjipani.

Lat. 18°-32'-50" N and Long. 81°-40'-55" E.

(ii) Andumpal dam site across Pulnadi near village Andumpal.

Lat. 18°-34'-43" N and Long. 81°-42'-04" E.

(d) Sailervagu Integrated Project.

- (i) Mankapal dam site across Malengar river near village Mankapal.

Lat. 18°-32'-00" N and Long. 81°-29'-26" E.

- (ii) Sailervagu dam site across Sailervagu near village Paila.

Lat. 18°-26'-12" N and Long. 81°-31'-38" E.

(e) Ordelong Integrated Project.

- (i) Ordelong dam site across tributary of Tinarayavagu near village Ordelong.

Lat. 18°-13'-24" N and Long. 81°-24'-06" E.

- (ii) Tinarayavagu dam site across Tinarayavagu near village Korrapal.

Lat. 18°-11'-0" N and Long. 81°-18'-56" E.

(f) Janavagu Integrated Project.

- (i) Janavagu dam site across Janavagu near village Gorkha.

Lat. 17°-57'-24" N and Long. 81°-20'-15" E.

- (ii) Elemmadugu vagu dam site across Elemmadugu vagu near Jarput village.

Lat. 18°-03'-42" N and Long. 81°-18'-09" E.

(B) The State of Madhya Pradesh can use an additional quantity of 18 TMC downstream of the project sites as specified in clause (VIII) (A) above, for its existing, under construction and proposed schemes each using not more than 1.5 TMC annually.

(C) The quantum of water to meet the evaporation losses of the power projects across the Sabari, of the State of Madhya Pradesh will be in addition to the quantum as specified in clauses (VIII) (A) and (B) above and this quantum would however be limited to 10 TMC while excess if any, shall be borne by the State of Madhya Pradesh out of its quantum already specified in clauses (VIII) (A) & (B) above.

(D) The State of Andhra Pradesh can use the remaining waters of the Sabari sub-basin for the existing, under construction and proposed schemes/projects after the uses, by the State of Madhya Pradesh for projects/schemes as specified in clauses (VIII) (A) to (VIII) (C) above and the allocation that may be made by the Godavari Water Disputes Tribunal to the State of Orissa in this sub-basin.

(E) The State of Madhya Pradesh agrees subject to the State of Orissa agreeing for the construction of Polavaram Project of the State of Andhra Pradesh so that the maximum submergence in Madhya Pradesh territory at Konta does not exceed RL +150 ft. due to all effects including back water effect. The Polavaram Project shall be designed for the maximum probable flood in consultation with the Central Water Commission so as not to exceed the limit of submergence mentioned above. For the submerged lands and properties both of the Government as well as private parties, the cost of compensation and rehabilitation on the basis of the norms in vogue in the Country at the time of the construction of the project shall be charged to the project. Model villages with facilities/amenities etc., shall be constructed at the cost of the project before the submergence actually takes place. The sovereignty over the land shall continue to vest with the respective States. The State of Madhya Pradesh can lift 1.5 TMC from the Polavaram Lake for its use within its territory without bearing any cost of storage and this use shall be out of the allocation agreed to for the State as in clause (VIII).

(F) The State of Madhya Pradesh can transport its forest or mineral produce through all navigational facilities/lock etc., which shall be provided by Andhra Pradesh at its own cost at Polavaram. These facilities will be available to the state of Madhya Pradesh at the Polavaram Project, at the rates applicable to the State of Andhra Pradesh for their own cargo at Polavaram. The state of Madhya Pradesh can develop and exploit pisciculture and boating facilities in its own territory.

(IX) GENERAL CLAUSES:

(1) (a) The States of Madhya Pradesh and Maharashtra may vary the location of sites of projects using more than 1.5 TMC annually which have been specifically mentioned in the above paragraphs by informing the lower State/States. If as a result of shifting or alteration in the case of any such specified sites upto which a State has been permitted to use all the water more or less catchment area than what is indicated in above clauses is intercepted, a corresponding reduction/increase will be made in the catchment area of other specified sites, so that the total catchment area allowed for each State for interception of all the water is not exceeded.

(b) It is also agreed that with respect to projects as specified in clauses (III) (1) (B), (V) (1) (B) and (H), (V) (2) (B) , (VI) (2) (B), (VII) (C), (VII) (E), (VIII) (A) and (VIII) (B) and if there is a marginal increase of utilisation over 1.5 TMC but not exceeding 2 TMC for each project, such increase may be permitted by mutual consultation between the State concerned and the lower Riparian State/States, provided that the total utilisation as specified in each of the said clauses is not exceeded by the concerned State.

(2) In the above Agreement, wherever specified quantities of the water has been mentioned as permitted use by any State it is agreed that the use shall be measured in the manner indicated below:

<i>Use</i>	<i>Measurement</i>
(1)	(2)
(i) Irrigation use	100 per cent of the quantity diverted or lifted from the river or any of the tributaries or from any reservoir, storage or canal and 100 per cent of evaporation losses in these storages.
(ii) Power use	100 per cent of evaporation losses in the storage.
(iii) Domestic and municipal water supply within the basin.	By 20 per cent of the quantity of water diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.
(iv) Industrial use within the basin.	2.5 per cent of the quantity of water diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.
(v) All uses outside the basin	100 per cent of the quantity diverted or lifted from the river or any of the tributaries or from any reservoir, storage or canal.

(3) It is agreed that in using the waters permitted to each State in the above Agreement no State can construct projects other than those already specifically agreed to, submerging the territory of another State/States, without the prior consent of that State for such submergence.

(4) It is agreed that all the States can make use of underground water within their respective State territories in the Godavari basin and such use shall not be reckoned as use of the water of the river Godavari.

(5) The sub-basins referred to in the Agreement are according to the division of Godavari Basin into sub-basins made in the Report of the Krishna Godavari Commission in Chapter III paragraph 4.27 at page 28.

(6) Use shall include any use, made by any State of the waters of the river Godavari and its tributaries for domestic, municipal, irrigation, industrial, production of power, navigation, pisciculture, wild life protection, recreation purposes and evaporation losses from the storages created for the above purposes.

(7) All the levels mentioned in the clauses above are with reference to the G.T.S. levels.

(8) This agreement is subject to ratification by the respective State Governments of Maharashtra, Madhya Pradesh and Andhra Pradesh.

Dated the 7th August, 1978.

(Sd/-)
(V.R. DEUSKAR)
Secretary,
Irrigation Department
Government of Maharashtra.

(Sd/-)
(R.K. TIKKU)
Secretary,
Irrigation & Power Department,
Government of Madhya Pradesh.

(Sd/-)
(M. GOPALA KRISHNAN)
Secretary, Department of Irrigation & Power,
Government of Andhra Pradesh.

ANNEXURE “C”
ANNEXURE I -GODAVARI

**SUMMARY RECORD OF THE DISCUSSIONS OF THE MEETING HELD
BETWEEN THE CHIEF MINISTERS OF KARNATAKA AND ANDHRA PRADESH
AT BANGALORE ON 4TH AUGUST, 1978**

The following were present:

Karnataka :

1. Sri D.Devaraj Urs, Chief Minister.
2. Sri N. Narasimha Rau, Chief Secretary.
3. Sri J.C.Lynn, Secretary to Chief Minister.
4. Sri B.C.Angadi, Special Secretary, P.W. & E. dept.,(Irrigation).
5. Sri S.R.S. Sastry, Chief Engineer, W.R.D.O.
6. Sri B. Subramanyam, Chief Engineer, Bangalore Water Supply & Sewerage Board.

Andhra Pradesh :

1. Dr. M. Chenna Reddy, Chief Minister.
2. Sri G.V.Sudhakara Rao, Irrigation Minister.
3. Sri M.Gopalakrishnan, Secretary, Irrigation & Power.
4. Sri B. Gopalakrishna Murthy, Adviser, Irrigation & Power.
5. Sri K. R. Chudamani, Adviser, Irrigation & Power.
6. Sri M.Satyanarayana Singh, Special Officer, Water Resources.

After discussion, the following points were agreed to:

Andhra Pradesh and Karnataka agree that Karnataka would, in addition to its existing utilisation above the proposed Singur project in the Manjra Sub-basin and the utilisation for Karanja and Chulkinala projects, as per the agreement of 17.9.1975 read with the agreement of 19.12.1975 utilise one TMC of water more for lift irrigation from the Manjra river.

2. In order to utilise this quantity or any other additional quantity that may be agreed to later, on the Manjra, Karnataka may put up such pondage as may be necessary and as may be agreed to between Andhra Pradesh and Karnataka to utilise one TMC or such additional agreed quantities as may become available for this purpose.

3. Andhra Pradesh and Karnataka agree that Karnataka may utilise 2.5 (two point five) TMC of water in the Manjra sub-basin in its territory in the catchment below Nizamsagar project.

4. Andhra Pradesh and Karnataka agree that Andhra Pradesh may go ahead with the construction of the Singur Project, as proposed by Andhra Pradesh, with the maximum capacity of 30 TMC of gross storage with FRL/MWL of plus 523.6 meters (1,717.41 ft.) above MSL.

5. Karnataka will take necessary action to acquire any land or structure that may be submerged and/or affected under Singur Project and Andhra Pradesh agrees to bear the cost of acquisition, the cost of rehabilitation of the displaced families and the cost of

construction of bridges and roads that may become necessary. Such acquisition and rehabilitation shall be as per the norms prevailing in Karnataka at the time of acquisition/rehabilitation. Karnataka also agrees to the submergence of the river bed and its stream-beds.

6. In the event of Andhra Pradesh developing hydroelectric power at Singur project, Karnataka and Andhra Pradesh agree to share the cost and benefits of such power in such proportion as may be agreed upon.

7. (a) Subject to the clearance of Polavaram Project by the Central Water Commission for FRL/MWL plus 150 ft. the State of Andhra Pradesh agrees that a quantity of 80 TMC at 75 per cent dependability of Godavari waters from Polavaram project can be diverted into Krishna river above Vijayawada Anicut displacing the discharges from Nagarjunasagar Project for Krishna Delta, thus enabling the use of the said 80 TMC for projects upstream of Nagarjunasagar.

(b) The States of Andhra Pradesh and Karnataka agree that the said quantity of 80 TMC shall be shared in the proportion of Andhra Pradesh 45 TMC, Karnataka and Maharashtra together 35 TMC.

(c) Andhra Pradesh agrees to submit the Polavaram project report to Central Water Commission within three months of reaching an over-all agreement on Godavari waters among the five party States.

(d) Andhra Pradesh agrees to bear the cost of diversion fully.

(e) Maharashtra and Karnataka are at liberty to utilise their share of 35 TMC mentioned in sub-para 7(b) above from the date of clearance of the Polavaram project by Central Water Commission with FRL/MWL of plus 150 ft., irrespective of the actual diversion taking place.

(f) It is also agreed that if the diversion at 75 per cent dependability as stated in clause (a) above exceeds the said quantity of 80 TMC due to diversion of Godavari waters from the proposed Polavaram Project into Krishna river, further diminishing the releases from Nagarjunasagar Project, such excess quantity shall also be shared between the three States in the same proportion as in sub-clause (b) above.

Mr.S.Chaudhuri,
Counsel
for
the State of Karnataka.

Mr.P.Ramachandra Reddy,
Advocate General
for
the State of Andhra Pradesh.

ANNEXURE II -KRISHNA

SUMMARY RECORD OF THE DISCUSSIONS OF THE MEETING HELD BETWEEN THE CHIEF MINISTERS OF KARNATAKA AND ANDHRA PRADESH AT BANGALORE ON 4TH AUGUST, 1978

The following were present:

Karnataka :

1. Sri D. Devaraj Urs, Chief Minister.
2. Sri N. Narasimha Rau, Chief Secretary.
3. Sri J. C. Lynn, Secretary to Chief Minister.
4. Sri B.C. Angadi, Special Secretary, P.W.& E.dept.,(Irrigation).
5. Sri S.R.S. Sastry, Chief Engineer, W.R.D.O.
6. Sri B. Subramanyam, Chief Engineer, Bangalore Water Supply & Sewerage Board.

Andhra Pradesh :

1. Dr. M. Chenna Reddy, Chief Minister.
2. Sri G.V.Sudhakara Rao, Irrigation Minister.
3. Sri M. Gopalakrishnan, Secretary, Irrigation & Power.
4. Sri B. Gopalakrishna Murthy, Adviser, Irrigation & Power.
5. Sri K.R. Chudamani, Adviser, Irrigation & Power.
6. Sri M. Satyanarayana Singh, Special Officer, Water Resources.

After discussion, the following points were agreed to:

Karnataka and Andhra Pradesh agree that Andhra Pradesh would go ahead with the proposed Jurala Project with FRL/MWL of plus 1045 feet above MSL in Krishna basin.

2. Karnataka will take necessary action to acquire any lands or structures that may be submerged and/or affected under Jurala Project and Andhra Pradesh agrees to bear the cost of acquisition, the cost of rehabilitation of the displaced families and the cost of construction of bridges and roads and cost of protection or shifting of temples and other religious shrines that may become necessary as decided by Karnataka. Such acquisition and rehabilitation shall be as per the norms prevailing in Karnataka at the time of acquisition/rehabilitation. Karnataka also agrees to the submergence of river bed and stream beds.

3. Karnataka and Andhra Pradesh also agree that in the event of Andhra Pradesh generating power from this project, the cost and benefits of hydro-power will be shared equally between the two states. The question of what would constitute the cost of hydro-power was not discussed and will be agreed upon separately.

Mr.S.Chaudhuri,
Counsel
for
the State of Karnataka.

Mr.P.Ramachandra Reddy,
Advocate General
for
the State of Andhra Pradesh.

ANNEXURE 'D'-GODAVARI

PROCEEDINGS OF THE MEETING BETWEEN THE CHIEF MINISTERS OF ANDHRA PRADESH AND ORISSA AT HYDERABAD ON THE 15TH OF DECEMBER, 1978

THE FOLLOWING WERE PRESENT:

Andhra Pradesh :

1. Dr. M. Chenna Reddy, Chief Minister.
2. Sri G. Rajaram, Minister for Finance & Power.
3. Sri G.V. Sudhakar Rao, Minister for Major Irrigation & Commercial Taxes.
4. Sri I.J. Naidu, I.A.S., Chief Secretary.
5. Sri S. R. Rama Murthy, I.A.S., Secretary to Chief Minister.
6. Sri P. Ramachandra Reddy, Advocate General.
7. Sri C.N. Shastry, I.A.S., Secretary, Irrigation & Power.
8. Sri M. Gopalakrishnan, I.A.S., Secretary, Primary & Secondary Education.
9. Dr. N. Tata Rao, Chairman, A.P.S.E.B.
10. Sri Satyanarayan Singh, Special Officer, Water Resources
11. Sri D.V. Sastry, Advocate.

Orissa :

1. Sri Nilamani Routroy, Chief Minister.
2. Sri Pratap Chandra Mohanty, Minister for Revenue & Power.
3. Sri Prahlad Mallik, Minister for Irrigation.
4. Sri B.M. Patnaik, Advocate General.
5. Sri B. Ramadorai, I.A.S., Secretary, Irrigation & Power.
6. Sri A.K. Biswal, Secretary to Chief Minister.
7. Sri S.C. Tripathy, Chief Engineer, Irrigation
8. Sri B. Mishra, Chief Engineer, Electricity,
9. Sri M. L. Lath, Executive Engineer, Irrigation.

After full discussions, the following agreement was reached:

I. G-11 Indravati Sub-basins:

The State of Orissa can utilise its share of water in G-11 Indravati sub-basin in terms of the Inter-State agreement dated 19.12.1975 affirming the bilateral agreement dated 9.12.1975 between the States of Orissa and Madhya Pradesh.

II. G-12 Sabari sub-basin:

(A) The State of Orissa can use all the water of the river Sabari (Kolab) upto the point (at near about Lat. 18°-55'-04" N and Long. 82°-14'-53" E) where the river Sabari forms the common boundary between the State of Orissa and the State of Madhya Pradesh in terms of the Inter-State Agreement dated 9.12.1975, Clause V.

(B) The States of Orissa and Andhra Pradesh agree for utilisation of all waters upto the following project sites on the tributaries and sub-tributaries of the river Sabari (Kolab) by the State of Orissa.

(i) Govindapalle Project on:-

(a) Dharmgedda nalla site near Lingiyaput Village. Lat. $18^{\circ}-36'-07''$ N and Long. $82^{\circ}-16'-11''$ E.

(b) Jamnadi site near Govindpalli village. Lat. $18^{\circ}-36'-13''$ N and Long. $82^{\circ}-16'-48''$ E.

(c) Garianadi site near Doraguda village. Lat. $18^{\circ}-34'-03''$ N, and Long. $82^{\circ}-17'-18''$ E.

(ii) Satiguda Project site on the tributary of Potteruvagu. Lat. $18^{\circ}-18'-57''$ N and Long $81^{\circ}-56'-24''$ E.

(iii) Parasanappalle project site on the tributary of Sabari near village Parsanapalli. Lat. $18^{\circ}-16'-44''$ N and Long $81^{\circ}-36'-44''$ E,

(iv) Potteru project site on Potteruvagu near Surlikunta village. Lat. $18^{\circ}-12'-30''$ N and Long $82^{\circ}-01'-30''$ E.

(C) The State of Orissa, in addition to the uses as specified in clauses II (A) and II (B) above, can use 40 TMC, for its existing, under construction and proposed project/schemes each using not more than 1.5 TMC, annually.

(D) Downstream of the point where the Sabari forms the common boundary between the States of Orissa and Madhya Pradesh (at near about Lat. $18^{\circ}-55'-04''$ N and Long $82^{\circ}-14'-53''$ E) and upto the confluence of the Sileru and the Sabari, the State of Orissa, can use not more than 27 TMC, for irrigation by withdrawals from the main river for its existing, under construction and proposed schemes/projects.

(E) The quantum of water to meet the evaporation losses of project under clause II D and power projects across the Sabari by the States of Madhya Pradesh and Orissa in terms of clause V of bilateral agreement dated 9.12.1975 between Orissa and Madhya Pradesh will be in addition to the quantum specified in clauses II A, B, C, & D above and shall be shared in such proportion as the said two States may agree. However, the share of Orissa in excess of 10 TMC, in the evaporation losses mentioned above shall be met from its quantum specified in clauses II A, B, C & D above.

(F) The States of Orissa and Andhra Pradesh shall utilise the Sileru river waters in terms of:

(a) 1946 Agreement between the Government of Madras and Orissa regarding development of Hydroelectric power at Dudma falls on the Machkund river.

(b) Final agreement between the Governments of Orissa and Andhra Pradesh in relation to the use of the waters of the Sileru River dated the 4th September, 1962.

(c) Any other subsequent agreement/agreements that the two States of Orissa and Andhra Pradesh may mutually conclude in future.

(d) All use of water for beneficial purpose by the States of Orissa and Andhra Pradesh for their existing, under construction and proposed schemes / projects upstream of Machkund Project the total utilisation under which shall not exceed 2 TMC by each state will be charged to their respective shares at Machkund correspondingly reducing their respective share of power at Machkund & Dudma

falls. Similarly, use under Schemes / Projects which shall not exceed 2 TMC by each State downstream of Machkund project and upstream of Balimela Dam, will be charged to their respective shares at Balimela dam project reducing their respective shares of water by the total quantity used both above Machkund project and between Machkund and Balimela project. All such use should be intimated to the other Government.

(e) Notwithstanding any restriction imposed under the past agreements, the State of Orissa will be permitted to utilise not exceeding 2 TMC of Sileru water for beneficial use downstream of Balimela dam for its existing, under construction and future projects out of the yield of the catchment lying downstream of Balimela dam project. This quantity will be out of 40 TMC as specified in clause II (C) above.

(G) The State of Orissa agrees for the construction of Lower Sileru Irrigation Scheme with FRL + 235 ft. and MWL +262 ft. by the State of Andhra Pradesh, which involves some submergence in the State of Orissa. The State of Andhra Pradesh shall bear the cost of compensation for submergence of land and properties both the Government as well as private parties that may be agreed to. The provision of rehabilitation of the oustees will be made as per the norms in vogue in the State of Orissa at the time of construction of the project.

(H) The State of Andhra Pradesh can, subject to agreement dated 7-8-1978, use the remaining waters in the Sabari sub-basin excluding Sileru river vide clause F above for the existing, under construction and proposed schemes/projects after the uses by the State of Orissa for projects/schemes as specified in Clauses I & II A to E above.

(I) The States of Orissa and Andhra Pradesh agree for the construction of Polavaram Project of the State of Andhra Pradesh, so that the maximum submersion in the State of Orissa territory at Motu/Konta does not exceed RL +150 ft, due to all effects including backwater effect. The Polavaram Project shall be designed for the maximum probable flood in consultation with the Central water Commission so as not to exceed the limit of Submergence mentioned above. For the submerged lands and properties both the Government as well as private parties, the cost of compensation and rehabilitation on the basis of the norms in vogue in the State of Orissa at the time of the construction of the projects shall be charged to the project. Model villages with facilities/amenities etc., shall be constructed at the cost of the project before the submergence actually takes place.

The sovereignty over the land shall continue to vest with the respective States. The State of Orissa can lift 5 TMC from the Polavaram Lake, without bearing any cost of the storage for its use in their territory and this use shall be reckoned against the allocation made to that State as specified in clause II above. The State of Orissa can transport their forest or mineral produce through all navigational facilities/lock etc.; which shall be provided, by the State of Andhra Pradesh at its own cost at Polavaram. These facilities will be available to the State of Orissa at the Polavaram project at the rates applicable to the State of Andhra Pradesh for their own cargo at Polavaram. The State of Orissa can develop and exploit pisciculture and boating facilities in their own territory. The States are agreeable to the level of RL + 150 feet for Polavaram storage as defined above only on the express conditions that any of the provisions, facilities and liberties given for utilisation of waters of the Godavari and its tributaries, to each other in this Agreement herein above or here under are not at all disturbed.

III. General clauses:

1. (a) The State of Orissa may vary the location of sites of projects using more than 1.5 TMC, annually which have been specifically mentioned in the above clauses by informing the lower State/States. If as a result of shifting or alteration in the case of any such specified sites upto which a State has been permitted to use all the water, more or less catchment area than what is indicated in the above clauses is intercepted, a corresponding reduction/increase will be made in the catchment area of other specified sites, so that the total catchment area allowed for each State for interception of all the water is not exceeded.

(b) It is also agreed that with respect to projects as specified in clauses I & II above if there is a marginal increase of utilisation over 1.5 TMC, but not exceeding 2 TMC, for each project, such increase may be permitted by mutual consultation between the States concerned and the lower Riparian State/States, provided that the total utilisation as specified in each of the said clauses is not exceeded by the concerned State.

(2) In the above agreement, wherever specified quantities of the water has been mentioned as permitted use by any States it is agreed the use shall be measured in the manner indicated below :

<i>Use</i> (1)	<i>Measurement</i> (2)
(i) Irrigation use	100 per cent of the quantity diverted or lifted from the river or any of the tributaries or from any reservoir, storage or canal and 100 per cent of evaporation losses in these storages.
(ii) Power use	100 per cent of evaporation losses in the storage.
(iii) Domestic and municipal water supply within the basin.	By 20 per cent of the quantity of water diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.
(iv) Industrial use within the basin.	By 2.5 per cent of the quantity of water diverted or lifted from the River or any of its tributaries or from any reservoir, storage or canal.
(v) All uses outside the basin	100 per cent of the quantity diverted or lifted from the river or any of the tributaries or from any reservoir, storage or canal.

(3) It is agreed that in using the waters permitted to each State in the above agreement no State can construct a project other than those already specifically agreed to submerging the territory of another State/States, without prior consent and acceptance by mutual discussions by that State for such submergence.

(4) It is agreed that all the States can make use of underground water within their respective State territories in the Godavari basin and such use shall not be reckoned as use of the water of the river Godavari.

(5) The sub-basins referred to in this agreement are according to the division of Godavari basin into sub-basins made in the report of the Krishna Godavari Commission in Chapter-III paragraph 4.27 at page 28.

(6) Use shall include any use, made by any State of waters of the river Godavari and its tributaries or domestic, municipal, irrigation, industrial, production of power, navigation, pisciculture, wild life protection, recreation purposes and evaporation losses from the storages created for the above purposes.

(7) All the levels mentioned in the clauses above are with reference to G.T.S. levels.

Sd/-
Dr. M. CHANNA REDDY,
Chief Minister,
Andhra Pradesh.

Sd/-
NILAMANI ROUTROY,
Chief Minister,
Orissa.

ANNEXURE "E"

ANNEXURE I

B.C.ANGADI,
Special Secretary To Government,
Irrigation Department

VIDHANSHOUDHA, BANGALORE
Dated 29th January, 1979.

DO No. PWD 25 BRA 78

DEAR SHRI DEUSKAR,

Sub:- Agreement between Maharashtra and Karnataka regarding Godavari waters distribution

In confirmation of our telephonic talks during the last week, I have to state that we agree that:

(a) 35 TMC of water in Krishna, which is the share of Karnataka and Maharashtra out of 80 TMC of Godavari diversion by the State of Andhra Pradesh from Polavaram Barrage, shall be shared between Karnataka and Maharashtra as under :-

Karnataka	21 T M C
Maharashtra	14 T M C

(b) Karnataka had requested for at least 1 TMC of Manjra waters upstream of Nizamsagar from the share allocated to Maharashtra. Maharashtra has expressed its inability to spare this water. Karnataka accepts that position in the interest of arriving at an agreement.

(c) A copy of this letter with your confirmation to it may be filed before the Godavari Tribunal on 02-02-1979.

Kindly confirm the above points as agreed on telephone.

Yours sincerely,
Sd. /-
29-1-1979
(B.C.ANGADI)

SHRI V.R. DEUSKAR,
Secretary to Government,
Irrigation Department,
Government of Maharashtra,
Mantralaya,
Bombay - 400 032.

ANNEXURE II

V.R.DEUSKAR,
Secretary to Government.

D.O. No. I S W 5179 K G
Irrigation Department,
Mantralaya, Bombay-400 032
Camp: New Delhi
Dated the 30th January, 1979.

Sub: - Agreement between Maharashtra and Karnataka regarding Godavari waters distribution.

Ref: - Your D.O. Letter No. PWD 25 BRA 78 dated 29th January, 1979.

Dear Shri Angadi,

In confirmation of our telephonic talk during the last week and with reference to your above D.O. letter, the points as agreed between the two States mentioned in your letter are hereby confirmed subject to the following understanding:

The present ratio of sharing of 35 TMC viz. 14 to Maharashtra and 21 to Karnataka shall not be applicable to any additional water that would become available by virtue of Andhra Pradesh diverting water in excess of 80 TMC

We may authorise our Counsel before Godavari Water Disputes Tribunal to draw up an agreement in a proper form in terms of our understanding reached between the two States and file it before the Godavari Tribunal.

Yours sincerely,
Sd./-
(V.R.DEUSKAR)

SHRI. B. C. ANGADI,
Special Secretary,
Irrigation Department,
Government of Karnataka,
Bangalore.

ANNEXURE III

B.C.ANGADI,
Special Secretary to Government,
Irrigation Department,

VIDHANA SOUDHA,
BANGALORE
Dated 31st January, 1979.

D.O. No. PWD 25 BRA 78

Dear Shri Deuskar,

Sub: - Agreement between Maharashtra and Karnataka regarding Godavari waters distribution.

I received your D.O. letter No. ISW 5179 - KG dated 30.1.1979 through telex, confirming our telephonic talk and points agreed between the two States as mentioned in my D.O. letter No. PWD 25 BRA 78, dated 29th January, 1979.

2. I further agree that the following condition mentioned in your above letter, namely, that ---

“The present ratio of sharing 35 TMC viz., 14 to Maharashtra and 21 to Karnataka shall not be applicable to any additional water that would become available, by virtue of Andhra Pradesh diverting water in excess of 80 TMC”

should form part of the agreement which should be drawn up and filed before the Tribunal.

Yours sincerely,

Sd./-
(B.C.ANGADI)

SHRI V. R. DEUSKAR,
Secretary to Government,
Irrigation Department,
Government of Maharashtra,
Mantralaya,
Bombay - 400 032.

**AGREEMENT ENTERED INTO BETWEEN THE STATES OF ORISSA AND
MADHYA PRADESH**

After full discussions, the following agreement was reached at Bhopal on 11th July, 1979.

G-11 Indravati Sub-basin:

1. ORISSA

(a). The State of Orissa can use all the waters upto Upper Indravati Project site comprising:

- (i) Indravati dam site (Lat. 19° –16’N & Long. 82° –50’E.)
- (ii) Podaga dam site (Lat. 19° –14’N and Long. 82° –49’E).
- (iii) Kapur dam site (Lat. 19° –06’N and Long. 82° –47’E)
- (iv) Muran dam site (Lat. 19° –06’N and Long. 82° –46’E).

(b). Out of the balance flows available below the Upper Indravati Project within its territory, the State of Orissa shall ensure forty five (45) TMC of water to flow down at the Orissa-Madhya Pradesh border in the Indravati sub-basin. In the years, when the diversion of water outside the Godavari basin at the Upper Indravati Project is less than eighty five (85) TMC (exclusive of evaporation losses) this quantum of forty five (45) TMC at the Orissa-Madhya Pradesh border in the Indravati sub-basin will be reduced in the same proportion as the reduction in the quantum of eighty five (85) TMC. The State of Orissa can use all the balance water thus left within its territory for its existing under construction, and proposed projects/schemes.

(c). (i). The States of Orissa and Madhya Pradesh agree to measure this quantum of forty five (45) TMC at Jagdalpur gauge site across Indravati river which is maintained at present by the Central Water Commission, subject to adjustment as mentioned in sub-paragraph (c) (ii).

(ii). The catchment area of the State of Orissa contributing to the flow in Indravati river below Jagdalpur gauge site is about two hundred and thirty eight (238) square miles, while the catchment area of the State of Madhya Pradesh upto the gauge site is about one hundred and ninety eight (198) square miles. The seventy five (75) per cent dependable yield from this area of forty (238 minus 198 equal to 40) square miles may be taken as two point eight (2.8) TMC. This quantum of two point eight (2.8) TMC will be added to the observed flow at Jagdalpur gauge site for estimating the flows available at the Orissa-Madhya Pradesh border specified in sub- paragraph 1(b). The quantum of two point eight (2.8) TMC, will be reduced proportionately in the lean years in the same proportion to the reduction of seventy five (75) per cent dependable yield of eighty nine point five (89.5) TMC at Upper Indravati Project site as cleared by Planning Commission.

(iii). At any time if the Central Water Commission closes Jagdalpur gauge site, the two States shall maintain the gauge site jointly or any other site(s) as may be mutually agreed upon for the purpose.

2 Madhya Pradesh

(a). The State of Madhya Pradesh can use two hundred and seventy three (273) TMC of water for its various existing, under construction and proposed projects/schemes, subject to the agreed uses in paragraph (1) upto the Bhopalpatnam-I Hydro-electric project site (Lat. $19^{\circ}-03'-45''$ N and Long. $80^{\circ}-19'-05''$ E) across Indravati river a joint project between the States of Madhya Pradesh and Maharashtra. This quantum includes the share of evaporation loss of the State of Madhya Pradesh at the Bhopalpatnam-I reservoir.

(b). The State of Madhya Pradesh in addition to the uses as agreed to in paragraph 2(a) can use all the waters upto the following project sites on the tributaries joining the Indravati downstream of Bhopalpatnam-I Hydro –electric project site:

- (i) Chintavagu Project site on Chintavagu near village Pavrel.
Lat. $18^{\circ}-41'-25''$ N Long. $80^{\circ}-40'-47''$ E.
- (ii) Jallavagu Project site on Jallavagu. near village Chillamarka.
Lat. $18^{\circ}-56'-34''$ N; Long. $80^{\circ}-21'-34''$ E
- (iii) Kothapalli Integrated Project across tributary of Chintavagu.
 - (a) Kothapalli Project site:
Lat. $18^{\circ}-40'-54''$ N and Long. $80^{\circ}-34'-54''$ E
 - (b) Minur Project site:
Lat. $18^{\circ}-45'-24''$ N; and Long. $80^{\circ}-28'-13''$ E.

(c) The State of Madhya Pradesh can use an additional quantity of nineteen (19) TMC of water downstream of the project sites specified in paragraphs 2 (a) and 2 (b) for its existing, under construction and proposed projects/schemes each using not more than one point five (1.5) TMC annually.

G-12 Sabari sub-basin.

3. Orissa

(a) The State of Orissa can use all the waters of Sabari (Kolab) river upto a point near about Lat. $18^{\circ}-55'-04''$ N and Long. $82^{\circ}-14'-53''$ E where Sabari river forms the common boundary between the States of Orissa and Madhya Pradesh.

(b) In addition to the above, the State of Orissa can use all the waters upto the following project sites on the tributaries of Sabari (Kolab) river:

- (i) Govindapalle Project on:-
 - (a) Dharmgedda nalla site near Lingiyaput Village.
Lat. $18^{\circ}-36'-07''$ N and Long. $82^{\circ}-16'-11''$ E.
 - (b) Jamnadi site near Govindpalli village.
Lat. $18^{\circ}-36'-13''$ N and Long. $82^{\circ}-16'-48''$ E.
 - (c) Garianadi site near Doraguda village.
Lat. $18^{\circ}-34'-03''$ N and Long. $82^{\circ}-17'-18''$ E.
- (ii) Satiguda Project site on the tributary of Potteruvagu.
Lat. $18^{\circ}-18'-57''$ N and Long $81^{\circ}-56'-24''$ E.

(iii) Parasanappalle project site on the tributary of Sabari near village Parsanapalle.

Lat. 18°-16'-44" N and Long 81°-36'-44" E,

(iv) Potteru project site on Potteruvagu near Surlikunta village.

Lat. 18°-12'-30" N and Long 82°-01'-30" E.

(c) The State of Orissa can use an additional quantity of forty (40) TMC of water downstream of Projects specified in paragraphs 3 (a) and 3(b) for its existing, under construction and proposed projects/schemes each using not more than one point five (1.5) TMC annually.

(d) Downstream of the point where Sabari river forms the common boundary between the States of Orissa and Madhya Pradesh (near Lat. 18°-55'-04" N and Long. 82°-14'-53" E) and upto the confluence of Sileru and Sabari rivers, the State of Orissa in addition to the use specified in paragraphs 3 (a) to 3 (c) can use not more than twenty seven (27) TMC of water for irrigation by withdrawals from the main river for its existing, under construction and proposed projects/schemes.

(e). The State of Orissa agrees to exploit Sabari (Kolab) river waters by joint projects on the main Sabari river with the State of Madhya Pradesh from a point on Sabari (Kolab) river near about Lat. 18°-55'-04"N and Long. 82°-14'-53"E where it forms the common boundary between the two States upto the confluence with Sileru river on the basis of agreement(s) to be drawn up at appropriate time, except for use as mentioned in subparagraph 3 (d). At present Lower Kolab and Konta Projects are under investigation and the sites of these projects will be decided mutually by the two State Governments. The hydel power and the cost debitable to generation of such power will be shared equally between the two States in these or such other projects. The cost and benefit of irrigation, if any, from these projects will also be equitably shared between the two States.

(f). The share of evaporation losses for the projects specified in paragraph 3(e) for the State of Orissa to the extent of ten (10) TMC will be in addition to the quantum specified in paragraphs 3 (a) to 3 (d) and excess if any, will be met from the use specified in paragraphs 3 (a) to 3 (d).

(g). The use specified for the State of Orissa in paragraphs 3 (a) to 3 (d) and 3 (f) is exclusive of the use in Sileru river as per the agreement dated 15.12.1978 between the States of Orissa and Andhra Pradesh.

4. *Madhya Pradesh*

The State of Madhya Pradesh can use all the waters of the tributaries of Sabari river downstream of a point where Sabari river forms the common boundary between the States of Orissa and Madhya Pradesh near about Lat. 18°-55'-04"N and Long. 82°-14'-53"E and upto the following project sites:

(a) Baru Nadi Integrated Project comprising:

(i) Barunadi site across Baru River near village Tankavada.

Lat. 18°-45'-33" N and Long. 81°-48"-50" E.

(ii) Bhimsen Storage site across Bhimsen near village Bodavada.

Lat. 18°-45'-0" N and Long. 81°-55'-46" E.

(iii) Kudripal Pickup weir site across Baru river near village Kudripal.

- Lat. 18°-40'-42" N and Long. 81°-51'-30" E.
- (b) Mupari Project site across Mupari (Jaimar) river near village Jaimar.
Lat. 18°-42'-30" N and Long. 81°-45'-0" E.
- (c) Gorali Nadi Project comprising:
- (i) Gorali dam site across Gorali Nadi near village Kanjipani.
Lat. 18°-32'-50" N and Long. 81°-40'-55" E.
 - (ii) Andumpal dam site across Pulnadi near village Andumpal.
Lat. 18°-34'-43" N and Long. 81°-42'-04" E.
- (d) Sailervagu Integrated Project comprising:
- (i) Mankapal dam site across Malengar river near village Mankapal.
Lat. 18°-32'-06" N and Long. 81°-29'-26" E.
 - (ii) Sailervagu dam site across Sailervagu near village Paila.
Lat. 18°-26'-12" N and Long. 81°-31'-38" E.
- (e) Ordeitong Integrated Project comprising:
- (i) Ordeitong dam site across tributary of Tinarayavagu near village Ordeitong.
Lat. 18°-13'-24" N and Long. 81°-24'-06" E.
 - (ii) Tinarayavagu dam site across Tinarayavagu near village Korrapal.
Lat. 18°-11'-0" N and Long. 81°-18'-56" E.
- (f) Janavagu Integrated Project comprising:
- (i) Janavagu dam site across Janavagu near village Gorkha.
Lat. 17°-57'-24" N and Long. 81°-20'-15" E.
 - (ii) Elemmadugu vagu dam site across Elemmadugu vagu near Jarput village.
Lat. 18°-03'-42" N and Long. 81°-18'-09" E.
- (b). The State of Madhya Pradesh can use an additional quantity of eighteen (18) TMC of water downstream of the project sites specified in paragraph 4 (a) for its existing, under construction and proposed projects/schemes each using not more than one point five (1.5) TMC annually.
- (c) (i) The share of evaporation losses of the power projects across Sabari river specified in paragraph 3 (e) for the State of Madhya Pradesh to the extent of ten (10) TMC will be in addition to the quantum specified in paragraphs 4 (a) and 4 (b) and excess, if any, shall be borne by the State of Madhya Pradesh out of its share specified in paragraphs 4 (a) & 4 (b).
- (ii) The quantum of water for the use by the State of Madhya Pradesh in the joint projects specified in paragraph 3(e) would be met with from the use specified for the State in paragraph 4(a).
- (iii) Further, the quantum of water to meet the evaporation losses of the joint projects/schemes specified in the paragraph 3(e) shall be shared equally between States of Orissa and Madhya Pradesh.

B. RAMADORAI, *Secretary*,
Irrigation & Power Department,
Government of Orissa.

DR. ISHWAR DASS,
Secretary, Irrigation & Power
Department,
Government of Madhya Pradesh.

**AGREEMENT DATED THE 2ND APRIL, 1980 BETWEEN THE STATES OF
ANDHRA PRADESH, MADHYA PRADESH AND ORISSA**

To enable clearance of Polavaram Project, the following is agreed to:--

1. The Polavaram Project spillway shall be designed for a flood discharging capacity of 36 (thirty six) lakh cusecs at pond level of RL +140 (one hundred and forty) feet and not less than 20 (twenty) lakh cusecs at pond level of RL +130 (one hundred and thirty) feet.

2. The pond level shall not be kept higher than RL+145 (one hundred and forty five) feet in the month of June if the inflow into the Polavaram reservoir exceeds 3 (three) lakh cusecs.

3. On receipt of flood warning from the upper sites and/ or due to anticipated inflows into the reservoir requiring regulation, the pond levels shall be regulated as follows:-

(a) the pond level of RL+145 (one hundred and forty five) feet shall be lowered progressively as the inflows exceed 3 (three) lakh cusecs so as to restrict the pond level to RL+140 (one hundred and forty) feet for an inflow of 10 (ten) lakh cusecs.

(b) for inflows higher than 10 (ten) lakh cusecs the pond level shall be further lowered, so that it does not exceed RL +130 (one hundred and thirty) feet for an inflow of 20 (twenty) lakh cusecs.

(c) for inflows higher than 20 (twenty) lakh cusecs, all the gates shall be opened fully.

(d) The pond level can be built up progressively in the receding floods to RL+140 (one hundred and forty) feet if the inflow drops down to 10 (ten) lakh cusecs and to RL+145 (one hundred and forty five) feet if the inflow drops down to 3 (three) lakh cusecs or less, but during the months of July and August, the pond level shall not exceed RL+145 (one hundred and forty five) feet.

(e) On or after first September, whenever the inflow in the Polavaram Reservoir is 1 (one) lakh cusecs or less, the storage at Polavaram can be built up beyond RL+145 (one hundred and forty five) feet, subject to aforementioned depletions at (a) to (c) in the case of higher inflows.

4. In order to protect the lands and properties above RL+150 (one hundred and fifty) feet in the territory of the State of Orissa likely to be affected due to construction of Polavaram Project, protective embankments with adequate drainage sluices, shall be constructed and maintained at the cost of Polavaram Project. However, the State of Orissa may exercise an option at the time of construction of Polavaram Project for compensation to land and property likely to be affected above RL+150 (one hundred and fifty) feet as agreed to in the case of State of Madhya Pradesh in paragraph 5 (five) below.

5. In respect of the properties in the territory of State of Madhya Pradesh likely to be affected above RL+150 (one hundred and fifty) feet, because of the construction of the Polavaram Project, the State of Andhra Pradesh shall:-

(a) pay compensation towards all buildings with their appurtenant lands situated above RL+150 (one hundred and fifty) feet which will be affected due to all effects including backwater effect and rehabilitate the oustees, etc. on the same pattern as below RL+150 (one hundred and fifty) feet at the project cost;

or.

(b) construct and maintain at the cost of the State of Andhra Pradesh, the necessary protection embankments with adequate pumping arrangements and/or drainage sluices.

The said option for alternatives (a) or (b) being exercised by the State of Madhya Pradesh at the time of the construction of Polavaram Project depending upon the location of each affected site.

(c) For damages or injury to lands beyond RL+150 (one hundred and fifty) feet in the territory of the State of Madhya Pradesh, in any event, the State of Andhra Pradesh shall pay full compensation for such damage or injury as may be assessed by the District Collector of the said District of the State of Madhya Pradesh.

(d) The State of Andhra Pradesh agrees to fix permanent Bench Marks connected to G.T.S. Bench Marks in the territory of the State of Madhya Pradesh for RL +150 (One hundred and fifty) feet as well as for the backwater effect, in both cases, at an interval of approximate one kilometer all along the periphery of the Polavaram reservoir.

(Sd.) 2-4-80 Representative for the State of Andhra Pradesh.	(Sd.)H.V. MAHAJANI 2-4-80 Representative for the State of Madhya Pradesh	(Sd.)M.L. LATH 2-4-80 Representative for the State of Orissa.
(Sd.) P. RAMACHANDRA REDDY Advocate General for the State of Andhra Pradesh.	(Sd.) M.K. RAMAMURTHY Senior Counsel for the State of Madhya Pradesh.	(Sd.) G.B. PATNAIK Govt Advocate Orissa.

ANNEXURE “H”

**STATEMENT SUBMITTED BY COUNSEL FOR THE GOVERNMENT OF
INDIA IN THE MINISTRY OF ENERGY AND IRRIGATION, (DEPARTMENT
OF IRRIGATION) AND THE CENTRAL WATER COMMISSION**

The Government of India in the Ministry of Energy & Irrigation (Department of Irrigation) and the Central Water Commission are willing to submit to the following order by the Tribunal:

The Polavaram Project shall be cleared by the Central Water Commission as expeditiously as possible for FRL/MWL+150 feet.

The matter of design of the dam and its operation schedule shall be left to the Central Water Commission, which they shall decide keeping in view all the Agreements between the parties, including the Agreement of 2nd April, 1980 filed today, as far as practicable.

If there is to be any change in the operation schedule as indicated in the Agreement of 2nd April, 1980 it shall be made only after consultation with the States of Andhra Pradesh, Madhya Pradesh and Orissa. The design aspects shall, however, be left entirely to the Central Water Commission.

Sd./

MURLIDHAR BHANDARE,

3-4-1980

Counsel for the Department of Irrigation and
Central Water Commission.

SUB-BASINS OF THE GODAVARI BASIN

G-1. UPPER GODAVARI: - This sub-basin includes the reach of the river Godavari from its source to its confluence with the Manjra. The sub-basin excludes the catchment areas of the Pravara, the Purna and the Manjra but includes that of all other tributaries which fall into the Godavari in this reach.

G-2. PRAVARA: - This sub-basin includes the entire catchment of the Pravara from the source to its confluence with the Godavari including the catchment areas of the Mula and other tributaries of the Pravara.

G-3. PURNA: - This sub-basin includes the entire catchment of the Purna and of all its tributaries.

G-4. MANJRA: - This sub-basin includes the entire catchment of the Manjra from its source to its confluence with the Godavari including the catchment areas of the Tirna, the Karanja, the Haldi, the Lendi, the Maner and other tributaries.

G-5. MIDDLE GODAVARI: - This sub-basin comprises the river Godavari from its confluence with the Manjra to its confluence with the Pranhita. The sub-basin includes the direct catchment of the Godavari in this reach as well as of its tributaries, except the Maner and the Pranhita.

G-6. MANER: - This sub-basin includes the entire catchment of the Maner from its source to its confluence with the Godavari, including all its tributaries.

G-7. PENGANGA: - This sub-basin includes the entire catchment of the Penganga from its source to its confluence with the Wardha with all its tributaries.

G-8. WARDHA: - This sub-basin comprises river Wardha from its source to its confluence with the Wainganga with all its tributaries but excluding the catchment of the Penganga (G-7 above).

G-9. PRANHITA: - This sub-basin comprises the catchments of river Wainganga from its source to its confluence with the Wardha and the Pranhita up to its confluence with the Godavari. The sub-basin includes all the tributaries of the Wainganga and the Pranhita except the Penganga and the Wardha (G-7 and G-8 above). The Wainganga after its confluence with the Wardha is called the Pranhita.

G-10. LOWER GODAVARI: - This sub-basin consists of the lower part of the river Godavari from its confluence with the Pranhita up to the sea. The sub-basin includes the direct catchment of the Godavari in this reach with all its tributaries except the Indravati and the Sabari (G-11 and G-12 below).

G-11. INDRAVATI: - This sub-basin includes all the areas drained by the Indravati and its tributaries from its source to its confluence with the Godavari.

G-12. SABARI: - This sub-basin includes the entire catchment of the Sabari River from its source to its confluence with the Godavari including its main tributary Sileru (also known as Machkund River in its initial reaches).

Interim Order⁷ of Cauvery Water Dispute Tribunal

On 5th January, 1991, we had dismissed the CMP Nos. 4 & 9 of 1990 filed by the State of Tamil Nadu and CMP No.5 of 1990, filed by the Union Territory of Pondicherry, inter alia upon the view that the Central Government had as yet made no reference to the Tribunal for adjudication of the interim reliefs prayed in the said CMPs filed by the State of Tamil Nadu and the Union Territory of Pondicherry, respectively and hence the said petitions for interim reliefs were not maintainable. Being aggrieved by our said order, the State of Tamil Nadu and Union Territory of Pondicherry had respectively filed Civil Appeal Nos.303-304 of 1991 and Civil Appeal No.2036 of 1991, before the Supreme Court of India. On 26th April, 1991, the Bench consisting of Kasliwal, Punchhi & Sahai, JJ. allowed the said appeals, set aside our order dated 5th January, 1991, and directed that the said CMP Nos.4,5 and 9/90, be decided on merits. Kasliwal, J. with whom Punchhi, J. agreed, inter alia held that the requests for expeditious action contained in a passage of the letter dated 6.7.1986 of the Government of Tamil Nadu and which was quoted by the learned judge showed that the State of Tamil Nadu “was claiming for immediate relief as year after year realization at Mettur was falling etc.” Therefore, the Tribunal was clearly wrong in holding that the Central Government had not made any reference for any interim relief. The reliefs prayed by the appellants in CMP Nos. 4, 5 & 9/90, clearly came within the purview of the disputes referred by the Central Government under section 5 of the Act (Inter State Water Disputes Act, 1956). Kasliwal, J. had further observed that in view of the above circumstances, he did not consider it necessary to decide the larger question whether a Tribunal constituted under the ‘Act’ has any power to grant any interim relief. The appellants become entitled to succeed on the basis of the finding recorded by the Supreme Court that the reliefs prayed by them in their CMP Nos.4, 5 & 9/90 were covered in the reference made by the Central Government. In his judgment, Kasliwal, J. also noted that at the fag end of the arguments it was submitted on behalf of the State of Karnataka that they were agreeable to proceed with the CMPs on merits before the Tribunal on the terms that all party States agreed that all questions arising out of or connected with or relevant to the water dispute be determined by the Tribunal on merits. Kasliwal, J. observed that the above terms were not agreed to by the State of Tamil Nadu as such he was deciding the appeals on merits. As already mentioned Punchhi, J. agreed with Kasliwal, J. In his separate judgment, Sahai, J., while concurring that the appeals should be allowed, observed, inter alia that he had reservations about certain issues including the construction of the letter dated 6th July, 1986. He did not prefer to express any opinion on them since according to Sahai, J. the States of Karnataka and Kerala were agreeable to the determination of the applications for interim relief on merits.

After the Supreme Court rendered the above decision, these C.M.Ps were again placed before us. Both the State of Tamil Nadu and Union Territory of Pondicherry, filed

⁷ Interim Order was delivered by Cauvery Water Dispute Tribunal on 25th June 1991. The order was published in Official Gazette on 10th December 1991. Subsequently, CWDT has submitted its report and the decision in 2007 superseding the interim order. The said decision was published in Official Gazette on 19th February, 2013. Therefore, Interim Order is no longer valid and effective.

applications for amendment of their respective C.M.Ps Nos. 4 & 9/90 and 5/90 inter alia to incorporate additional prayers therein. In its amendment application the State of Tamil Nadu also placed on record certain additional facts. After hearing the parties, we allowed the said prayers for amendment of CMP Nos.4, 5 & 9/90. Thereupon, the State of Karnataka filed supplementary objections, supported by affidavit. The State of Tamil Nadu also filed rejoinder to the said supplementary objections dated 27th May, 1991.

We are not prepared to give any countenance to the objections as to the maintainability of these CMPs raised by Mr. F.S. Nariman, Senior Counsel appearing on behalf of the State of Karnataka. The Supreme Court has directed the Tribunal to decide these CMPs on merits. Accordingly, it is no longer open to the State of Karnataka to urge this point of maintainability. The said direction of the Supreme Court is binding upon the parties and the Tribunal. It is accordingly, unnecessary for us to notice the various authorities cited by both sides on the question as to whether this Tribunal possesses inherent powers and as to whether it can grant interim reliefs. We have already mentioned that Kasliwal, J., with whom Punchhi, J. agreed, categorically held that Tamil Nadu's prayer for grant of interim relief was covered by the reference dated 2nd June, 1990, made to this Tribunal.

We proceed to consider the merits of the petitions for emergent reliefs respectively made by the State of Tamil Nadu and the Union Territory of Pondicherry.

In its CMP No.4 of 1990, the State of Tamil Nadu had initially prayed for directing the State of Karnataka not to impound or utilise waters of the Cauvery River beyond "what it was on 31st May, 1972" agreed by the Chief Ministers of basin States and the Union Minister for Irrigation and Power. The State of Tamil Nadu also had prayed for restraining the State of Karnataka from undertaking or proceeding with any new projects, dams, reservoirs, canals, etc. without the consent of the State of Tamil Nadu. The State of Tamil Nadu has now made an additional prayer for directing the State of Karnataka to make timely and adequate releases of waters from its storages and reservoirs in such a manner as to ensure availability of inflow into the Mettur reservoir of Tamil Nadu on week to week basis as reflected in the Statement (Annexure I to the Amendment Petition).

Pleadings are not complete, parties have not yet placed on record all their documents and papers etc. Therefore, we propose not to make any pronouncement about the Agreement of 1892 between the then princely State of Mysore and then State of Madras regarding irrigation reservoirs over thirteen major rivers flowing through the then State of Mysore, including the Cauvery and its five tributaries viz. Hemavathi, Laxman Thirtha, Kabini, Suvaranavathi and Yagachi. For the identical reasons, we refrain from examining the submission of the two sets of contending parties about the Agreement between the then Mysore and the then Madras Governments dated 18th February, 1924 under which Mysore Government became entitled to construct a dam and a reservoir across and over the river Cauvery at Kannambadi, now known as Krishnarajasagar, according to the stipulated specifications. The discharge through and from the said reservoir was to be strictly in accordance with the Rules and Regulations set forth in Annexure I to the said

Agreement. One of the clauses of the Agreement of 1924 was that Mysore Government would be at liberty to carry out future extensions of irrigation in Mysore under the Cauvery and its tributaries to an extent fixed at 1,10,000 acres in addition to the area of irrigation fixed under the Rules and Regulations. The Madras Government under clause (xiv) of the Agreement was at liberty to construct on the Bhavani, Amaravathi or Noyil rivers in Madras any new storage reservoir and Mysore Government would be at liberty to construct as an offset storage reservoir in addition to the reservoirs mentioned in clause (vii) of the said Agreement not exceeding 60% of the new reservoir in Madras. Clause (xi) of the Agreement of 1924 provided that the limitations and arrangements in Clauses (iv) to (viii) shall be open to reconsideration at the expiry of fifty years from the execution of the Agreement. The parties before us were at variance about the scope of this clause (xi). Shortly before the expiry of fifty years from the date of the signing of the Agreement of 1924, discussions were held on 29th May, 1972, at New Delhi between the Chief Ministers of Mysore, Tamil Nadu and Kerala. The Union Minister of Irrigation and Power was also present. "The discussions amongst Chief Ministers revealed general consensus on the three points as in para 2". Under the paragraph 2.2, the Central Government was to appoint a Fact Finding Committee to collect all the connected data pertaining to the Cauvery waters. Paragraph 2.3 provided that by making use of the data, discussions will be held between the Chief Ministers of the three States to arrive at an agreed allocation of waters for the respective States. The paragraph 3 recorded "the Union Government will assist in arriving at such a settlement in six months, and in the meanwhile no State will take any steps to make the solution of the problem difficult either by impounding or by utilising water of Cauvery beyond what it is at present". The Fact Finding Committee was constituted, and it had submitted its reports. But no final agreement was arrived at between the States regarding the allocation of waters for the respective States.

When we are deliberating whether any emergent order ought to be passed, our prime consideration ought to preserve, as far as possible, pending final adjudication the rights of the parties and also to ensure that by unilateral action of one party other party is not prejudiced from getting appropriate relief at the time of the passing of the final orders. We ought to also endeavour to prevent the commission of any act by the parties which might impede the Tribunal from making final orders in conformity with the principles of fair and equitable distribution of the waters of this inter-State river.

Undisputedly, the Cauvery River is an inter-State river. Therefore, the three States and the Union Territory of Pondicherry being riparian to the said river are entitled to the release of waters of the said river in a reasonable and beneficial manner. In the "Law of International Drainage Basins" edited by A.H. Garretson, R.D. Hayton & C.J. Olmstead, at page 63 it has been pointed out that equality of right does not give a co-riparian the right to an equal division of the waters. Rather, equality of right is the equal right of each co-riparian State to a division of the waters on the basis of its economic and social needs, consistent with the corresponding rights of its co-riparian States, and excluding from consideration factors unrelated to such needs. At this stage it would be neither feasible

nor reasonable to determine how to satisfy the needs of each State to the greatest extent possible with a minimum of detriment to others. We do not also propose at this stage to enter into the question whether the present use of water of the river Cauvery either by the State of Tamil Nadu or the State of Karnataka is the most beneficial use to which the water could be put to. At an appropriate stage and in the appropriate manner, it may be necessary to consider legitimate economic and social needs of each State for the purpose of making equitable utilisation of the waters. The learned editors of the "Law of International Drainage Basins" at page 64 have pointed out that the multitude of factors should be examined. "While many factors are relevant, all are not of equal weight. Existing uses are particularly significant and are generally entitled to great weight". We are not unmindful of the further observations made by the learned editors to the fact that the matter of existing use is most controversial. These points may arise for our consideration at the time we finally dispose of the 'Reference'. At this interlocutory stage it would be more in consonance with the needs of justice to examine the prayers made by the State of Tamil Nadu and Union Territory of Pondicherry in the light of the considerations which are germane for granting or refusing interim reliefs in a list of this kind. We have already mentioned herein before that pending final adjudication by materially altering the present position, no party should be allowed to cause prejudice to the other party or to obstruct and impede this Tribunal from making its final order in accordance with the law.

The substance of the allegations made on behalf of the State of Tamil Nadu in CMP No.4/90 is that by reason of impounding greater and greater volume of water in the reservoirs constructed in different tributaries of Cauvery flowing through Karnataka, the inflow of water into Mettur Dam of Tamil Nadu from year to year is being reduced. At this stage, we however make it clear that it will not be appropriate to fix the inflow of water into Mettur Dam on the basis of their figures at the time of recording of consensus arrived at the meeting of the Chief Ministers of the States of the then Mysore, Tamil Nadu and Kerala in the presence of Union Minister of Irrigation and Power, held on 29th May, 1972. More than eighteen years have elapsed since the recording of said consensus of 29th May 1972 and various subsequent events also, including construction of additional dams and reservoirs and other irrigation facilities, have taken place. We do not propose to examine at this stage the legality or justifiability of erection of these reservoirs, dams, canals, etc. The said matters may be gone into if found necessary at the appropriate stage. In this case it would be in accordance with justice to fix the annual releases into Mettur Dam by making average of the same for a number of normal years in the immediate past.

It is pertinent to point out that after the minutes of the meeting of the Chief Ministers of the States of Mysore, Tamil Nadu and Kerala were recorded on 29th May, 1972, more than one attempt were made to estimate the total flow of the water in the river Cauvery and also to specify the share of utilisation, particularly by the States of Karnataka and the State of Tamil Nadu. Since the correctness of the reports made by the Fact Finding Committee and thereafter by the Study Team under the Chairmanship of Sri C.C. Patel

will hereinafter come up for our consideration, we propose not to deal with these reports at this stage. Our attention has also been drawn to the draft Agreements which were prepared in 1974 and 1976, but were not formally signed by the contesting States. We may only indicate that the attempts made in the past to determine the shares of waters to be allocated to the States and Union Territory of Pondicherry had been abortive, and the same still remain for adjudication by the Tribunal. We have already mentioned that at the present stage we would be guided by consideration of balance of convenience and maintenance of the existing utilisation so that rights of the parties may be preserved till the final adjudication. For this purpose the average of the annual flow of the waters of the river Cauvery into the reservoir of the Mettur Dam in Tamil Nadu could serve as a reasonable basis. We are also not unmindful of the fact that besides releases made from Krishnarajasagar and Kabini Dams of Karnataka, some water from the intermediate catchment area also flows down into the Mettur Dam. The said fact cannot be the ground for totally rejecting the prayer of the Tamil Nadu because the contribution of the said catchment area into the Mettur Dam is not large enough. We are of the views that there ought to be the release of waters by Karnataka which is to be fixed by having regard to the realisation made over a span of years in the proximate past after excluding abnormally good and abnormally bad years.

Tamil Nadu has furnished before us the following figures for the period of ten years, i.e. 1980-81 to 1989-90 of inflow of water into Mettur Dam.

	TMC
1980-81	394.01
1981-82	403.2
1982-83	173.09
1983-84	230.37
1984-85	284.36
1985-86	158.28
1986-87	187.36
1987-88	103.9
1988-89	181.37
1989-90	175.64

In considering these figures we have decided to exclude the figures for the years, 1980-81 and 1981-82, which were described by parties as abnormally good years. We have also excluded from consideration the figures for the years 1985-86, 1987-88 which were classified to be bad years. The average flow of the remaining six years work out at 205.03 TMC, which may be rounded of to 205 TMC.

Karaikal region of Union Territory of Pondicherry is at the tail end of Cauvery delta. Before us submissions were made about the plight suffered by this area because of utter dearth of water. The Union Territory of Pondicherry has claimed before us 9.355 TMC of water towards irrigation and water supply etc. In our view, while making order upon these emergent petitions we ought to take into consideration the prayer of the Union

Territory of Pondicherry for release of some additional volume of water. We propose to direct for the ends of justice, release of 6 TMC of water by Tamil Nadu for Union Territory of Pondicherry.

The grievance of Tamil Nadu broadly was that not only the total volume of water from Karnataka for flowing down to Mettur Dam was becoming less and less, but also the said releases were not being made timely to meet the need of cultivation of crops, particularly in the Cauvery delta of Tamil Nadu. It would be fair to direct that annual releases be made in a regulated manner from week to week basis from June to May.

The State of Kerala has not applied for any interim order, therefore, this order is without prejudice to the claims and contentions of the State of Kerala about the equitable distribution and release of the waters of river Cauvery and its tributaries. We again make it clear that the interim orders passed today do not amount to final adjudication of the rights and contentions of the parties in regard to the dispute referred to this Tribunal.

In view of the above, we direct the State of Karnataka to release water from its reservoirs in Karnataka so as to ensure that 205 TMC of water is available in Tamil Nadu's Mettur Reservoir in a year from June to May.

This year, the order will be effective from 1st of July, 1991. We further direct that the State of Karnataka shall regulate the release of water in the following manner:-

	TMC		TMC
June	10.16	December	10.37
July	42.76	January	2.51
August	54.72	February	2.17
September	29.36	March	2.40
October	30.17	April	2.32
November	16.05	May	2.01

In respect of a particular month the releases are to be made in four weeks in four equal instalments. If in a particular week, it is not possible to release the required quantum of water, the said deficit shall be made good in the subsequent week. 6 TMC water for Karaikal region of the Union Territory of Pondicherry will be delivered by the State of Tamil Nadu in a regulated manner. We further direct that the State of Karnataka shall not increase its area under irrigation by the waters of the river Cauvery beyond existing 11.2 lac acres, as mentioned in their Annexure K-V, Column 13, at page 103 to the Supplementary Statement of Objections dated 22nd May, 1991 to the amended CMP No.4/90. The above order will remain operative till the final adjudication of the dispute, referred to the Tribunal. CMP Nos. 4 and 5/90 are hereby disposed of in the above terms. CMP No.9/90 for granting relief pending disposal of CMP No.4/90 no longer survives, and stands disposed of accordingly.

CAUVERY WATER DISPUTES TRIBUNAL
4TH FLOOR, A-WING, JANPATH BHAWAN,
JANPATH, NEW DELHI- 110001

Ref. No. F 74/CWDT/Admn./2917

Dated 5th February, 2007

The Secretary to the Govt. of India,
Ministry of Water Resources,
Shram Shakti Bhawan,
New Delhi-110001

Sir,

On the 2nd June, 1990, the Government of India, constituted the Cauvery Water Disputes Tribunal by Notification No. S.O. 437 (E) dated 2nd June, 1990. Vacancies in the offices of Chairman and Member of the Tribunal were filled up by the Government of India vide Notification No. S.O. 862 (E) dated 11th December, 1996 issued by the Ministry of Water Resources and Notification No. S.O. 15 (E) dated 7th January, 2003 issued by the Government of India, Ministry of Water Resources.

On 2nd June, 1990, the Government of India, Ministry of Water Resources, referred to the Tribunal for adjudication of the water dispute regarding the inter-State River Cauvery and the River Valley thereof vide reference No. 21/1/90-WD.

On the directions of the Supreme Court of India, in respect of the petition made by the Government of Tamil Nadu regarding interim relief, the Tribunal gave its interim award on 25th June, 1991. Thereafter, the State Government of Karnataka passed legislation for the protection of irrigated area in that State. Thereupon on the request of the Government of India, a Presidential Reference was made to the Supreme Court on the

question of validity of the Tribunal's order vis-a-vis the legislation passed by the Government of Karnataka. The Supreme Court, in its opinion under Article 143 of the Constitution, said that the Ordinance promulgated and later replaced by the Act was ultra-vires and unconstitutional. Accordingly, the Government of India by Notification No. S.O. 840 (E) dated 10th December, 1991 published the interim order in the Gazette of India.

The State of Tamil Nadu opened its case before the Tribunal on 13th December, 1991, followed by the opening of case by the States of Karnataka, Kerala and Union Territory of Pondicherry. The evidence of witnesses – twenty in number - of the parties concerned was concluded on 30th December, 2001.


The State of Tamil Nadu commenced its arguments on 29th January, 2002 followed by the States of Karnataka, Kerala and Union Territory of Pondicherry. Because of the re-constitution of the Tribunal, the arguments on issues under Group I & II were reheard. The final arguments were completed on 21st April, 2006. Thereafter, matters as referred to in orders of various dates (5.5.2006, 10.5.2006, 10.7.2006 and 11.7.2006) were considered and finally on 27.7.2006, the order in respect of report/decision under section 5(2) of Inter-State Water Disputes Act, 1956 was reserved.

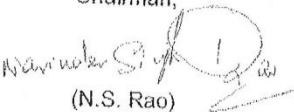
Accordingly, this Tribunal has investigated the matters referred to it by the Central Government and prepared its report setting out the facts

found by it and giving its Decision on the matter referred to it under
Section 5(2) of the inter-State Water Disputes Act (Act 33) of 1956.

The unanimous report of the Tribunal (Volumes I to VI) is
forwarded herewith.

Yours faithfully,


(N.P. Singh)
Chairman,


(N.S. Rao)
Member,


(Sudhir Narain)
Member,

Encl: Report Volumes I to VI

Cauvery Water Disputes Tribunal

Final Order

The Tribunal hereby passes, in conclusion the following order:-

Clause-I

This order shall come into operation on the date⁸ of the publication of the decision of this Tribunal in the official gazette under Section 6 of the Inter- State Water Disputes Act, 1956 as amended from time to time.

Clause-II

Agreements of the years 1892 and 1924:

The Agreements of the years 1892 and 1924 which were executed between the then Governments of Mysore and Madras cannot be held to be invalid, specially after a lapse of about more than 110 and 80 years respectively. Before the execution of the two agreements, there was full consultation between the then Governments of Madras and Mysore. However, the agreement of 1924 provides for review of some of the clauses after 1974. Accordingly, we have reviewed and re-examined various provisions of the agreement on the principles of just and equitable apportionment.

Clause-III

This order shall supersede –

- i) The agreement of 1892 between the then Government of Madras and the Government of Mysore so far as it related to the Cauvery river system.
- ii) The agreement of 1924 between the then Government of Madras and the Government of Mysore so far as it related to the Cauvery river system.

Clause-IV

The Tribunal hereby determines that the utilisable quantum of waters of the Cauvery at Lower Coleroon Anicut site on the basis of 50% dependability to be 740 thousand million cubic feet-TMC (20,954 M.cu.m.).

Clause-V

The Tribunal hereby orders that the waters of the river Cauvery be allocated in three States of Kerala, Karnataka and Tamil Nadu and U.T. of Pondicherry for their beneficial uses as mentioned hereunder:-

i)	The State of Kerala-	30 TMC
ii)	The State of Karnataka -	270 TMC
iii)	The State of Tamil Nadu -	419 TMC
iv)	U.T. of Pondicherry -	7 TMC
		726 TMC

⁸ The order was published in the Official Gazette on 19th February, 2013.

In addition, we reserve some quantity of water for (i) environmental protection and (ii) inevitable escapages into the sea as under:-

i) Quantity reserved for environmental protection.	- 10 TMC
ii) Quantity determined for inevitable escapages into the sea.	- 4 TMC
	14 TMC
Total (726 + 14)	740 TMC

Clause-VI

The State of Kerala has been allocated a total share of 30 TMC, the distribution of which in different tributary basins is as under:

(i) Kabini sub-basin	- 21 TMC
(ii) Bhavani sub-basin	- 6 TMC
(iii) Pambar sub-basin	- 3 TMC

Clause-VII

In case the yield of Cauvery basin is less in a distress year, the allocated shares shall be proportionately reduced among the States of Kerala, Karnataka, Tamil Nadu and Union Territory of Pondicherry.

Clause-VIII

The following inter-State contact points are identified for monitoring the water deliveries:

- (i) Between Kerala and Karnataka: Kabini reservoir site
- (ii) Between Kerala and Tamil Nadu
 - a) For Bhavani sub-basin: Chavadiyoor G.D.site
It is reported that Chavadiyoor G.D. Site was being earlier operated by the State of Kerala which could be revived for inter-State observations.
 - b) For Pambar sub-basin: Amaravathy reservoir site
- (iii) Between Karnataka and TamilNadu: Billigundulu G.D. site/any other site on common border
- (iv) Between Tamil Nadu and Pondicherry: Seven contact points as already in operation

Clause-IX

Since the major shareholders in the Cauvery waters are the States of Karnataka and Tamil Nadu, we order the tentative monthly deliveries during a normal year to be made available by the State of Karnataka at the inter- State contact point presently identified as Billigundulu gauge and discharge station located on the common border as under:-

Month	TMC	Month	TMC
June	10	December	8
July	34	January	3
August	50	February	2.5
September	40	March	2.5
October	22	April	2.5
November	15	May	2.5
			192

The above quantum of 192 TMC of water comprises of 182 TMC from the allocated share of Tamil Nadu and 10 TMC of water allocated for environmental purposes.

The above monthly releases shall be broken in 10 daily intervals by the Regulatory Authority.

The Authority shall properly monitor the working of monthly schedule with the help of the concerned States and Central Water Commission for a period of five years and if any modification/adjustment is needed in the schedule thereafter, it may be worked out in consultation with the party States and help of Central Water Commission for future adoption without changing the annual allocation amongst the parties.

Clause –X

The available utilisable waters during a water year will include the waters carried over from the previous water year as assessed on the 1st of June on the basis of stored waters available on that date in all the reservoirs with effective storage capacity of 3 TMC and above.

Clause-XI

Any upper riparian State shall not take any action so as to affect the scheduled deliveries of water to the lower riparian States. However, the States concerned can by mutual agreement and in consultation with the Regulatory Authority make any amendment in the pattern of water deliveries.

Clause-XII

The use of underground waters by any riparian State and U.T. of Pondicherry shall not be reckoned as use of the water of the river Cauvery. The above declaration shall not in any way alter the rights, if any, under the law for the time being in force, of any private individuals, bodies or authorities.

Clause-XIII

The States of Karnataka and Tamil Nadu brought to our notice that a few hydro-power projects in the common reach boundary are being negotiated with the National Hydro-Power Corporation (NHPC). In this connection, we have only to observe that whenever any such hydro-power project is constructed and Cauvery waters are stored in the reservoir, the pattern of downstream releases should be consistent with our order so that the irrigation requirements are not jeopardized.

Clause-XIV

Use of water shall be measured by the extent of its depletion of the waters of the river Cauvery including its tributaries in any manner whatsoever; the depletion would also include the evaporation losses from the reservoirs.

The storage in any reservoir across any stream of the Cauvery river system except the annual evaporation losses shall form part of the available water. The water diverted from any reservoir by a State for its own use during any water year shall be reckoned as use by that State in that water year. The measurement for domestic and municipal water supply, as also the industrial use shall be made in the manner indicated below:-

Use	Measurement
Domestic and municipal	By 20 per cent of the quantity of water supply diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.
Industrial use	By 2.5 per cent of the quantity of water diverted or lifted from the river or any of its tributaries or from any reservoir, storage or canal.

Clause-XV

If any riparian State or U.T. of Pondicherry is not able to make use of any portion of its allocated share during any month in a particular water year and requests for its storage in the designated reservoirs, it shall be at liberty to make use of its unutilized share in any other subsequent month during the same water year provided this arrangement is approved by the Implementing Authority.

Clause-XVI

Inability of any State to make use of some portion of the water allocated to it during any water year shall not constitute forfeiture or abandonment of its share of water in any subsequent water year nor shall it increase the share of other State in the subsequent year if such State has used that water.

Clause-XVII

In addition, note shall be taken of all such orders, directions, recommendations, suggestions etc, which have been detailed earlier in different chapters/volumes of the report with decision for appropriate action.

Clause XVIII

Nothing in the order of this Tribunal shall impair the right or power or authority of any State to regulate within its boundaries the use of water, or to enjoy the benefit of waters within that State in a manner not inconsistent with the order of this Tribunal.

Clause-XIX

In this order,

(a) “Normal year” shall mean a year in which the total yield of the Cauvery basin is 740 TMC.

(b) Use of the water of the river Cauvery by any person or entity of any nature whatsoever, within the territories of a State, shall be reckoned as use by that State.

(c) The expression “water year” shall mean the year commencing on 1st June and ending on 31st May.

(d) The “irrigation season” shall mean the season commencing on 1st June and ending on 31st January of the next year.

(e) The expression “Cauvery river” includes the main stream of the Cauvery River, all its tributaries and all other streams contributing water directly or indirectly to the Cauvery River.

(f) The expression “TMC” means thousand million cubic feet of water.

Clause-XX

Nothing contained herein shall prevent the alteration, amendment or modification of all or any of the foregoing clauses by agreement between the parties.

Clause-XXI

The State Governments of Kerala, Karnataka, Tamil Nadu and Union Territory of Pondicherry shall bear the expenses of the Tribunal in the ratio of 15:40:40:5. However, these parties shall bear their own costs before this Tribunal.

Sd/-
Sudhir Narain J.
MEMBER

Sd/-
N. S. Rao J.
MEMBER

Sd/-
N. P. Singh J.
CHAIRMAN

New Delhi
5th February, 2007

PART II

DECISION

OF

INTER STATE WATER DISPUTES TRIBUNAL

NOT

PUBLISHED

IN

THE OFFICIAL GAZETTE

No.F.15 (2)/86-I.T.
Government of India
Ministry of Water Resources

....

REFERENCE

In exercise of the powers conferred by sub-section (3) of Section 14 of the Inter-State Water Disputes Act, 1956 (33 of 1956), the Central Government hereby refers the following matters specified in paragraphs 9.1 and 9.2 of the Punjab Settlement to the Ravi and Beas Waters Tribunal constituted under sub-section (1) of section 14 of the said Act, for verification and adjudication, namely:-

1. The farmers of Punjab, Haryana and Rajasthan will continue to get water not less than what they were using from the Ravi-Beas System as on 1.7.1985.
Waters used for consumptive purposes will also remain unaffected.
Quantum of usage claimed shall be verified by the Tribunal.
2. The claim of Punjab and Haryana regarding the shares in their remaining waters will be adjudicated by the Tribunal.”
2. The Tribunal shall submit its report within a period of six months from the date of this reference.

Sd/-
(RAMASWAMY R.IYER)
SECERETARY TO THE GOVERNMENT OF
INDIA

New Delhi,
Dated the 2nd April, 1986

12th Chaitra, 1908 (Saka)

To
The Chairman,
Ravi and Beas Waters Tribunal,
New Delhi,

Note:- The period for submission of the Report was extended.

CHAPTER XXIII

CONCLUSIONS

In the light of the preceding discussion, our conclusions on the two points referred to us are as under:-

- I. Re: Item No. 1 of the Reference
(Paragraph 9.1 of the Punjab Settlement).

The result of our verification is:

The quantum of water used by the farmers and other consumptive users of the three party States as on 1st July 1985, was as under:

Punjab: 3.106 MAF (This is inclusive of 0.352 MAF of permissive use allowed by Rajasthan under clause (ii) of the 1981 agreement and subject thereto but is exclusive of the pre-partition use of 1.98 MAF as well as 0.32 MAF in Shah Nehar Canal areas.)

Haryana: 1.620 MAF.

Rajasthan: 4.985 MAF. (This figure is exclusive of the pre-partition use of 1.11 MAF.)

- II. Re: Item No. 2 of the Reference
(Paragraph 9.2 of the Punjab Settlement).

On adjudication of the claims of Punjab and Haryana regarding the shares in their remaining waters, we decide and allocate as under:-

Punjab: 5.00 MAF

Haryana: 3.83 MAF

We direct that in the event of fluctuations in the availability of water in the Ravi-Beas System in any particular year, the shares of the aforesaid two States shall be increased or decreased pro-rata on the above basis.

Note: The shares of Rajasthan in the surplus water fixed at 8.60 MAF and that of Delhi Water Supply fixed at 0.2 MAF under the 1981 agreement shall remain unaffected. But the demand of Delhi Administration for allocation of additional supply over the existing use of 0.2 MAF is rejected as falling outside the scope of the Reference to this Tribunal.

In answering the two points referred to us, we have strictly confined ourselves to the terms of reference and paragraphs 9.1 and 9.2 of the Punjab Settlement but we think it would not be out of place now to mention that paragraph 9.3 of the Punjab Settlement envisaged the construction of the S.Y.L. Canal and its completion by 15th August 1986. We are informed that the canal is complete in the Haryana area and it is under construction in the Punjab area. This canal is the lifeline for the farmers of Haryana and unless it is, expeditiously completed, Haryana will not be in a position to utilise the full quantum of water allocated to it hereunder. It is, therefore, necessary that all concerned should make a concerted effort to see that the construction of the canal is completed at an early date without loss of further time.

We have allocated only a portion of the waters below the rim stations as we think that the said quantity can be used by installation of pumps as a short term measure but the remaining waters below the rim stations also need to be harnessed on a long term basis by installation of appropriate engineering works at suitable sites by the concerned States with the help of the Government of India. Fortunately, the concerned States have excellent teams of experts who can put in a co-operative effort to draw up and implement the necessary project schemes with the advice and assistance of the Government of India at an early date with a view to harnessing every drop of utilisable water available below the rim stations.

The Governments of Haryana, Punjab and Rajasthan shall bear their own costs of appearing before the Tribunal. The expenses of the Tribunal shall be apportioned and paid by the three States in equal shares.

Sd. V. Balakrishna Eradi, J.
CHAIRMAN

NEW DELHI
DATED: 30th January, 1987

Sd. A.M. Ahmadi, J.
MEMBER

Sd.P.C. Balakrishna Menon, J.
MEMBER

Note- This Order has not been published in the Official gazette as on Date

Krishna Water Dispute Tribunal-II

O R D E R⁹

Clause-I

In view and on the basis of the discussions held and the findings recorded on the issues hereinbefore, the following order is passed in so far as it deviates from, modifies, amends and reviews the decision and the order passed by the KWDT-1.

Clause-II

That for the purposes of this case, so as to assess the yearly yield of the river Krishna afresh, on the data now available, an yearly water series for 47 years has been prepared, accordingly the dependable yield is determined as follows :-

- | | |
|--------------------------------|------------|
| (a) Average yield | - 2578 TMC |
| (b) Yield at 50% dependability | - 2626 TMC |
| (c) Yield at 60% dependability | - 2528 TMC |
| (d) Yield at 65% dependability | - 2293 TMC |
| (e) Yield at 75% dependability | - 2173 TMC |

Clause-III

That it is decided that the water of river Krishna be distributed amongst the three States of Maharashtra, Karnataka and Andhra Pradesh on 65% dependability of the new series of 47 years i.e. 2293 TMC.

Clause-IV

That it is decided that the allocations already made by KWDT-1 at 75% dependability which was determined as 2060 TMC on the basis of old series of 78 years plus return flows, assessed as 70 TMC in all totalling to 2130 TMC, be maintained and shall not be disturbed.

Clause-V

That it is hereby determined that the remaining distributable flows at 65% dependability, over and above 2130 TMC (already distributed), is 163 TMC (2293 TMC minus 2130 TMC = 163 TMC).

Clause-VI

That it is hereby decided that the surplus flows which is determined as 285 TMC (2578 TMC minus 2293 TMC = 285 TMC) be also distributed amongst the three States.

Clause-VII

That the balance amount of water at 65% dependability i.e. 163 TMC and the surplus flows of 285 TMC is distributed as given below:

⁹ The KWDT-II by its order dated 19th October, 2016 held that the decision of KWDT-II finally settles the disputes amongst the parties inter-se, subject to any order passed by the Tribunal itself on a further reference under Section 12 of Act No. 33 of 1956 and it is further provided that it shall also be subject to any order which may be passed in the appeals by the Hon'ble Supreme Court.

State of Karnataka

Allocation at 65% dependability	61 TMC
Allocation out of surplus flows	105 TMC
Total	166 TMC
Flows made available for Minimum flows in the stream out of 65% dependability	7 TMC
Grand Total	173 TMC

State of Maharashtra

Allocation at 65% dependability	43 TMC
Allocation out of surplus flows	35 TMC
Total	78 TMC
Flows made available for Minimum flows in the stream out of 65% dependability	3 TMC
Grand Total	81 TMC

State of Andhra Pradesh

Allocation at 65% dependability	43 TMC
Allocation out of surplus flows	145 TMC
Total	188 TMC
Flows made available for Minimum flows in the stream out of 65% dependability	6 TMC
Grand Total	194 TMC

Clause-VIII

That the total allocations at different dependability including those made by KWDT-1 at 75% dependability with return flows are given below:

State of Karnataka

Allocation at 75% dependability with return flows	734 TMC
Allocation at 65% dependability	61 TMC
Allocation out of surplus flows	105 TMC
Total	900 TMC
Plus 7 TMC provided for Minimum flows	7 TMC
Grand Total	907 TMC

State of Maharashtra

Allocation at 75% dependability with return flows	585 TMC
Allocation at 65% dependability	43 TMC
Allocation out of surplus flows	35 TMC
Total	663 TMC
Plus 3TMC provided for Minimum flows	3 TMC
Grand Total	666 TMC

State of Andhra Pradesh

Allocation at 75% dependability with return flows	811TMC
Allocation at 65% dependability	43 TMC
Allocation out of surplus flows	145TMC
Total	999 TMC
Plus 6TMC provided for Minimum flows	6 TMC
Grand Total	1005 MC

Clause-IX

That since the allocations have been made at different dependabilities, the party States are directed to utilize the water strictly in accordance with the allocations. And for that purpose they are further directed to prepare or caused to be prepared ten daily working tables and the Rule Curve and shall furnish copies of the same to each other and on its coming into being, also to the 'Krishna Waters Decision – Implementation Board'.

Clause –IX-A

Detailed Mechanism for Drawal of Water by States at Different Dependability.

PART-I

1(a). That the three States of Maharashtra, Karnataka and Andhra Pradesh shall continue to use the water at 75% dependability plus the return flows according to and in the manner as provided in Clause-V of the Decision of the KWDT-I except the progressive increase in the allocated share, in given percentage, on account of return flows, since the return flows now stand quantified. The total figure of allocations at 75% dependability with quantified return flows is 585 TMC, 734 TMC and 811 TMC for the States of Maharashtra, Karnataka and Andhra Pradesh respectively.

(b) Thus, in the first instance, not more than 2130 TMC shall be utilized in the following manner, as before:-

- (i) The State of Maharashtra shall not use more than 585 TMC;
- (ii) The State of Karnataka shall not use more than 734 TMC;
- (iii) The State of Andhra Pradesh shall use 811 TMC.

2. Thereafter, in the second instance, not more than 163 TMC shall be utilized by all the three States in the following manner:-

- (i) The State of Maharashtra shall not use (over and above 585 TMC) more than 46 TMC, only after the State of Karnataka has used 734 TMC and the State of Andhra Pradesh 811 TMC;
- (ii) The State of Karnataka shall not use (over and above 734 TMC) more than 68 TMC, only after State of Andhra Pradesh has used 811 TMC;

(a) ALTERNATIVELY, in so far it relates to the upper riparian States viz. Maharashtra and Karnataka, before using/storing their additional allocation of 46 TMC and 68 TMC respectively at 65% dependability, they have released/and/or water flowed down, the balance amount of share of Andhra

Pradesh at 75% dependability at the relevant point of time, taking into account the self-generation of water due to rainfall in the State of Andhra Pradesh. Self-generation of water in Andhra Pradesh at 75% dependability may be taken as 369 TMC, as per their own calculation made in the paper dated 16.4.2012.

(b) Notwithstanding anything contained in sub clauses (i) and (ii)(a) of Clause 2 above, the three riparian States, in the light of the opinion of their experts about the assessment of expected rains, or otherwise, in the best of the spirit of cooperation and share and care to achieve their share fairly and smoothly, are free to make any other arrangement by means of a written agreement amongst the three States, in respect of the manner of withdrawal as to at what point of time they may draw their share in full or in parts thereof, at 65% dependability.

(c) The agreement, if any, shall be jointly submitted to the Board and the Board shall see to it that the drawal of water is made by the parties as per the agreement; if necessary it may issue directions to the parties accordingly.

(iii) The State of Andhra Pradesh shall not use (over and above 811 TMC) more than 49 TMC.

3. In the third instance, not more than 285 TMC shall be used by the three States in the following manner:-

(i) The State of Maharashtra shall not use (over and above $585+46=631$ TMC) more than 35 TMC, only after the State of Karnataka has used $734+68=802$ TMC and the State of Andhra Pradesh $811+49=860$ TMC.

(ii) The State of Karnataka shall not use (over and above 802TMC) more than 105 TMC, only after the State of Andhra Pradesh has used 860 TMC.

(iii) The State of Andhra Pradesh shall not use (over and above 860 TMC) more than 145 TMC.

Note: The provisions made above allowing Andhra Pradesh to draw only its allocated shares at different dependability does not affect the drawals/use, which Andhra Pradesh is entitled to, as per provision made in sub-para of para 3 of Clause X of the Order which allows Andhra Pradesh to use the remaining water.

4. That notwithstanding the provision in Clause VII of the Decision of KWDT-I, for the purpose of paragraphs 1 to 3 above only, the expression “use” would mean the water used or diverted plus the amount of water stored by any State at any point of time in a water year so as to be available in a storage for utilization to achieve its allocation in that water year.

5. That the Krishna Waters Decision – Implementation Board shall monitor and ensure the use of the water by the three States as allocated to them in the manner provided in the aforesaid paragraphs 1 to 3.

PART-II

Procedure to ascertain the use of water by the Riparian States and other related matters.

1. That all the three party States shall exchange data on daily basis with each other relating to opening and the closing balance of the reservoirs, the water which has been released from the reservoir to the canals and the 10 daily and monthly data statement of all major, medium and minor schemes accordingly. The data of measured flows at the sites maintained by the Central Water Commission shall also be obtained by the parties on daily basis. The data so maintained by respective parties and at the gauging sites shall also be furnished by the respective parties and CWC to the Implementation Board.
2. For the purpose of ascertaining as to how much water has been released to/flowed down/used by the States, the data which is maintained and exchanged as indicated in the preceding clause shall be used by the States. If so needed, data may be ascertained from the Implementation Board, which shall maintain a Data Cell for this purpose and shall promptly provide information sought by any party.
3. Any of the upper riparian State which wants to store or utilize water at 65% dependability before the lower riparian State have used their allocation at 75% dependability, shall at that point of time ascertain, from the data exchanged, the quantity of water which has been released to/flowed down and on that basis shall ascertain the shortfall of the remaining unutilized allocation of the lower/lowest riparian States excluding the self-generation of that lower riparian State at 75% dependability. The amount of water which has flown down plus the water generation within the State at 75% dependability, shall be deducted from the allocated share at 75% dependability and the balance amount of water shall be released/flow down, with due intimation along with the calculations to the lower riparian State/States at least 12 hours before storing/using its allocation at 65% dependability. The gauging sites of CWC at interstate boundaries between Maharashtra and Karnataka and between Karnataka and Andhra Pradesh shall be used for measuring the flows of releases amongst the party States.
4. If the lower/lowest riparian States have any doubt about the correctness of the calculations made by the upper riparian States about the use, storage and the water which has been released/flowed down till that point of time to lower riparian States, in that event the States may ascertain the correct position from the Implementation Board which shall check the same and provide it to them immediately, say within 12 hours. Information so furnished by the Board shall be taken to be the correct position of water having released/flowed down, to the lower/lowest riparian State.
5. In the event the lower/lowest riparian States inform to the upper riparian States that it is not in a position to receive the balance flow of water of its allocation at 75% dependability, at that point of time due to lack of storage capacity or the like, in that case, the parties may enter into an agreement under Clause “(ii)b” allowing storage of that part of the balance of allocation of the lower/lowest riparian States also which may be released later as and when so required by the lower/lowest riparian States or as agreed.
6. In any water year if it is noticed that the self-generation of water in the State of Andhra Pradesh is likely to fall short of 369 TMC and the State of Andhra Pradesh cannot realize its allocation of 811 TMC at 75% dependability and the upper riparian States have used

their additional allocation, in that case the State of Andhra Pradesh at the end of winter monsoon season shall intimate about the shortfall in 811 TMC with calculations to the upper riparian states which shall make good the shortfall, if necessary on verifying the correctness of the claim.

7. Any State if defaults in timely exchange of data, will not be entitled to question the calculation made by upper riparian State, which shall be treated as correct. Similarly, if an upper riparian State fails to furnish its data on time, will not be entitled to claim commencement of use of its additional allocation.

8. The party States and the Board shall make use of the latest information technology and install a suitable Real Time Data Acquisition System in the entire Krishna basin for the purposes of acquisition and exchange of reservoir and utilisation data indicated in the foregoing clauses. The same technology shall be used for data to be obtained from the gauging sites of Central Water Commission and the States, if any. The Implementation Board may get, for this purpose, the necessary software and hardware for quick and instant exchange of data amongst the States, the Implementation Board and the Central Water Commission. The Board shall use all facilities in this regard available with the CWC and the party States. The Board shall be responsible for installation and maintenance of the System. The financing of this activity of the Board shall be covered by the Clause 41 of Appendix I of the Decision of this Tribunal.

Clause-X

That on change in availability and the allocation of more water, at different dependabilities, the restrictions placed on the States on utilizations in some sub-basins would consequently change. The changes in the restrictions are in keeping with the dependabilities at which allocations have been made. These restrictions, as given below, shall be strictly adhered to by the concerned States:-

1.
 - a) Maharashtra shall not utilize more than 98 TMC in a 65% dependable water year (it includes 3 TMC allocated for Kukadi Complex) and 123 TMC in an average water year from Bhima sub-basin (K-5).
 - b) Maharashtra shall not divert more than 92.5 TMC (including that allowed by KWDT-1 and further 25 TMC now allocated) from K-1 Upper Krishna sub basin for Koyna Hydel Station for west-ward diversion in a 65% dependable or average water year.
 - c) Maharashtra shall not utilize more than 628 TMC in a 65% dependable water year and not more than 663 TMC in an average water year.
 - d) Maharashtra shall not divert any water out of basin except (b) above from K-1 sub-basin.
 - (e) (i) Maharashtra shall not utilize water allocated to it by this Tribunal in any non- scarcity /DPAP area either in existing project or in future projects.

- (ii) In basin utilization in any other project for DPAP area may be permissible with prior intimation in writing and written no objection of the Krishna Water Decision Implementation Board. It shall not involve any inter basin transfer of water.
2. a) Karnataka shall not utilize more than 356TMC from K-8 Tungabhadra sub-basin in a 65% dependable water year (it includes allocation of 40 TMC for Upper Tunga, Upper Bhadra and Singatlur Projects) or in an average water year.
- b) Karnataka shall not utilize more than 194 TMC in a 65% dependable water year and not more than 303 TMC in an average water year from Upper Krishna project (it includes allocation of 130 TMC for UKP Stage-III with reservoir level of Almatti Dam at 524.256 m).
- c) Karnataka shall not utilize more than 795 TMC in a 65% dependable water year and not more than 900 TMC in an average water year.
3. (a) That the State of Andhra Pradesh shall not utilise more than 860 TMC in a 65% dependable year (It includes 30 TMC for carry over in Sirisailam and Nagarjunasagar projects in K-7 sub-basin, 9 TMC for Jurala project, 4 TMC for Right Main Canal of RDS project and 6 TMC towards Minimum flows).
- (b) That the State of Andhra Pradesh shall not utilize more than 1005 TMC as per allocation made in Clause-VIII above in an average water year. (It includes further allocation of 9 TMC for Jurala Project, 25 TMC for Telugu Ganga Project, 4 TMC for RDS Right Main Canal, 150 TMC for carry over storage in Srisailam and Nagarjunasagar Dams and 6 TMC towards minimum flows).
- So far as remaining water is concerned, as may be available, that may also be utilized by State of Andhra Pradesh till the next review for consideration by any competent authority under the law. It will be open to each of the parties to raise its claim to the remaining water before the Competent Authority as it may consider necessary and that no right would accrue to Andhra Pradesh over the remaining water on the ground of its user under this clause.
4. The above restrictions are inclusive of evaporation losses.

Clause-XI

That all the three States are hereby directed that for the purposes of drinking water supply for Chennai city, each State shall contribute 3.30 TMC in equal quantity distributed in the months of July, August, September and October and 1.70 TMC distributed similarly in four equal instalments in the months of January, February, March and April.

Clause-XII

That all the three States shall release in all 16 TMC of water for maintaining minimum in-stream flow and for environment and ecology, in the manner and the quantity as indicated in Table to the discussion held on the subject of minimum flows.

Clause-XIII

That it is hereby directed, as provided in the discussion held while dealing with Issue No. 14, that the State of Karnataka shall release 8 to 10 TMC of water to the State of Andhra Pradesh from Almatti Reservoir in the months of June and July, as regulated releases.

Clause-XIII-A

If on periodical survey any significant change is reported in sedimentation within 20 KM of Maharashtra territory of river Krishna the KWD-IB may direct Karnataka and Maharashtra to undertake dredging jointly to clear the same and the cost of which shall be equally borne by them.

Clause- XIV

That it is hereby provided that on the constitution of the 'Krishna Water Decision – Implementation Board' the administrative control and regulation over Tungabhadra Dam and its Reservoir including Head Regulators of all the canal systems both on the left and the right sides and all its gates as well as the administrative control of Rajolibunda Diversion Scheme shall vest in the Board and the notifications dated 29th September, 1953 and the 10th March, 1955 issued under Section 66(1) and (4) respectively of the Andhra State Act, 1953 shall cease to be operative.

Clause-XV

That besides the gauging sites as indicated in Clause-XIII in the final order of the KWDT-1, the 'Krishna Waters Decision – Implementation Board' may set up or caused to be set up more gauging sites as the Board may consider necessary. No existing site nor any site established hereinafter shall be abolished or downgraded except in consultation with the Board.

Clause-XV-A

That Krishna Water Decision – Implementation Board shall implement the Real Time Flood Forecasting System in the entire Krishna basin. In case, however, if the system is already installed by the CWC covering Krishna Basin and it is in operation, the KWD-IB shall take all necessary help in the matter from CWC and shall make use of the same.

Clause-XVI

At any time after 31st May, 2050, order may be reviewed or revised by a Competent Authority or Tribunal, but such review or revision shall not as far as possible disturb any utilization that may have been undertaken by any State within the limits of allocation made to it.

Clause-XVII

Nothing contained herein shall prevent the alteration, amendment or modification of all or any of the Clauses by agreement between the Parties.

Clause-XVIII

The scheme which has been framed for implementation of this decision and the decision and directions made by KWDT-I, which have not been modified or reviewed by this Tribunal has been appended as Appendix-I to this decision and forms part thereof. The Board constituted to carry out the functions and duties provided for in the scheme shall be called 'Krishna Waters Decision – Implementation Board'. It shall be constituted as early as possible. The Central Government and the State Government shall nominate the Members of the Board at the earliest, in any case, not later than three months from the date of publication of the decision. The Board shall function as per the provisions of the scheme.

Clause-XIX

That a Map which has been prepared before this Tribunal and brought on record as TD-1 vide orders dated 30th July, 2009 and 9th August, 2009 of this Tribunal has been appended as Appendix-II to the decision.

Clause-XX

That the order or directions as contained in this order shall be read in reference and context with the preceding discussions and the findings recorded on different issues along with the reasoning thereof. It is further provided that any direction given or provision made under any Issue or otherwise, not finding mention in this order shall also be complied with by all the parties as a part of the decision and this order.

Clause-XXI

The Governments of Maharashtra, Karnataka and Andhra Pradesh shall bear their own costs of appearing before the Tribunal. The expenditure of the Tribunal shall be borne and paid by the aforesaid three States in equal shares except the expenditure incurred in Hydrographic Survey in Hippargi Barrage and Almatti Dam conducted by M/s Tojo Vikas International Pvt. Ltd. which shall be borne by the States of Maharashtra and Karnataka in equal shares.

Clause-XXII

This decision and order shall come into operation on the date of publication in the official gazette under Section 6 of the Inter-State River Water Disputes Act, 1956.

Clause-XXIII

The provisions made in the decision/order passed and the decision and directions given by KWDT-I which have not been amended, modified or reviewed by this order shall continue to be operative.

(JUSTICE B.P. DAS)	(JUSTICE D.K. SETH)	(JUSTICE BRIJESH KUMAR)
MEMBER	MEMBER	CHAIRMAN

Dated this the 29th day of November, 2013

INTERIM ORDER¹⁰ OF VANSADHARA WATER DISPUTES TRIBUNAL

JUSTICE DR. M.K.SHARMA:

1. Mahatma Gandhi once said “Earth provides enough to satisfy every man’s need but not every man’s greed”. Unfortunately, it is the man’s greed and to some extent their need also which has led to the present environmental degradation all around. Such degradation has been always and everywhere causing havoc upon the entire world of life and material bases. In order to avoid conflict and struggle in our life, the protection of environment must be both our motto as well as the ultimate goal. India has all along the tradition of protecting the environment by showing respect to it. Respecting environment has indeed been a part of our heritage. The concept of ‘Panchabhootas’ i.e. Air, Water, Earth, Fire and Atmosphere are indeed essential for making life meaningful. Our tradition has taught us to be respectful to the nature by worshipping plants, trees, sky, air, water and mother earth.

2. Mankind, during the initial stages of life was in harmony with nature and there was practically no stress at all on the environment around. With the progress and development of the civilization and the growth of the population there has been a pressure in the environment as mankind has been extracting from the nature energy, power, water and firewood etc. in quantity more than what could be actually extracted from the nature. Consequent thereupon there has been a clash between the need of the man and what nature could actually give to the mankind.

3. It cannot be disputed that there has to be economic development in a developing country like ours, but at the same time we must clearly remember that such development has to be in the closest possible harmony with the environment as otherwise there would be only development but no environment which would result in total devastation. This is what is called sustainable development, meaning thereby that whatever development that we think of could be sustained by the nature and the environment.

4. Out of the various natural resources, water and air are considered to be the most precious natural resources, but as we look around, we find that we have sufficient air around us although a part of it could be polluted. But so far as water is concerned, it is decreasing and depleting in quantity through the years because of various reasons like global warming and lack of rainfalls due to failure of monsoon etc. But it is accepted by each and every one that water plays a key role in the socio-economic development of the country. Water has always been given a unique and sacred position by all the civilizations which have grown across the world. One common factor across the world is that each civilization has grown by the side of a river. No other entity touches all aspects of our life as water does. Water is indeed a life line for us and our social and economic activities, our culture, our festivals all revolve around water in one way or the other.

5. With the depletion of the quantum of water available with us, another difficulty that is being faced is that the demand for water has grown more owing to the growth of population, and therefore, there is also a nightmare of water scarcity which is looming large in the horizon. We have seen number of conflicts and disputes amongst communities, States and countries with regard to user of water.

¹⁰ The Interim order was delivered by Tribunal on 17th December, 2013, however, it has not published in Official Gazette, hence, it is not effective.

6. The need of the hour therefore, is optimising the utilization of available water for which a proper planning has to be done, which would involve participation and coordination of all the stake holders. Water availability and its demand and proper planning of its utilization is of utmost importance in the present day environment for our livelihood and also in order to sustain, maintain and promote sustainable development. Efficient planning and management of country's water resources will also depend upon the availability of requisite data and therefore, there is a need to have a National Information System consisting of data at watershed level and integration of the same to State level and National level.

7. We have stated the aforesaid facts as we are concerned with a dispute arising out of use of water of a river called 'VANSADHARA RIVER' flowing through two States namely Orissa and Andhra Pradesh. This river is an important East-flowing river originating just South-West of Lanjigarh Village, Kalahandi District Orissa at an elevation of about 1300 Meters above sea level. The river flows for a total length of about 265 Kms. out of which 154 Kms. of length lies in Orissa, whereas remaining 82 Kms. lies in Andhra Pradesh before it falls into the sea. This also indicates that approximately 29 Kms. length of the river forms the common boundary between Orissa and Andhra Pradesh as it runs through both the States. The Vansadhara River basin has a catchment area of 10830 Sq. Kms. of which 8960 Sq. Kms. (82.7%) lies in Orissa and the remaining 1870 Sq. Kms. (17.3%) lies in Andhra Pradesh.

8. The Vansadhara river is rain fed river and the river basin experiences rainfall mainly from the South-West monsoon which contributes about 74% of average annual rainfall of 1067 mm. The monsoon is active from the month of June to November for the purpose of hydrological study.

9. Andhra Pradesh and Orissa are co-riparian States of Vansadhara Basin. Orissa is the upper riparian while Andhra Pradesh is the lower riparian. The people inhabiting the near about area of the river in both the States are totally dependent on the water of this river for the purpose of drinking, agriculture and their livelihood. In that view of the matter after independence of the country steps were taken for development of Vansadhara river basin. As a part of the said development, State of Andhra Pradesh somewhere in 1950 proposed construction of Gotta reservoir and Neradi barrage across river Vansadhara. In terms thereof Gotta reservoir stood constructed consequent upon which some area of irrigated land was submerged. The construction of the aforesaid Gotta barrage was completed sometime in the year 1982.

10. The proposal to construct the barrage across the river Vansadhara called 'Neradi barrage' is proposed to be constructed 48 Kms. upstream of Gotta barrage. Since the said project when constructed would amount to submerging of a large area of land both of Andhra Pradesh and Orissa, mutual consultation between the two Governments of Andhra Pradesh and Orissa were required.

11. Consequent upon such mutual discussion the Governments of Orissa and Andhra Pradesh agreed on 30.9.1962 to share the waters of Vansadhara River and its valley. The said agreement was signed by the Additional Chief Engineer of Orissa and Additional Secretary, Public Works Department of Andhra Pradesh and is acted upon and accepted by both the States. The minutes of discussion leading to signing of the agreement record as follows:

“From the date available, it has been estimated that the yield of Vansadhara River at Gotta Reservoir is 115.00 TMC. The requirement of Andhra Pradesh for Gotta Irrigation Project and Neradi anicut is 47.4 TMC. The total quantity of water for the existing irrigation in Andhra Pradesh is about 7 TMC so the total requirement of water of Andhra Pradesh for the existing irrigation and Projects which are now being taken up is 54.5 TMC. The requirements of water for the projects in Orissa State have been roughly estimated to be 55 TMC”.

.....

Thus the yield of Vansadhara basin is just sufficient to meet the requirements of both the States. The water of Vansadhara basin may consequently be utilized by both Andhra Pradesh and Orissa on 50: 50 basis. It is agreed that the projects in Andhra Pradesh can be taken up immediately on this basis”.

12. In view of the aforesaid agreement arrived at between the two States it is an agreed position that the water of Vansadhara River could and would be utilised by the two States on 50: 50 basis and ratio. Therefore, there is no dispute between the two States with regard to the water sharing of this river nor the same is raised before us. The only dispute that stands out is regarding construction of the Neradi Barrage which although at one stage was mutually agreed upon but is now being opposed by the State of Orissa on various grounds. Records indicating such agreement are recorded in the minutes of the meeting held on 27.7.1980. The following decision is recorded:

“(A) Andhra Pradesh will confine acquisition of Orissa lands to 106 acres as originally provided in the proceedings of the Inter-State agreement. It was agreed that the 106 acres acquisition would be exclusive of the river bed. It was also agreed that the left flood bank would be realigned and re-designed with the above acquisition in view. It was agreed that the embankment will be done with revetments wherever necessary and the money would be deposited with the Govt. of Orissa for execution of the left flood bank. The expenditure on the maintenance over flood bank, it was agreed, will be a charge on the project. The problem regarding water logging in the rear of left flood bank was discussed and it was agreed, that catch drains on the land side of the embankment would be provided to avoid water logging. It was agreed that the construction of flood banks on both sides of the river should be taken up simultaneously.

(B) The Chief Engineer, Irrigation, Orissa State pointed out that the original agreement provided for utilization of water only during the first crop period at Neradi barrage. It was agreed that the project report should be revised for ensuring withdrawal of water from Neradi barrage during the first crop period and all flow thereafter or beyond first December is let down in the river for use by both the States.”

In this connection, the following decision of the meeting dated 10.6.1992 is extracted:

“Hydrology data upto 1991 and mathematical model studies will be supplied by the Irrigation Department, Andhra Pradesh within 10 days. Mathematical Model has a linkage with the aggradation of the river bed which in turn will

affect the Orissa portion by floods beyond the stipulated 3 Kms. Andhra Pradesh Engineers however, assured that the backwater effect will be limited to 3 Kms. Sharing of water would be on 50:50 basis. It was agreed in principle that Orissa Government would have no objection to the Government of Andhra Pradesh going ahead with construction of the barrage, but the height of the barrage would be subject to mathematical model studies and hydrological data.”

13. In view of such position and there being some objection on the part of the State of Orissa regarding construction of the Neradi Barrage, the State of Andhra Pradesh has proposed construction of a side weir on its side of the river as a temporary measure to utilise effectively some of the water of the river before it falls into the sea. This Side Weir would have a pond near the gate and also escape channel for sending the excess river water back to the river and thereafter it shall be connected by a link canal of about 2-1/2 Kms.

14. In this connection we may make a reference to the letter of the Chief Minister of Orissa who in his letter dated 3.10.1962 informed the Chief Minister of Andhra Pradesh that he had taken note of the record of discussions held between the Engineers of the two States on 4.9.1962 and 30.9.1962 and that Andhra Pradesh may now go ahead with the construction of the Neradi Barrage. Subsequent thereto the State of Andhra Pradesh split the Neradi Irrigation Project into two stages – stage - (i) consisting of construction of Gotta Barrage and left main canal; stage - (ii) consisted of construction of Neradi Barrage alongwith the Flood Flow Canal and three offline reservoirs. A meeting was held on 15.12.1978 between the two Chief Ministers of Orissa and Andhra Pradesh wherein it was decided that Andhra Pradesh would send immediately the Neradi Project Report to Orissa for incorporating Orissa's requirement on the left side of the river. From the records placed before us we find that the Chief Ministers and officials of the two States are meeting from time to time. Pursuant to such meetings although broad consensus has been arrived at with regard to water sharing of the river Vansadhara but no agreement could be arrived at with regard to the construction of Neradi barrage resulting in submerging of 106 acres of land of Orissa and also construction of Side Weir with a link canal of about 2-1/2 Kms.

15. During September, 1980 unprecedented floods occurred in Vansadhara Basin. In view of the unprecedented floods the State of Orissa wanted Andhra Pradesh to modify the design of Neradi Barrage. During the meeting held in February 1985 between the two States it was agreed that the Neradi Barrage should be designed for a peak flood of 6 lac cusecs of water. In order to confine the acquisition of land to only 106 acres in Orissa for implementing the Neradi Project, the State of Andhra Pradesh forwarded a proposal in February 1987 to Central Water Commission as well as to the State of Orissa duly proposing for construction of a flood protection wall of 3.5 Kms. upstream of the Barrage on left bank in Orissa territory and also for construction of a catch drain for draining the water behind the protection wall. The aforesaid proposal of Andhra Pradesh was discussed in a meeting convened by the Central Water Commission on 8.4.1988 wherein the Engineers of the co-basin States participated. In the said meeting the proposal with regard to afflux was agreed to. It was agreed that the afflux due to the barrage as computed by Andhra Pradesh and the effect of afflux beyond 3 Km. of protection wall upstream of the barrage is within permissible limits.

16. Despite the aforesaid agreement which was arrived at between the two States, the State of Orissa expressed its reservation and took up a stand that mathematical model studies should be conducted before proceeding with construction of barrage. The aforesaid proposal of the State of Orissa was accepted by the Government of Andhra Pradesh and they proceeded to get the mathematical model studies conducted through the Central Water Commission.

17. Consequent thereto a meeting took place between the Chief Minister of Orissa and Irrigation Minister of Andhra Pradesh on 15.2.2001 wherein it was recorded as follows:

“Government of Orissa Officers pointed out that people of Gunupur and surrounding areas are very much apprehensive, in view of devastating experience of 1980 floods. This being a sensitive issue, all the design parameters are to be checked very carefully before taking any decision. It was further pointed out that only mathematical model studies are not enough. Physical model studies are to be conducted, which will be more reliable. It was agreed that CWPRS, Pune may be associated with the conduct of physical model studies from the beginning and shall have access to the data being used.”

18. In consonance with the aforesaid agreement the State of Andhra Pradesh engaged the services of Central Water and Power Research Station for conducting the physical model studies for Neradi Project. They were also authorised to conduct the physical model studies regarding the construction of Side Weir Project. The said studies were duly completed.

19. The Tribunal had the advantage of visiting the premises of the aforesaid Central Water and Power Research Station at Pune and to see and observe the functioning of the physical model studies both for Neradi Project as also for the Side Weir Project. During the aforesaid visit and verification of the physical model studies, the State of Orissa raised certain objection with regard to the results of the model studies which were however, negated and explained by the authorities and scientists at Central Water and Power Research Station.

20. Since a dispute is raised by the State of Orissa with regard to the construction of Neradi Barrage and also with regard to the possible effect and consequence of such construction and also in view of the inordinate delay in construction of the aforesaid Neradi Barrage which was proposed about 5 decades back, the State of Andhra Pradesh proposed the construction of a Side Weir on its side of the river as a temporary measure to enable the State of Andhra Pradesh to draw about 8 TMC of Water to meet its immediate irrigation requirement. In the said proposal the State of Andhra Pradesh has further proposed that 300 meter long side weir with crest level of 70.4 meters (0.9 meter above bed level) is proposed at 2 Km. upstream of proposed Neradi Barrage. The State of Andhra Pradesh has also made it explicit when it proposed that the aforesaid side weir would be so constructed that water from the river Vansadhara would enter into the proposed side weir only when discharge in the river is more than 4000 cusecs, which would happen when the river would reach a level of 70.4 meters.

21. The aforesaid proposal of the State of Andhra Pradesh was also opposed by the State of Orissa and it conveyed its objection against the implementation of construction of the proposed side weir on the ground that such diversion would deprive the existing & possible irrigation projects of 30,000 acres and also would adversely affect the supply of

drinking water to 18 villages, apart from causing irreparable damage to the environment, flora, fauna and river morphology. The State of Orissa also conveyed its apprehension that the flow on the right side of the river Vansadhara would increase as a result of construction of the side weir in which event, according to them, the right side of the Vansadhara River would suffer degradation on one hand whereas the left side would suffer aggradation. Another apprehension of the State of Orissa was that such aggradation, if caused, as apprehended, would decrease and would cause shift of the river flow towards right side bank which falls within the territory of Andhra Pradesh, which in turn in course of time would cause shift of the river course towards the side of Andhra Pradesh. The further apprehension of the State of Orissa was that the left side of the bank would get completely cut off due to aggradation as a consequence of which the river would undergo morphological changes.

22. Although there was stiff opposition by the State of Orissa to the construction of the side weir, yet the State of Andhra Pradesh started mobilising resources with the intention of going ahead with the construction of the side weir project and therefore, the State of Orissa filed a complaint as envisaged under Section 3 of the Inter-State River Water Disputes Act, 1956, with the Ministry of Water Resources, Government of India on 14.2.2006 seeking constitution of an Inter-State Water Disputes Tribunal and to refer the water dispute between the State of Orissa and Andhra Pradesh in respect of inter-State river Vansadhara and its valley for adjudication to it.

23. After receipt of the aforesaid complaint dated 14.2.2006 the Ministry of Water Resources, Government of India, took initiative to settle the dispute through negotiations, but no positive result came out of the aforesaid effort. As the dispute was not resolved till then and also as no tribunal was constituted as requested by the State of Orissa, a petition was filed under Article 32 of the Constitution of India by the State of Orissa before the Supreme Court of India with a prayer for directing the Central Government to constitute a Tribunal in terms of Inter State River Water Disputes Act and to refer all the water disputes in respect of the Inter-State River Vansadhara to it for adjudication. The said writ petition was registered and numbered as Writ Petition (Civil) No. 443/2006. The aforesaid writ petition was heard on merit and by judgment rendered on 6.2.2009 the Supreme Court of India issued a direction to the Central Government to constitute a Water Disputes Tribunal in terms of Section 3 of Inter-State River Water Disputes Act and refer the water dispute to the Tribunal. The Supreme Court while disposing off the writ petition further directed that pending constitution of the Tribunal and reference of the above dispute to it, the State of Andhra Pradesh would maintain status quo. The operative part of the said order reads as follows:

“I also direct that pending constitution of the Water Disputes Tribunal and reference of the above dispute to it, the State of Andhra Pradesh will maintain status quo as of date with regard to the construction of the Side Channel Weir and the Flood Flow Canal at Katragadda. Once the Tribunal is constituted the parties will be free to apply for further interim orders before the Tribunal.”

24. Pursuant to the aforesaid order passed by the Supreme Court, the Central Government constituted the Vansadhara Water Disputes Tribunal by issuing a Gazette Notification on 24.2.2010. After constitution of the said Tribunal the first meeting of the tribunal was held on 9.9.2010 when I.A. No. 1/2010 filed by the State of Orissa and I.A. No.2/2010 filed by the State of Andhra Pradesh were taken up and both the states were

directed to file their counter affidavit within 4 weeks. So far as I.A. No.1/2010 is concerned, the tribunal proceeded to pass an order on 9.9.2010 which reads as follows:

“Until further orders the State of Andhra Pradesh is directed to maintain status quo as of date with regard to the construction of the side channel and flood flow canal at Katragadda”.

As a consequence thereof there is status quo maintained by both the parties with regard to the construction of Neradi Barrage as also with regard to the construction of the Side Weir on the bank of river Vansadhara falling in the State of Andhra Pradesh till date.

25. Subsequent thereto pleadings in respect of both the applications have been completed by the parties. The Tribunal also undertook a local inspection of the site as well as the visual inspection of the model situated within the premises of Central Water and Power Research Station, Pune, as stated herein before.

26. After completion of the pleadings, arguments of both the parties were heard on I.A. No.1/2010, as it was stated that the said application requires early disposal and that I.A. No.2/2010 could be taken up for consideration at a subsequent stage.

27. After hearing counsel appearing for both the parties, order on I.A. No.1/2010 was reserved. By the present order we propose to dispose of I.A. No.1/2010 in terms of observations and directions passed herein.

28. By filing the aforesaid application the State of Orissa has raised serious objection against construction of the Side Weir with Link Canal by the respondent State of Andhra Pradesh on the ground that once the construction of the said Side Weir is permitted and it is so constructed the same would naturally facilitate free flow of water of the river Vansadhara by way of gravity into the Side Weir followed by Link Canal, as a consequence of which it is apprehended by the State of Orissa that the water from the river would start flowing into the canal consequently drying the existing river bed downstream of Katragadda. It was also submitted by the State of Orissa that such diversion would also deprive the existing and possible irrigation project of 30,000 acres in Orissa lying on the left bank of river Vansadhara which is situated downstream of Katragadda.

29. The other apprehension of the State of Orissa as pointed out in the application was that the villagers inhabiting 18 villages in Orissa lying on the left bank will also be substantially deprived of drinking water and fulfilling other requirements including the requirements of flora and fauna particularly during the non-monsoon months as there would be possibility of river bed on the side of Orissa State getting dry due to morphological change. It was suggested by the State of Orissa that as a result the ground water table would also be affected. A strong apprehension is also raised that once a diversion through the Side Weir is allowed to be constructed there is every possibility of the river bed scouring towards the right bank with deposit of silt and sand occurring on the left bank towards Orissa resulting in morphological changes in the river leading to environmental changes, shifting the course of the river from the present channel towards the Flood Flow Canal.

30. The State of Andhra Pradesh however, in its pleadings filed in respect of the aforesaid application denied the allegation and submitted that all the aforesaid apprehensions are misplaced and incorrect. It was pointed out by the State of Andhra

Pradesh that it proposes to utilize only about 8 TMC of water after construction of the Side Channel Weir at Katragadda. It was also pointed out that the State of Orissa had not provided the detail of the water requirement of its inhabitants or the cultivable land in its territory, as alleged in their pleadings.

31. The State of Andhra Pradesh in its additional reply has pointed out and dealt with the issue of water requirement for irrigable area of 30,000 acres lying in the State of Orissa downstream of Side Weir at Katragadda. It had also worked out the domestic and livestock requirement for 18 villages by adopting national norms. For arriving at the final figure of 3.85 TMC for growing paddy in an area of 30,000 acres the norms as adopted by National Commission for Integrated Water Resources Development have been adopted. After giving the calculations, it was suggested that in terms of a practical and proper calculation the domestic water requirement would work out to 0.116 TMC with another 0.058 TMC being added as a provision for livestock requirements. According to the State of Andhra Pradesh the total water requirement of the State of Orissa for irrigation as well as domestic requirement, on their own showing and on appropriate calculation on the basis of the norms adopted by National Commission for Integrated Water Resources Development would work out to only 4.02 TMC and thereby the State of Andhra Pradesh indicated that all the apprehensions of the State of Orissa are totally baseless and misplaced.

32. The State of Andhra Pradesh also relied on the mathematical study report of the Central Water Commission in support of their contention that there would be no morphological changes as suggested by the State of Orissa. The State of Andhra Pradesh has particularly relied upon the following passage from the aforesaid report which reads as follows:

“The general characteristics of the river like ‘Width-Depth Ratio, Plan forms, Channel Characteristics, Bed Forms etc., had already been analysed in the previous study and given in the report submitted in March, 1994. The analysis done at that time had shown that the river is fairly stable and straight in the reach under study. A comparatively stable river indicates of low value of ‘n’, the manning’s roughness coefficient, because of the absence of morphological activities like meander, bank erosion etc.”

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“The river is slow in responding to the changes in its morphological conditions. It means that if any structure is built across the river the morphological changes resulting from this would continue for a period of 1600 years. In other words, the final regime condition after the construction of any structure is not likely to be attained within the life span of the structure.”

33. Relying on the said passage the State of Andhra Pradesh suggested that it is explicit that the morphological changes are not going to occur in Vansadhara river due to the construction of the Side Weir and therefore, all the apprehensions of the State of Orissa that the river’s shift towards Flood Flow Canal and that there would be sizeable environmental changes are baseless and are incorrect.

34. It was also stated that the morphological changes, if at all take place, would take place over a long period of time as stated by the Central Water and Power Research Station in its letter dated 12.03.2008, which reads as follows:

“In this connection this is to state that morphological behaviour of a river is generally referred to bank line or plan form changes which are noticed only after sufficient long periods. Their assessment is possible by comparison of past river courses available through survey plan, toposheets or satellite imageries. These are ‘macro-level’ changes, as long reaches and time-spans are involved.”

35. The State of Andhra Pradesh has completely denied the allegation of drying up of the existing bed downstream of Katragadda and also the allegation of adverse effect on flora and fauna and ground water table.

36. Counsel appearing for the State of Orissa very forcefully submitted that unless the interim order passed by the Supreme Court and also by the Tribunal is continued the objection raised by the State of Orissa would be rendered infructuous. He also drew attention of the Tribunal to the problem of sedimentation of the river which according to him would definitely cause morphological changes in the river and would also cause adverse environmental impact. In support of his aforesaid contention he referred to the extract of Kishan Ganga interim award pertaining to sedimentation and its management as well as principle No.3, Basic principle No.15 – Precautionary Approach of the report of U.N.Conference on Environment and Development (Rio Declaration). He also contended, relying on the pleadings filed and referred to above that the interest of the Government of Orissa would be adversely affected on account of inadequate water supply to 18 villages downstream of Katragadda as well as to sizeable area of land, which to his estimation is about 30,000 acres of irrigable land.

37. On the other hand counsel appearing for the Government of Andhra Pradesh also submitted with equal force that the documents on record would clearly establish that the apprehension of morphological changes in the river is misplaced and baseless, in view of the categorical assertion in the mathematical study report of the Central Water Commission and also as stated in the letter of the Central Water and Power Research Station dated 12.3.2008. According to him the population of 18 Villages and 30,000 acres of irrigable land would require only about 4 TMC of water whereas 81.91 TMC of water of the river usually goes waste to the sea every year. According to his estimation and statement the maximum flow possible through Flood Flow Canal would be 6400 cusecs and under best hydrological conditions the State would be able to draw the aforesaid water only for 55 days in a year. As against the aforesaid possibility, the Government of Andhra Pradesh only sought to take 8 TMC of water through the Side Weir when the flow in the river is more than 4000 cusecs and that according to the counsel is a justified claim in view of loss of water quantified at 81.91 TMC which usually goes waste to the sea every year. The counsel relied upon the decision of the Supreme Court in respect of Babhali Barrage being State of Andhra Pradesh Vs. State of Maharashtra and others, Original Suit No.1/2006 with Writ Petition (Civil) No. 134/2006.

38. Counsel appearing for the parties during the course of their arguments relied upon and referred to various decisions of the Supreme Court and various reports which would

be referred to and discussed in our discussion on the contentions which follow hereinafter.

39. The contention of the State of Orissa that since Supreme Court has passed an order directing for maintenance of status quo in respect of any construction in the course of Vansadhara river including that of construction of a Side Weir and that order being functional and operative for the last 4-1/2 years, therefore, there is no scope to vary the said order is concerned, suffice it to say that the aforesaid order was passed by the Supreme Court only as an interim measure as is clearly visible from the tenor of the order passed. The Supreme Court passed the said interim order which was made operative till the prayer of stay with regard to construction of the Side Weir is taken up for consideration by the Tribunal. Therefore, the idea in passing the order of the Supreme Court also was to get the stay application heard on merit by the Tribunal and to get the same adjudicated and decided on appreciation of various documents, pleadings and other aspects of the matter. A perusal of the order of the Supreme Court would show that the interim order was passed only as a stop-gap arrangement and while passing the said order therefore, no discussion was at all made with regard to issue involved in the case and also with regard to the issue of strong prima facie case, balance of convenience and sufferance of irreparable loss and injury. Therefore, the aforesaid submission of the State of Orissa has no merit.

40. The next submission of the counsel appearing for the State of Orissa was that the interim order should be continued in order to protect ecological integrity, protection and preservation of the eco-system in the neighbourhood of the river Vansadhara and if any construction of the Side Weir is made the same would definitely adversely affect the ecological balance in the area, for water is a precious part of the eco-system. In this connection it may be stated that the proposal of Andhra Pradesh is only to construct a Side Weir and therefore, it cannot be argued that such construction would in any manner affect the ecological balance in the aforesaid area. Besides, even if permission for construction of such a Side Weir is granted the same would in any case be subject to all the precautionary principles like grant of permission from the Ministry of Environment and Forests. Besides, clearance and permission shall also have to be statutorily obtained from the Technical Authority of Ministry of Water Resources and Ministry of Tribal Affairs before taking up the aforesaid venture on the side of the State of Andhra Pradesh.

41. All the objections with regard to adverse effect on flora and fauna and other ecological balance in any case be subjected to scrutiny of all those Statutory authorities as prescribed and the views of the said authorities would clinch the issue. Consequently, it would be more appropriate to leave the said issue for consideration of such statutory authorities constituted of experts on the subject.

42. Therefore, sufficient safeguards are provided for to examine and ascertain whether or not such a proposal of construction of a Side Weir would in any manner create obstruction to the concept of protection and preservation of the eco-system there being well oiled mechanism laid down by the Government of India for according such permission of construction. The apprehension of the State of Orissa in that regard is belied. These findings also receive support from the reasoning and decision rendered by the Supreme Court in Suit No.1 dated 28.2.2013 (State of Andhra Pradesh Vs. State of Maharashtra and others, reported in 2013 (3) Scale page 102). In the said decision also the Supreme Court has allowed construction of a barrage across the river Godavari under

almost similar circumstances. So far as presence of factors for grant of injunction, this is what was said in paragraph 57 of the judgment:

“Alternatively, even if we accept the stand of Andhra Pradesh that utilization of waters to the extent of 60 TMC for new projects by Maharashtra from below the three dam sites mentioned in clause II (i) upto Pochampad dam site can be only from water flowing through the river from the catchment area and not from the pondage/water spread area of Pochampad dam, the question that arises for consideration is, whether Andhra Pradesh is entitled to injunction against Maharashtra from setting up Babhali barrage in the suit filed under Article 131 of the Constitution.”

In paragraph 58 references was made to the U.S. Supreme Court decision, which was also referred to during the course of hearing in the present case also. For better understanding para 58 is also extracted below:

“The US Supreme Court in State of Washington Vs. State of Oregon has expositied two principles, one a context between the states is to be settled in the large and ample way that alone becomes the dignity of litigants concerned and two, burden of proof falls heavily on complainant in a suit for injunction when states are involved. The above principles are sound principles in law and, in our view; there is no reason for not applying them to a suit of this nature. We are of the considered view that in a suit for injunction filed by one state against the other state, the burden on the complaining state is much greater than generally required to be borne by one seeking an injunction in a suit between private parties. The complaining state has to establish that threatened invasion of rights is substantial and of a serious magnitude. In the matter between states, injunction would not follow because there is infraction of some rights of the complaining state but a case of high equity must be made out that moves the conscience of the Court in granting injunction. We shall consider whether burden of that degree has been discharged by Andhra Pradesh on the charge of wrong doing by Maharashtra in construction of Babhali barrage and a case of substantial injury of a serious magnitude and high equity made out.”

43. The circumstances under which the aforesaid decision was rendered are somewhat similar to the facts of the present case and that would be clear once we read paragraph 79 of the judgment which reads as follows:

“Moreover, admittedly rainfall during monsoon months is the major contribution to the Godavari river flows. Monsoon contributes about 90% of the river flow. During monsoon months, the gates of Babhali barrage shall remain lifted. Thus, river flow towards Pochampad dam during monsoon shall not be affected in any manner whatsoever. There is no diminution of flow during monsoon irrespective of construction of Babhali barrage by Maharashtra. The only difficulty is in respect of non-monsoon season which contributes about 10 per cent of the flows that too is not well defined and well spread. If this difficulty is taken care of, virtually there is no injury to Andhra Pradesh much less substantial injury in as much as the inhabitants of seven districts (Adilabad, Nizamabad, Karimnagar, Warrangal, Nalgonda, Khammam, and Medak) shall not be deprived of water for drinking purpose

and irrigation which is the main concern of Andhra Pradesh. On the other hand, if Babhali barrage is made operational subject to certain conditions and some supervisory mechanism is put in place to ensure that those conditions are strictly adhered to, Maharashtra may be able to meet drinking water requirement of 58 villages and three towns and also provide water for irrigation to 7995 hectares. The matter needs to be viewed in this perspective as well.”

44. A strong case was sought to be made out on behalf of the State of Orissa with regard to sedimentation and silting in the river thereby causing morphological changes in the Vansadhara River provided permission is granted for construction of the Side Weir on its side as proposed by the State of Andhra Pradesh. The mathematical model studies to which reference was made hereinbefore which were carried out by the Central Water Commission to evaluate the Hydrodynamical and morphological consequences of construction of Neradi barrage concluded that the river is morphologically stable besides in the physical model studies carried out by Central Water and Power Research Station regarding the proposed Side Weir at Katragadda, it is recorded that morphological changes in the Vansadhara river near Katragadda Side Weir cannot be assessed from the model studies, as it is felt that the river channel has not shown any tendency to vitiate from time to time. In the said studies it is also concluded that even after the construction of a Side Weir the position would not alter drastically but it would be necessary to keep a close watch on the river behaviour from year to year. From the aforesaid and records available to which reference was also made hereinbefore, it is clearly established that there may not be any noticeable changes in the morphology of the river post construction of Katragadda Side Weir, if any.

45. So far the apprehension of silting and sedimentation taking place near the construction of the Side Weir is concerned the record before us fully discloses that such apprehension is also baseless. Be that as it may, even if such sedimentation and silting occurs due to the construction of the Side Weir and functioning of the same, these could be properly tackled and taken care of by directing de-silting of the area near the construction of the Side Weir as and when such silting and sedimentation is noticed.

46. We also cannot lose sight of another major factor. The river Vansadhara originates in the State of Orissa and it runs for about 154 Kms within the territory of Orissa and thereafter for the duration of such a long distance of 154 Kms there are only couple of noticeable irrigation projects constructed by the State of Orissa and there is also no existing major irrigation project which has been undertaken by the State of Orissa as of today even between 154 to 183 Kms which is the joint area between both the States. There is no dispute with regard to the fact that on an average atleast 81.91 TMC of the river water is going to the sea yearly. Instead of wasting that much of water which goes to the sea, if the State of Andhra Pradesh desires to utilize only 8 TMC of water by the same through the Side Weir and that also only for a short period of about 60 days in a year and that also in monsoon time, the same would not in any manner adversely affect the interest of the State of Orissa, for the total quantity of water being so used by taking it through the Side Weir will only be about 8 TMC.

47. There is also an apprehension on the part of the State of Orissa that the existing river bed downstream of Katragadda would dry up once such construction as proposed is made. The aforesaid apprehension of the State of Orissa has arisen on account of possible aggradation on the left bank of Vansadhara. However, in their affidavit they

have stated that the aggradation would take place on the side of Orissa as well as in front of the Side Weir at Katragadda. It is also a known fact that aggradation and degradation in a river is a natural phenomenon and it keeps on changing depending upon the flow of water during the future monsoon season. There could be no dispute to the fact which is also apparently visible from the model available on the site of the Central Water and Power Research Station that major portion of the river flow even after the construction of the Side Weir would keep on flowing in the river itself and it is only when the flow is more than 4000 Cusecs the water would then only spill over into the Side Weir.

48. Another contention which was substantially advanced during the course of arguments by the State of Orissa was regarding deprivation of drinking water supply to 18 villages and also deprivation of existing irrigation system of water to 30,000 acres of cultivable land and also causing irreparable damages to their environment, flora and fauna. The aforesaid apprehension appears to be illusory, for assuming that even the quantity of 8 TMC of water is taken through the Side Weir, the same would occur only for a particular period of approximately 60 days in a year and that also during the full monsoon season and for the rest of the period the entire water in the river would go down according to the river course only and even during that period of approximately 60 days there shall be sufficient flow of water as it is the monsoon period and therefore, there would be no obstruction at all for the State of Orissa drawing and distributing drinking water to all its neighbouring villages and also irrigating the cultivable land situated nearby in terms of its entire requirement. While giving the aforesaid statistics of supplying of drinking water to 18 villages and irrigating 30,000 acres of land, the State of Orissa has not provided any calculation or the details of the water requirement for its inhabitants or the cultivable land in its territory. The State of Andhra Pradesh, during the course of arguments urged on these aspects and stated that without such statistics such tall claims should not be entertained.

49. In the pleadings filed before us by the State of Andhra Pradesh they have sought to give some statistics and have worked out the water requirement for irrigable area of 30,000 acres lying in the State of Orissa downstream of Side Weir at Katragadda. Similarly it has also worked out the water requirement for the inhabitants of the 18 villages by adopting the national norms. For arriving at the final figure of 3.85 TMC for growing paddy in an area of 30,000 acres the norms adopted are the norms adopted by the National Commission for Integrated Water Resource Development. While working out the drinking water requirement for the domestic and livestock in 18 villages of Orissa the population details of 12 villages as available from the census of 2001 have been taken and have been projected for the year 2050. Relying on the same it is calculated that the domestic water requirement of all the 18 villages would come to about 0.116 TMC and therefore, the total water requirement for irrigation as well as domestic requirement has been worked out to about 4 TMC of water. We agree with the aforesaid calculation and hold that quantum of about 4 TMC would be sufficient to meet the present and future domestic and irrigation requirement of the State of Orissa at the downstream of the Side Channel Weir at Katragadda. From the data made available by the Central Government to both the State Governments it is clearly established that there would be still ample water in the river to meet the present and future requirements of both the States.

50. The proposed construction of the Side Channel Weir consists of stilling basin, silt excluder and escape channel, which would definitely ensure lesser silt in the flood flow

canal. The hydraulic behaviour of side channel weir is very complex and difficult to predict.

51. We may also record the statement of the counsel of the State of Andhra Pradesh that as and when permission is granted for construction of Neradi barrage and after such construction is completed, the proposed Side Weir even if constructed would get submerged under water. Besides, as per the agreements of both the States which are also being acted upon, the water of Vansadhara has to be utilised by the two co-riparian States namely – Andhra Pradesh and Orissa on 50:50 ratio and basis. 8 TMC of water proposed to be diverted through the Side Weir forms and constitutes a part of 50% share of Andhra Pradesh and therefore, there could be no objection from the State of Orissa on that score also.

52. We, therefore, are of the considered opinion that the State of Andhra Pradesh has been able to establish that balance of convenience is on their side and also that they would suffer irreparable loss and injury, if the Side Weir is not allowed to be constructed, for the State would be deprived to utilise that quantity of water for irrigation and other ancillary purpose. The burden which is on the shoulder of State of Orissa to prove a strong prima facie case in its favour could not be discharged. Rather the facts and documents on record tilt the scale in favour of the State of Andhra Pradesh. In State of Washington vs. State of Oregon, reported in 297 US 517, the US Supreme Court has held that the burden of proof falls heavily on complainant and more heavily, than in a suit for an injunction where States are not involved.

53. Considering the entire facts and circumstances of the case, therefore, we allow the Government of Andhra Pradesh to construct the Side Channel Weir along with the ancillary works as proposed, but with certain conditions which are enumerated hereinafter:

- (i) A Supervisory Flow Management and Regulation Committee consisting of three members – one from the Central Water Commission; one from the State of Andhra Pradesh; and one from the State of Orissa with the member/representative from the Central Water Commission acting as the Chairman of the Committee, shall be constituted to supervise the construction as also functioning of the Side Weir and also for implementation of the order of the Tribunal;
- (ii) The Project proposal must get clearance from the Central Water Commission, Ministry of Water Resources, Ministry of Environment and Forest, Ministry of Tribal Welfare and other statutory clearances as would be required;
- (iii) The Supervisory Committee shall supervise the operation of the gates of the Side Channel Weir including the closure of the same;
- (iv) The Committee shall select the place for its office which shall be provided by the State of Andhra Pradesh. The expenses for the maintenance of office and all expenses for conducting the monitoring activity would be borne by the State of Andhra Pradesh;
- (v) The Committee shall maintain the record of the flow upstream of the Side Channel Weir and that passing through the side channel Weir. The Committee shall permit the opening of the gate only when the flow in the Vansadhara river upstream of Side Channel Weir exceeds 4000 Cusecs and the flow downstream of the Side Channel Weir is equal to or more than 4000 Cusecs;

- (vi) The Committee shall ensure that total spill from the Side Channel Weir during the months of June to November in any year would not in any case exceed 8 TMC, constituting a part of 50% share of water of State of Andhra Pradesh;
- (vii) The Committee would also ensure that during the period from the month of June to November the gates would be closed as soon as the spill over from the Side Channel Weir equals to 8 TMC and it shall so remain closed till the next monsoon year;
- (viii) The gates of the Side Channel Weir would remain closed during 1st of December to 31st of May so that the entire water flowing through the Vansadhara river could flow down the river for use by both the States;
- (ix) That the Committee should also ensure that if there be any silting or sedimentation near the gate of the Side Weir same should be got cleared through the staff and the agency of the State of Andhra Pradesh every year after the monsoon.
- (x) The Committee shall also make a periodical survey, as it deems necessary, on the alleged issue of aggradation and degradation and take appropriate steps thereto and to ensure that the bed level of the Side Weir at all times shall be as per its original design.

54. These conditions shall have to be scrupulously followed and maintained. It is also made clear that this order granting permission to construct the Side Weir with its ancillary work and the conditions laid herein are all temporary in nature and could be varied by the Tribunal as and when there is appropriate cause and reason for it.

55. With these observations and directions I.A. No.1 /2010 stands disposed of.

DECEMBER 17, 2013.

(DR. M.K.SHARMA, J.)
CHAIRMAN
(B.N.CHATURVEDI, J.)
MEMBER
(GHULAM MOHAMMED, J.)
MEMBER

FINAL ORDER AND DECISION OF THE VANSADHARA WATER DISPUTES TRIBUNAL

At the end, the Tribunal records its final order¹¹ and decision in the following manner:-

Clause I

The complaint filed by the State of Andhra Pradesh is held to be maintainable. This order shall come into operation on the date of publication of the Decision of this Tribunal in the Official Gazette under section 6 of the Inter-State River Water Disputes Act, 1956.

Clause II

The Tribunal hereby declares that the yield of the river Vansadhara at Gotta Barrage is 115 TMC and this shall be shared by both the States on 50:50 basis. This was agreed to by the State of Andhra Pradesh and the State of Odisha during the meeting held on 30th September, 1962.

Clause III

The Tribunal hereby permits the State of Andhra Pradesh to construct the Side Weir along with ancillary structures as proposed. The State of Andhra Pradesh is permitted to withdraw water only upto 8 TMC from 1st of June to 30th of November every year through the Side Weir. The gates of the Head Regulator of Flood Flow canal of the Side Weir shall be closed on 1st of December or earlier, as the case may be, i.e., as soon as the total drawal of water equals to 8 TMC and the gates shall remain closed till 31st May of next year.

Clause IV

The Tribunal hereby permits the State of Andhra Pradesh to construct the Neradi Barrage across the river Vansadhara with ancillary structures. The Barrage will have a Right Head Sluice of design capacity of 8000 cusecs for meeting the requirements of State of Andhra Pradesh. The Barrage will also have a Left Head Sluice for meeting the requirements of the State of Odisha below Neradi Barrage. The capacity of this Left Head Sluice will be intimated by the State of Odisha to State of the Andhra Pradesh within six months of the publication of this order in the official Gazette. The cost of Left Head Sluice shall be borne by the State of Odisha. If and when in future, irrigation is decided in Odisha State, the cost of the proposed Neradi Barrage shall be borne between the two States on ayacut basis. This is as per the agreed resolution dated 4th September, 1962 between the two States.

Clause V

The Tribunal hereby permits the State of Andhra Pradesh to withdraw the water of Vansadhara River from Neradi Barrage during the first crop period i.e. from 1st of June to 30th of November every year. All flows thereafter shall be let down in the river for use by both the States as agreed upon.

Clause VI

Side Weir at Katragada shall be totally plugged and made completely non-functional immediately after the Neradi Barrage is commissioned.

¹¹ The Tribunal submitted its report and decision on 13.09.2017. However, within a period of three months party States and Central Government have sought clarification from tribunal under sec 5(3) of ISWRD Act 1956. Further, the order has not published in the Official Gazette hence, it is not effective.

Clause VII

The proposed Neradi Barrage project as well as the proposed Side Weir project must get necessary clearances from Central Water Commission; Ministry of Water Resources, River Development & Ganga Rejuvenation; Ministry of Environment, Forest and Climate Change; Ministry of Tribal Affairs and other statutory bodies, as required.

Clause VIII

The State of Odisha shall acquire 106 acres of land as per relevant provisions of the concerned Act in its territory, required for the Neradi Barrage Project and hand it over to the State of Andhra Pradesh within a period of one year from the date of publication of this order in the official Gazette.

Clause IX

Andhra Pradesh shall pay to Odisha all costs including compensation, charges and expenses incurred by Odisha for or in respect of the compulsory acquisition of lands, as provided in the Detailed Project Report of Neradi Barrage, which are required to be acquired for Neradi Barrage.

Clause X

Setting up of Supervisory Committee

We make the following orders with regard to setting up of Inter-State Regulatory Body (Supervisory Committee) for implementing the decision of the Tribunal. The composition, functions and powers of the Supervisory Committee are as follows:

(1) A Supervisory Committee consisting of four members – two from the Central Water Commission; one from the State of Andhra Pradesh; and one from the State of Odisha shall be constituted to supervise the functioning of the Side Weir complex at Katragada and Neradi Barrage when constructed and also for implementation of the order of the Tribunal.

(2) The composition of the Committee shall be:

- | | |
|--|--------------------|
| (i) Chief Engineer, CWC | - Chairman |
| (ii) Representative of State of Andhra Pradesh | - Member |
| (iii) Representative of State of Odisha | - Member |
| (iv) Superintending Engineer/Director, CWC | – Member Secretary |

(3) The Committee shall have following functions and powers:

- (i) To supervise the operation of the gates, of the Head Regulator of Flood Flow Canal of Side Weir complex, including the closure of the same.
- (ii) To ensure that total drawal of water through Head Regulator of Flood Flow Canal of Side Weir complex, during the months of June to November in any year shall not in any case exceed 8 TMC, constituting a part of 50% share of water of the State of Andhra Pradesh.
- (iii) To ensure that the gates of the Head Regulator of the Flood Flow Canal of Side Weir complex shall open on 1st June and close on 1st December or earlier as soon as the total drawal of water equals to 8 TMC every year and the gates shall so remain closed till 31st May of next year.

(iv) To maintain the record of the flow upstream of the Side Weir and also of the flow passing through the Head Regulator of Flood Flow Canal. When the Flood Flow Canal is operational, it may be ensured that the flow downstream of the Side Weir is equal to or more than 4000 cusecs.

(v) To make periodical survey, as it deems necessary, for assessing aggradation and degradation in the river near the Side Weir and take appropriate steps thereto so as to ensure that the bed level of the Side Weir at all times shall be as per its original design.

(vi) To keep a close watch on the river behaviour and to ensure that if there be any silting or Sedimentation in front of the Side Weir at Katragada or upstream near the Neradi Barrage the same shall be got cleared, as and when required, through the State Government of Andhra Pradesh.

(vii) To ensure that the Side Weir is totally plugged and made completely non-functional immediately after commissioning of the Neradi Barrage.

(viii) To supervise the regulation of flows from Neradi Barrage so as to ensure:

(a) that the water from Vansadhara river at Neradi Barrage is withdrawn by the State of Andhra Pradesh and the State of Odisha during the period from 1st of June to 30th of November every year.

(b) that during the period from 1st December to 31st May every year, entire water reaching Neradi Barrage, flows down the river for use by both the States.

(ix) To visit the flood affected areas of Odisha, if any, impacted due to the backwater of Neradi Barrage beyond its pool level and make assessment for giving recommendations regarding compensation to be paid to the flood affected families/persons. For this purpose, the Committee may co-opt any member(s) as it deems fit.

(4) The Committee shall select the place for its office which shall be provided by the State of Andhra Pradesh.

(5) The expenses for the maintenance of office and all expenses for conducting the monitoring activity shall be borne by the State of Andhra Pradesh.

The Central Government and the party States shall nominate members of the Supervisory Committee at the earliest, in any case, not later than 3 months from the date of publication of this decision in the official Gazette. No decision of the Supervisory Committee shall be in valid merely because of non-appointment of any member by any State or by reason of absence of any member.

Clause XI

The State of Andhra Pradesh, on the recommendation of the Supervisory Committee, which shall be final and binding, shall make the payment to the State of Odisha on account of the compensation for the damages, if any, caused by backwater of Neradi Barrage beyond its pool level.

Clause XII

The decision or directions as contained in this order shall be read in reference and context with preceding discussions and the findings recorded on different issues along with the reasoning thereof. It is further provided that any direction given or provision made under

any issue or otherwise not finding mention in this order shall also be binding and complied with by both party States as a part of this decision and this order.

Clause XIII

Nothing contained herein shall prevent the alteration, amendment or modification of all or any of the foregoing clauses by agreement between the parties or by legislation of the parliament.

Clause XIV

Order as to costs of proceedings

The States of Andhra Pradesh and Odisha shall bear their own costs. The expenses and costs of the Tribunal shall be borne and paid by the two States in equal shares.

Ghulam Mohammed J.
Member

B.N.Chaturvedi
Member

Dr. Mukundakam Sharma J.
Chairman

New Delhi
13th September, 2017