KRISHNA WATER DISPUTES TRIBUNAL

THE FURTHER REPORT
OF
THE KRISHNA WATER DISPUTES TRIBUNAL

IN THE MATTER OF WATER DISPUTES REGARDING THE INTER- STATE RIVER KRISHNA AND THE RIVER VALLEY THEREOF

BETWEEN

1. The State of Maharashtra
2. The State of Karnataka
3. The State of Andhra Pradesh

VOLUME I
(Pages 1 to 139)

NEW DELHI
2013

COMPOSITION OF

THE KRISHNA WATER DISPUTES TRIBUNAL

(During the hearing of the References under Section 5(3) of the Inter-State Water Disputes Act, 1956).

CHAIRMAN

Shri Justice Brijesh Kumar,
(Former Judge, Supreme Court of India)

MEMBERS

Late Shri Justice S.P. Srivastava,
(Former Judge, Allahabad High Court, Uttar Pradesh)
(Upto 09.08.2012)

Shri Justice D. K. Seth,
(Former Judge, Calcutta High Court, Kolkata)

Shri Justice B.P. Das,
(Former Judge, Odisha High Court, Cuttack)
(From 21.01.2013 to date)

KRISHNA WATER DISPUTES TRIBUNAL

सत्यमेव जयते

FURTHER REPORT

Assessors

1. Shri R.S. Prasad
   Former Chairman, CWC
   19.06.2006 to 01.02.2011

2. Shri Suresh Chandra
   Former Chairman, CWC
   19.06.2006 to 26.04.2011

3. Shri Indraraj
   Former Member, CWC
   10.02.2012 to date.

Consultant

1. Shri Suresh Chandra
   27.04.2011 to 28.09.2112
   07.08.2013 to 28.09.2013

Assisted by –

1. Mr. V. Raghunathan (Ex. Engineer)
   20.03.2008 to 20.3.2011

2. Mr. M.R. Chakraborty (Ex. Enginer)
   16.07.2011 to date

ADVOCATES :

1. For the State of **Maharashtra**:-

   Shri T.R. Andhyarujina, Sr. Advocate

   Shri Shoumik Ghosal, Advocate

   Shri D.M. Nargolkar, Advocate on Record.

2. For the State of **Karnataka**:-

   Shri F.S. Nariman, Sr. Advocate

   Shri Anil B. Divan, Sr. Advocate

   Shri S.S. Javali, Sr. Advocate

   Shri Ravi Varma Kumar, Advocate General

   Shri Mohan V. Katarki, Advocate

   Shri Subhash C. Sharma, Advocate,

   Shri Gurudatta Ankolekar, Advocate

   Shri Ranvir Singh, Advocate

   Shri Brijesh Kalappa, Advocate on Record.

Contd……

3. For the State of **Andhra Pradesh**:-

Shri Dipankar P. Gupta, Sr. Advocate

Shri D. Sudershan Reddy, Sr. Advocate

Shri Rakesh Dwivedi, Sr. Advocate

Shri M.R.S. Srinivas, Advocate

Shri G. Umapathy, Advocate

Late Shri T.N. Rao, Advocate on Record (Upto 4.10.2012)

Mrs. S. Usha Reddy, Advocate on Record.

4. For **Central Government**:-

Shri Wasim A. Qadri, Advocate on Record

Shri Zaid Ali, Advocate

Shri Yatin Bhushan, Advocate

Shri Tamim Qadri, Advocate

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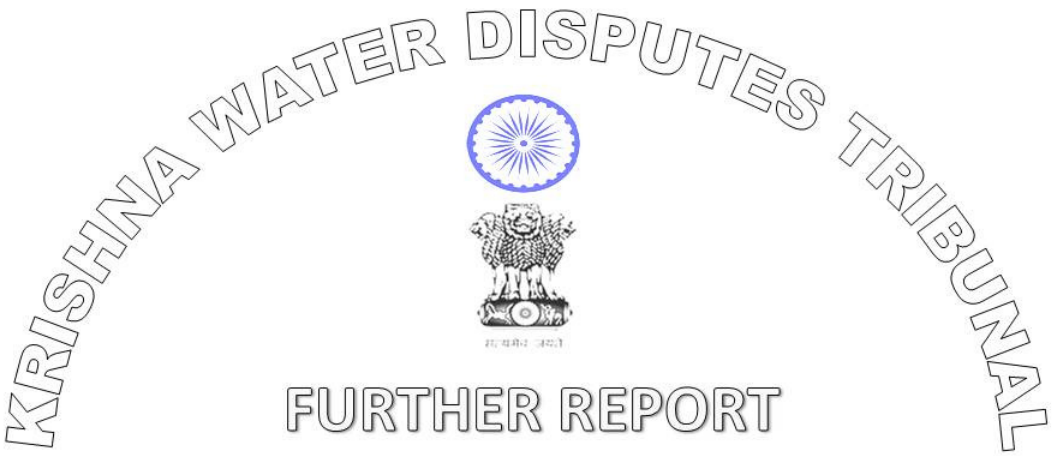
KRISHNA WATER DISPUTES TRIBUNAL
FURTHER REPORT

CHAPTER – I

Reference No. 1 of 2011; Reference No. 2 of 2011; Reference No. 3 of 2011 & Reference No. 4 of 2011

Introductory :

The Central Government had referred the water dispute amongst the three States of Maharashtra, Karnataka and Andhra Pradesh, relating to the waters of river Krishna, to this Tribunal (hereinafter referred to as the Tribunal) for adjudication under sub-section 1 of Section 5 of the Inter State River Water Disputes Act, 1956 (hereinafter referred to as the Act). The Tribunal after investigation and the hearing of the matter, rendered its Decision/Report on 30th December, 2010 and forwarded the same to the Central Government on the same date namely, 30th December, 2010 as per sub-section 2 of Section 5 of the Act.

It is provided under sub-section 3 of Section 5 of the Act that the Central Government or any State Government, in case it is of the opinion that anything contained in the decision requires explanation or that guidance is needed upon any point not originally referred to the Tribunal, may within three months

from the date of the Decision, again refer the matter to the Tribunal for further consideration.

The States of Andhra Pradesh and Karnataka filed their Reference Petitions under Section 5(3) of the Act on 28.3.2011. The State of Maharashtra and the Central Government filed their Reference Petitions on 29.3.2011. The Reference Petitions have been registered as Reference No.1 of 2011 to Reference No. 4 of 2011, respectively. All the References have been filed within the prescribed period of three months from the date of the decision.

So far as the State of Andhra Pradesh is concerned, in para-9 page 11 of its Reference Petition, it has listed the issues, fourteen in number, on which clarification and guidance/explanation has been sought. It covers almost the whole subject matter which had been investigated and considered by the Tribunal in proceedings under sub-section 2 of Section 5 of the Act and the learned Counsel argued many of these issues e.g. issue pertaining to the yield series of 47 years, the distribution and utilisation of water at different dependability, i.e. at 65% dependability and on average yield, the height of Almatti Dam and its operation at different

dependability, duty of minor irrigation of Maharashtra and Karnataka, inequities in distribution of water for water scarcity areas of Andhra Pradesh, allocation to Karnataka in Tungabhadra sub-basin and decrease in storage capacity in reservoir in Andhra Pradesh due to siltation etc. Not all issues, but most of the points listed in para 9 of Reference Petition have been argued.

The State of Karnataka sought explanation/guidance on the points like distribution of remaining water in a given proportion of percentage as stated in the Reference Petition and also as to what would be the amount of return flows in the future utilizations and that the State of Karnataka has a right to save water out of its allocated share and plan projects against the same. It also raised objections about the allocation of water to the State of Maharashtra for diverting it outside the basin for generation of power and also for Telguganga Project in Andhra Pradesh outside the basin and so on.

The State of Maharashtra seeks clarification for enhancement of its allocation in the surplus flows, allocation on the percentage basis, reduction in the allocation to Andhra Pradesh for carryover storage, to distribute the return flows on

account of increased utilizations by the three States. Further that it may be clarified that the allocation is en bloc. It also pleaded for relaxation of utilization limit in K-7 sub-basin and raised points on some other similar matters.

So far the Central Government is concerned; one of the main grounds raised in the reference is about distribution of water over and above 75% dependability i.e. at 65% dependability and on average availability. Further that the Tribunal may give its direction about share of each State under different conditions of water availability, and further that time stipulated for nomination of the Members of the Implementation Board (hereinafter to be referred as KWD-IB or the Implementation Board) may be increased. It is also averred that KWD-IB may have to address to the situations arising out of availability of water at different dependability and it may also have to consider the forecast model about availability of water in different years. It is also indicated that annual gross flows, indicated at two places in the Report at pages 302-04 and pages 397 to 399 for the period 1961-62 to 2007-08, do not tally. These are some of the points mainly raised in the reference filed by the Central Government.

The preceding paragraphs give an overview of the case of the different States in these proceedings. The parties exchanged replies and the rejoinders to the reference petition of each other, thereafter, arguments of the parties were heard as advanced by their Ld. Senior Counsels. On behalf of the State of Karnataka, Mr. F.S. Nariman opened arguments followed by Mr. Anil B. Divan, Mr. S.S. Javali and also by Mr.Katarki, covering different aspects of the matter. On behalf of the State of Maharashtra, Mr. T.R. Andhyarujina, Ld. Senior Advocate, made his submissions, whereas Mr. Dipankar Gupta, Senior Counsel made submissions followed by Mr. D. Sudersana Reddy, Senior Counsel on behalf of Andhra Pradesh. Mr. Wasim Qadri made submissions on behalf of the Central Government. Replies to the arguments of each other have also been heard.

During the course of the hearing late Hon'ble Mr. Justice S.P. Shrivastava, a Member of the Tribunal, got unwell some time in April/May, 2012 and unfortunately he passed away on August 9, 2012. The vacancy so caused was filled up by appointment of Hon'ble Mr. Justice B.P. Das as Member of

this Tribunal, and he joined on 21st January, 2013. The proceedings could be resumed thereafter.

Background of the Decision dated December 30, 2010.

Before we take up and deal with the points argued by the parties before us, we feel that it would be beneficial to precisely recapitulate the manner in which the amount of distributable water, over and above 2130 TMC, has been arrived at different dependability and distributed to the parties by the decision dated December 30, 2010 given by this Tribunal. It will facilitate to deal with the points argued by the parties.

The first Krishna Water Disputes Tribunal (hereinafter to be referred to as KWDT-I) had held, as agreed amongst the parties, the yield of river Krishna as 2060 TMC at 75% dependability based on a yearly water series of 78 years (1894-95 to 1971-72). The return flows as assessed were also progressively distributed, in steps, amongst the three States. It amounted to 70 TMC in all. Thus, 2130 TMC stood distributed including the return flows. The State of Maharashtra has been allocated 585 TMC, State of Karnataka

734 TMC and the State of Andhra Pradesh has been allocated 811 TMC.

This Tribunal has maintained the above mentioned yield at 75% dependability, with return flows and also the share of the each State allocated by KWDT-I.

The Clause-IV of the Order of this Tribunal provides as follows :-

"Clause-IV – That it is decided that the allocations already made by KWDT-I 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 totaling to 2130 TMC be maintained and shall not be disturbed."

This Tribunal, therefore, proceeded to assess the present annual yield of the river, using the latest data available and to distribute surplus water, i.e. the quantity of water over and above 2130 TMC which the KWDT-I had permitted temporarily to be utilized by Andhra Pradesh with the specific condition that Andhra Pradesh would acquire no right in such

surplus water. After considering the overall facts and circumstances, as have been discussed in detail in the decision, this Tribunal distributed a major part of the surplus flows, in two steps, firstly, the yield at 65% dependability which is over and above 2130 TMC and in the next step thereafter, the yield at average availability. In the water series of 47 years 1961-62 to 2007-08, the yield at 65% dependability was found to be 2293 TMC and the average yield as 2578 TMC. Since 2130 TMC already stood distributed by KWDT-I, the difference between 2293 TMC and 2130 TMC, which came to be 163 TMC, was found to be distributable amount of water at 65% dependability.

In the next step, it was found that the difference between the average yield namely, 2578 TMC and 2293 TMC at 65% dependability is 285 TMC, which was held to be distributable quantity of water, at average yield. Thus, over and above 2130 TMC, a total of only 448 TMC (163 + 285 = 448 TMC), which was not distributed earlier by KWDT-I under the scheme which eventually became effective, has been distributed by the Tribunal, in two steps.

In a limited sense more theoretically rather, one may like to say that the distribution of water is at 65% dependability and/or on average yield but the fact of the matter in reality is that the distribution and allocation of 2130 TMC at 75% dependability already made, is preserved and remains undisturbed and untouched under the decision of the Tribunal. Obviously therefore, question of utilization of more than 2130 TMC or more than one's allocation at 75% dependability, would arise only in case more water is available in any water year, after satisfying the allocated share of all the States at 75% dependability, and not otherwise, else it will disturb the allocation made by KWDT-I at 75% dependability.

The distribution is in steps viz. at 75% dependability 2130 TMC; next 163 TMC at 65% dependability and then it is only 285 TMC at average yield, distinctly separate from each other. This position clearly emerges from a reading of the decision on the whole, stray sentences or observation apart, made here and there.

It is obvious that 163 TMC over and above 2130 TMC, which constitutes distributable water at 65% dependability,

would be available in 65 years in the scale of 100 which would come to nearly 2 out of 3 years. And 285 TMC, which constitutes distributable water on yearly average yield, would be available over and above 2293 TMC in 27 years out of 47 years which comes to about 58% of years. So far as yield at 75% dependability is concerned i.e. 2130 TMC, and in the respective shares as allocated by KWDT-I will continue to remain available undisturbed in three out of four years as before as per Clause IV of the order, despite distribution of 163 TMC and 285 TMC in steps. The norm of availability of water at 75% dependability for agricultural operations is preserved and not disturbed.

The distribution of 163 TMC and thereafter 285 TMC over and above 2130 TMC and 2293 TMC respectively, would only enable utilization of more and extra water rather than allow it to go waste down to sea or a part of it, as could be utilized by Andhra Pradesh alone under the permissive and time gap arrangement made by KWDT-I. The availability of 585 TMC to Maharashtra, 734 TMC to Karnataka and 811 TMC to Andhra Pradesh as allocated by KWDT-I at 75%

availability continues to be available as before for utilization accordingly since maintained and preserved by this Tribunal.

By its decision dated December 30, 2010, this Tribunal has provided nothing else but to put 448 TMC more, though at lower dependability for utilization in two steps as and when available for meeting out acute water scarcity conditions and the like, as could be possible.

Out of 163 TMC, the distribution of water at 65% dependability, 46 TMC has been allocated to Maharashtra, 72 TMC to Karnataka and 45 TMC to Andhra Pradesh. It is liable to be utilized, if available over and above 2130 TMC. Out of 285 TMC over and above 2293 TMC, Maharashtra is allocated 35 TMC, State of Karnataka 105 TMC and the State of Andhra Pradesh 145 TMC. This amount of water would be utilized, if available, over and above 2293 TMC.

The obvious implication of Clause IV of the Order quoted earlier, is that the distribution now made, over and above availability at 75% , i.e., 2130 TMC, is not to be drawn/utilised in any manner which may affect the availability of water as per allocations made by KWDT-I at 75%

dependability as that has to be maintained and is not to be disturbed. That is to say its availability in 3 out of 4 years must continue as it is. It will also ensure that utilizations already undertaken under allocations made by KWDT-I at 75% dependability shall not get disturbed by reason of allocation of more water now at lower dependability.

Hence drawal of water at lower dependability, as now allocated may not be mixed up with the utilisation of water at 75% dependability because then it may lower the dependability factor of distribution already made at 75% dependability by KWDT-I. That is to say availability of water in 3 out of 4 years will be distributed against the norm of 75% dependability. This is the clear implication of Clause IV of the order of the Tribunal which it was not thought necessary to be further elaborated.

But the parties particularly the State of Andhra Pradesh and the Central Government besides others as well, have shown anxiety about utilisation of water at different dependability. Besides Clause IV, the Clause IX of the Order/decision also throws light on the point where it is provided that since the allocations have been made at different dependability,

therefore, utilization will also be made accordingly and further Clause X of the decision provides for restrictions which have been indicated as to the maximum amount of water which could be drawn/utilised at 65% availability and on average availability. In a water year when the availability is more than 2130 TMC in that year a State would be free to draw the allocation made to it at that dependability i.e. at 65% and not beyond that whereafter it will allow the water to flow down. Similarly, when more than 2293 TMC is available, they would not draw more than the allocation made at average yield and allow it to flow down thereafter. Thus, a clear clue to method of drawal of water at different dependability is provided at different places as indicated earlier. As the allocation, the utilization will also be in steps, as and when the water is available. Therefore, in a year where availability is not more than 2130 TMC, there would be no occasion to draw one's share allocated at 65% dependability by any State. Thus, it is not distribution at 65% or at average yield in general. The distribution is at graded dependability in steps in contradistinction to distribution at 65% dependability or at average in general, so a different method of drawal also.

The distribution of water as provided in the decision of the Tribunal dated December 30, 2010 saves some wastage of water and increases utilization of the same though at a lower dependability to cater the need of drought prone and water scarcity areas and other acute needs while still preserving the norm of availability of water at 75% dependability for agricultural operations. The availability of water allocated at 65% dependability and at average, would obviously be lesser in period of time as compared to at 75% dependability. Nonetheless, it may still go a long way in serving the people of drought prone areas and minimizing their miseries to a considerable extent.

It is also to be found provided in Clause-XXIV of the Final Report of KWDT-1 that a Competent Authority or a Tribunal may review the order passed by it, but review or revision shall not, as far as possible, disturb any utilization that may have been undertaken by any State within the limits of the allocations made to it. This clause also has its persuasive value. So in case more water is available for distribution at a lower dependability, its use may not be such that it may disturb the utilization already undertaken at 75% dependability in

pursuance of the Decision of KWDT-I. That apart, it will also keep maintained the norm of availability of water at 75% dependability for agricultural purposes.

So far extra water now distributed over and above available at 75% dependability is concerned, will be utilized at lesser availability in the manner best possible with newly developed irrigation techniques and crops for such areas. At worst, if nothing else, it will at least give one full fledged Rabi Crop intact in the otherwise drought prone water scarcity areas.

However, despite the sufficient indications available in the Order of this Tribunal that water is to be utilized dependability-wise, the parties have still raised doubts as to how the water at different dependability shall be drawn. Besides the Central Government and the State of Andhra Pradesh, the State of Maharashtra and Karnataka also expressed their concern about the manner of drawal of water at different dependability. During the course of the arguments by the parties at different stages in these proceedings, it was given out that the parties would draw first allocations as made by KWDT-I at 75% dependability and thereafter the allocations at the lower dependability in steps. Since it appears that some

more elaboration was required, it has been so elaborated, while dealing with the relevant questions raised in Reference Petitions, by providing manner of drawal of water at different dependability.

The manner of withdrawal has been provided in two parts. The first part deals with manner of drawal at different dependability, according to which, at the first instance, the three riparian States shall continue to draw their share at 75% dependability as allocated by KWDT-I; and after Andhra Pradesh has achieved its allocation of 811 TMC, in the second instance, the parties will draw their allocation at 65% dependability. In the third instance, after the parties have achieved their allocation at 75% dependability plus at 65% dependability including the State of Andhra Pradesh, they will commence drawing their allocated share at average yield. There is an alternative provision also in one of the clauses. It would not be necessary to mention or discuss here, nor the part-II of the provision. The allocation at different dependability implies that the availability of water may also be at different points of time, so its drawal also in steps as the water becomes available.

Therefore, the availability at 75% dependability has been ensured first as that part is continued to be drawn as before according to Clause-V of the Order of KWDT-1. This aspect of the matter has, however, been discussed at length while dealing with the relevant questions raised in these proceedings.

The manner of drawal at different dependability, as indicated above will make it easier to properly follow the discussion made hereinafter on different questions raised in the References.

Arguments on some general aspects:

We now proceed to deal with some general legal points raised by the parties.

Mr. Nariman, while opening the arguments, at first raised a legal issue, as to when the decision of the Tribunal becomes effective i.e. on the decision being delivered by the Tribunal or after its publication in the Official Gazette. This question is not relatable to any of the grounds or points raised by the State of Karnataka or anyone else. Yet Mr. Nariman, as a legal proposition, stressed on the point that the decision of the Tribunal would become effective on its being delivered and it

would not be necessary to wait till its publication in the Official Gazette. His anxiety seemed to be to impress that the decision of the Tribunal is already in operation. He even went on to ask the Counsel for the Central Government to inform the Tribunal as to when Government was going to publish the decision in the Official Gazette. It is, however, not understandable that once the position has been taken that the decision became effective on its being delivered without its publication, we see no occasion for them to have any anxiety about the publication of the decision for that purpose. We are dealing with this aspect since it has been raised as a legal issue with all vehemence.

In this connection, he referred to sub-section (1) of Section 6 of the Act which provides for publication of the decision of the Tribunal in the Official Gazette, whereafter it provides 'and 'the decision shall be final and binding on the parties and that the decision shall be given effect to by them. The provisions may be beneficially quoted below :-

> *"6. (1) The Central Government shall publish the decision of the Tribunal in the Official Gazette and the decision shall be final*

and binding on the parties to the dispute and shall be given effect to by them.

(2) The decision of the Tribunal, after its publication in the Official Gazette by the Central Government under sub-section (1), shall have the same force as an order or decree of the Supreme Court."

It is submitted that the word 'and' used in sub-section (1) of Section 6 is not conjunctive use but it is disjunctive use of the word. Therefore, first part of the provision which relates to publication of the decision has nothing to do with the later part which provides that the decision shall be final and binding on the parties who shall give effect to the same. It is further submitted that the finality and the binding nature of the decision is not the consequence of the decision being published in the Official Gazette. The consequence of publication, it is submitted, is provided in sub-section (2) of Section 6 which provides that after its publication in the Official Gazette, the decision of the Tribunal shall have the same force as an order or decree of the Supreme Court. With a view to further strengthen his arguments, Mr. Nariman refers to sub-section (3)

of Section 5 of the Act which provides that on forwarding the Further Report to the Central Government giving explanation or guidance, as may be deemed fit, the decision of the Tribunal shall be deemed to be modified accordingly. It is submitted that there is no requirement of publication of the Further Report or for the modified decision. Therefore, publication in the Official Gazette cannot have any bearing on the question of the decision of the Tribunal becoming effective on its being rendered by the Tribunal.

In the first blush, no doubt, the argument seemed to be quite attractive, but a bare reading of sub-section (1) of Section 6 a bit closely, makes it clear that the word 'and' is not used disjunctively. It is in continuation that the word 'and' has been used and the provision for decision being final and binding, follows after it is provided for publication of the decision of the Tribunal in the earlier part of sub-section (1) itself. A plain reading of the provisions quoted above would show that the decision becomes binding and effective on publication of the decision by the Central Government.

This correct position seems to have been realized by the Ld. Counsel and on the subsequent date of hearing i.e.

17.8.2011, Mr. Nariman submitted that though sub-section (2) of Section 6 created some doubt about the use of the word 'and' in sub-section (1) but a reading of the provisions as contained in Sub-sections (1) & (2) of Section 6 of the Act together, makes it clear that the use of the word 'and' has been made conjunctively. He further explained that doubt had arisen because sub-section (2) was introduced later on by means of an amendment in the Act in the year 2002 while sub-section (1) existed well from before. Therefore, there may have been some lack of harmony and misplacement of provision in sub-sections (1) and (2) but nothing more and the only conclusion is that the decision would become effective on publication of the decision and not at any earlier stage. It was pointed out to the learned counsel that the decision cannot be in piecemeal i.e. to say, it may become effective and binding first under sub-section (1) of Section 6 but it may attain force of an order of the Supreme Court later only after its publication under sub-section (2) of Section 6. Both provisions have to be read together. Anyway sub-section (1) provides for publication of the decision.

Mr. Andhyarujina, Ld. Counsel for the State of Maharashtra also pointed out that since sub-section (2) was introduced later, there may not have been proper placement of the provisions the two sub-sections but the whole reading of the scheme of the provisions leads to the conclusion that the word *'and'* used in sub-section (1) of Section 6 is conjunctive use and not disjunctive. He further submitted that if instead of the word '*and*' there would have been a full stop after the words '*Official Gazette*' and the next sentence would have started afresh "that the decision shall be final" without using the word '*and*' , in that event it could perhaps be said that the two were different or separate parts of sub-section (1) viz. publication and finality.

We find that the submission made by Mr. Nariman later on 17.8.2011 reflects the correct picture and the meaning of the provision and the stand taken up initially has been rightly given up.

Nonetheless, Mr. Nariman further went on to submit that the publication of the decision in the Official Gazette is not a discretionary matter for the Central Government. The word used in sub-section (1) is that the "Central Government shall

publish the decision of the Tribunal". It is submitted that it is mandatory. And on this proposition has relied upon two decisions reported in (1990) 3 SCC p. 440 paragraph 18 and (2009) 5 SCC p. 495/499.

Mr. Nariman, further submitted that giving effect to the judgment may be postponed which may become effective later on but it cannot be withheld and not published and in that connection refers to (1987) 1 SCC 362 at page 367 and that such a duty as cast upon the Central Government to publish the decision must be discharged within a reasonable time and for that proposition refers to AIR (1969) SC 1297 paragraphs 12, 13 & 14 of the report.

The above noted general submissions have been made by Mr. Nariman relating to the effective date of the decision of the Tribunal and the time within which it is supposed to be published by the Central Government, viz. within a reasonable time etc. Again it has not been made clear as to for what purpose and in connection of which point raised in the Reference petition of Karnataka that these questions were raised before us. It is more, as a matter of record that we have recorded the argument, made by Mr. Nariman, having legal

implications relating to effective data of decision etc. rather than on any question raised before us in the Reference Petitions.

All that can however be appreciated is that realizing subsequently, the hollowness of the first point raised which hardly merited any argument before this Tribunal, Mr. Nariman, in our view, stating the correct legal position as it emerges on the careful reading of the whole provision contained in Section 6 of the Act, dropped the argument rather than to go on beating an argument in an untenable direction. It did save, some time from further being consumed on the point.

Scope of proceedings u/s 5(3) of the Act.

Mr. Nariman then made a submission regarding the scope of these proceedings under sub-section (3) of Section 5 of the Act. Sub-section (2) of Section 5 provides that the Tribunal shall investigate the matter referred to it and forward a report and its decision to the Central Government. Sub-section (3) of Section 5 provides as follows :

> *"**(3)** If, upon consideration of the decision of the Tribunal, the Central Government or any*

State Government is of opinion that anything therein contained requires explanation or that guidance is needed upon any point not originally referred to the Tribunal, the Central Government or the State Government, as the case may be, within three months from the date of the decision, again refer the matter to the Tribunal for further consideration, and on such reference, the Tribunal may forward to the Central Government a further report within one year from the date of such reference giving such explanation or guidance as it deems fit and in such a case, the decision of the Tribunal shall be deemed to be modified accordingly."

It is to be noticed that a reference is made by the Central Government or by the States to the Tribunal for two purposes viz. on consideration of the decision, if it is opined that anything contained in the decision "requires explanation" or that "guidance is needed" upon any point not originally referred to the Tribunal. A bare reading of the provision and the phraseology used, is a definite pointer to the fact that the

scope for further consideration under sub-section (3) of Section 5 is limited for "explanation" and "guidance". It is on consideration of the decision that the Central Government or a party may request for an explanation meaning thereby that something in respect of which explanation is required emerges on consideration of the decision of the Tribunal. So far it provides for seeking guidance on any point is concerned, it has to be a point which was not originally referred to the Tribunal. Sometimes, loosely it is described as Review of the decision by the Tribunal. But undisputedly the fact is that there is no such provision for review of the decision. Power to Review is not inherent in a judicial Authority or Body unless specifically conferred by laws constituting such Body or Authority. As a matter of fact, jurisdiction of review is also very restricted jurisdiction e.g. according to the provision for review provided under the Code of Civil Procedure review can be sought on very limited grounds. So far, guidance is concerned, it should also be in relation to a point which was originally not referred to the Tribunal but it arose on account of the findings etc. recorded in the decision.

Mr. Nariman, with a view to demonstrate by a concrete example submitted that under the order of the Tribunal, Andhra Pradesh has been allowed to utilize the remaining water subject to the trapping or its storage. It is submitted that in view of the reply contained in paragraph 1.5 page-7 of the reply of Andhra Pradesh to the Reference Petition of Karnataka, Andhra Pradesh contends that it is entitled to trap or store whole quantity of water for its own use as remaining water. Whereas, according to Mr. Nariman, since it would be subject to trap or storage by the other two States, it requires to be explained. It is submitted that this is a situation in which an explanation would justifiably be sought. It is further submitted that so far guidance is concerned, it is the Central Government which may seek guidance on the points not originally referred e.g. the Central Government has sought guidance in para-1(b) of its reference as to what would be the position in case the water may fall short of the quantities at different dependability, e.g. 2130 TMC at 75% dependability. It is submitted that such a point arose out of the decision rendered by the Tribunal and since there was no occasion earlier at the time of reference made to the Tribunal to get any adjudication on such a point, now the Central Government may seek guidance about it. It is

further submitted that since the Central Government is also entitled to frame a scheme under Section 6(A) of the Act, for that purpose also, the Central Government may seek guidance for framing a proper scheme for the purpose of implementation of the decision of the Tribunal.

Referring to dictionary meaning of the word 'explain', it is submitted, it means to make plain or intelligible, to clear off obscurity or difficulty and to interpret etc. whereas meaning of the word 'guide' means to point out the way for, direct on a course, conduct, lead and to direct etc. It is submitted that the provision contained in sub-section (3) of Section 5 is not meant to interfere with its decision already made nor it is allowed to re-open or re-consideration of the matter which has already been considered. In this connection, he has referred to the Further Report of KWDT-I at pages 4 and 5. He also made a reference to Order passed by this Tribunal in IA No.27 of 2006 dated 27.4.2007, particularly to page 10 where this point has been considered.

Mr. Andhyarujina, learned Counsel for the State of Maharashtra, submitted that the scope of proceedings under section 5(3) of the Act should be liberally construed and for the

proposition he also refers to the discussion on the point held by KWDT-1 at pages 4 and 5 of the Further Report. It has, however, also been submitted that these proceedings cannot be treated as proceedings in appeal nor the matter is to be re-opened and argued afresh.

Mr. Deepankar Gupta, learned Counsel for the State of Andhra Pradesh submitted that no narrow interpretation of sub-section (3) of Section 5 is possible since it is not only for explanation or guidance but it also provides that the matter may be referred again for "further consideration" which implies that any matter referred for explanation or guidance may have to be further looked into and considered to examine the merit of the point raised in proceedings under sub-section (3) of Section 5. He has also referred to the Further Report of KWDT-I on the point relating to scope of sub-section (3) of Section 5 of the Act.

We feel that it may, however, be difficult to construe meaning of the expression "further consideration" so as to equate it with appeal, revision or review of a decision. It is well established that review of the decision is not permissible unless the Court is vested with the power to review its decision.

The legislature has not used any of the expressions indicated above in sub-section (3) of Section 5 of the Act. It has been preferred to use the expression explanation and guidance, as may be required, on consideration of the decision of the Tribunal. It is, therefore, clear that it was never envisaged in the scheme of the Act that a decision which is once rendered, may be subjected to re-hearing of the matter or re-appraisal of the evidence and material on record which has already been considered. There may be cases where it may be possible to take two views of the matter but one already taken by the Tribunal would not be upset or substituted only because another view was also possible. The legislature chose the expression used in sub-section (3) of Section 5 as it thought fit in its wisdom instead of expressions like appeal, revision or review which are well known expressions used in the statutes.

May be, it can be viewed that explanation and guidance may be required for securing and ensuring the implementation of the decision of the Tribunal removing the impracticability in the way of implementation of the decision. Any doubt or obscurity may be explained or guidance be provided to facilitate the implementation of the Decision of the Tribunal.

Otherwise, once the matter has been considered on appraisal of the evidence, there is no occasion to interfere with the same. The expression "further consideration" used in sub-section (3) of Section 5 is in the background of the provision contained in sub-section (2) which provides for investigation into the matter referred to it, by the Tribunal, whereafter to forward the report and the decision to the Central Government. The expression "further consideration" may, by no stretch of imagination, means that the matter is to be re-heard and material on the record is to be re-appraised. The expression "further consideration" is confined to and for the purpose of explanation required and the guidance needed. It can also be said, the remedy of reference under sub-section (3) of Section 5 of the Act is not for supplanting anything in the decision of the Tribunal but only for supplementing the same by providing explanation or guidance so that the implementation of the decision will be ensured in the right perspective.

It will, however, narrow down the scope of the provision by sticking to the literal meaning, that too in a very strict manner, rather than to look to the spirit behind it. May be, it would not be possible to say that explanation and guidance

must always be provided only to facilitate the implementation of the decision and for nothing else. There may still be some cases, though not generally, where some explanation or guidance may be required which may logically lead to consequential changes on the merit of the matter. If that be not so, it may amount to rendering the provisions contained under sub-section (3) of Section 5 redundant. The meaning of the words explanation and guidance may also imply and convey some broader sense of the expression.

We may now better have a look on the Order dated 27.4.2007 passed in IA No.27 of 2006 referred to by Mr. Nariman. It would be useful to quote paragraph 6.2 at page 10 of the Order which reads as under :-

> *"**6.2** From a reading of the provisions of the Act, particularly Section 5(2), 5(3) and 6(1), it does not appear to us that the legislature had intended to restrict the meaning within its strict sense. Having regard to the fact that no appeal being provided for, and that the jurisdiction of all other courts including that of the Supreme Court being ousted under the provisions of the Act, the expression 'explanation' is to be construed liberally, but*

not inconsistent with the context in which it has been so legislated. The jurisdiction conferred under Section 5(3) cannot be cut down by narrow interpretation. The word 'explanation' and 'clarification' may not be synonyms but at the same time those are not opposed to each other."

The dictionary meaning of the word "explanation" has been discussed in the following paragraph of the order. A reference to pages 4 & 5 of the Further Report of KWDT-I has been made in paragraph 6.4 of the order, learned Counsel for all the three party-States have placed reliance on the observations of the Further Report of KWDT-I which has also been extensively read out before us.

We find that KWDT-I has elaborately considered the question and at page 2 of the Further Report noted the contentions of the different parties regarding the scope of sub-section 3 of Section 5. This fact has also been taken note of that power like Sections 151, 152 or 114 or Order 47 Rule 1 of the Code of Civil Procedure have not been conferred on the Tribunal.

KWDT-I looked into the meaning of the words 'explanation' and 'guidance' as given in different dictionaries and it has been observed as follows:

> *"…… In interpreting Section 5(3) we must bear in mind that the jurisdiction of all Courts is barred in respect of any water dispute which has been referred to the Tribunal and that on publication in the Official Gazette, the decision of the tribunal will be final and binding on the parties to the dispute. In this background, Section 5(3) should be construed liberally and the amplitude of the powers given by it should not be cut down by a narrow interpretation of the words 'explanation' and 'guidance'."*

It is then observed illustratively that matters which may arise for consideration under Section 5(3) of the Act may be of varied nature. Hence, instead of giving any rigid or exhaustive definition of the word explanation, KWDT-I preferred to give examples of certain kinds of situations in which explanations may be required e.g. as mentioned in para-8

"…….. *omission to give necessary directions or to consider and take into account relevant material or relevant factors in arriving at any conclusion on any particular point or any lacuna in the decision may require explanation*." It is then provided as follows in paragraph 8, page 4 of the Further Report :-

"For example, an explanation may be necessary in respect of (1) the omission to consider whether the restrictions on the uses of any State in any area require revision as and when return flows become progressively available for its use and to consider the effect of any revision of such restrictions on the uses of other States, (2) the omission to provide guidelines for the operation of the Tungabhadra Reservoir which is the common source of supply for several projects of the States of Karnataka and Andhra Pradesh, (3) the omission to take into consideration the effect of prolonged and continuous irrigation on return flow and on the quantum of

dependable flow available for distribution among the parties, (4) the omission to consider relevant matters in respect of Clause XIV(B) of the Final Order."

It is further held "*If the Tribunal gives any explanation, the Tribunal may also give all consequential directions and relief arising out of such explanation.*"

Considering the arguments of the learned Counsels, as indicated above, and our Order dated 27.4.2007 and the discussion and the views expressed by KWDT-I on the scope of sub-section (3) of Section 5, it is clear that the scope of the provisions cannot be as wide as that of the appeal which may entitle a party to re-argue the matter or may press for fresh appraisal and re-appreciation of the material on record to take a different view or to upset the finding and decision already arrived at. No interference is envisaged to be made only because of possibility of two views on a matter. The phraseology used in sub-section 3 of Section 5 restricts and narrows the scope of interference but not to the extent that the provision may be rendered nugatory or devoid of any consequence. The meaning of the expression "explanation"

and "guidance" is to be considered in a wider perspective so that, if necessary, as a consequence of explanation required modification in the decision may be made as also envisaged in the later part of sub-section (3) of Section 5. Some examples of different situations have been given by KWDT-I as to in what kind of circumstances, an explanation or guidance may be required. There may be a case where there may be misreading of the evidence or a finding may be recorded on mistaken facts or on by omitting material facts having bearing on merits, in such a situation, it may require an explanation, or guidance on further consideration of the matter. Hence, the consequential changes may be required to be made in the decision and the provision and contained under sub-section (3) of Section 5 would not fall short of it.

In the result, we are of the view that the expression explanation and guidance used under sub section (3) of Section 5 is to be liberally construed for the reason which have already been indicated in our Order dated 27.4.2007 and there seems to be no reason to take any different view in the matter as has been taken by KWDT-I in its Further Report.

CHAPTER - II

Reference of the States and the Central Government :

We may now take up the matters/points which are sought to be explained or guidance be provided to the parties, in respect thereof, under sub-section (3) of Section 5 of the Act.

KARNATAKA.
Reference No.2 of 2011.

Points taken up by the State of Karnataka :

Since the State of Karnataka has opened the arguments first in these proceedings as well, we take up first the matters referred and argued by the State of Karnataka.

Mr. Fali Nariman firstly raised the matter relating to quantity of the remaining unallocated water of river Krishna and the utilization of the same, by all the three riparian States in a given proportion. It is para 2(i) of the Reference Petition which is quoted below:-

Remaining unallocated water and its distribution:

2(i) "*(i) Whether the available quantity of unallocated "remaining water" is not*

less than 513 TMC in the Krishna basin based on the "gross flow" series determined by the Tribunal in the Report at pages 302 to 304 and whether it is not just and equitable to frame guidelines permitting the basin States of Maharashtra, Karnataka and Andhra Pradesh to use the 'remaining water" in the proportion of 25%, 50% and 25% respectively?"

From a reading of the matter, as raised and quoted above, it seems that it is required to be explained, by its first part, that the quantity of remaining unallocated water is not less than 513 TMC as per the suggestion of the State of Karnataka, as said to be based on series of 47 years. At the very outset, it may be indicated that no such occasion arises to seek an explanation that the quantity of remaining water is "not less than 513 TMC". As a matter of fact, ascertainment of actual quantity of remaining unallocated water, by way of an enquiry from the Tribunal, seems to have, presently, no relevance at all nor such a query lies within the scope of Section 5(3) of the Act. Nothing may remain ambiguous or unexplained in absence of a finding as to whether remaining water is "not less than 513 TMC". No part of our decision may be rendered

unintelligible without it, nor that may the decision be un-implementable in absence thereof.

Along with its rejoinder, a working sheet has been annexed by the State of Karnataka as Annexure-A under the title "Remaining Water". Without going into the merit or correctness of the said Annexure, since not required also, it may be pointed out that on the face of it, the average remaining water has been worked out against 30 years' of the series only out of the series of 47 years. The years of nil value have been admittedly ignored. The learned counsel for the State of Andhra Pradesh, Mr. Reddy also points out the same fallacy and submits that it is wrong to say that average remaining water is not less than 513 TMC.

Therefore, the first part of Question No.2(i) requires no explanation, nor it would fall as said earlier within the scope of Section 5(3) of the Act.

We may now take up the second part of the Question No.2(i), as to whether guidelines are required to be framed for utilization of the remaining water by the three riparian States,

Maharashtra, Karnataka and Andhra Pradesh in proportion of 25%, 50% and 35% respectively.

In connection with above matter, it may be pointed out that Clause X(3) of our Order at page 806, provides for the use of the remaining water as under:-

> "*So far as the remaining water is concerned, as may be available, that may also be utilized by the State of Andhra Pradesh subject to any part of it being stored/trapped in future and/or till the next review or reconsideration by any Competent Authority under the law.*"

The remaining water is whatever may be available after utilization of 2578 TMC. As per the provision made, and quoted above, Andhra Pradesh has been allowed to utilize the remaining water specifically but it is subjected to two conditions – one that it is subject to any part of it is being stored or trapped in future and second that the utilization is subject to the next review or reconsideration by any competent authority.

According to Mr. Nariman, the State of Andhra Pradesh is not entitled to utilize the whole of remaining water in terms of sub-para of Clause X (3) of the Order since it is specifically provided that the remaining water may be utilized by Andhra Pradesh subject to any part of it being stored or trapped in future. It is submitted that it would mean subject to any part of water which may be stored or trapped in future by the State of Maharashtra or Karnataka as well, that is to say, whichever State may be able to store or trap the remaining water or part thereof, will be entitled to utilize the same. Mr. Nariman further submitted that it requires to be explained in Clause X(3) as to be stored/trapped 'by whom', which part is missing in the said clause.

Mr. Nariman then points out paragraph 1.5 at page 7 of the reply of Andhra Pradesh to the Reference Petition of Karnataka, where it is stated that this Tribunal has permitted State of Andhra Pradesh to utilize the remaining water to the extent it could store/trap. Therefore, according to Andhra Pradesh, the question of unallocated remaining water being available for distribution, as claimed by Karnataka, does not

arise, nor does the question of storing or trapping by Karnataka or Maharashtra.

The position thus that emerges is that according to Andhra Pradesh, all the remaining water as may be stored or trapped by Andhra Pradesh could be utilized by it. On the other hand, according to Karnataka, it is to be clarified that the remaining water, as may be trapped or stored by any of the State, could be utilized by that State and not by Andhra Pradesh alone. Although in its Question No. 2(vi) Karnataka has mentioned that the State of Andhra Pradesh has been given the liberty to use remaining water under Clause X(3) of the order. However, we will deal with this aspect of the matter.

First of all, we may examine the possibility of distributing the remaining water in proportion of 25%, 50% and 25% amongst the States of Maharashtra, Karnataka and Andhra Pradesh respectively as sought by Karnataka to be explained by the Tribunal. It is to be noted that sharing on percentage has no where been resorted to in distribution of water either by KWDT-I or by this Tribunal except as was proposed by KWDT-I under Scheme-B which could never see the light of the day. The distribution of quantified amount of

water has throughout been made on the principles of equitable distribution i.e. on consideration of need and the comparative facts and circumstances prevailing in different States. There seems to be no good reason now to distribute the remaining water, if it is to be distributed at all, on percentage basis.

The other question that remains to be considered is, as to whether all the remaining unallocated water is at the disposal of Andhra Pradesh, as much as may be trapped or stored and utilized by it alone or it is to be utilized as it may be trapped/stored by any of the three States. It is, no doubt, true that by reading sub-para of Clause X(3) of our Order, one may be led to an impression that utilization of remaining water by Andhra Pradesh is subject to any part of it being stored or trapped, by any State. Otherwise, perhaps it may not have been necessary to say "…….that may also be utilized by the State of Andhra Pradesh subject to any part……..." It can well be said that it puts a restrictive condition to the blanket use of all the remaining water by Andhra Pradesh.

We have given our anxious thought to this aspect of the matter and we do find that there may be some scope of ambiguity as to by whom the remaining water may be trapped

and utilized. It does require to be explained and clarified as argued by Mr.Nariman.

In case it was intended that the remaining water may be utilized by all the three States depending upon their capability to trap and store to the extent they could, it could simply and plainly be said so without any difficulty. But the provision starts by saying that so far as remaining water is concerned, as may be available, that may also be utilized by the State of Andhra Pradesh, whereafter the words "subject to any part" follows. May be, there may have been some idea that if some part of the remaining water is stored by any other State, it can be used by that State also but it is not clearly made out, as it is. The water was to be 'stored or trapped by whom' has not made clear either way.

On the other hand, on a reading of the whole Clause X(3), it is clear that the dominant factor imminently governing the thrust of the provision, is that the remaining water, as may be available would also be utilized by Andhra Pradesh. This main object of the provision may not be curtailed or adversely affected by introducing an uncertain and ambiguous condition.

If all the three States are made entitled to use unallocated remaining water to the extent they are able to store/trap, it will lead to an unguided situation of "free for all" resulting in confusing state of affairs. Therefore, after giving our serious consideration to this aspect of the matter, we feel, that the matter, would best be explained by deleting the unclear and ambiguous the part of sub-para of Clause X(3) i.e. "subject to any part of it being stored/trapped in future and/or" while modifying and reframing the remaining part. Thus, the provision after deletion of a part of it, as indicated above, it is reframed and the Order of this Tribunal dated December 30,2010 stands deemed to be modified as follows:-

> *"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 or 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".

The utilization of remaining water permitted to the State of Andhra Pradesh is till the next review. Thus, it is obviously by way of temporary arrangement and whatever may be decided about the remaining water by the competent authority will ultimately be final in this respect.

Clause X(3) of the Order dated December 30, 2010 of the Tribunal stands deemed to be modified in part to the extent indicated above.

<u>Return flows</u>:

The next question, which has been taken up by the State of Karnataka relates to return flows on account of utilization of the additional allocations now made by the Tribunal at 65% dependability and at average flows. The question as referred in the Reference Petition on this subject is as follows :-

2(ii) *"Whether on a true and correct interpretation of the Report and Order of the Tribunal dated December 30, 2010, what is the return flow*

(regeneration flows) at the rate of 10% in future utilizations in the Krishna basin?"

The State of Maharashtra has also raised the question relating to the return flows. It is Clarification No.III in Reference Petition of the State of Maharashtra which reads as under :

"*This Hon'ble Tribunal may be pleased to clarify that additional water that would be available because of Return flows due to the increased utilizations by the States on account of enhanced allocations by this Hon'ble Tribunal would be accruing according to the formula devised by KWDT-I and allocate the same to the States.*"

At page 15 of the Reference Petition of Maharashtra, a prayer has been made for allocation of future return flows that would accrue from the increased irrigation use from projects utilizing 3 TMC or more annually in each of the States, to the respective States, as it was done by KWDT-I.

Since the above noted two questions relate to the same subject matter, we propose to consider them together. The learned Counsel for the State of Karnataka and for the State of Maharashtra have made their submissions for distribution of the return flows accruing from the use of additional allocation made by the Tribunal. On behalf of the State of Andhra Pradesh, it has been pleaded that no study about return flows had been filed and in case there was any seriousness about the claim, it should have been carried out and placed before the Tribunal.

The fact is that additional allocations have been made by the Tribunal in two steps, first at 65% dependability and on the average flow which together totals to 448 TMC but the question of generation of return flows on account of use of the aforesaid quantity of water was not adverted to in the Report of the Tribunal. It was generally thought that the quantity of return flows may not be so much that it may require its distribution and in that connection one of the factors which had occurred was that 448 TMC would not be available for utilization every year but in only 65% of the period say in a scale of 100 years only in 65 years and so far as average flows

are concerned, that will be available in a still lesser number of years. However, this aspect of the matter, we now feel requires consideration and, if necessary, an explanation/clarification as well, since it has been specifically raised by the two States.

On the discussion held on the point, the Tribunal had come to the conclusion that at 65% dependability, 163 TMC (2293-2130=163) was still available for distribution and on average flows, 285 TMC (2578-2293=285).

The Tribunal has thus allocated 163 TMC at 65% dependability and 285 TMC at average flows to the party states. The total allocation above 75% dependable flow of 2130 TMC would thus amount to 163+285 TMC =448 TMC. We have to check whether all of this quantity of water would generate any significant amount of return flows or not in Krishna basin.

On examination of the matter, we find that the quantity of 448 TMC includes some water for utilization outside the Krishna Basin also, which would not generate return flows in Krishna Basin. KWDT-I had in its Report laid down some 'Special Considerations Affecting Return Flows in the Krishna

Basin' (page 84, left hand column) out of which item No.2 is relevant in this regard which is quoted below :-

> *"(2) A part of the water of Krishna river system is diverted outside the Krishna Basin for purposes of irrigation and power production. There is no return flow in the Krishna River from water diverted outside the Krishna Basin."*

Therefore, we have to deduct the allocated quantity of water which is to be diverted outside the Krishna Basin from the total additional allocated water. The Tribunal has allocated 25 TMC out of the 65% dependable flow for Koyna Project, which is meant for westward diversion outside basin. So we have to deduct 25 TMC from 163 TMC. Out of average distributable flows i.e. 285 TMC, 25 TMC is for outside basin use i.e. for Telugu Ganga Project in Andhra Pradesh, which will not generate return flows in Krishna Basin and therefore, we shall have to deduct this quantity also from average flows.

At the same time, we have to deduct the quantity of water allocated for minimum flows (total 16 TMC) to the states out of enhanced allocation between 75% and 65%

dependable flows (163 TMC) since this quantity of water would remain within the river streams and would contribute negligible quantity of return flows.

It is further to be noted that the Tribunal has allocated 30 TMC out of 65% dependable flows and 120 TMC from average flows to Andhra Pradesh towards carry over storage in Srisailam and Nagarjunasagar dams, which quantum of water, Andhra Pradesh was already storing/utilizing for the last near about 35 to 40 years and the particular fact to be noted is that this carry over quantum must have been generating return flows which must have been reflected in the measured stream flows at Prakasham Barrage during the years which constitute the 47 years yield series. Hence, distributing return flows on the carryover quantum to the States would amount to duplication. We have to, therefore, deduct this quantity of 150 TMC also from the enhanced allocation of 448 TMC before working out the return flows for distribution.

Thus, according to the above, the effective quantities of water that would generate return flows from the allocation between 75% and 65% dependability (163 TMC) would

become 163-25-16-30=92 TMC and that between 65% dependability and average flows (285 TMC) would become 285-25-120=140 TMC. Therefore, only 92 TMC would be utilised within the basin in 65% of the years. That is to say, in a scale of 100 years, this quantity of water would not be used in 35 years. Similarly, 140 TMC only will be utilised in 58% of the years and not in 42 years in a scale of 100 years.

According to the plea of Maharashtra and Karnataka, the return flows should be calculated at the rate of 10% as was done by KWDT-I. But we find that it has been rightly submitted on behalf of the State of Andhra Pradesh that the utilisation of water is not on the same pattern as it was in the case of utilisation of water at 75% dependability. It was regular utilisation in 3 out of 4 years but in the present case, the utilisation is for much lesser period and at two different intervals. Another factor which we find stands on a different footing is that the additional allocations have been made for water scarcity and drought prone areas. Normally, return flows out of utilisation of water in such areas would be less and not at the same rate as from utilisation in non-drought prone areas. In these circumstances, it is difficult to apply the same rate of

return flows as has been applied by KWDT-I after considering the material which was placed by the parties before that Tribunal on this point.

In this case, the States of Maharashtra and Karnataka have not given any estimation of return flows nor have thrown any light about the likely rate of return flows in the circumstances of the present case which stands on a different footing from the relevant facts before KWDT-I. The rate of return flows at 10% sought to be applied, is difficult to apply as a straight jacket formula in all kind of facts and circumstances howsoever different they may be. Apart from the fact that no studies have been put forward, even no suggestion has been given by the two States as to at what rate the return flows would be available except that in a very over simplified manner it is sought to be applied at the same rate as found by KWDT-I. No material has been placed before us to suggest any other rate of return flows on the basis of which any estimation could be made about it. Apart from the fact noted above, we also find that by utilisation of 92 TMC at 65% dependable flows and 140 TMC at average, may not perhaps constitute such a quantity of return flows which may make any significant difference in the

average yearly yield so as to require distribution amongst the three States. The upper riparian States have not been able to make out any case for calculating the return flows at the rate of 10% nor have come forward to estimate return flows at any other rate even though it may be less than 10%.

For the reasons indicated above, we find no force in the Point No.2(ii) of Karnataka and Clarification No.III of the State of Maharashtra. The clarification sought only deserves to be rejected.

Restriction on UKP utilization:

It has next been submitted that there may not be an absolute restriction on utilization of 198 TMC in UKP in a 65% dependable year. Instead, it may be indicated that overall utilization in the State of Karnataka would remain within the allocated quantity at 65% dependability. In regard to this submission, Question No.2 (iii) is referred to, which finds place at page 3 of the Reference and it is quoted below:-

2(iii) *"2(iii) Whether the provision in Clause-X(2)(b) of the Order of the Tribunal dated December 30, 2010 that "Karnataka shall not utilize more than 198 TMC in a 65% dependable*

year….” From the Upper Krishna Project is not an absolute restriction for utilization of more than 198 TMC of water in the Upper Krishna Project in Karnataka, but an indication that the overall utilization in the State of Karnataka should remain within the allocated quantity of water at 65% dependability?”

Learned Counsel then makes a reference to Clause X(2)(b) at page 806 of our Order as well as Clause XIII at page 807 which provides for regulated releases by Karnataka to Andhra Pradesh to the extent of 8 TMC to 10 TMC. It is submitted that the State of Karnataka may be allowed to use more than 198 TMC from UKP without exceeding the overall limit of utilization of 799 TMC and further without affecting the regulated releases of 8 TMC to 10 TMC to Andhra Pradesh. It is further submitted that it will not adversely affect the State of Andhra Pradesh and ultimately the submission is that the State of Karnataka may be allowed to have more projects by utilizing more than 198 TMC in UKP without exceeding the limit of 799 TMC.

The learned Counsel was required to explain as to how it proposes to keep its utilization within the total limit of allocation while utilizing more than 198 TMC in UKP. It was further pointed out that the limit of 198 TMC was put for utilization in UKP by Karnataka so that Andhra Pradesh may be able to realize its allocation.

After the above discussion on the point, Mr. Nariman, learned Sr. Counsel, appearing for the State of Karnataka, resuming his arguments on the next date, made a statement that the question No.2(iii) is not pressed.

That being the position, namely, the question having not been pressed, it requires no explanation or guidance and is accordingly rejected as such.

<u>Water Saving and Project Planning</u> :

The State of Karnataka, as a general proposition, raised a query as to whether it has a right to save water and plan projects against such savings or not. In this connection, it refers to Clarification No.2 (iv) which reads as under:-

2(iv) "2(iv) *Whether, the State of Karnataka has a right to save water out of allocated quantity of*

water and seek clearances of the projects planned against such savings" from the concerned authorities or Commission or Board?"

The above noted query which seeks explanation is an abstract query by way of a general proposition. No facts or figures are given nor the kind of planning which it would want to make and against the what kind of savings. It is not indicated as to in relation to which part of the decision or any particular finding in the report and the decision that this question arises to be explained. We feel that such hypothetical and general proposition without reference to facts or any part of the decision of the Tribunal, is not envisaged to be responded to under sub-section (3) of Section 5 of the Act. Under the aforesaid provision, a matter which may require explanation or guidance, as may emerge from consideration of the decision that alone may be referred for further consideration.

As a matter of fact, generally speaking, savings are to be encouraged. To economise on use of water is the need of the hour as it has never been before. It should be the endeavour of

all the States rather all the users of water to economise on water, a resource getting into scarcity day by day. To say so, it is more a duty rather than a right, in the present day context.

However, a State may be able to make some genuine savings but all that will be a question of fact. That State has obviously to utilize the water saved in an appropriate manner, in a project new or the existing one, subject to applicable rules and regulations as prescribed and the prevalent norms of use of water.

A few questions may arise to be considered e.g. the saving is genuine or a mere pretense for utilizing the water somewhere else or for some other purpose. Similarly, it may also be one of the most relevant considerations as to from what kind of use and the area saving has been made and where it is proposed to be utilized. No saving may perhaps be advisable from the drought prone or water scarcity area and the so-called saved quantity of water may be planned to be utilized in wet crops e.g. sugarcane crop or the like ignoring the interest of the people of water scarcity area for whom water is precious to sustain their agricultural operations and their livelihood. So, there may arise some relevant considerations depending upon

factual situation that may or may not justify the planning of the new projects etc. against savings claimed. The authorities, who are charged with the duty to look over the water management of the area, and other related authorities under different provisions of Statutes or otherwise, shall have to examine all such aspects.

As observed earlier, genuine saving of water is a welcome step; it in fact amounts to augmentation of availability of water to be better utilized.

Mr. Nariman had drawn our attention to the objection taken by State of Andhra Pradesh in its Reply particularly about obtaining approval of Krishna Water Decision Implementation Board (KWD-IB) in consultation and the consent of the co-riparian States before undertaking any new project and seeking clearance from Central Water Commission (CWC). Mr. Nariman does not object to examination of the matter by KWD-IB and to obtain clearance from CWC wherever it may be so required. However, he strongly objected to the consultation and the consent which, according to Andhra Pradesh, must be obtained from the co-riparian States. Mr. Nariman argued that once the projects have to bear the scrutiny

of KWD-IB and have to seek clearance from CWC in appropriate matters, there is no occasion to consult or to obtain any consent from the co-riparian States because while doing so, the authorities concerned look into all aspects of the matter. We also do not find any good reason for consultation and obtaining any consent for a project from co-riparian States. The co-riparian States may, however, it they so choose, place their point of view before the concerned authorities while the matter would be examined by them.

As a matter of fact, Mr. Reddy, while making his submissions, has not raised any question regarding consent of the co-riparian States. He has submitted that savings may be made but they must be genuine and real savings which fact must be checked by some authority and it may also be ascertained that the project is planned only out of the savings. In this connection, he has referred to Reply of Andhra Pradesh at page-16 in an effort to show that earlier Karnataka had tried to show some savings which according to Andhra Pradesh were not real but we don't think that we are called upon to go into the merit of any such factual averments. The fact of the matter, however, is that Andhra Pradesh does not object to

savings as may be made by any State, but all that is required is that such savings as claimed, must be scrutinized by KWD-IB and the new projects sought to be undertaken, out of the water saved, wherever there is a requirement of obtaining clearance from CWC or other authorities under any statute, those requirements must be complied with before a new project may be undertaken.

Since no specific part of the decision has been referred to nor any factual situation has been indicated, it is held that the question requires no clarification or explanation and it stands accordingly disposed of as such with the observations that saving is always welcome rather it is a duty of every user of water and genuinely saved water can always be used for beneficial purposes.

Validity of Clearances Already Given in Respect of UKP.

The next explanation which has been sought by the State of Karnataka is in regard to the observations made by this Tribunal at page-674 of the Report providing that there would be a fresh consideration of clearances of the conditions by the

Authorities for raising the height of Almatti Dam. The query raised seeking explanation, reads as under :-

2(v) "*2(v) Whether the expression – "Let fresh consideration of clearance take place by the Authorities, on being moved by the State of Karnataka" (Under issue No. 15, mentioned in the Report of the Tribunal at pages 674 does not affect the validity of clearances already given in respect of Upper Krishna Project*".

According to the submissions made on behalf of the State of Karnataka, the clearances which had already been given by the Authorities in connection with raising the height of Almatti Dam, pertaining to three matters, their validity should not be affected and fresh clearance need not be required to be taken in respect of those three conditions as they already stand cleared.

In connection with the above matter, it may be pointed out that Issue No.15, was framed as follows :

"Whether the State of Karnataka had violated the conditions required for raising the height of Almatti Dam? If so, to what effect?"

It related to raising of the height of Almatti Dam to 519.60 m. According to the State of Andhra Pradesh, the conditions subject to which Karnataka was allowed to raise the height of the dam upto 519.60 m, were not fulfilled and clearances of the Authorities were not obtained. Hence, the height of Almatti Dam was raised to 519.60 m violating such conditions. But ultimately at pages 673 of the Report, it has been observed by this Tribunal as under :-

"*But, in our opinion, all this now goes in the background since the concerned authorities under the Statutes or otherwise, as may be provided, may have to consider the matter afresh in the light of the fact that FRL of Almatti Dam has been allowed at 524.256 m by this Tribunal under Issue No.14"*.

In the next following paragraphs, it has been observed in the Report as under :-

"The reasons for allowing the FRL at 524.256 m have already been indicated in the discussion held under Issue No.14. But it does not dispense with the statutory requirements under different Statues or otherwise laid down for the purposes of technical clearance of a project. It will not serve any purpose to keep on harping any more on the question of clearances at FRL 519.60 m. It is now to be considered at FRL 524.256 m. It will be a fresh consideration. On being approached by the State of Karnataka for clearance of Amatti Project with FRL 524.256 m, the concerned authorities under different Statutes or otherwise, as may be required, would no doubt, expeditiously consider the same ……."

At the bottom of page 674, it is observed "let fresh consideration of clearance take place by the Authorities, on being moved by the State of Karnataka", which is subject matter of the clarification at hand viz. question No.2(v).

The case of State of Karnataka is that while raising the height, the State of Karnataka had already taken clearances in respect of three conditions insofar as it related to investment clearance, the clearance about the gates of Almatti Dam and the foundation of Dam structure at 528 FRL. It is submitted that clearances in connection with the above three matters may not be required to be sought again from the Authorities.

The learned Counsel for the State of Karnataka has passed on compilation of certain documents to substantiate its case regarding clearance of three items in regard to the Upper Krishna Project. He has referred to C-I-D-282 and it is pointed out that at page-VII under the caption 'note' Sl. No. 1 says "*the foundations of Dam & Head works, flood hydrology and civil designs have been accepted by CWC vide letter No. 11/86/97-PA(S)/356-57 Dtd.24/25.5.99."* On the basis of the above note, it is submitted that foundation of Dam stands cleared as also other related matters.

He then referred to Note (3) which reads "*the Gate directorate has communicated their 'No Objection' vide their letter No. 11/3/97-PA(S)/1072 Dtd. 9.10.97",* to indicate that

the Gate design and height etc. of Dam has been approved since 'no objection' was duly granted by the authorities.

So far the above noted two letters are concerned, they do not seem to be on record except their references in the Note as mentioned above contained in C-I-D-282. There is, however, one letter bearing No. 11/3/96-PA(S)/603 dated 4.7.1996 at page 443 of C-III-2B from CWC addressed to the Karnataka Authorities, saying that Gates design Directorate had cleared the gates design aspect subject to compliance of certain observations.

Ld. Counsel has then referred to a letter No.2(10)/88 I & CAD date the 24.9.1990 at pages 434-436 of C-III-2B relating to investment clearance for Upper Krishna Irrigation Project Stage-I. The annexure accompanying the letter regarding the Salient Features of Upper Krishna Project indicating in sub-clause-iii of the third paragraphs at the bottom of page 437, that construction of Almatti Dam upto a height of EL 523.8 m as the maximum water level in Stage-I (flood impinging at FRL 512.2 m with crest as EL 509 m) works out to be 519.8 m and freeboard 4.00 m. Later, in the next paragraphs, it is said that there was no objection to the investments planning by

Government of Karnataka for construction of Almatti Dam upto FRL 528.25 m.

On the basis of the above material, it is ultimately submitted that in respect of other matters, the clearance may be sought by the State of Karnataka from the appropriate authorities except for investment clearance, gate design of the Dam and about dam foundation for height upto to 528.25 m.

Mr. Reddy, learned Counsel for the State of Andhra Pradesh has opposed the submissions made on behalf of the State of Karnataka and submits that the matter relating to clearances including the three conditions which according to Karnataka stand cleared, require to be examined afresh by the concerned authorities along with other conditions. It is not to be taken as those conditions stand complied with since a lot of developments have taken place during all this period.

It is true that out of several conditions which were required to be fulfilled by the State of Karnataka for raising the height of Almatti Dam, three, according to them, stand cleared, a reference to which has been made above. It all related to Stage-I & II of the Project. Now, by our decision dated

December 30, 2010, the State of Karnataka has been allowed to raise the height of Almatti Dam to 524.256 m from 519.60 m. Therefore, it has been provided that all such conditions which are required to be fulfilled under various provisions, the State of Karnataka may seek such clearances from the appropriate Authorities and the required conditions may be complied with. It will not be for us to consider the three clearances which, according to Karnataka, have already been accorded for raising the height of Almatti but it will be only appropriate that while applying afresh for required clearances, the State of Karnataka may place the relevant material and documents in respect of clearances on the above said three counts also, before the appropriate authorities who may look into the relevant documents, and consider as to any further compliance is required to be made or whatever has been cleared, as per the case of State of Karnataka, is sufficient or not for the purposes of the height of Almatti Dam at 524.256 m.

Therefore, no clarification to this effect can be made that in respect of three items indicated above, the State of Karnataka may not be required to apply for clearance before the concerned authorities, for height of Almatti Dam at 524.256 m. Whatever has already been provided by the

concerned authorities in connection with the above noted three conditions, we do not say that it stands invalidated but at the same time Karnataka may submit all relevant papers to the concerned authorities and it will be for those authorities to examine and to see if whatever has been done by the appropriate authorities in respect of those three conditions is sufficient clearance or any further compliance is required.

We, therefore, explain and clarify that the three clearances in question as discussed above, which according to Karnataka, have already been cleared, would not be rendered invalid, merely for the reason of observations made by this Tribunal at page-674 of the Report on Issue No.15 to the effect "Let fresh consideration of clearance take place by the authorities, on being approached by the State of Karnataka". However, it is further clarified that the State of Karnataka shall place the relevant papers, regarding those three clearances, before the appropriate authorities, who shall look into those clearances as claimed by Karnataka to have been cleared and arrive at a conclusion as to whether those clearances, if already given, still hold good or not.

Allocation of more water to Andhra Pradesh and less to Karnataka having highest drought prone areas.

The next question raised for consideration by the State of Karnataka is that Andhra Pradesh has been allocated more water although this Tribunal recorded a finding that the highest drought prone area in Krishna basin is in the State of Karnataka. It is Question No.2(vi) quoted as under:-

2(vi) *"2(vi) Whether, this Hon'ble Tribunal having in its Report allocated more quantity of water to the State of Andhra Pradesh being a total of 1001 tmc (besides giving liberty to use the remaining water in Clause-X(3) of the Order) and a less quantity of water to the State of Karnataka being a total of 911 tmc, overlooking a specific finding (already made at page 763 of the Report) that – "The highest drought prone area in Krishna basin is in the State of Karnataka whereas State of Andhra Pradesh has smallest drought prone area in Krishna basin….", is not*

Clause-VII read with Clauses V and VI of the Order of the Tribunal opposed to the doctrine of equality of States and should be reconsidered?"

We feel that this point, as raised by State of Karnataka for reconsideration, is misconceived and by no stretch of imagination attracts sub-section (3) of Section 5 of the Act. The extent of drought prone area in a basin State is only one amongst the many other factors which are taken into consideration, in totality, while making the allocations. It is not totally based on any one single factor. All such relevant factors have been taken into consideration by the Tribunal while making equitable distribution of water of river Krishna to the riparian States. We do not find that any such question arises like doctrine of equality of all States which may have been violated. It is equitable distribution and not equal distribution to each State though it is true that principles of equitable distribution are to be equally applied in the circumstances and situations prevailing in the States. There is no occasion to reconsider the allocation merely for the reason

that there is highest drought prone area in the State of Karnataka.

The question raised has no merit for being reconsidered nor it is envisaged under the purview of 5(3) of the Act hence rejected.

Drinking Water and water for Industrial use –Separate Allocations

The State of Karnataka then raises a question about separate allocations for drinking water and industrial use. Question No.2(vii) reads as under:-

2. (vii) "*2(vii)Whether separate allocation for drinking water and industrial use should be made in favour of Karnataka*?"

The above question does not refer to any part of the finding or decision of this Tribunal on consideration of which a question such as one posed, would arise for further consideration. It discloses no facts or circumstances which necessitated to raise such a question which, in the absence of facts and figures or circumstances, is merely an abstract question. It does not attract sub-section (3) of Section 5 of the

Act for any further consideration of the matter. In fact, there is no merit in the question. It is as bare as it could be, hence the question raised does not require any consideration u/s 5(3) of the Act and it is rejected.

Regulated Release from Almatti To Andhra Pradesh:

Next, according to the State of Karnataka, the State of Maharashtra should also contribute to the regulated releases of 8 to 10 TMC to State of Andhra Pradesh. It is Question No.2(viii) which reads as under:

2(viii) "*2(viii)Since it has been directed in Clause XIII of the Order that the State of Karnataka shall release 8 to 10 tmc of water to the State of Andhra Pradesh as regulated releases in the months of June and July from the Almatti reservoir, should not the State of Maharashtra also be directed to release water (in such quantities as may be directed) from their reservoirs at Koyna and Ujjaini.*"

This question which has been raised also seems to be without any basis. There is no occasion for the State of Maharashtra to contribute in the regulated releases to the State of Andhra Pradesh by Karnataka. The reason for making this provision was that according to the case of Andhra Pradesh it needs some water in the initial period of Kharif and sometimes monsoon is also delayed, so some provisions may be made for regulated releases from Almatti Dam in the months of June and July in the background of the fact that height of Almatti Reservoir was allowed to be raised up to 524.256 m. Consequently, it raised water reserves as well. Thus this provision was made for releases from the water stored in the Almatti Dam with capacity to store more water as allowed by the Tribunal. Hence, no such question arises that Maharashtra may also be directed to contribute or release a part of regulated releases for Andhra Pradesh.

In reply to this question as raised, the State of Maharashtra made averments in paragraph 3.5 of its Reply to the Reference of Karnataka saying that this demand of Andhra Pradesh was very much there during the main proceedings for regulated releases from Almatti Dam but Karnataka never took

any such plea that Maharashtra may also be made to contribute or release part of regulated releases for Andhra Pradesh. According to Maharashtra, this is a new point which is being taken by Karnataka for the first time.

We find no reason to further consider the matter to make any modification in regard to the regulated releases which had to be made by Karnataka to Andhra Pradesh as per Clause-XIII of the Order. Therefore, this question raised has no force and is rejected.

Objection to allocation for Telugu Ganga Project.

In regard to the allocation made for Telugu-Ganga Project of Andhra Pradesh, the objection of Karnataka is that, since the project is contrary to the observations made by the Hon'ble Supreme Court in the case of State of Karnataka Vs. State of Andhra Pradesh reported in 2000 (9) SCC 572. The question as raised is quoted below :-

2(x) "*2(x) Whether, the Tribunal should have at all considered allocating 25 TMC to Telug-Ganga project, when the said permanent project was constructed in the teeth of objections by the*

State of Karnataka and contrary to the observations of the Supreme Court in the case of State of Karnataka Vs. State of Andhra Pradesh reported in 2000 (9) SCC 572 at 608 – 610?"

The main grievance is that the Hon'ble Supreme Court has provided that no major project shall be constructed by the State of Andhra Pradesh for utilization of surplus flows, yet this project was constructed and much beyond the capacity required. It is also indicated that the water allocated is to be utilized outside the basin. True, the permanent project has been constructed contrary to the observations of the Supreme Court but it would not mean that if the water is required to be allocated based on the need of the area, that shall not be considered while making the allocations out of the additional and surplus water. May be that in an appropriate case, no water may be allocated on such considerations as pointed out but it does not mean that the need if projected should not be finally considered while distributing surplus water. It is though true that water would not be allocated only because a project has been constructed. Allocation has been made on different

considerations, considering the need and requirement of the area. This Tribunal has considered all the facts and circumstances whereafter thought it fit to allocate 25 TMC for Telguganga Project out of the average flows.

We, therefore, find no merit in the question raised in Clause 2 (x) and the same is rejected.

Minimum flows :

A question has then been raised regarding the minimum flows. It is quoted below:-

2(xii) "*2(xii) Whether, the minimum flows to be maintained in the Bhima river, (as mentioned in the Table at page 742 of the Report read with Clause XII of the Order), should be directed to be ensured by the State of Maharashtra – as measured at Takali Gauge Station on the Interstate border maintained by the Central Water Commission?*"

It relates to minimum flows. A reference has been made to page-742 of Vol. IV of our Decision which contains chart in

Col.1, which provides that in Bhima River Basin minimum flows will be released from Khadakwasla Dam to Begumpur Barrage where after it is mentioned (Maha-Kar Border). It is submitted that Begumpur Barrage is 16 miles upstream of the Border of Maharashtra and Karnataka. Therefore, Maharashtra should have been directed to maintain the flows upto the Border of Karnataka as seems to be the intention. It is submitted that to ensure the supplies upto the Border, the measurement should be at Takali Gauging Station.

We find no substance in the argument since, may be, the Begumpur Barrage is not just at the Border of Karnatka rather 16 miles upstream in Maharashtra, but it makes no difference as it is near Maharashtra Karnataka Border. On release of 60 cusecs as provided in Col.9, the minimum flow is to be maintained throughout for which release and monitor stations have been provided in Col.V and the flows are to be checked at C-13 Dhond, C-18 (Narsinghpur) and C-19 (Sarati) all CWC sites. Again the map shows that B-2 is the gauging site at Takali at the Border of Maharashtra and Karnataka below the Begumpur Barrage. Therefore, it is clear that the minimum flows have to be maintained along the whole stretch from

Khadakwasla to B-2 gauge site at Takali for which 60 cusecs has to be released.

No clarification is, therefore, needed.

No other arguments have been advanced regarding Questions No. **2(ix) and 2(xi)** of the Reference; therefore, they need neither consideration nor any explanation.

CHAPTER - III

MAHARASHTRA.
Reference No. 3 of 2011

Clarifications as sought by the State of Maharashtra.

Claim for increase in Surplus Allocation:

The State of Maharashtra has first of all claimed increase in its allocation out of the surplus flows from 35 TMC to 80 TMC. The Clarification No. 1 reads as under :-

Clarification-1 :

> "*This Tribunal may be pleased to clarify that on equitable grounds, the State of Maharashtra deserves enhancement of allocation in the surplus flows, from the present 35 TMC to 80 TMC.*"

In support of the above clarification, the State of Maharashtra has pointed out two Tables prepared by it indicating the allocations as made by Bachawat Tribunal in

Table-I at page-3 of the Reference. It is shown that the percentage of allocation to Maharashtra is 27.18% of the total allocations to the three States. The State of Karnataka was allocated 33.98% of the distributed water and the State of Andhra Pradesh 38.83%.

The Table-II is at page 4 showing the percentage of allocations made by this Tribunal and at 65% dependability, it has been allocated 28.2%, Andhra Pradesh 27.6% and Karnataka 44.2%. So far the average availability is concerned, Maharashtra's allocation is 12.3% and that of Karnataka 36.8% whereas Andhra Pradesh has been allocated 50.9% of the flows at average availability. In totality, the percentage of distribution to Maharashtra comes to 18.1%, Karnataka 39.5% and Andhra Pradesh 42.4%.

It is submitted that this Tribunal has also found that distribution of water should be on the principle of equitable distribution among the riparian States which is also the submission of the State of Maharashtra. The ld. Counsel then refers to Table-III which gives facts relating to different factors pertaining to the three States namely, basin population, population dependant on agriculture, DPAP Area, Contribution

of flows by the States etc. It is submitted that Maharashtra has not been allocated its share on the principles of equitable distribution.

But it is seen that Maharashtra has linked allocation on percentage basis, not on equitable principles. Ultimately, it is requested that the distribution may be brought to the level of allocation made by KWDT-I, i.e. 27.5% in place of 18.1% as allocated by this Tribunal. Therefore, 45 TMC more may be allocated from the surplus flows which would be 28% of 285 TMC.

At the very outset, it may be pointed out that percentage has not been relevant in the matter of distribution of water either by KWDT-I or by this Tribunal. The KWDT-I has also distributed the water on principle of equitable distribution and also gave weightage to the prior use of water which had been protected. The distribution of water by KWDT-I was not on the basis of percentage at all. It was never held by the KWDT-I that Maharashtra was to be allocated 27.5% of the total available water for distribution. Therefore, the prayer made that the allocation made by this Tribunal may be brought to the

level of 27.5% as made by KWDT-I is fallacious and untenable.

It may also be pointed out that except for equalizing the percentage at 27.5%, the State of Maharashtra has not indicated its need or requirement on the basis of which 45 TMC more should be allocated to it out of the surplus flows. The principle of equitable distribution is based on the need and requirement of the area for which allocation is made. Not a single word has been uttered about the need and requirement to be met by extra 45 TMC which is requested to be allocated more out of the surplus flows.

The allocations as have been made are on consideration of all relevant factors which find mention in the Report/Decision including the facts as indicated in Table-III. We are afraid, it may not be possible to re-evaluate or reconsider the allocations as made by this Tribunal, as it is not envisaged under sub-section 3 of Section 5 of the Act. Clarification No. I is misconceived. It is accordingly rejected.

Reduction in carryover storage provided to Andhra Pradesh and the distribution of the balance to Upper Riparian States :

It is in regard to the allocation made to Andhra Pradesh for carryover storage of 150 TMC. The clarification sought as formulated is quoted below:

Clarification II :

"This Hon'ble Tribunal may be pleased to clarify that the carry over of 150 TMC to Andhra Pradesh allowed by KWDT-I was on account of (a) likely sufferance of Andhra Pradesh in the deficit years and (b) likely inevitable wastage in the catchments area between Nagarjunasagar dam and Vijayawada and further, consequent upon its decision that there would be no inevitable wastage after construction of Pulichintala Dam, that portion of carry over allowed by KWDT-I to compensate inevitable waste requires to be withdrawn and distributed amongst the riparian States equitably."

It is submitted that carry over storage of 150 TMC was allowed to Andhra Pradesh in view of two factors. Firstly, to mitigate the comparatively more hardship to Andhra Pradesh during the deficit years and secondly, on account of some inevitable wastage of water going to the sea unutilized.

The submission is that since this Tribunal has found that there is no inevitable wastage out of the allocations made to the State of Andhra Pradesh or to say that no such wastage by reason of which Andhra Pradesh would not be able to realise its allocated share, the carry over storage should be reduced from 150 TMC to 75 TMC and the remaining 75 TMC should be distributed to the upper riparian States. It is true that this Tribunal has found that there is no inevitable wastage out of the allocations made to the State of Andhra Pradesh but the fact remains that KWDT-I was also not sure about the inevitable wastage, since it had also opined that some water may go waste unutilized to sea between Nagarjunasagar dam and Vijayawada but to what extent, is nowhere to be found in the decision. At page 171 of the Report of KWDT-I, again there is an observation that it was not possible to determine exactly how much water, out of the flow of the river Krishna between

Nagarjunasagar Dam and Vijayawada, will be going waste unutilized to the sea. While discussing this aspect of the matter in our Decision and the Report, the evidence of Mr. Jaffer Ali, expert of the State of Andhra Pradesh, produced in the proceedings before KWDT-I, has been referred, which fact is noted in the Report of KWDT-I that according to Mr. Jaffer Ali, it was not possible to indicate as to how much water would go waste unutilized to the sea unless daily discharge data was made available. Therefore, it was uncertain as to how much water would go waste or was likely to go waste, still in totality 150 TMC was allowed to be stored as carry over storage. In such circumstances, we do not think it would be possible or feasible to apportion any part of 150 TMC, to the extent of which carryover storage may be reduced. Now, 150 TMC has been made a part of allocation for the purpose of carryover storage which is mainly to meet out the comparatively more hardship to the State of Andhra Pradesh during the lean years. There may or may not be some more water than required for mitigating the hardship in the lean years, but that is not ascertainable therefore, we do not think it is a matter which may require any re-consideration since all such facts as have been pointed out by the State of Maharashtra have already been

before this Tribunal and no new situation arises to reconsider and modify the decision.

Return Flows :

The next Clarification sought is about the non-allocation of return flows of the increased amount of water to be utilized on the allocation of yield at 65% dependability and at average yield. The clarification No.III as formulated is quoted below :

Clarification-III :

"This Hon'ble Tribunal may be pleased to clarify that additional water that would be available because of Return flows due to the increased utilizations by the States on account of enhanced allocations by this Hon'ble Tribunal would be accruing according to the formula devised by KWDT-I and allocate the same to the States."

This aspect of the matter has already been dealt with alongwith the Question No.2(ii) raised by the State of Karnataka. Therefore, this matter also stands disposed of in the same terms as Question No. 2(ii) of the State of Karnataka. No

return flows are liable to be distributed on utilization of additional allocation. The discussion on the point may be seen in the Report dealing with Question No. 2(ii) of Karnataka.

Proportion of incremental shares of the State at different dependability and of 2173 TMC as at 75% dependability.

The State of Maharashtra has sought clarification that incremental shares of the riparian States in the yield between 2130 TMC and 2293 TMC may be indicated in the same proportion as the incremental allocations in 163 TMC at 65% dependability and similarly at average yield etc. The Clarification No. IV as framed is quoted below :-

Clarification – IV :

> *"This Hon'ble Tribunal may be pleased to clarify that the incremental shares of riparian States for availability of water between 2130 TMC (allocation made by KWDT-I) and 2293 TMC (65% dependable flow decided by this Tribunal) shall be in the same proportion as that of their incremental allocations in 163 TMC. This Hon'ble Tribunal may further*

declare on the above footing, the allocations of the riparian States within the 75% dependable flow of 2173 TMC. It may also be clarified that the incremental shares of riparian States for availability of water between 2293 TMC (65% dependable flow decided by this Tribunal) and 2578 TMC (average basin flow decided by this Tribunal) shall be in the same proportion as that of their incremental allocations in 285 TMC."

In connection with the above clarification, it may be pointed out that no such method of proportional allocation had been adopted under Scheme-A of KWDT- I which is in operation for the last near about 35 to 40 years. In substance, what is sought to be clarified is that in case yield falls short of the target quantity of water at a given dependability, in that event in what manner incremental allocation (share) is to be made amongst the three States. It is suggested that it should be in the same proportion as the distribution of 163 TMC.

Thus we feel, in case of shortfall of targeted yield at any given dependability it will virtually amount to deficit sharing,

going by the case taken up and suggestion made by Maharashtra.

As a matter of fact, sharing of deficit was an ingredient of Scheme-B which Maharashtra has also not pleaded it to be implemented, it rather opposed implementation of Scheme-B. The Scheme-A which is currently in operation for the last about 35 to 40 years, no such sharing of water which may be incremental in nature has been provided. It is true that this Tribunal has provided for utilization of the water in three steps, the initial being at 75% as provided by KWDT-I. The utilization in the next step is in respect of the difference between the 75% yield by KWDT-I and 65% yield of the series of 47 years, and in the third step utilization of difference between the yield at 65% and the average yield. The utilization shall be in the same manner as it is being done under Scheme-A. For that matter, it may be considered as extension of Scheme-A, for utilization of some more water which has been allocated by this Tribunal at 65% dependability and at average yield. The utilization of yield at 75% dependability, and the manner of utilization under Scheme-A is retained and continues to be the same.

In the above background, it was pointed out to the learned Counsel that all the three States shall utilize their allocation as they are doing according to Scheme-A of KWDT-I and after all the three States including Andhra Pradesh would utilize their allocation at one step thereafter, the next stage of utilization as per share of each State would commence, utilization of third stage share on average yield will also commence with a system of capping that upper riparian States would not realise more than their allocated share at each stage unless and until the lower riparian States have realised their allocation. In these circumstances, no such question of fixing incremental shares of each State arises. It is quite clear from the percentage of dependability that in the given number of years, or around that percentage of period, yield to the extent of dependability would be available and in the remaining years, there may be shortfall. It may be different amount of shortfall for different States or there may be no shortfall for one or the other State but some for the lowest riparian State.

After the above position was discussed, the learned Counsel did not pursue the clarification sought, any further.

Since this clarification has been dropped, no further discussion nor clarification is required.

Minimum flows:

The next clarification which is sought by the State of Maharashtra is that the States of Karnataka and Andhra Pradesh would have to contribute less amount of water for minimum flows as compared to the allocations made to them on that account. Therefore, the extra amount of water allocated to the States may be distributed among them. Clarification No.V is to the following effect:-

Clarification No. V:

> *"Correction in Provision for Minimum Flows: This Hon'ble Tribunal may be pleased to correct the excess allocations made to the States of Karnataka and Andhra Pradesh towards maintaining minimum flows and distribute among the States equally, 9 TMC of 65% dependable flows that become available on correction of excess allocation."*

At the outset, it may be pointed out that the whole scheme of releases for minimum flows has not been correctly understood. In Paragraph 4 at page 22 of the Reference, the extract from page 741 of our Decision has been quoted indicating the quantity of water which has to be released by the riparian States to maintain the minimum flow. The State of Maharashtra before quoting the extract from our Decision stated that the Tribunal had rightly mentioned the quantity of water that would flow down from the States. But we find that what is misunderstood is that all water released by one State e.g., Maharashtra itself, the whole of it will reach to the last reaches maintaining the same quantity, which is not so. If Maharashtra is to release 3 TMC, it will not be the same amount of water at the end since it would involve some wastages, seepage, evaporation, etc. So that the flow may remain maintained, Karnataka is to release about 7 TMC. But the State of Maharashtra in its calculation has deducted 2.574 TMC from the share of Karnataka for release, here it is that the calculation goes wrong. So as to maintain flow, Karnataka was required to release around 7 TMC not lesser quantity after

deducting the amount of water which has been released by Maharashtra for the purpose. Therefore, savings of 2.574 as shown by Maharashtra and ultimately with this method of calculation, it is alleged that Andhra Pradesh will ultimately be a gainer by 1.516 TMC rather than to release 6 TMC, is not correct. And according to its calculations, there would be a saving of 9 TMC since only around 7 TMC is to be released by the States at different points and not 16 TMC. Therefore, a prayer has been made that 9 TMC may be distributed equally among the three States. The saving has been calculated on mis-understanding the whole scheme. The flows are to be maintained throughout the stretch accordingly at different points releases have been provided so that minimum flow may not get diminished. It is not correct to say that 9 TMC will become available at 65% dependability for distribution. The clarification sought is misconceived. It is accordingly rejected.

Allocations made by this Tribunal are En bloc :

The next clarification sought is to the effect that the allocations made by this Tribunal are en bloc. The Clarification No.VI, as framed, is as follows:-

Clarification VI :

"This Hon'ble Tribunal may be pleased to clarify that the allocations made over and above those made by KWDT-I are en bloc."

In support of the above clarification, reliance is placed upon the observation of KWDT-I in its Report at page 179, which provides "*It is, of course, always to be borne in mind that the allocation of waters though based on consideration of certain projects being found to be worth consideration are not on that account to be restricted and confined to those projects alone. Indeed the States (and this applies to all the States) would be entitled to use the waters for irrigation in such manner as they find proper subject always to the restrictions and conditions which are placed on them.*"

Clause –XIII of our Order has been placed before us which provides that the decision and the order and the directions given by KWDT-I, which have not been amended, modified or reviewed by this Tribunal, shall continue to be operative. On this basis, the contention is that the allocations made by this Tribunal over and above 75% dependability made by KWDT-I, are also to be treated as en mass or en bloc and

that they are not tied to any particular project in consideration whereof the allocations have been made. But no explicit provision has been made by this Tribunal relating to the allocation made by it at 65% dependability and on average yield that it is en bloc. Therefore, in case, the water is proposed to be utilized in the projects other than those indicated at pages 786 and 787 of our Report, e.g. in the future projects as planned in C-II-3F or for spreading the benefits of additional allocations to more regions, the State of Maharashtra may, in absence of a clarification that the allocation made by this Tribunal is en bloc, feel difficulty in securing clearance for such other projects,.

It is submitted that the en bloc allocations can be utilized anywhere and in any manner as considered proper by the State but always subject to restrictions which may be placed on utilization of such waters. This condition of restrictions is also provided in the observations made by KWDT-I at page 179 quoted above. In this connection, the learned Counsel refers to the observations made by this Tribunal at page 791 of the Report where it is observed that the manner in which the States would be utilizing their allocations and consequent restrictions

as may be imposed on utilization by the States of Maharashtra and Karnataka in different sub-basins, shall be provided for in the chapter containing the Order and directions of this Tribunal.

Our attention is then drawn to Clause-X of our Order at pages 804 and 805 which provides for restrictions which have been placed on utilization of water by State of Maharashtra. It is submitted that no restriction is placed, in respect of the utilization of water as allocated by this Tribunal to the State of Maharashtra. Hence there is, in fact, no restriction placed but in the absence of any clarification that allocation is en bloc, Maharashtra may face difficulty in getting the projects cleared elsewhere and other than those mentioned at pages 786 and 787 of our Report.

As a matter of fact, Clause-X of our Order deals with change in the restrictions placed on the States on utilization in some sub-basins, as a consequence of availability of more water and allocations. The restrictions which relate to State of Maharashtra are mentioned in Clause-X I (a) to (d) which relate to capping on utilization of water and Clause (d) is in respect of diversion of flows for Koyna hydel station. The fact,

however, remains that nothing has been said anywhere, either way as to whether allocations made by this Tribunal out of the availability at 65% dependability and on average yield are en bloc or not. It is also not mentioned that the allocation is tied to the specific projects, though allocations are against specific projects enumerated at pages 786/787 of the report of this Tribunal. The question of putting any condition to the utilization of the allocated water was also not considered and dealt with. But these aspects have now certainly to be adverted to since specific clarification is sought to the effect that the allocation is en bloc. We, therefore, proceed to consider this aspect of the matter.

We may straightaway come to pages 786/787 of our Report where allocations to the State of Maharashtra have been made. It is found that the allocations have been made out of the yield at 65% dependability for Krishna Project in K-1 Sub-basin and for Kukadi Complex in K-5 Sub-basin. The other five projects for which allocations have been made out of average flows, four of them are also in K-5 Sub-basin, namely, Nira Deogarh, Bhama Askhed, Gunjani at Velhe and Sina Nimgaon and for Revised Urmodi Project which lies in K-1

Sub-basin. So, it is clear that the allocations are for two projects in K-1 Sub-basin and for other five in K-5 Sub-basin. It is then observed at page 787 that all the allocations are in the drought prone areas of Maharashtra. It is again observed at page 787 *"It covers the drought prone areas, and in part the area, which was proposed to be provided for by undertaking Krishna Bhima Stablization Scheme."* Undisputedly, all these projects fall in water scarcity/DPAP area and that is the reason why water was allocated for these projects. In these circumstances, if it is held plainly that the allocation is en bloc and thus allows the water to be diverted to non-DPAP/water scarcity area, it will frustrate the purpose for which the allocation was made and shall also betray the hopes of the people of the drought prone water scarcity/DPAP area. Therefore, question of placing restrictions becomes important so that maximum benefit must go to the people of water scarcity area and it may not be diverted to non-scarcity/DPAP areas or for the purposes of crops like sugarcane which is a high water demanding crop and the like or for power generation.

Here, we may say a word about the ground taken by the State of Maharashtra, which may, according to them, necessitate change in utilization of the water anywhere and in any manner, because in future capacities of major reservoirs of Maharashtra may be reduced significantly as they are already 25-30 years old and the next review may be after 40 years, this ground we find is devoid of any merit. Generally speaking, irrigation projects are prepared with the lifespan of the project as 100 years. This is how generally the planning is supposed to be made. There is still a long time for any such eventuality to happen, as apprehended in para 7 at page 26 of the Reference. This all is a hypothetical assumption and without any facts to substantiate the likelihood of reduction in the reservoir capacity or their becoming non-functional in coming 40 years period or so.

In the same context of en bloc allocations, Mr. Andhyarujina, Learned Senior Counsel, submits that this Tribunal has allocated water for the projects viz., revised Urmodi, Nira Deogarh, Bhama Askhed, Gunjani at Velhe and Sina Nimgaon, but the fact is that Maharashtra had not made any request for allocation of water for these projects. Our

attention has been drawn to page 786 of the Report to show the allocations have been made to the above named five projects besides Krishna Project in K-1 sub-basin and Kukadi Complex in K-5 sub-basin. The learned Counsel then refers to the Affidavit of Mr. Deokule and the Annexures IV and VI annexed therewith to show that as per Annexure IV, the 5 projects mentioned above, namely, revised Urmodi in K-1 sub-basin and the remaining 4 projects in K-5 sub-basin have already been adjusted against the allocations made by KWDT-I to Maharashtra at 75% dependability. Therefore, there was no occasion to make any demand for these projects. However, demand for Krishna Project in K-1 sub-basin and Kukadi Complex in K-5 sub-basin was made as per Annexure VI to the Affidavit of Shri Deokule. Therefore, 35 TMC allocated for the abovesaid 5 projects out of average yield may be allowed to be utilized in other projects, being en bloc, subject to any condition as this Tribunal may like to place on its use.

The learned Counsel had then drawn our attention to page 783 of the Report to indicate that additional allocation has been made by this Tribunal essentially for utilization in the districts of Satara, Ahmed Nagar, Sholapur and Pune which are

all water scarcity area. Therefore, Maharashtra may be permitted to utilize 35 TMC to the said 5 projects in the water scarcity districts, requirement of which was intended to be met by the allocations in question.

It however appears that the 5 projects namely, revised Urmodi, Nira Deogarh, Bhama Askhed, Gunjani at Velhe and Sina Nimgaon have been mentioned in MHAD-5 filed by Maharashtra, at page 6, paragraph 3.0 and 3.9. In C-1-D-P-138 dated 21.1.2008 signed by Mr. Deokule, shows the above noted 5 projects as planned against the availability of water at 50% dependability. The aforesaid documents namely, MHAD-5, C-II-D-P-136 and C-II-D-P-138, somehow rightly or wrongly lead to an impression that perhaps water was required at 50% dependability for the purpose of the above noted 5 projects.

However, the position as emerges is that the above named five projects had been adjusted against allocations at 75% dependability. It is submitted that Maharashtra may be allowed to utilize 35 TMC against the average yield allocated to cater to the requirement of water scarcity districts as found by the Tribunal, in some other projects with such conditions as may be placed by the Tribunal. It is submitted that the

allocation may not be treated as tied to the projects but for the water starved districts.

Some projects have even been indicated in which Maharashtra intends to utilize this amount of water, namely, 35 TMC including Krishna-Bhima Stabilisation Scheme which envisages water to be taken from K-1 sub-basin to K-5 sub-basin. The two points of the project are at considerable distance. It had been pointed out to the learned Counsel for the State of Maharashtra that this could not be permitted since this inter-basin transfer from K-1 sub-basin to K-5 sub-basin after travelling a long distance may disturb the flow and use of water in K-1 sub-basin. Thus, considering all facts and circumstances and the facts, it is provided that en bloc use is permissible subject to certain conditions, it is provided that 35 TMC as against the average yield allocated to the above mentioned 5 projects may be utilized within the respective sub-basins in which allocation has been made. It will serve the cause of the drought prone area, which is a large water starved area. It will not be utilized involving inter-basin transfer of water. Therefore, it is provided that the State of Maharashtra may utilize the water allocated to the 5 projects, namely, revised Urmodi, Nira Deogarh, Bhama Askhed, Gunjani at Velhe and

Sina Nimgaon in other projects subject to the condition that the utilization shall be within the sub-basin and not inter-basin utilisation.

Therefore, while clarifying that the allocations made to the State of Maharashtra out of the yield at 65% dependability and at average, are en bloc, but with the restrictions placed on its utilization after the Clause X(1)(d) in Clause X(1) of the Order, Clause X(1)(e) to be added to as follows :-

"(e) (i) Maharashtra shall not utilize the water allocated to it by this Tribunal in any non-scarcity/DPAP area, either in existing projects or in future projects.

(ii) in basin, utilization in any other project for DPAP area may be permissible with prior intimation in writing and a written no objection of the Krishna Water Decisions Implementation Board (KWD-IB). It shall not involve any inter basin transfer of water.

To the extent indicated above, the Order dated 30.12.2012 stands deemed to be modified by way of addition of sub-clause (e) to Clause X-(I) of the Order.

Correction in Clause X 1(a) of the Order, correcting it as "mainstream of River Bhima".

The next clarification sought by the State of Maharashtra is in Clause X 1 (a) of the final Order of this Tribunal to the effect that in the end, in place of "Bhima sub-basin K-5" it may be clarified as "main stream of River Bhima". Clarification No. VII formulated for the purpose is quoted below :-

Clarification No. VII:

"No.VII. This Hon'ble Tribunal may be pleased to clarify that the restriction imposed on Maharashtra under sub-clause 1 (a) of Clause X of the final order of this Hon'ble Tribunal pertained not to "Bhima sub-basin (K-5)" but to "main stream of river Bhima".

It is submitted that KWDT-I had placed certain restrictions in Clause IX of its Order and the State of Maharashtra was restricted to use not more than 95 TMC from the "main stream of river Bhima" from the water year 1990-91".

This Tribunal had distributed water at 65% dependability and on average availability which is over and above the allocation previously made by KWDT-I. That being the position, it was thought that some relaxation may have to be made in the restriction placed by KWDT-I and with that in view it was provided under Clause X 1(a) as follows :-

"..... 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)".

Obviously, in view of allocation for Kukadi Complex to the extent of 3 TMC at 65% dependability, the figure of 98 TMC occurs in the above noted Clause which is arrived at by adding 3 TMC to 95 TMC to which KWDT-I had restricted Maharashtra to utilize from the "main stream of river Bhima". The previous restriction by KWDT-I was in respect of utilization from the main stream of river Bhima and in our Order also the same seems to be intended to provide where it is said "123 TMC in an average water year from Bhima sub-basin K-5". It leads to no such inference that the restriction was

meant for utilization in K-5 sub-basin rather it goes well with restricton on utilization from the main stream of river Bhima. It is revised restriction on utilization from main stream of the river due to fresh allocation for Kukadi Complex. The words 'Bhima sub-basin K-5' is an inadvertent slip causing inadvertent mistake which needs a clarification.

The State of Andhra Pradesh in its reply to the Reference of Maharashtra stated numerous facts about restrictions in utilization in Bhima sub-basin. However, in the last part of paragraphs 7.3 at page-30 of the reply, it is stated as follows :-

> *"Thus, no case is made out for relaxation of restriction imposed by KWDT-I under Clause IX on utilizations by the State of Maharashtra from main stream of Bhima except to the extent of additional 3 TMC allocated by this Hon'ble Tribunal under Kukadi Complex".*

So, Andhra Pradesh also rightly felt that restriction placed in Clause IX by KWDT-I for utilization by the State of Maharashtra from main stream of Bhima could be relaxed only to the extent of 3 TMC, now allocated for Kukadi Complex at

65% dependability. This is what has been done as no other relaxation has been made except to the extent of allocation to Kukadi Complex at 65% dependability. Since the allocation is out of the yield at 65% dependability, other observations made by KWDT-I as referred to in reply of Andhra Pradesh are not relevant. In case yield beyond 75% dependability is not attained, the restriction will obviously remain at 95 TMC up to the yearly yield of 2130 TMC i.e. at 75% dependability.

In view of the discussion held above, the clarification sought for deserves to be accepted and it is provided that in Clause X 1(a) of the Order, the words 'sub-basin (K-5)' in the last line shall be deleted and the words 'the main stream of river' shall be substituted between the words 'from' and 'Bhima' in the last line of the said clause. Consequently, sub-para (a) of Clause X(1), as deemed to be modified, will be as follows:-

> "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 the main stream of river Bhima."

The Order of the Tribunal is deemed to be modified to the extent indicated above.

Relaxation in Restricted Use of Water in <u>Ghataprabha Sub-Basin K-3.</u>

It is submitted by the Learned Senior Counsel for the State of Maharashtra that restrictions placed on the use of water by Maharashtra in Ghataprabha (K-3) sub-basin may be relaxed from 7 TMC to 14 TMC annually and that Maharashtra be entitled to take up additional projects in K-3 sub-basin. The clarification as formulated for the purpose is quoted below:-

Clarification No. VIII:

"Relaxation of Restriction on use from Ghataprabha (K- 3) Sub Basin:

This Hon'ble Tribunal may be pleased to clarify that the quantitative restriction on the use of water by Maharashtra in Ghataprabha (K-3) sub-basin be relaxed from 7 TMC to 14 TMC annually, and that Maharashtra be entitled to take up additional projects in K-3 sub-basin from within the additional quantum of water allocated by this Hon'ble Tribunal."

Our attention is drawn to Clause-IX of the Final Order of KWDT-I at page 182 which reads as follows:-

> *"We have also placed restriction on the State of Maharashtra that it shall not use in any water year more than 7 T.M.C. from the Ghataprabha sub- basin (K-3) as otherwise the requirements of the State of Mysore for the projects in that sub-basin may suffer."*

It is then submitted that in view of Clause-XXIII of the Order of this Tribunal, the restriction placed under Clause-IX by KWDT-I remains in operation whereas now more water has been allocated which Maharashtra intends to utilize in Ghataprabha (K-3) sub-basin. Therefore, it is necessary to be clarified that limit of utilization placed on utilization from K-3 sub-basin is relaxed.

It is submitted that as per Master Plan of Maharashtra, C-II-3F, 7 TMC is required for utilization in three proposed projects, namely, Gudawale Lift Scheme requiring 3.1 TMC, Kitawade Project requiring 3 TMC and Minor irrigation

requiring 0.9 TMC. This is how 7 TMC more is planned to be utilized in K-3 sub-basin.

We have seen that KWDT-I in Clause-IX had placed the restriction on utilization from Ghataprabha sub-basin so that the requirement of State of Mysore for the projects in that sub-basin may not suffer. In this connection, the submission of Learned Senior Counsel for the State of Maharashtra is that now additional allocations have been made by this Tribunal, hence more water is available and it would be out of the additional allocation that utilization of 7 TMC more from Ghataprabha K-3 sub-basin is proposed to be made. This would require relaxation in the restriction placed to utilize not more than 7 TMC from Ghataprabha K-3 sub-basin. The submission is that with additional allocation, additional utilization is also expected which logically needs to be clarified that restriction to the extent of additional utilization is relaxed.

In connection with the above, it is pertinent to point out that additional allocations have been made by this Tribunal for seven projects in Maharashtra which fall in Upper Krishna K-1 sub-basin and Bhima K-5 sub-basin.

Out of total allocation of 43 TMC at 65% dependability, 25 TMC has been allocated for westward diversion for Koyna Power Plant. The remaining 18 TMC has been allocated for irrigation purposes in the DPAP area which is drought prone and water scarcity area. 15 TMC is for Krishna Project K-1 sub-basin and 3 TMC for Kukadi Complex in K-5 sub-basin.

Another 35 TMC has been allocated to Maharashtra out of flows at average yield. These are for the projects Nira Deogarh, Bhama Askhed, Gunjani at Velhe and Sina Nimgaon which are all in Bhima K-5 sub-basin. Revised Urmodi Project has also been allocated at average yield which lies in K-1 sub-basin. It is thus found that all the additional allocations have been made in K-1 and K-5 sub-basins for the projects in DPAP area which is drought prone water scarcity area. No additional allocation has been made for any project from K-3 sub-basin. In a map annexed with MHAD-23, K-3 sub-basin is shown in purple colour which indicates it a non-DPAP area and portions shown in yellow colour are DPAP areas including K-1 and K-5 both sub-basins. There would be no occasion to utilize the water allocated for drought prone DPAP area to the non-DPAP area. It is also clear from the map that K-5 sub-basin is quite

far from K-3 sub-basin. We could see some force in the argument of Ld Senior Counsel for the State of Maharashtra for relaxation of restriction for utilization from K-3 Ghataprabha sub-basin if some additional allocation had been made for K-3 Ghataprabha sub-basin but there is none, hence there is no occasion to relax the restriction placed on utilization from Ghataprabha K-3 sub-basin. Without any additional allocation for projects in K-3 sub-basin if the utilization limit is relaxed, it will adversely affect the State of Karnataka and the purpose for which restriction was placed by KWDT-I would be frustrated.

In this connection, we may also refer to discussion on clarification No.VI a little earlier, where it has been found that the allocations against the projects in DPAP area shall not be used for non-DPAP areas and the allocation made to 5 projects viz. revised Urmodi, Nira Deogarh, Bhama Askhed, Gunjani at Velhe and Sina Nimgaon shall be utilized within the sub-basin of allocation.

In view of the discussion held above, no case for clarification as prayed for is made out and the same is rejected.

Drinking Water Supply for Chennai.

The next clarification sought is in respect of contribution of 5 TMC by each of the three riparian States for Chennai City Water Supply, for the drinking water purposes in Chennai City. Clarification No. IX is in three parts. It is quoted below :-

Clarification –IX:

"(a) This Hon'ble Tribunal may be pleased to clarify that the obligation of the upper States of Maharashtra and Karnataka to contribute their respective shares of 5 TMC each for Chennai City Water Supply shall be limited during the period July to October each year.

(b) Hon'ble Tribunal may further be pleased to clarify and provide that the contribution of Maharashtra towards Madras city water supply shall be the aggregate of flows measured at the terminal gauging stations on river Krishana and tributaries in Maharashtra viz., Takali on Bhima, Kurundwad on Krishna, Bastewad on Dudhganga, Daddi

on Hiranyakeshi and Gotur on Ghataprabha river. It may further be provided that the KWD Implementation Board shall measure the contributions every month from July and October and communicate to all the party States.

(c) The Tribunal may further direct that the Implementation Board shall measure at the off take point, quantum of water actually supplies to Tamilnadu State for the purpose of supply to Madras city. And that in the event of the supplies to Tamilnadu falling short of 15 TMC in any year, the obligation of upper States to make contribution in the subsequent year shall stand reduced proportionately".

Thus, in clause (a) of clarification IX, it is sought to be clarified that State of Maharashtra shall contribute for Chennai City Water Supply only in 4 months of the year namely, from July to October. The reasons for not making any contribution during the period January to April, as indicated, is that the Agreement of 28th October, 1977 to which the States of

Maharashtra, Andhra Pradesh and Tamilnadu were parties, had provided to contribute 5 TMC during the period from 1st July to 31st October only. There was no mention of any supply from January to April. The other reason is that the arrangement under which supplies were to be made between January to April also, was between Andhra Pradesh and Tamilnadu only, deviating from the earlier agreements of 1976 and 1977. It is agreement dated April 18, 1983 between Andhra Pradesh and Tamilnadu to which Maharashtra was not a party. About off take point also a grievance has been made as well as about construction of very wide canal by Andhra Pradesh much beyond the agreed capacity.

It is to be seen that the quantity of water to be contributed for Chennai Drinking Water Supply remains the same though spread over in set of two periods of four months each but it does not exceed 5 TMC for each State. Supplies in the months of January to April would come to about 0.43 TMC or around that in each of four months.

All such points which have been submitted by the learned Counsel regarding the agreement of 1983, ratification of the earlier agreement, off take point and about the capacity

of canal etc. had been raised in the main proceedings and have been elaborately discussed and dealt with. Hence, all these points cannot be raised again since it is not a re-hearing of the matter, nor re-opening of the whole issue, nor the facts are to be re-appreciated time and again. It is beyond the scope of Section 5(3) of the Act and the clarification sought is misconceived.

In connection with the point raised in clause (b) indicating certain points from which the State of Maharashtra proposes to make releases for contributing its share towards Chennai Drinking Water Supply Scheme, it may be noticed that the State of Karnataka in its reply has made no comment about the locations of releases nor about measurement of flows on those sites. About the supplies to be effected by Maharashtra from river Krishna and its tributaries, the aggregate of which may be taken as Maharashtra's contribution, the State of Andhra Pradesh stated in its reply that it is absolutely incorrect and misconceived. But no reasons have been indicated as to why it is misconceived or incorrect. The contribution of Maharashtra has to go to Andhra Pradesh through Karnataka. As indicated above, Karnataka had no

comment to make on that aspect of the matter. In these circumstances, suffice it to say that Maharashtra may, if it so likes indicate the points of supply and the quantity thereof and timely inform the same to the other two riparian States and to the State of Tamilnadu and to the Implementation Board. The detailed specific instructions sought to be given by the Tribunal to the Implementation Board would not be necessary once the Implementation Board has been charged with duty to ensure that the decision of this Tribunal is properly implemented. It includes supply to be made to Chennai for its drinking water scheme which is ultimately to be delivered by the State of Andhra Pradesh to Chennai. It goes without saying that the Implementation Board shall monitor the contributions to be made by the States of Maharashtra, Karnataka and Andhra Pradesh and the delivery of the supplies to Tamilnadu according to the decision. It is implied that all necessary steps regarding checking and measurement of supplies etc. would obviously be taken by the Board.

The point raised in clause (c) also stands covered by the observation made in the preceding paragraph while dealing with clause (b). There is no occasion to make any such

provision that in case there is short supply to Tamilnadu in any year the upper riparian States would stand absolved of their responsibility to contribute next year to the extent of the shortage. It is also beyond the scope of Sec. 5(3) of the Act. No State can be required to contribute more than 5 TMC or less than that amount of water, each year, on any pretext whatsoever. The Implementation Board would ensure that each State complies with the decision and contributes its share.

In the light of the discussion held above, we find that State of Maharashtra wants, in effect, a fresh hearing of the matter which is beyond the scope of Sec. 5(3) of the Act and no clarification is required to be made, the prayer made to that effect in respect of the clauses (a) to (c) cannot be acceded to.

Review Authority.

It is sought to be clarified that the directions/resolution of the Implementation Board may be made subject to review. Clarification No. X in this regard is as follows :-

Clarification No.X :

"This Hon'ble Tribunal may be pleased to clarify that the direction/resolution of the

Implementation Board, under Clause 14 of the Appendix 1 to the Final Order, solving questions referred to the Board, shall be reviewable. The Tribunal may provide for appropriate review forum which is competent to review, suo moto or on the application of any riparian State, the direction/resolution of the Board."

In support of the above clarification, Mr. Andhyarujina, ld. Senior Counsel for the State of Maharashtra refers to clause (i) of Section 6A(2) of the Act, according to which, in a scheme which may be framed by the Central Government, a provision may be made, making the decision of the Authority subject to review. It may also provide as per sub-clause (j) for the constitution of a Review Committee and the procedure to be followed by such Committee. It is submitted that constituting a Review Authority is thus envisaged under the provisions of the Act. He also refers to the fact that Narmada Water Disputes Tribunal Constituted such a Review Authority and had also provided a mechanism to review the decision of the Narmada Control Authority. An excerpt from the decision

of the Narmada Water Disputes Tribunal has been annexed with the Reference Petition, and our attention is drawn to Clause 14 which relates to constitution of Review Committee. The Union Minister for Irrigation has been made the Chairman of the Review Committee and the Chief Ministers of all the four States have been made the Members with option for them to nominate Irrigation Ministers of their respective States as Members of the Review Committee.

No doubt at all, that there is a provision under the Act which enables the Central Government also to frame a scheme providing for constituting a Review Committee to review the orders of an Authority constituted for implementing the decision of the Tribunal. Some such Review Authorities have also been constituted by some Water Disputes Tribunals e.g. Narmada Water Disputes Tribunal and The Cauvery Water Disputes Tribunal.

It is submitted that such a Review Authority may be constituted in this case also.

The resolution and the direction of the Board are final which are obviously to be carried out by the parties. It is also

true that a provision for Review, may cause delay in compliance with the resolutions or directions of the Board and in some cases, may be, the purpose of the resolution or the direction may also get frustrated but this alone may not be a good reason for not providing for a Review. The Review Authority must make efforts to dispose of the review petition at the earliest and avoid any delay in its disposal. With this end in view such a Review Authority should be constituted which may be able to act fast, having easily available and meaningful assistance at its disposal which may be conducive to take quick decisions, since many matters, in controversy, may be relevant for a particular water year only whereafter they may be rendered infructuous.

The decision of this Tribunal does not contain any provision for review nor for any such Review Authority, which on giving due consideration, we feel that in the interest of justice, may be provided for and that we hereby do provide so.

We are of the view that Review authority may not necessarily to have the representatives of all the riparian States as its Members. The dispute would obviously relate to one or the other party State. One of the parties would prefer a review

having its own interest in the matter besides that of its opponent, but review must be considered by an independent forum which is not involved as party in the controversy. If it is constituted with the representatives of all the riparian States, it will become a body in which decision making will have to depend upon the stand taken by the parties to the dispute having interest adverse to each other. So from practical point of view also, smooth and hassle-free functioning and decision of the Review Authority will be very difficult.

To have representatives of the States in the implementing body is a different matter altogether where it has to implement the decision of the Tribunal and in case of any differences, as far as possible it is to be sorted out amicably, otherwise by resolution or direction of the Board. Whereas, the Review Authority is to act as an adjudicator to evaluate the resolution/direction of the Board on merit independently without bias and. We, therefore, conclude that it would be better to avoid involving the riparian States as members of the Review Authority in its decision making. It must be an Independent Authority. Of course, at the time review is

considered by the Review Authority, the representatives of the States must be heard to place their point of view.

Again it may also not be possible for a multimember Review Committee to assemble and meet as early and as often as it may be necessary to deal with the matter within the water year. It has to act on fast track. Therefore, a Single Member Review Authority will be the best suited option but it must at the same time necessarily have proper assistance of persons competent to deal with such matters, technical and otherwise and who may be easily available, as well.

Therefore, it is provided as follows:-

(14A) **Review Committee** : The resolution/direction of the Krishna Water Disputes Decision Implementation Board shall be reviewable on application of any party State and the decision of the Review Committee on the review petition, if any preferred, shall be final and binding on all the parties.

(i) The Minister for Water Resources, Govt. of India, shall constitute the Single Member Review Authority.

(ii) The Review Authority while dealing with the review petition and taking a decision on it shall take assistance of a panel of three designated personnel consisting of :-

(1) The Secretary, Ministry of Water Resources, Government of India ;

(2) The Secretary, Ministry of Agriculture, Government of India ;

(3) The Chairman, Central Water Commission.

The Review Authority shall take the assistance of the aforesaid panel any time before hearing of the parties, during the course of review proceedings and after that before rendering its decision.

The Secretary, Ministry of Water Resources shall be the Convener of the Review Authority.

(iii) The Review Authority shall give opportunity of hearing to all the parties to the Review Petition, before taking any decision in the matter.

(iv) The Review Authority may also, if necessary, call for the records and the comments of the implementation Board on the Review Petition.

(v) The decision shall be recorded in writing.

The provision as made in the preceding paragraphs shall be added as Clause 14A of the Appendix-1 to the decision relating to the Implementation Board.

The Report and the Decision of this Tribunal shall deem to be modified to the extent indicated above by adding the above noted clause 14A after clause 14 of Appendix-I of the Report and Decision (Order) dated December 30, 2010 of the Tribunal.

The Expenditure incurred by KWD-IB on administration of Tungabhadra project be shared only by Karnataka and Andhra Pradesh and not by Maharashtra.

It is sought to be clarified by this Tribunal that the expenditure incurred on administration of Tungabhadra Project may be shared between the States of Karnataka and Andhra Pradesh only. The State of Maharashtra could not be burdened with such expenditure while sharing the expenditure of KWD

Implementation Board. Clarification – XI in this regard as framed is noted below :-

> **Clarification – XI** : *"This Hon'ble Tribunal may be pleased to clarify and provide that the expenditure incurred by the KWD Implementation Board on administration of Tungabhadra Project and other joint projects of Karnataka and Andhra Pradesh shall be shared by those two States only".*

It is submitted that powers and functions of Tungabhadra Board shall vest in KWD Implementation Board (KWD-IB) as per decision of this Tribunal. The expenditure incurred on KWD-IB has been ordered to be shared by all the three States equally. The submission is that the State of Maharashtra has no concern with Tungabhadra Project. It is further submitted that the functions of the Tungabhadra Board are now to be discharged by KWD-IB including maintenance and operations of the entire Tungabhadra Dam and the Canals etc. There exists huge staff for discharging all these functions of the Tungabhadra Board. According to the decision of this Tribunal, the existing staff of the Tungabhadra Board may also

be retained as employees of KWD-IB as per requirement and the need.

The ld. Counsel for the State of Maharashtra submits that KWD-IB is to be funded by the Government of India and that the expenditure is to be reimbursed by the three States in equal shares or may have to be released in advance, if so required. But there is no justification for State of Maharashtra shouldering the expenditure which may be incurred by KWD-IB on the part of the existing functions of Tungabhadra Board which are now to vest in it. It is submitted that Tungabhadra Dam and other allied projects are between two States of Karnataka and Andhra Pradesh and Maharashtra has no stakes in those projects. Therefore, KWD-IB may maintain a separate account of expenditure incurred on administration, operation and management of Tungabhadra Project and other allied projects, expenditure of which may be borne jointly by the States of Karnataka and Andhra Pradesh only.

In connection with the above point as raised, it may be pointed out that it was the view of KWDT-I as also that of the parties that there may be one single Authority for looking into the affairs of the whole basin. This Tribunal also felt the same

way that it was only proper that one single authority may look into all the matters relating to the affairs of the whole basin, as one integrated authority. Thus, considering all those factors, a provision for single authority by the name of Krishna Water Decision Implementation Board (KWD-IB) has been constituted. All functions which are being discharged by the Tungbhadra Board have also been vested in KWD-IB.

The Tungabhadra sub-basin K-8 is a part of the whole Krishna Basin. It contributes substantially to the yield of River Krishna and the river Tungbhadra is one of its main tributaries. The yield of river Krishna which includes the yield of river Tungabhadra, in totality constitutes the dependable yield for the whole basin. The dependable yield is distributed taking into consideration various requirements of each State as well as the current utilization including as in K-8 sub-basin and the yield of Tungabhadra and its diversions through the Tungabhadra Dam and its system. It may not be very material that it may serve only one part of the Krishna Basin and may not have any direct impact on one of the States viz. the State of Maharashtra as canvassed before us.

The whole basin is being considered as one unit and yield and utilization in one part certainly has impact on allocations and all other related matters. Therefore, it is difficult to bifurcate the basin on the basis as pleaded by the State of Maharashtra to avoid a part of the financial liability relating to functioning of the KWD-IB.

Considering all facts which were before us, we feel that since there is one single authority for the whole basin and there is direct or indirect impact of one part of the basin on the other in the matter of yield, allocation, sharing and utilization, it would not be possible to make any split in part, in the matter of expenditure of KWD-IB, The clarification as sought cannot be allowed and the same is rejected.

Sedimentation within 20 Kms. Of Maharashtra – its dredging by Karnataka.

A Clarification is sought that in case sediment deposit of more than 500 mm is found within 20 km of Maharashtra border in river Krishna, it would be the duty of Karnataka to remove the sedimentation completely. The Clarification No.XII as formulated is quoted below:-

Clarification No. XII:

"This Tribunal may be pleased to clarify that in the event of sediment deposition of more than 500 mm being revealed in the periodical sediment surveys of Almatti/Hippargi reservoir at any location in Krishna river within Maharashtra or in Krishna river within 20 km of Maharashtra border, it shall be the duty of the State of Karnataka to remove the said sediment completely."

In connection with the above clarification, Mr. Andhiarujina, learned Senior Counsel for the State of Maharashtra, referred to KAD-125 where it is submitted that the State of Karnataka had agreed that if sedimentation is found in Maharashtra, an arrangement for its removal can be agreed to. He also refers to KAD-22 where dredging of such location of sedimentation has been mentioned. It is submitted that this Tribunal has observed that if necessary, both the States would take further steps to reduce sedimentation and that Karnataka would take steps for survey to find out sedimentation every five year. It is contended that the observations of this Tribunal

that the apprehension of Maharashtra was unfounded, were guided by the fact that presently there was no sedimentation in Maharashtra but this is the situation in only seven years of operation of the dam with FRL 519.6 mm. It may be different at FRL 524.256 m. Therefore, Maharashtra needs to be protected from ill-effects of sedimentation in case it occurs within Maharashtra or close to the border of Maharashtra.

It may be pointed out that the Tribunal had not accepted the evidence adduced on behalf of the State of Maharashtra apprehending sedimentation to the extent that it may cause injury to Maharashtra. The State of Karnataka had only given out in KAD-22 that in case sedimentation was more rapid than estimated, dredging may be resorted to. KAD-125 only provided that if there was any sedimentation in Maharashtra, arrangement for removal of the same could be agreed to. But considering the report of M/s Tojo Vikas International Pvt. Ltd., which also reported besides other things that there was no rise in the bed level barring at one or two places insignificantly nor there was any rise in the water level in river Krishna in Maharashtra territory, it was ultimately found by the Tribunal that there was no reason for apprehension of any substantial

injury as apprehended by State of Maharashtra. It was also found that the apprehensions were unfounded having in mind the height of Almatti Dam up to 524.526 m. In these circumstances, we do not find any good reason to further clarify the order presently making a provision for dredging by Karnataka as suggested by the State of Maharashtra. However, in future, if on periodical survey, any significant change is reported in sedimentation within 20 Kms. of Maharashtra territory in the river Krishna, the KWD-IB may direct Karnataka and Maharashtra to undertake dredging jointly to clear the same for which at one stage Karnataka had also agreed to enter into an agreement. The cost of dredging, if any, shall be borne equally by both.

Therefore, the clarification as sought is given to a limited extent and the order stands deemed to be modified and after Clause XIII, Clause XIII-A is added to the following effect :-

> "XIII-A. If on periodical survey any significant change is reported in sedimentation within 20 Kms. of Maharashtra territory in the 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 both".

The decision of the Tribunal is deemed to be modified to the extent by adding the above clause as Clause XIII-A in the order of the Tribunal.

Sedimentatioin Survey by Tojo Vikas International Private Limited – Cost to be borne by Karnataka alone:

A clarification is sought that the expenditure incurred towards the cost of sedimentation survey of Almatti Dam and Hippargi barrage carried out by M/s Tojo Vikas International Pvt. Ltd. should be borne by Karnataka alone. The Clarification No.XIII is noted below:-

Clarification No. XIII:

"This Hon'ble Tribunal may be pleased to clarify that the cost of sedimentation survey of Almatti Dam and Hippargi barrage carried out by M/s Tojo Vikas International Pvt. Ltd. should be borne by the State of Karnataka alone and modify the Clause XXI accordingly."

It is submitted that it was the duty of the State of Karnataka to have the survey done regarding sedimentation in the first year of the operation of Almatti Dam and thereafter subsequently also but Karnataka failed to comply with that condition which ultimately led to survey by M/s Tojo Vikas International Pvt. Ltd.

It may be mentioned here that the State of Maharashtra had taken up a case that there has been heavy sedimentation at its border and there was imminent apprehension of submergence of the territory of Maharashtra. It had also led evidence oral as well as documentary to make out a case of heavy sedimentation. The State of Karnataka also led its evidence and there was vast variation in the experts' opinions of the two States. It led to order for survey by an independent agency. The evidence of both the parties on the point was found incorrect. It has also been found by the Tribunal that there is no such apprehension of submergence of territory of Maharashtra as was its case and had pressed it vehemently.

In the above circumstances, it is not correct to say that only one State should be saddled with the cost of survey. The stand of both the States was incorrect, hence the necessity to

have independent opinion was considered necessary. There is no ground to deviate u/s 5(3) of the Act from the order already passed.

KWD-IB should implement the Real Time Flood Forecasting System in the entire Krishna basin to mitigate the flood situation.

The State of Maharashtra wants a clarification that KWD-IB shall implement the Real Time Flood Forecasting System in the entire basin and the Clarification No.XIV as formulated is quoted below:-

Clarification No. XIV:

> *"This Hon'ble Tribunal may be pleased to clarify and order that the Krishna Water Decision – Implementation Board shall implement the Real Time Flood Forecasting System in the entire Krishna basin in order to effectively forecast and to the extent possible, mitigate the flood situation."*

In connection with the above matter, we have seen observations of this Tribunal made at page 690 of Vol.III of the Report where it has been observed that timely exchange of

relevant data about the reservoir levels would help in assessing the likely flood situation. Clause IX of our Order also requires the States to prepare ten daily working tables and rule curve and to furnish copies to each other and also to the KWD-IB. The Tribunal had also made observations while disposing of I.A.No.4 and I.A.No.5 of 2005 that it would be of great benefit that in these modern times, help of advance scientific methods/techniques and the devices, may be taken which may help in alerting in advance about impending rise in water level etc. In this background, we feel that it may specifically be clarified for installation of Real Time Flood Forecasting System in the entire Krishna basin by the KWD-IB. It would be of great help in management of flood situation and its avoidance. It is, therefore, clarified and the order stands deemed to be modified accordingly after Clause XV, Clause XV-A is added to the following effect :-

as follows:-

> "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".

The decision of the Tribunal is deemed to be modified to the extent by adding the above clause as Clause XV-A in the order of the Tribunal.

CHAPTER - IV

Andhra pradesh.
Reference No. 1 of 2011

Clarifications of Andhra Pradesh :

The State of Andhra Pradesh seeks clarifications, explanations and guidance on certain points and consequent modification of the Decision of this Tribunal. So as to indicate the points or issues on which clarification, explanation and guidance is sought, Mr. Dipankar Gupta , learned Senior Counsel, referred to paragraph 9 at page 11 of the Reference Petition, listing 14 issues which are quoted below :-

> *"9. The State of Andhra Pradesh respectfully prays for clarification and guidance/explanation on the following issues :-*
>
> *1. 47 Years Yield Series*
>
> *2. Duties of Minor irrigation*
>
> *3. Percentage of Dependability to be adopted*
>
> *4. Allocation of water at different dependability*
>
> *5. Distribution of surplus water upto average*
>
> *6. Inequitable allocations*

7. *Inclusion of Carryover Storage in Equitable Allocation of the State of Andhra Pradesh*

8. *Height of Almatti Dam and operation of Almatti Dam at different dependability. (75%, 65% and average).*

9. *Indiscriminate construction of projects in the State of Maharashtra.*

10. *Permitting additional projects in Tungabhadra Basin.*

11. *Indiscriminate construction of projects and KT weirs/barrages by the State of Karnataka*

12. *Success rate*

13. *Inevitable Wastage*

14. *Functions of KWD-IB."*

After reading out the points noted above, the learned Counsel indicated that detailed facts and grounds supporting such points are contained in the rest of the petition, which indeed is a lengthy petition of more than 90 pages. To us it appears to be full of facts and covering almost all that which

had been argued in proceedings under sub section (2) of Section 5 of the Act.

The learned Counsel has advanced the arguments, topic and subject-wise, covering most of the points which have been referred to above. We propose to deal with the arguments subject-wise as advanced leaving the points on which no submissions have been made, e.g. Point No.13.

1. <u>Length of Series for assessing yearly yield:</u>

Firstly, the subject which has been taken up by the ld. Counsel is "the length of series" for assessing the yearly yield of river Krishna and the manner in which it was prepared by KWDT-I.

It is argued that the Tribunal was not right in rejecting the series of 78 years prepared by KWDT-I. In this connection, Mr. Dipankar Gupta has drawn our attention to the manner in which KWDT-I had prepared the series of 78 years by referring to pages 73, 76 Col. 1 and page 77 of the Report of KWDT-I particularly to say that KWDT-I had applied MDSS formula and its equations for measuring the water and added utilization to it, which reflected yearly yield of river Krishna.

Referring to page 80, col. 2 of the Report of KWDT-I, submitted that though there have been controversies about calculating the discharge over the standing shutters as well as about the value of the velocity of flow, but ultimately parties agreed on all such points as well as agreed that for non-modular flow, the discharge will be calculated according to the formula given in the Krishna Godawari Commission Report. We also find it observed in the Report that parties had broadly agreed about the utilization made by each of them. He then refers to page-81 of the Report of KWDT-I, Col. 2 where KWDT-I mentions about the submission of agreed statement by the parties that 75% dependable flow of the Krishna River at Vijayawada, for the purpose of the case, be adopted as 2060 TMC. It is also observed by KWDT-I that it was a matter of great satisfaction that the dispute on a very crucial matter which had been the subject matter of serious controversies stood satisfactorily resolved. It is submitted that the series of 78 years thus being an agreed series, it could not be ignored or rejected and that it is a matter finally settled by the previous Tribunal. Therefore, it cannot be re-opened in view of proviso to sub-Section 1 of Section 4 of the Act. The fresh data could only be added to series of 78 years.

The learned Counsel then refers to page 241 of the Report of the Tribunal where it has been observed that some piecemeal information was available which was put together to prepare water series of 78 years and further that some data was observed data, but for the other period, two different formulae had been adopted and water discharge was calculated on the basis of equations which were different for different periods. It had also been indicated that for the period from 1951-52 to 1961-62, there had been breach in the Vijayawada anicut which had disrupted the gauging at that site. It was resumed only after 10 years on construction of Prakasham Barrage, a different gauging site. It was also noted that for the years 1894-95 to 1900-01, flow data was borrowed from Krishna Reservoir Project Report.

It is submitted that 78 years series is a series of measured flows by applying MDSS formula having two limbs, one for flows above the barrage and the other for below the barrage. Therefore, the agreed series of the measured flows could not be faulted with and rejected. The observations of the Tribunal as pointed out in the preceding paragraph relating to series of 78 years are not called for and require explanation.

First of all, it may be made clear that the series of 78 years has not been rejected by the Tribunal. On the other hand, the effort made to prepare the series by KWDT-I, has been appreciated and commended since nothing better was then available nor possible at that stage, rather the agreed yield of 2060 TMC at 75% dependability plus return flows and its allocation as made by KWDT-I has not been disturbed and to that extent it has been allowed to continue and to be in operation even now. Therefore, it is wrong to argue that the agreed series of 78 years has been rejected or ignored or that it has been re-opened violating proviso to sub-Sec. (1) of Section 4 of the Act.

The question then was to assess the current yield <u>in presenti</u> for distribution of water as may now be available over and above 2130 TMC. Now fresh **and observed** data, not calculated data, was available, for a sufficiently long period which is free from any controversy and better qualitatively to assess the current yield. Therefore, the fresh series of 47 years 1961-62 to 2007-08 was prepared for the purpose.

So far as the data as was available for preparing a series of 78 years for different periods and the manner in which it has

been calculated, can well be found first hand from Appendix-O at page 272 of the printed Report of KWDT-I which is a series prepared by Maharashtra for a period of 78 years. The same will also be available in Appendix-P and Appendix-Q, the series prepared by Karnataka and Andhra Pradesh at pages 274 and 278 of the printed Report of KWDT-I. A look at these series will briefly make clear some of the facts out of many, for example : -

(1) the data for the years 1894-95 to 1900-01 was borrowed from another record viz. Krishna Reservoir Project Report.

(2) For the period 1901-02 to 1950-51, the flows were to be deemed to be modular on all the days except 116 days.

(3) For the years 1929-30 to 1950-51 for which flow data was available, the flows were to be calculated by applying the equations mentioned in MRK-334.

(4) For the years 1925-26 to 1928-29, flows were to be taken in the manner indicated in MR Note 1.

(5) For the years 1901-02 to 1924-45, as per Appendix-O Note (10), flows were calculated according to that Note.

(6) For the years 1951-52 to 1970-71, the flows were to be taken as indicated in MR Note 2.

It is noteworthy that for the period 1951-52 to 1960-61, there was breach in Vijayawada anicut and there was no reliable data for this period. So, assumed data was taken into account.

(7) For the period 1961-62 to 1971-72, the observed data was provided by Andhra Pradesh after construction of Prakasham Barrage which is a new gauging site not having existed prior to 1961.

So in the series of 78 years, the observed data is for a period of 10 years only. The rest of the period of 68 years out of the series, consists of borrowed data, assumed data, calculated data and data based on agreed notes etc. for main stream flows besides agreed utilization data for almost the whole period by each State. No exception can be taken to remark that piecemeal data was put together to prepare the series. Since there was no other option then available, hence for

the limited purpose it was and it is being acted upon. The only possible series, in the circumstances, was made use of. But it is not necessarily to be perpetuated for all future times to come even though better data came into existence subsequently.

After the construction of Prakasham Barrage, Andhra Pradesh had provided to KWDT-I the observed data for the period from 1961-62 to 1971-72. Now CWC has provided observed data for the remaining period making it a series of 47 years of observed data only and further as gauged at the site available after construction of Prakasham Barrage. No better data could be available for the purposes of assessing the yield of river Krishna in presenti. The two series have different features and characteristics, hence could not be mixed by adding up them together as suggested by the learned Counsel. It will be a mismatch to add up two sets of data as one series. It will be a vitiated series. On availability of better and fresh data of near about five decades, the efficacy of the series of 78 years stood exhausted for finding out present yield, particularly over and above 2130 TMC.

In this view of the matter, it was considered that for assessing the present yield of river Krishna, the new and fresh

data of a sufficiently long period of 47 years may be used in preference to adding fresh data to the series of 78 years. So far as it is pointed out about data for one year, in respect of which Annexure-I has been filed with the Reference Petition at page 95 for the year 2007-08, it is to be noted that the flow data was found out by CWC by using stabilized GD Curve of historical data cross section and HYMOS Software. It is also a measurement of observed data. In this background, making use of fresh series of 47 years consisting of observed data only gauged at the new site available after construction of Prakasham Barrage cannot be objected to. It is the best possible data of flow of mainstream of River Krishna. The witness of AP Prof. Subhash Chander called observed data as "The truth".

The Tribunal had already taken note of all those things which have been pointed out by the learned Counsel, namely, the manner in which KWDT-I had prepared the series and the application of MDDS formula etc. The whole argument for the purposes of explanation or clarification u/s 5(3) of the Act is misconceived and beyond the scope of the said provisos. It has only been tried to reopen or to reargue the matter. No

explanation is required nor any clarification resulting in any kind of modification of the decision.

2. **Section 4(1) Proviso: Series of 78 Years – a settled issue:**

The next point which has been urged is that the series of 78 years is a settled issue which cannot be reopened in view of proviso to sub-section (1) of Section 4 of the Act. It is submitted that sub-clause (A) of Clause XIV at page 101 of the Further Report of KWDT-I is the only provision permitting review after 31st May, 2000 which also provides that as far as possible any utilization that may have been undertaken by any State within the limits of allocation shall not be disturbed. We have already discussed in the main Report about the aforesaid provision referring to Clause-XVII also, of the Final Order holding that the amendment adding the proviso in the year 2000 may have an overriding effect in respect of matters already decided but not in respect of a new situation or case as developed subsequently with passage of time.

In connection with the above matter, the learned Counsel also referred to the observation at page 159, col. 2 of the

Report of KWDT-I which is also to the same effect that a review may take place any time after 31st May, 2000 but at the same time it is also observed at same page that the demand may increase with the passage of time which may be considered in the light of fresh data that may be available. It is clear that series of 78 years has not been reopened by the Tribunal, rather it is saved by clause IV of the Order. Nonetheless the scope of proviso to sub-section (1) of Section 4 has been considered and our attention has rightly been drawn by the learned Counsel to the discussion at pages 201 to 205 of the Report/decision of the Tribunal where ultimately four categories of cases have been indicated in which the proviso of sub-section (1) of Section 4 will not be attracted.

The major part of the data now used in the series of 47 years, data of 37 years came into existence only after the decision of KWDT-I. Making use of the new data of sufficiently long period of time, a new series was prepared which showed increase in the yield of river Krishna. A significant part of the increased yield would be due to return flows which were not available at the time the matter was decided by KWDT-I. The KWDT-I had distributed the yield at

75% dependability as then agreed, the rest of the yield remained undistributed. That part of the dispute relating to the availability of water over and above 2130 TMC was not decided nor the dispute in respect of that was ever settled, much less about the increased yield now available. The series of a sufficiently long period now prepared for assessment of yield as now available currently on the basis of new and fresh data or material, would not attract the proviso of sub-section (1) of Section 4 of the Act. The matter has been considered at length in our decision, the assessment of the yield of Krishna river on the basis of fresh and new material would not amount to reopening of the series of 78 years which has been kept intact and is to operate to the extent of yield at 75% dependability as found in that series of 78 years, the allocations are also to continue accordingly. Hence, the argument based on proviso to sub-section (1) of Section 4 is misconceived. It was necessary to assess the yield as now available, which was not and could not be assessed in the earlier proceedings, so it could not be, distributed then. It has been assessed on the basis of the fresh and new data as now exists and available. No question of re-opening of any settled issue is involved. No clarification or explanation is required as sought.

3. **IS 5477 (Indian Standard) – Fixing the Capacity of Reservoir:**

The learned Counsel for the State of Andhra Pradesh next took up the point relating to IS 5477 (Indian Standard – Fixing the Capacities of **Reservoir Method Part-I General Requirements)** and in that connection refers to page 272 of the Report of the Tribunal where it is observed that according to the above noted provision, a water series of 40 years would be sufficiently long to give an idea of available quantity of water at a particular site of the project or any nearby site. He again refers to page 274 of the Report of the Tribunal where it has been observed that series of 47 years fulfills more than the minimum requirements as per IS Code.

It is submitted that IS 5477 does not relate to assessment of yield of a river but it applies to a project site for Reservoir. Yet it has been relied upon by the Tribunal for the purposes of assessing the yield of the river. Since the aforesaid provision relates to method of fixing the capacity of a reservoir keeping in mind the feasible service period of life of a reservoir and

having nothing to do with the length of water series for assessing the yield of a river, it requires an explanation.

It is proposed to deal with the above noted point as raised, a little later, after the factual position is pointed out, in coming to a conclusion that a series of 47 years is a sufficiently long series, for assessing the yield of River Krishna.

At the outset, it is important to point out that IS 5477 is not the basis or criteria on which the Tribunal held that series of 47 years is a sufficiently long series to assess the yield of the river, rather this conclusion was drawn independent of IS 5477. Other factors had been taken into account to arrive at that finding. The discussion on the point of length of series had started at page 260 of the Report of the Tribunal and all relevant facts and material on the record are to be found discussed upto page 274 including the affidavit of the witness of Andhra Pradesh, Prof. Subhash Chander and the Annexures which were annexed therewith. The discussion was about the length of water series for assessing the yield of a river. The method of 'law of large numbers' or statistical method was discussed and also the case on the point as taken up by the State of Maharashtra in the affidavit of its witness. In this

connection, at page 267 of the Report of the Tribunal a reference has been made to Annexure 2(A) filed along with the affidavit of Prof. Subhash Chander, a Paper No. 1123 of US GS, in support of law of large numbers where it was indicated that increase in the length of record decreases uncertainty and it was illustrated by Fig. 4 at page 43, in which the author had taken into account record of 50 years. This fact was importantly noted by the Tribunal while discussing the point of length of series. Apart from that, statement of witness of Andhra Pradesh Mr. M.S. Reddy was also referred to who had also admitted that data of at least 40 years should be available for such purposes viz. to assess the yield of the river. Therefore, it is clear that IS 5477 was not the basis for holding that series of 47 years was for a sufficiently long period for the purposes of assessing the yield of river Krishna.

Further on merit, the contents of the series of 47 years, 1961-62 to 2007-08, were also discussed, e.g. showing the highs and lows of yield in different years and variations during the series period of near about 5 decades. It was thus on consideration of all that material which is on the record that series of 47 years was found to be for a sufficiently long period

for the purposes of assessing the yield of river Krishna. So far as IS 5477 is concerned, its reference was made observing that according to it, simulation period should not be less than 40 years, though true, it is for the purposes of assessing the availability of water at a project site. Again, at page 274 it is observed that a series of 47 years more than fulfills the minimum requirement of IS Code though, of course, meant for projects. It was further observed that nonetheless to a great extent the same principle may apply about availability of flows of a river as it may apply to a project site. It was taken more as a supportive material not as the basis to arrive at a conclusion that 47 years series is a series of sufficiently long period to assess the yield of a river.

Therefore, it is clear that the finding of the Tribunal regarding series of 47 years is not based on IS 5477. It is on its own merit and on other material and evidence available and discussed in the Report devoting about fifteen pages thereto.

We may now consider the point raised by the State of Andhra Pradesh as indicated earlier which according to them requires explanation. In that connection, the learned Counsel refers to C-III-D-6 page 46, IS 5477 (Part-I) : 1999 with the

heading Indian Standard – Fixing the Capacities of Reservoirs – Methods Part-I General Requirements. It is submitted that it is for the purposes of fixing the capacities of reservoirs and provides the method for the same. Therefore, reliance on this provision for the purposes of fixing length of water series for assessing the yield of the river is not appropriate.

Relying upon same provision i.e. IS 5477, it has been submitted that a water series of 100 years is required for the irrigation projects. He refers to para 4.1.2 at page 48 of C-III D-6 which is quoted below :-

"4.1.2. Sill level of lowest outlets for any reservoir is fixed from command considerations

……

……

……

…….. *feasible service period according to IS 12182 which is generally taken as 100 years for irrigation projects and 70 years for power projects supplying power to a grid."*

Much reliance has been placed where it is provided the feasible service period according to IS 12182 is generally taken

as 100 years for irrigation projects. Para 4.2 with the heading "Active or Conservation Storage" and para 4.2.2 may also be perused which is beneficially quoted under :-

> *"4.2.2 The active or conservation storage in a project should be sufficient to ensure success in demand satisfaction, say 75 percent of the simulation period for irrigation projects.....*
> *.....*
> *.....*
>
> *The simulation period is the feasible service period as determined in **4.1** but in no case be less than 40 years."*

From the above provision, it is clear that simulation period is the feasible service period as determined in para 4.1 but in no case it could be less than 40 years. According to para 4.1.2 quoted earlier, feasible service period would generally be taken as 100 years for irrigation projects and according to para 4.2.2, in the later part, it is provided that the simulation period is the feasible service period, but in no case it should be less than 40 years. On the basis of the above provisions, that feasible service period for irrigation project is taken 100 years,

it is submitted that simulation of feasible service period would be required. But while making the above submission, the other part of the same provision that it would in no case be less than 40 years, is ignored to be taken notice of by the learned Counsel. One part of the provision cannot be relied, totally and conveniently leaving or ignoring the other part.

The contention of the learned Counsel that IS 5477 is not a provision relating to length of water series for assessment of yield of a river but for the purposes of fixing the capacities of reservoirs has never been in dispute. This fact was taken note of by the Tribunal itself immediately after mentioning IS 5477 that the provision is for assessing the availability of water at a project site but a series of a period of 40 years was considered enough to give an idea of availability of water at a particular site of the project. Again while making observation at page 274 of the Report, the Tribunal observed that to a great extent, the same principle may also apply for assessing availability of flows of a river. It could very well give some clue to have an idea about the length of series for assessment of yield at any site may be site for a project or it may be terminal site of a river.

As a matter of fact, it is only a methodology to find out availability of water at a particular place so as to have an idea about its present availability and in future as well, at a particular site may be other than a project site of a reservoir. However, it cannot be said that while making a reference of IS 5477, the Tribunal was not aware of the fact that the provision was in respect of the projects and not for water series for assessing the yield of the river. But it could well lend reassurance about length of water series of 47 years even though it may not be for a Reservoir project site. At best IS 5477 was referred to by the Tribunal as a material supporting its conclusion for a series of 47 years to ascertain the availability of water at a particular site for whatever purpose that it may be i.e. water availability could be ascertained by series of 47 years.

The learned Counsel was required to indicate any provision which may specifically be providing for length of 100 years water series to assess the yield of a river. It was pointed out by the learned Counsel that right then and there no such provision was available but it might be indicated later. However, instead of indicating any specific provision, which it

appears there is none, he relied upon the same IS 5477 to say that 100 years water series is required for assessing the yield of a river. One cannot be allowed to blow hot and cold at the same time. If it is not permissible to refer to IS 5477 for assessing the yield of a river it would not be referable either for the purposes of requirement of water series of 100 years to assess the yield of the river nor for the purposes that in no case it should be less than 40 years. The stand taken by the learned Counsel about requirement of 100 years' series for river yield is self contradictory.

From the discussion made above, it is clear that the conclusion of the Tribunal that a water series of 47 years is a sufficiently long series to assess the yield of a river is not on the basis of IS 5477. For that purpose, other material and evidence on record has been considered and discussed as indicated earlier. The Tribunal was aware of the fact that IS 5477 was for the purposes of Reservoir projects.

It is not a hearing in appeal or a fresh round of argument; hence the question raised and argued is beyond the scope of Section 5(3) of the Act. There is, therefore, no force in this question as raised requiring explanation.

4. **Utilisation in Minor Irrigation of Maharashtra:**

Mr. Dipankar Gupta, learned Counsel, next raised the issue regarding utilization of water by State of Maharashtra on account of minor irrigation. He refers to page 291 of the Report of the Tribunal where this aspect has been dealt with and ultimately it is held that utilization in minor irrigation for the State of Maharashtra shall be taken as 32.34 TMC for the years 1972-73 to 2003-04. Thereafter, it shall be taken as per the recorded utilization in their relevant records. It is submitted that the utilization of 32.34 TMC could not be taken uniformly of all the period from 1972-73 to 2003-04, it would vary year to year. It is further submitted that the Tribunal has taken into account not only the actual utilization but included the planned utilization as well. Therefore, it requires an explanation.

The utilization on account of minor irrigation, as given out by the State of Maharashtra, appeared much less than the actual utilization. This was the case of the other two States also that Maharashtra has been utilizing more water in minor irrigation. In these circumstances, the State of Maharashtra was required to indicate the correct statement of utilization in

minor irrigation. Maharashtra filed a statement as Annexure-III in IA No. 109 of 2009 giving figures of utilizations for the years 1972-73 to 2007-08. It shows average yearly utilization as 17.81 TMC only. Since it was the case of Andhra Pradesh also that the State of Maharashtra was operating a large number of minor irrigation projects e.g. K T Weirs and Bhandaras etc. scattered all over, the statement of utilization did not appear to be correct and ultimately a note dated 29.3.2010 was submitted by the State of Maharashtra in the Tribunal as MHAD 52. In MHAD - 52, an extract from MHAD 41 which had been submitted on 24.11.2009, has been quoted, where it was mentioned that in his evidence Mr. Deokule had indicated the utilizations of Maharashtra in its various projects against its allocated share. It is also mentioned that Annexure-IV to his affidavit shows the details of existing projects and the projects under construction. Under Item No. 71 of Annexure-IV, an amount of 19.120 TMC has been indicated as utilization pertaining to minor irrigation. The statement quoted from MHAD – 41 further mentions that another 13.22 TMC was being utilized in projects utilizing less then 1 TMC which were enlisted individually under other items than Sl. No. 71 of Annexure IV of the affidavit of Mr. Deokule. Therefore,

according to Mr. Deokule, total utilization for projects utilizing less than 1 TMC is 19.120 TMC + 13.22 TMC = 32.34 TMC. We find it mentioned in the bottom of paragraph 4 of MHAD 52 i.e. in its last para which reads as under :-

> *"Therefore, use proposed by Maharashtra in its overall planning for MI projects is 32.34 TMC only. This is the correct figure of present utilization of Maharashtra under MI (Use less than 1 TMC).*" (underlined by us)

On 29.3.2010, the matter was taken up and heard particularly in regard to MHAD 52 on consideration of which and after hearing Mr. Andhyarujina, it was held that for the period from 1972-73 to 2003-04, utilization on account of minor irrigation be taken as 32.34 TMC. Mr. Andhyarujina had agreed to it. This was so provided because for all this period, there was a doubt that correct account of utilization of minor irrigation was not coming forth. No party, though all present, suggested anything different.

Mr. Dipankar Gupta now in these proceedings submitted that in Annexure-IV of the affidavit of Mr. Deokule, it is planned utilization of 19.20 TMC which has been indicated,

not the actual utilization. Mr.Reddy also reiterated the same argument. A perusal of Annexure-IV to the affidavit of Shri Deokule shows that it is a chart which is divided in 13 Columns. Cols. No. 4 to 7 indicate planned utilization under different heads including irrigation, whereas Cols. No.9 to12 indicate the utilizations and Col. No. 13 shows total utilization under any particular head. As against item No. 71 under the head 'minor irrigation and small private lifts', total utilisation on that account is shown as 19.120 TMC in Col. No. 13. It is only this figure which is being indicated as actual use on account of minor irrigation as per Annexure-IV to the affidavit of Shri Deokule. It is not the planned utilisation as submitted on behalf of the State of Andhra Pradesh. It has further been indicated by Mr. Andhyarujina that apart from 19.120 TMC, another amount of 13.22 TMC was being utilized in projects utilizing less than 1 TMC which are enlisted individually under other items i.e. other than Item No. 71. Therefore, it was pointed out in MHAD 52 that total utilization on account of minor irrigation comes to 32.34 TMC. This was not opposed by any party and the same was accepted by Tribunal by its order dated 29.3.2010 as indicated earlier.

Mr. Dipankar Gupta, ld. Counsel, has now stressed more on the first sentence of the last paragraph viz. paragraph 4 of MHAD 52 saying that use proposed by Maharashtra in its overall planning for MI Projects is 32.34 TMC only. But the sentence immediately following thereafter is being ignored where it is stated "this is the correct figure of present utilization of Maharashtra under MI (use less than 1 TMC)". The final sentence of para-4 of MHAD 52 says about the correct figure of present utilization on account of minor irrigation which also finds support from Annexure-IV to the affidavit of Mr. Deokule as indicated earlier. Therefore, the amount of actual utilization on account of minor irrigation as given by Maharashtra was accepted which finds mention in the order passed by the Tribunal on 29.3.2010. If the contention of Mr. Dipankar Gupta is accepted that 19.120 TMC is the figure of planned utilization, in that case there will be no actual utilization at all in minor irrigation. It will not be an acceptable argument.

It has then been pointed out by the learned Counsel for the State of Andhra Pradesh that the yearly average utilization on account of minor irrigation as per Annexure-I to MHAD 52,

which is chart of utilisation from 1972 – 2007 comes to 17.82 TMC. Therefore, there may not be any justification to take the utilization for the whole period as 32.34 TMC. It may, however, once again be pointed out that 13.22 TMC was also to be added to 19.120 TMC as discussed earlier being utilization enlisted under other items of Annexure-IV to the affidavit of Mr. Deokule and not reflected under Item No. 71.. This is how the figure came to 32.34 TMC. If the figure 13.22 TMC is added to even 17.82 TMC as suggested on behalf of Andhra Pradesh, it totals to 31.04 TMC which does not make any material difference to the figures given by the State of Maharashtra viz. 32.34 TMC.

About another argument that figure of each year will vary and it cannot be the same as 32.34 TMC for the whole period, suffice it to say that the figure 17.82 TMC, as pointed out by ld. Counsel, is the average of varying figures of different years from 1972 to 2007 to which 13.22 if added, the added whole figure will include the element of variation of each different year. The calculation of average figure evens out the variation. Therefore, it will be one figure by adding 13.22 either to 17.82 TMC or to 19.12 TMC. The difference

between the two figures as seen earlier is insignificant. For the sake of argument if 13.22 TMC is added to the figure of each year from 1972 to 2007 as indicated in Annex.-I to MHAD-52, the yearly utilization figures will vary but the result will be the same. There is no force in such arguments that there should be varying figures etc. for each year.

As a matter of fact, it has been the case of Andhra Pradesh that correct figures of utilization of Maharashtra on account of minor irrigation were not coming forth and that the actual utilization was much more. It is now not open for the State of Andhra Pradesh to object to the increased amount of utilisation of 32.34 TMC in place of 19.120 TMC as given out by the State of Maharashtra itself vide Annexure-IV to the affidavit of Mr. Deokule or as indicated by the ld. Counsel in Annexure-I to MHAD-52 which is 17.82. In a way, the initial contention of Andhra Pradesh that Maharashtra was not showing correct utilization but less on account of minor irrigation stood accepted but that is also objected to. It cannot have both ways.

The same figure 32.34 TMC as arrived at in MHAD-52 was taken for the whole period by means of order dated

29.3.2010 which was passed in the presence of all the parties including the State of Andhra Pradesh. Andhra Pradesh did not raise any objection of any kind whatsoever during the hearing on MHAD-52 nor at the time of passing of the order thereon on 29.3.2010 or otherwise anytime except now in Reference proceedings only.

In the above circumstances, there is no justification now to take up such points in proceedings under sub-Section 3 of Section 5 of the Act. It is not reopening nor rehearing of the case. The issue raised is misconceived and it is, therefore, rejected.

5. **Utilisation in Minor Irrigation of Karnataka:**

The Learned Counsel for the State of Andhra Pradesh next disputed the minor irrigation utilization of the State of Karnataka as found by this Tribunal in its Decision dated December 30, 2010.

In the main proceedings, the State of Andhra Pradesh had challenged the minor irrigation utilization of the State of Karnataka complaining that much less amount of utilization on account of minor irrigation has been shown by the State of

Karnataka. According to them, it would be much higher. As a matter of fact, the State of Maharashtra also challenged the minor irrigation utilization of the State of Karnataka. According to both namely, the States of Andhra Pradesh and Maharashtra, the minor irrigation utilization should be calculated on the basis of Agreement dated 26.8.1971 amongst all the three parties agreeing to the duties of minor irrigation. It differed from area to area depending upon various relevant factors. The State of Karnataka had applied an uniform duty of 10.58 acres/mcft. throughout the entire area and for the entire period vide C-I-D-108. The State of Maharashtra had even calculated the utilization supposed to have been made by the State of Karnataka, as per agreed duty which was indicated in the affidavit filed by Mr. S.N. Huddar, a witness for the State of Maharashtra.

The point raised on behalf of the State of Andhra Pradesh is that in the duty calculated as per the agreement, an allowance of 10% improvement in duty should not have been allowed by the Tribunal in the absence of any proof thereof. Thus it requires for an explanation.

In connection with the above contention, the learned Counsel for the State of Andhra Pradesh refers to our observation at page 279 of the Report where it is observed that a party adopting changed duty may have to satisfactorily show the change in duty substantiated by facts and reasons. Again refers to page 280 where it is observed that not much area in Karnataka had been covered under Lift Irrigation Scheme and page 282 where it is observed that the documents relied upon by the State of Karnataka do not support the case of "alleged progress" made in LIS and that in the initial period, i.e. in 1972-73 and onwards, there seems to be no lift irrigation. Finally, he draws our attention to page 285 of the Report where it is observed that if the improvement in duty as projected by the State of Karnataka was accepted, it will be about 30% improvement in duty, which was not accepted by the Tribunal. It was also observed that the improvement in duty, by applying the improved methods of irrigation e.g. LIS etc. or by taking other measures could generally range between 10 to 20 per cent.

The State of Karnataka filed Minor Irrigation Census Reports of 1986-87, 1993-94 and of the year 2005 to show the

improvement in minor irrigation resulting in improvement in the duty as projected. Another study was filed on the basis of crop-wise water demand raised by Chief Engineer (Minor Irrigation) as well as one study undertaken by Agriculture University, Dharwar, to show improvement in minor irrigation duty and an effort was made to indicate that the improvement was to the extent of 10.58 acres/mcft. The Tribunal did not agree with the submissions made on behalf of State of Karnataka on the basis of the aforesaid Reports and the studies trying to justify minor irrigation duty as 10.58 acres/mcft for the entire area and the period.

It was urged on behalf of the State of Karnataka that the duties as agreed to, long time back, would not apply now in the face of a lot of improvement in irrigation techniques and modern methods having been introduced in the system. It is also submitted that efforts were made accordingly to improve the utilization in minor irrigation which is well indicated in the documents furnished by State of Karnataka. Ultimately, it was submitted that as an alternative the duty may be calculated on the basis of the weighted average, which was worked out district-wise by the State of Karnataka, as 7.64 acres/mcft

keeping in mind MRDK-VIII i.e. the Agreement dated 26.8.1971. This contention was also not accepted by the Tribunal.

However, by not accepting the case of the State of Karnataka to apply uniform duty @ 10.58 acres/mcft, it does not follow that there would be no improvement at all in the minor irrigation, though may not be to the extent of 10.58 acres/mcft, as claimed. It is evident that system to improve minor irrigation duty was introduced. Different reports and studies emanating from different sources had been filed to support the fact, but exact extent to which improvement may have been made was difficult to calculate. The Tribunal thus took the view that the State of Karnataka must calculate the water supposed to have been utilized on account of minor irrigation according to the agreed duties, on which some reasonable allowance on account of improvement in minor irrigation may be provided to them, which was rather specifically suggested to be 10% of the agreed duty.

In this connection, on 31.3.2010 an order was passed by the Tribunal which may be beneficially quoted :

"Mr. Katarki, also appearing for the State of Karnataka, made submissions with respect to utilizations in minor irrigation. He furnished KAD-126 calculating duty on the basis of weighted average duty of the agreed duty arrived at before the KWDT-I. It has, however, been suggested that the duty may be calculated not on weighted average but on the basis of the agreed duty, whereupon an allowance at the rate of 10% on account of improvement in minor irrigation system may be made. He submits that such an exercise shall be undertaken and to be furnished to the Tribunal."

In pursuance of the aforesaid order dated 31.3.2010, KAD-134 was furnished by the learned Counsel for the State of Karnataka on 22.4.2010 and he also made his submissions in reference to KAD-134 on 22.4.2010 itself and also on 23.4.2010. The chart KAD-134 shows the water utilization on account of minor irrigation @ 10.58 acres/mcft as was claimed by the State of Karnataka, then in the next column the utilization as per the agreement as was calculated by Mr. S.N.

Huddar, in the next column thereafter the utilization after applying 10% improvement over the utilization according to agreed duty has been indicated apart from some other features as contained in the chart.

It is though true that case of Karnataka, claiming minor irrigation duty @ 10.58 acres/mcft. has not been accepted by the Tribunal and the Tribunal had also directed them to calculate the utilization on the basis of the agreed duty, but it was nowhere held that there was no improvement at all in the duty of minor irrigation. It was also not held that if it is not to the extent of 10.58 acres/mcft. then next it will be only zero and nothing else in between. The State of Karnataka did claim improvement in duty. The Tribunal only observed at page 282 of its report that the "alleged progress" is not supported by the documents filed by Karnataka.

By giving allowance of 10%, it has not made much difference in the amount of water utilized for the minor irrigation as per duties in the agreement. We may have a few examples in that connection. In the year 1972-73, the utilization @ 10.58 acres/mcft. as claimed by Karnataka was 97.174 TMC. But according to the agreed duty, it is calculated

as 193.706 TMC and with an allowance of 10%, it comes to 176.096 TMC. Thus, there is a difference of 17.610 TMC between the agreed duty and the duty with allowance of 10% where the total utilization for that year was supposed to be 193 TMC as per agreed duty. We may then take another example of 20 years later for the year 1992-93 where according to the Karnataka, the utilization was 64.108 TMC but according to the agreed duty it would come to 127.489 TMC. At the same time, after allowance of 10%, it would come to 115.899 TMC. Thus, the difference will be only that of 11.59 TMC. Yet another example may be taken for the year 2005-06 where according to Karnataka, the utilization was 74.345 TMC, according to agreed duty it would come to 140.365 TMC whereas after an allowance of 10%, it comes to 127.605 TMC. The difference between the agreed duty and the duty with 10% allowance is only 12.760 TMC as against supposed utilization of 140 TMC.

It may be pointed out that this much improvement as indicated above during all that period which lapsed between the agreement and thereafter till now, would be reasonably expected more so when it certainly appears that measures to

improve minor irrigation duty were introduced by the State of Karnataka which has been consistently its case. An allowance of 10% by no stretch of imagination can be said to be unreasonable or out of proportion as seen in the preceding paragraph. A flat rate of allowance @ 10% was provided throughout for the reason that in the initial period there may be no improvement or little improvement but with passage of time there would be improvement progressively and later on it may be at a higher rate. Therefore, to even out initial period of lesser speed of improvement and the higher rarte of improvement later, 10% improvement was allowed to make the difference even for the whole period.

It is noticeable that in the three years in respect of which examples have been given in the earlier paragraph, there has been an increase of 78.92 TMC, 51.79 TMC and 53.26 TMC for the years 1972-73, 1992-93 and 2005-06 respectively in utilization of minor irrigation even after allowing an improvement in duty @ 10% of the agreed duty. It increased the amount of total utilizations of the State of Karnataka and in case this allowance of 10% was not provided, the utilizations may have further gone up ultimately further increasing the

yearly yield of River Krishna which eventually also goes against the case taken up and vehemently pursued by the State of Andhra Pradesh.

All that emerges out of the discussion held above is that though the claim of improvement as made by Karnataka was not found to be substantiated to that extent but at the same time, it was nowhere held that there was no improvement in minor irrigation at all. It was difficult to assess the exact extent of improvement; a via–media which seemed to be reasonable was applied allowing 10% improvement in minor irrigation duties, which actually is not much as stands demonstrated in the earlier paragraphs.

Yet another thing which may be pointed out is that on 31.3.2010, the order, a part of which has been quoted above, was passed by the Tribunal in connection with argument of Karnataka to apply weighted average duty. It was very clearly given out by the Tribunal, as is evident from the order itself, that the duty may be calculated by Karnataka on the basis of agreed duty on which an allowance @ 10 % on account of improvement in minor irrigation may be made admissible. Thus, the mind of the Tribunal was openly expressed in the

order as well, passed on 31.3.2010, in the presence of all the parties including the State of Andhra Pradesh. No objection or submission was made in regard to the suggestion made. This is perhaps not the stage now to challenge that part so late under sub-Section 3 of Section 5 of the Act. We may again observe here that it is neither a stage for reopening of the case nor it is rehearing of the matter. If any objection had to be made, it should have been made at the time when the order was passed and 10% allowance on account of improvement over the agreed duty was suggested. In compliance of which Karnataka filed KAD-134 indicating in column No.5 utilizations with improvement in minor irrigation by 10% over the agreed duties as suggested by the Tribunal but at the time of filing of KAD-134 also no objection whatsoever was raised about it though the point was argued by Karnataka on two dates i.e. on 22nd and 23rd April, 2010, but only now the controversy is being raised in these proceedings which is legally not permissible.

In view of the discussions held above, the objection has no merit and no clarification as sought is required.

6. Challenge to the Yearly Water Series of 47 Years:

The yearly water series for 47 years from 1961-62 to 2007-08 prepared to assess the annual yield of river Krishna is challenged and to begin with, the first attack on it is that it includes the wettest period in the series.

Mr. Dipankar Gupta, learned Senior Counsel for the State of Andhra Pradesh, submits that the series of 56 years from 1950-51 to 2005-06 put forth by the State of Karnataka was rejected by this Tribunal on the ground that they had chosen the wettest period for that series. It is further submitted that the period of the above said 56 years series is also included in the series of 47 years. It also includes the yield of the years 2006-07 and 2007-08 which are high yield years. Therefore, the series of 47 years gives an over estimation of the yield of the river Krishna. It is a plentiful series, which fact is also said to be evident, since the yield at 50% dependability is more as compared to the average yield. Hence, series prepared by Prof. Subhash Chander for a period of 112 years should have been accepted.

So far as non-acceptance of the series from 1950-51 to 2005-06, which was put forth by the State of Karnataka, is concerned, it is dealt with at pages 253/254 of our Report, in detail. As a matter of fact, no such series was prepared by the State of Karnataka. On the other hand, the series of 112 years prepared by Prof. Subhash Chander, a witness of the State of Andhra Pradesh, was bifurcated by the State of Karnataka into two series half and half, the one from 1894-95 to 1949-50 and the other 1950-51 to 2005-06. The series from 1950-51 to 2005-06 was introduced by means of C-I-DP-201 and C-I-DP-247. The State of Andhra Pradesh raised objection to the series of 56 years 1950-51 to 2005-06, firstly on the ground that it could not be introduced and accepted by means of a paper during the course of cross examination unless it was admitted by the witness. Prof. Subhash Chander, did not admit the correctness of the said documents.

It was rightly pointed out by Andhra Pradesh that C-I-D-P 201 and C-I-D-P 247 could not be treated as a part of evidence since it was being introduced by means of a Paper during the course of cross examination of the witnesses who did not admit its correctness. It is also observed at page 254 of

the Report that ground water use was included in the said series, which is not included in any other series nor it could be done. The State of Karnataka, out of the two bifurcated series, wanted to rely upon the series from 1950-51 to 2005-06 and not the other half of it i.e. series from 1894-95 to 1949-50. The reason obviously was that the series from 1951-52 to 2005-06 showed more yield as compared to the yield of the other half of the series from 1894-95 to 1949-50 which was less. Apparently there would be no reason to bifurcate one series and then choose one half of it which suits since it shows higher yield and leave the other with lesser yield. In this background, the Tribunal had observed that the State of Karnataka chose the wettest period. It was further observed that the main case of State of Karnataka was based on another series of 50 years from 1948 to 1998 as indicated in their Master Plan and not on 56 years series. So, in totality of the background and the factors indicated above, this Tribunal had held that the series from 1950-51 to 2005-06 would not be helpful in ascertaining the available yield of river Krishna. This series was obtained by Karnataka by breaking a series of longer period and then exercising its choice for one part of it showing higher yield.

To say and argue that the series of 1950-51 to 2005-06 put forth by Karnataka through a document during the course of cross examination of a witness and not filed as evidence was rejected by the Tribunal for the reason that Karnataka had chosen the wettest period, will not be correct, rather it gives a wrong impression. Of the two series made out of one, Karnataka had chosen series which was having higher yield. So it was in fact, a comparative comment between the two series, not otherwise. The stress was more on 'choosing' one part of the broken series which suited them more indicating higher yield.

One of the submissions which has been made is that the series of 47 years includes the same period as in the series of 56 years from 1950-51 to 2005-06 put forth by the State of Karnataka which has not been accepted by the Tribunal. This contention is also not correct. The series of 47 years does not include a substantial period from 1950-51 to 1960-61. It starts with 1961-62 and ends with 2007-08. The series of 56 years sought to be relied upon by the State of Karnataka was only upto 2005-06. So far period from 1950-51 to 1960-61 is concerned, there had been a breach in the Vijayawada Anicut.

According to the statement of the witness of the State of Andhra Pradesh itself, the data for the aforesaid period is a vitiated data which if left to him, personally, he would not have used in his series but for the fact that parties had agreed to it. Therefore, to say that the series of 47 years included the same data as in the series sought to be relied upon by Karnataka is not correct.

We may now consider as to whether the series of 47 years is a wet or plentiful series or not. It is submitted by the learned Counsel that where there is a difference between the average yield and the yield at 50% dependability, it shows that it is plentiful series or a wet series, the two yields should be close to each other. We find that the average yield in the series of 47 years is 2578 TMC and that at 50% dependability is 2626 TMC. The difference between the two is only that of 48 TMC out of an average yield of 2578 TMC and yield at 50% dependability as 2626 TMC. It is a very insignificant difference between the two yields. The difference between the average yield and the yield at 50% dependability is only 1.62% [48 x 100/(4193.72 – 1239.45) = 1.62%]. This is small percentage of the entire spectrum i.e. the highest and the lowest

of the series which is negligible in the flow quantities of the order of 2578 – 2626 TMC. Therefore, the series of 47 years is fairly balanced containing both wet and dry periods with neither being predominant. On the whole, it is quite an even series.

Besides what has been indicated above to meet objection of Andhra Pradesh about the disparity between the amount of average flows and availability at 50% dependability, it would be pertinent to point out that a series can be said to be a wet or plentiful series where the average yield is more than the yield at 50% dependability. In a descending yield series, the point of 50% dependability will fall at the middle of the series. It will always be so. Where the average flows fall on a point which is above the point of 50% dependability, in that event an inference can be drawn that the series is plentiful series otherwise where it falls below the point of 50% dependability, it may either be a normal series or a dry series. In the present case, we find that yield at 50% dependability is 2626 TMC which is at a higher position in the descending order of the yield series, whereas average flows of 2578 TMC is below the point of 50% dependability. The average flows having a lower

value as compared to the value of yield at 50% dependability, the series of 47 years can, in no way, be said to be a plentiful or wet series. It is a grossly incorrect argument which has been advanced by the State of Andhra Pradesh.

Yet another point which is raised is that the yield for the years 2006-07 and 2007-08 have been added in the series which are years of high yield, therefore, having chosen the wet years, the series of 47 years suffers from the vice of plentiful series. In this connection it may be pointed out that the series of 47 years consists of all the data, as was available upto date, provided by the Central Water Commission. There is no question of choosing to add last two years of the series having high yield. The data for 2006-07 and 2007-08 was available; it could not be ignored or left out without any reason just as a matter of choice. If those two years happened to be years of good yield, no objection to that can be taken. In any case it is not a plentiful series on the whole which stands established looking to the percentage of difference in the average yield and yield at 50% dependability in the series of 47 years as indicated earlier.

The fact that the series of 47 years is a balanced series, neither predominantly wet nor dry will also be evident from analysis of different years of the series and their yield. It may be noted that out of 47 years, it is only in one year that the yield was above 4000 TMC viz. 4193 TMC, in 10 years it was above 3000 TMC but below 4000 TMC and it ranges between 3079 TMC to 3760 TMC, in 26 years the yield was above 2000 TMC but below 3000 TMC ranging between 2074 TMC to 2967 TMC and lastly in 10 years it was above 1000 TMC and below 2000 TMC ranging between 1239 TMC to 1957 TMC. The above position shows that the bulk of the period which constitutes the major part of the series, i.e. in 26 years, the yield was above 2000 TMC but below 3000 TMC. The average yield is 2578 TMC. In 10 years, it is above 3000 TMC but in another 10 years it is above 1000 TMC but below 2000 TMC. As discussed in the earlier part of this Report, it has been seen that the series has highs and dips including some dry spells as well. The above facts do not leave any room to doubt that the series is neither a wet series nor a dry series. On the other hand, it is established to be a very balanced series.

We, therefore, find no force in the contention that series of 47 years requires any explanation as sought for on any of the grounds raised by Andhra Pradesh and discussed above.

7. **Series of 112 Years prepared by Prof. Subhash Chandra Should be Accepted:**

In the next point argued, the case of the State of Andhra Pradesh is that the factors which have been considered in holding that instead of 78 years series prepared by KWDT-I, the fresh series of 47 years may be made use of, the same factors apply to the series of 47 years also hence, the series prepared by Prof. Subhash Chandra for 112 years may be accepted and used.

In this connection, the learned Counsel has taken us through pages 241 to 247 of the report of the Tribunal. It is observed at page 241 that some piecemeal information as it was available was put together to prepare the water series of 78 years. It was also observed that some data in that series was observed data and for the rest of the period two different formulae had been adopted to calculate the yield during all that period from 1901-02 to 1950-51 for which cogent and proper data was not available and there were several controversies

amongst the parties about the same. It was also observed that for the period from 1951-52 to 1961-62 there had been breach in Vijayawada Anicut disrupting the gauging at that site and the data for 1894-95 to 1900-01 was taken from Krishna Reservoir Project Report. It was thereafter observed that despite lack of uniform and proper data and serious controversies about flows and utilizations, yet a series of 78 years could be prepared, which was appreciated since in the circumstances as then prevailing and the data available nothing better was possible. About the long series prepared by Prof. Subhash Chander, it is also observed at page 246 that the series of 78 years could not be extended to 112 years' series by inter-grafting another mismatched series into it.

The learned Counsel then draws our attention to paragraph 9.1.4 at page 13 of Reference Petition No.1 of 2011. Similarities between the series of 78 years and that of 47 years have been tried to be indicated on five counts in a chart form.

(i) The first similarity, in the chart, which is pointed out is that the series of 47 years also consists of piecemeal information since eleven years data i.e. for the years 1961-62 to 1971-72, is taken from the series of 78 years prepared by

KWDT-I and the remaining 36 years' data belongs to another set.

It may be out rightly pointed out that even according to Andhra Pradesh, there is one set of 36 years. It can very well be said, as a set of a pretty long period in which data of eleven years from another set has been added. Suffice it to say that the data of eleven years 1961-62 to 1971-72, as indicated by the State of Andhra Pradesh, is different which constitutes a distinct category from the rest of the data in the series of 78 years. In fact it matches well to be added to the data of remaining 36 years of the series of 47 years. The data for 1961-62 to 1971-72 was obtained by the State of Andhra Pradesh itself on gauging discharge on the new site after construction of Prakasham Barrage. Therefore, this important factor of site of measurement and gauging of discharge in respect of data of 11 years and the remaining 36 years in the series of 47 years is matching with each other. Again we find that the data of 11 years and the remaining 36 years is observed data. Therefore, it could very well form part of the series of 47 years. It is not a kind of inter-grafting of two series like that in the series of 112 years.

The mere fact that it was taken, in part, from another series, therefore, it is piecemeal information, is of no consequence since what is more important is the nature and the characteristic of the data used. In the series of 78 years, we find there has been piecemeal information on several counts which were added together having been obtained differently which can very well be seen from the series of 78 years furnished by the three States before the KWDT-I at pages 270 to 281 of the printed Report of KWDT-I. The details indicated therein will fully show that there is no comparison on piecemeal information in the series of 78 years and that of 47 years. A full discussion on this aspect of the matter has already been made in the Report of the Tribunal on pages 238 to 247 which need not be repeated.

(ii) For the second ground, it may be pointed out that an incomplete sentence has been picked up from the discussion at page 241 of our report to the effect “some data is observed data”. This observation was in regard to the series of 78 years but the sentence goes on to describe the nature of other data which was made use of in making the series of 78 years. However, on the basis of the above observation, the point

which is sought to be made out is that in the series of 47 years also, some data is observed data whereas the remaining data is not. And that minor irrigation data is not as per agreed duties but generated by the Tribunal. Further, for the year 2007-08, the flows are not measured by current meter by CWC. We will take up these three points in the second ground one by one.

It is incorrect to say that in the series of 47 years also, some data is not observed data. The series consists of observed data. The discharge has been gauged both for 36 years' data and for data from 1961-62 to 1971-72 on the new site. These are observed data for those years. For the year 2007-08, it may be pointed out that it was also measured on the new site and it is as good as measurement by current meter. It is also observed data.

The next ground about the minor irrigation data, that it is generated by the Tribunal is also not correct. A detailed discussion about the utilization of water for minor irrigation by the States of Maharashtra and Karnataka has already been held in the earlier part of this Report, which may be seen for the purposes of this ground as well.

However, briefly to recapitulate, doubts were expressed about utilization in minor irrigation by Maharashtra. Hence, the matter was probed and on their own showing, a part of the utilization was left out to be taken into account. So, in order to arrive at the correct figure of utilization, the two figures one which was indicated in the documents and the affidavit of the witness of the State of Maharashtra and the amount of utilization which was left out, were added. It has also been held that it does not include the figure of planned utilization but it is on the basis of actual utilization which will differ for each year but having calculated the yearly average, that figure has to be taken into account. The average figure and the left out figure, if added together bring about almost the same result as already discussed in the earlier part of this Report.

It is very peculiar that one party would object to the utilization figure given by the other State but once it is corrected upholding the objection, it is called by the objector party as figure generated by the Tribunal. Nothing has been generated by the Tribunal but on the basis of the data furnished by the State of Maharashtra, the revised figure of utilization was accordingly arrived at without any objection from any

corner including the State of Andhra Pradesh, though there was ample opportunity to do so during the course of the main proceedings.

So far it relates to the State of Karnataka that has also been elaborately discussed in the earlier part of this Report. However, it may again be pointed out briefly that the utilization on account of minor irrigation by State of Karnataka has been calculated only on the basis of the agreed duties as worked out by Mr. S.N. Hueddar, witness of the State of Maharashtra, and the same data has been adopted in KAD-134 by Karnataka. The utilization data on minor irrigation, as it was given by the State of Karnataka has not been accepted to any party. On calculating the utilization on the basis of the agreed duties, an allowance to the extent of 10% has been permitted on account of improvement in minor irrigation. It has been found that the State of Karnataka did introduce measures to improve the duties. Essentially, it is based on agreed duty. Therefore, it will not be correct to say that any data has been generated by the Tribunal. The discussion on the point in the earlier part of this Report would better also be seen for the details which need not be repeated.

The observation at page-241 of our Report related to observed of flows of the main stream of the river. It was not in connection with utilization data. The half sentence of the observation at page-241, is being misapplied for the purpose of a small component of upstream utilizations in minor irrigation. Thus, the objection raised in serial No. 2 of the chart is frivolous and unsustainable.

As it relates to the data for 2007-08, it is evident from the letter of the Chief Engineer, Krishna & Godavari Basin Office, dated 23rd March, 2011, Annexure-I to the Reference Petition, that it was not gauged by current meter. Sometimes for one reason or the other e.g. during flood period when it may not be safe to do so or otherwise it may not be possible to use current meter, in such circumstance, usually the procedure for measurement of the flows, as indicated in Annexure-I, is adopted. The data is based on using stabilized GD curve of Historical data, Cross Section and application of HYMOS Software. The GD curve is drawn on the basis of the historical data measured by current meter. In such cases water level reading is observed and recorded, which is applied to the stabilized GD curve. It gives the correct reading of the flows

through HYMOS software. It is observed data and as good as measurement by current meter.

(iii) Our attention has again been drawn to the observations made at page 241 of the Report of the Tribunal where it is observed about the series of 78 years that some data was observed data and in respect of certain other periods two different formulae had been adopted. It is mentioned in objection at page 13 of the Reference in column 3 of the chart "In 47 years series also for the first 11 years (1961-62 to 1971-72), the same formulae, which were used for the period 1901-02 to 1950-51, is adopted and for the remaining period it was observed data."

It will be important to mention here that although the above ground had been taken but in fact no arguments have been advanced in support thereof and we feel, rightly so, since the allegation is not supported by any material on the record. It is merely a bald and bare statement.

Since the issue has not been argued to substantiate it, it was not necessary to go into this aspect of the matter at all. But so as to avoid any confusion which may be created or arise

later and since the point was also not before the Tribunal earlier, we deem it desirable to throw some light about the above noted point.

In connection with the above aspect, it will be useful to quote a few lines from the 3rd paragraph in left hand col. at page 81 of the Report of KWDT-I, which says "The States of Maharashtra and Mysore further submitted that the recorded data over the Krishna Anicut from the years **1950-51 to 1960-61** and the discharge data gauged by the State of Andhra Pradesh on the Krishna (Prakasham) Barrage (which came into operation in 1961) for the years **1961-62 to 1970-71** may be taken into account without making any modifications. The case of the State of Maharashtra and Mysore on this point is summed up in paragraphs 5, 6 and 7 of MR Note No.10 filed on the 5th of April, 1973. The State of Andhra Pradesh has, however, raised objection to the inclusion of the recorded data for these years." (Emphasis supplied by us). The recorded data is for the years 1950-51 to 1960-61. The data for 1961-62 to 1970-71 has been described above as data gauged by Andhra Pradesh on Prakasham Barrage.

It is well known that Vijayawada Anicut had breached sometime in the year 1951 and no gauging was possible up to 1960-61 till a new barrage, namely, Prakasham Barrage, was constructed. The data for the period from 1951-52 to 1960-61 even if recorded on Vijayawada Anicut, which had suffered a breach, had been considered to be vitiated data by Prof. Subhash Chandra also who is a witness for Andhra Pradesh. It was used in the series of 78 years, as agreed, was a different matter. A new site became available to gauge the discharge of river Krishna with construction of new Krishna (Prakasham Barrage) which came into operation in 1961.

Thus, from the passage quoted above, from the report of KWDT-I, it is clear that there were two sets of data – one data recorded on Krishna Anicut during breach period from 1951-52 to 1960-61 (vitiated data) and the other set of the discharge data gauged by the State of Andhra Pradesh on Krishna (Prakasham Barrage) the new site, for the period from 1961-62 to 1970-71 and 1971-72. And according to the case of Maharashtra and Mysore, these two sets of data were to be taken into account without any modification. Further, it appears that Andhra Pradesh had some objection to the

inclusion of the "recorded data". The term recorded data is used by KWDT-I in the passage quoted above for the data for the period 1951-52 to 1960-61 which according to the witness of the State of Andhra Pradesh, Prof. Subhash Chandra, was vitiated data.

It is nowhere to be found that same formulae, which may have been applied to the data for the period 1901-02 to 1950-51, was applied to the data for the period 1951-52 to 1970-71 and 1971-72 or to the period from 1961-62 to 1971-72. It is amply evident that data for 1961-62 to 1970-71 is data gauged by Andhra Pradesh after construction of new barrage viz. Krishna Barrage and that alone has been used in the series of 47 years. The point which is now sought to be raised by Andhra Pradesh is against the findings of KWDT-I quoted above.

On the other hand, it is clear and evident from paragraph 6 of Appendix-O at page 270 of the Report of KWDT-I, which is the series as submitted by the State of Maharashtra, from paragraph 5 of the series of Mysore at page 274 and paragraph 5 at page 278 of the Report of KWDT-I, which is the series of the State of Andhra Pradesh, that KWDT-I had accepted the

case of Maharashtra and Mysore, that for the years 1951-52 to 1971-72, flows as per recorded data may be adopted. This was the case of these two States which finds mention at page 81 of the Report of KWDT-I quoted above. No formula was applied to the data gauged for the years 1961-62 to 1971-72. The plea taken for State of Andhra Pradesh, fails.

(iv) In so far as the ground indicated in Col.4 of the chart in reference to the observations made by the Tribunal at page-242 of its Report that there was lack of uniform and proper data with regard to the flows and utilizations constituting series of 78 years, it is submitted that in the series of 47 years also, there is no uniform data for minor irrigation and the flow data of the year 2007-08 is computed by adopting different procedure. These two points as raised have been elaborately dealt with in the earlier paragraphs of this report. It is not necessary to repeat the same, but for the reasons as discussed earlier in those paragraphs, it is incorrect to say that there is no uniform data for minor irrigation in the series of 47 years or that the data for 2007-08 was lacking in any manner for being included in the series of 47 years.

One thing which requires notice is that at page 242, the Tribunal had made the observation about lack of uniform and proper data about the flows and the utilization in the series of 78 years regarding the main stream flows of the River Krishna and the absence of utilization data as a whole of all the three States for a number of years, and for some other years agreed figures were adopted.

(v) The ground in Col.5 of the chart is in reference to the observation made by the Tribunal at page 242 of the Report that upstream utilization data for 10 years was not available, it may be indicated that it related to the total upstream utilization data for a long period. The missing data was not for any one component of the total yearly utilization by the States or relating to only some years of some projects. The rest was only agreed data. In this background, to compare it with some years when some data of Karnataka was not available pertaining to some medium projects only can have no justification. The remark that record was not available in the utilization statement of Karnataka could not be a good reason to treat the utilization, as nil, for those years. Therefore, with the help of the data as was already available for other years in respect of those

projects, the utilization data for the years in which it was missing, was got worked out and the same was used for the purpose of calculating the utilization in the medium projects of the State of Karnataka. It is not comparable with absence of total utilization data of States as was the position with series of 78 years. The extent of effect in different situations, as one indicated above, is different.

Again, it may be pointed out that in a situation where data for the year 1972-73 was not available, the average utilization of two years – one prior to the year in question and the other after that year, has been taken as utilization for the year 1972-73. It may be pointed out that this via-media resorted to cannot be faulted with nor the same was objected when the order was passed on 15.12.2009. It pertains to only one year. Thus, a few gaps in utilization data of some medium projects cannot be equated or compared with absence of total upstream utilization data of all the States for long number of years.

It is submitted that the missing and incomplete upstream utilization data has been taken care of to make it good, while preparing the series of 78 years and for that refers paragraph 8

of the Appendix-O (series prepared by Maharashtra) at page 270 of the Report of KWDT-I (page 240 of the Report of the Tribunal), which provides that upstream utilizations for the period 1894-95 to 1900-1901, in absence of data or agreed figures, the same utilizations as for the year 1901-02 be adopted. Further, for the years 1901-02 to 1955-56, the utilizations as agreed between the States be adopted. It is again that for the years 1956-57 to 1968-69 agreed figures between Maharashtra and Mysore have been adopted and figures given by Andhra Pradesh have been given in the bracket as per para 9 of Appendix-O. Further, para 10 at page 241 of the report of the KWDT-I shows that the utilizations for the years 1969-70 to 1971-72 were not available and the same figures of utilizations as for the year 1968-69 were taken into account disregarding higher utilization, if any.

The position as it emerges is that there has been absence of clear upstream utilization data throughout the period of the series of 78 years and the agreed data or the data of the previous or subsequent years have been taken into account. It is also clear that there cannot be any comparison of the missing data of upstream utilization which was in respect of a few

projects and in some of the years in the case of Karnataka with the absence of data altogether or there being only agreed data, not actual, for the whole period of series of 78 years in respect of the whole upstream utilization, by all the three States. A vain effort has been made to unnecessarily compare some gaps here and there in the utilization data of some projects. The objection thus taken at Sl.No. 5 of the chart also fails.

During the course of hearing, it was also tried to be mentioned that the series of 47 years should not have been prepared without calling for the objections from the party States on the length of series and data to be considered. The argument is a bit strange for being given any weight to it. The question as to what should be the length of a water series to assess the annual yield of river was a subject which has been argued at length by all the parties including the State of Andhra Pradesh. The argument of the State of Andhra Pradesh has been that it should be a series of a long period while it need not be so, according to others. The witness of the State of Andhra Pradesh Prof. Subhash Chander deposed regarding the length of series. All parties had their full say on the point, oral as well as documentary evidence were tendered and witnesses were

also cross-examined. On consideration of all the evidence the Tribunal had only come to a conclusion that a series of 47 years, in respect of which cogent data was available, constitutes a series of a long period sufficient enough to assess the yearly yield of the river. There was no occasion of any second opportunity for "47 years" in particular, during the course of preparation of the judgment. It is a misconceived plea that any objections were to be called for. The matter relating to length of series was fully argued by all the parties. Only decision was left to be taken by the Tribunal and that it did. All the objections now taken against the series of 47 years are flimsy and frivolous, taken only for the sake of objections.

So far as data used for the series is concerned, all that data was placed on record by the parties, within the knowledge of each other. Whereas the data which was supplied by Central Water Commission was made open for inspection by the parties. And wherever there was a gap or doubt about the data, supplied by the parties, it was got cleared by the parties during the course of the hearing itself. Therefore, we find no force in this kind of a ground as well. All the data was on the record within the knowledge of all the parties.

Yet another submission which has been made is that the Tribunal should have directed any independent authority like Central Water Commission or National Water Development Agency or any other National Agency to compute the yield in the River Krishna. It is contended that for this purpose, Section 9 of the Act should have been invoked. We do not think it was at all necessary to direct any other Agency to assess the yield of River Krishna. All the necessary material was available on the record, on the basis of which a series could very well be prepared and which has in fact been prepared. The Tribunal had also the help of two able Assessors, both of whom had been the Chairman of the Central Water Commission. There was neither need nor occasion to invoke Section 9 of the Act at all, for the purposes of assessment of yearly yield of the River Krishna.

Considering all the arguments placed before us against the series of 47 years, which have been dealt with and discussed above, we do not find any merit in these grounds and we find that there is no case for any clarification or explanation much less to the effect that the series of 47 years may be discarded or ignored and the one prepared on behalf of the

State of Andhra Pradesh for a period of 112 years may be accepted and acted upon.

8. <u>Indiscriminate increase in projects of Maharashtra and Karnataka and over-sized Reservoirs: Real and apprehended over utilisation.</u>

It has been pointed out by the State of Andhra Pradesh that Maharashtra was allocated 560 TMC by KWDT-I but it has been revising its plan and gradually kept on increasing the same. It is pointed out that instead of 560 TMC allocated to Maharashtra, it has revised its plan to utilise 563.69 TMC. It is also submitted that Maharashtra has also been over-utilising water in various projects including Koyna Project. The Learned Counsel has referred to some projects and alleged over-utilisation therein in particular years and otherwise and ultimately, it is submitted that by means of Master Plan C-II-3-F, the number of projects of Maharashtra has increased from 30 projects to 102 projects and the planned utilisations to the extent of 945.64 TMC. This Master Plan was prepared in the year 2005. It is apprehended that if this Master Plan is executed and Maharashtra utilises the planned utilisation, that would affect the availability of water in Andhra Pradesh even at 75% dependability. It is further submitted that the total live storage

capacity of reservoirs of Maharashtra is 483.31 TMC and by applying ratio of 1 : 1.4, it would be sufficient to utilise about 700 TMC, which is much over and above the allocation.

Suffice it to observe here that now the total allocation to Maharashtra at different dependability comes to 666 TMC. It is also indicated that a number of KT Weirs and barrages have been constructed by Maharashtra and their utilisation would be about 50 TMC.

In so far Koyna Project of Maharashtra is concerned, it is submitted that though Maharashtra is supposed to utilise 67.5 TMC, it has got storage capacity of 98 TMC, but records show that they have been utilising more water and even upto 123.06 TMC. However, it has been pointed out by the other side that the storage of 98 TMC for Koyna includes component of lift irrigation to the extent of 16 TMC as permitted by the Government as evident from the observations made by KWDT-I clarifying that 16 TMC for Koyna Krishna Lift Irrigation scheme is to be supplied from Koyna Dam and the balance requirement for KKLI to the extent of 7.40 TMC was to be meted out from down-stream of Koyna Dam. There does not seem to be much force in this argument of over-sized reservoir

capacities of Koyna Project. Then a complaint has been made about further increase in the storage capacity of Koyna to 105.25 TMC by the Government of Maharashtra by providing 5 ft flaps to the existing radial gates of Koyna Dam. A reference is also to be made to the utilisation of Bhima Ujjani Reservoir. In that connection refers to C-II-D-51, page 3.It is pointed out that the live storage capacity of Bhima Ujjani Reservoir is shown as 53.71 TMC and planned utilisation as 83.94 TMC whereas the gross capacity of the Reservoir is shown as 117 TMC. A perusal of record of drawals from Ujjani Reservoir shows that there have not been drawals from below the MDDL except for a few occasions. The Learned Counsel has kept on pointing out such matters as Pawna Project has planned utilisation of 10.19 TMC but live storage capacity is 9.68 TMC. In reply, Mr. Andhyarujina pointed out that this contention about Pawna project is a mere oral argument without any foundation. It is further submitted that Pawna project is different and it is not on mainstream of Bhima. It is a tributary of Mulla which joints Mutha and it is Mutha which thereafter joins Bhima. It is submitted that limit which was fixed by KWDT-I was about the mainstream of Bhima and not its tributary and sub-tributaries. It is further submitted that the

utilization of river Bhima is within limit and now the same has been increased to 98 TMC and 123 TMC in 65% dependability and on an average yield.

A proposed revision of Bhima Ujjani storage is also opposed. The apprehension is that if the storage capacity is increased as per proposal, it will affect the flows in Andhra Pradesh. We don't think such apprehensions need to be necessarily raked up before this Tribunal. The utilisation can not exceed allocation. The appropriate authority which may have to approve the project may examine all the pros and cons of the project. It is difficult for us to reject any proposal right here and now. Yet another question which has been raised is that the State of Maharashtra had called for feasibility Report to lift 16 TMC water to pump up which shows that sufficient power is available and it was not necessary to divert more water for Koyna Hydro Project. In this connection, on behalf of the State of Maharashtra, it has been submitted that such a proposal was not found feasible nor it is in the offing at all. Similarly, Chaskman Project's planned utilisation is 10.28 TMC whereas live storage is 7.16 TMC. It can not be called an oversized storage, if at all, it may be significantly merginal. It

may be noted that Maharashtra may have revised its plan viz: C-II-3-F in 2005, but as shown by Andhra Pradesh itself, it has built up storage capacity of 483 TMC only so far. It is not commensurating to the requirement of the new plan. However, in case there are some difference in storage capacity and the planned utilisation, it does not necessarily mean that it is being misused apart from some instances here and there as shown.

But now the position has also substantially changed with constitution of Krishna Water Decision – Implementation Board (KWD-IB). The apprehension of Andhra Pradesh that over-sized storages may be mis-utilised or there may be more utilisation in different projects, all this has to be seen and checked by the Board. If there is any such complaint, Andhra Pradesh can always bring that fact to the notice of the Board. Most of the arguments are based on the apprehension in future. That would of course be taken care of by the Implementation Board. Therefore, we do not find any good reason to explain any point or consequently to modify the decision.

Similar facts have been pointed out in respect of the State of Karnataka also. Such matters as the return flows to be utilised by Karnataka in Tungabhadra sub-basin would be 16

TMC and not 25 TMC as claimed by Karnataka, we feel these things stand settled now and such grievances are no more relevant. It may be pointed out that if Karnataka would be utilising more water than allocated, that would be seen and checked by the Implementation Board. The lengthy arguments which have been made as to whether only 31 TMC would flow down to Andhra Pradesh from Tungbhadra or not, all that has gone into background since allocations which have been made to the 3 projects of Karnataka, namely, Upper Bhadra Project, Upper Tunga Project and Singatalur LIS are out of the yield at 65% dependability. Therefore, it is not going to affect the inflows into Andhra Pradesh at 75% dependability which would of course continue to be the same as before. It is not necessary to discuss all detailed controversies anymore which have been argued in connection with the above point. Our discussion in the Report was only to show that since according to the case of Andhra Pradesh before KWDT-I, 31 TMC was going down to Andhra Pradesh from Tungabhadra sub-basin, it was tried to be shown that it would not be affected after the allocations to the 3 projects named above in Tungabhadra K-8 sub-basin even out of 75% yield, though it was not necessary since allocation was out of 65% yield. So, no purpose would be

served by arguing about the discussion made by Tribunal on the above noted point. There may be some over lapping or mixing up of some figures of yield at 75% and 65% but ultimately the fact remains that it was not a very relevant discussion affecting merit in any way, it could be avoided in view of allocations being made at 65% dependability. Whole discussion thus examining the respective cases of the parties and observations of KWDT-1 about flows into Andhra Pradesh from Tungbhadra Dam was not necessary nor remains relevant any more.

One of the submission is that the utilisation in 4 small projects namely G. Mallapur LIS, Basapur LIS, Hirehalla and Maskinala of Karnataka comes to 4.65 TMC. The ld. Counsel for the State of Andhra Pradesh at the time of arguments in respect of the above 4 projects besides major projects of Karnataka in K-8 sub-basin, had submitted that they had no objection in regard to these small projects. It is submitted that it will lead to the result that 4.65 TMC would be utilized by Karnataka in the above named 4 small projects but without adding this quantity of water in the utilisation of Tungabhadra Reservoir by the State of Karnataka. It is submitted that this

amount may also be included in the total limit of utilization by Karnataka in K-8 sub-basin. We do not find that there is any substance in such points which are being raised since the allocation of the State of Karnataka is clearly earmarked like that of other States at different dependability as well as the capping on its utilisation in Tungabhadra Reservoir. That being the position, whatever utilisation is made by Karnataka in whichever project must conform to the conditions, capping and limits placed. No State can exceed the allocation or the restriction for utilisation in respect of any reservoir and basin. Therefore, the apprehension of the State of Andhra Pradesh that Karnataka may exceed its allocation by 4.65 TMC is unfounded.

Again, in respect of Karnataka also it has been submitted that it has revised its plan in 1993 and again in 2002 and increased the number of projects to 45 in place of 28 projects originally. The increased allocations to projects in revised Master Plan are also subject of apprehension of Andhra Pradesh, that it may affect the flows to Andhra Pradesh. It has also been complained that after the revision of Master Plan in 2002, Karnataka has increased the utilisation to the extent of 40

TMC in in place of 27 TMC as allocated to it. In respect of Vanivilas project, the saving shown to the extent of 2.95 TMC has been disputed. We have not gone into the question of savings etc. which were opposed vehemently by the State of Andhra Pradesh arguing that the savings proposed by Karnataka were unrealistic.

Another complaint which has been made about the storage of Vanivilas project, which it is said to be 30 TMC, whereas it's planned utilisation is much less.

Some details about the saving etc. which were proposed to be made by Karnataka have been pointed out but it was not necessary to enter into that controversy nor to record any finding whether proposed saving were real or unrealistic and would take place or not. The savings as proposed by State of Karnataka, as pointed out above had been vehemently opposed by Andhra Pradesh that they were un-realistic. The State of Andhra Pradesh cannot argue both ways that the saving was unrealistic and at the same time that amount of saving may be used in other projects. In the facts and circumstances and looking to the challenge made by the State of Andhra Pradesh that the proposed savings were unrealistic, no finding was

recorded by the Tribunal as to whether the proposal for the saving was realistic or not, since it was not necessary nor relevant to examine the claim of saving since water was available and could be allocated otherwise also. In case it was unrealistic as has been the case of Andhra Pradesh, it should have no grievance since Tribunal has nowhere held it to be realistic or correct. Since more water was available for allocation to the projects of Karnataka, those projects have been provided for out of the additional water. In the circumstances, as pointed out above, it was not necessary to go into that controversy raised about savings at all. The projects of Karnataka had not been provided for out of the alleged and proposed savings of Karnataka. Andhra Pradesh is trying to blow hot and cold in the same breath – first vehemently objecting to the alleged and proposed savings of Karnataka and later apprehending that those savings would be utilised elsewhere by Karnataka.

Considering all the facts and circumstances discussed above, we do not find any force in the submissions made by the State of Andhra Pradesh. Now, as stated earlier, there is Krishna Water Decision Implementation Board. It is the duty

of the Board now, as fastened upon it by this Tribunal to see that all the parties draw and utilise their allocations as per the Order of the Tribunal, and no party be allowed to exceed its allocated share or violates other restrictions which have been placed on utilisation in different sub-basins and reservoirs. If some reservoirs are oversized, it does not necessarily mean that it must be misused. The Board is to check that only allocated amount of water is used. Some apprehensions which have been expressed merely on the basis of the revised plans or proposals, need not be there at all, since no State can exceed its allocated share at different dependability nor can violate the restrictions placed on utilisation. The Implementation Board is charged with the duty to check it.

Therefore, no such clarification is needed nor any modification in the Decision already rendered. It has been argued as a matter in appeal or rehearing of the matter.

9. <u>The Loss of Storage of Tungabhadra Reservoir Due to Siltation.</u>

The next point taken by the learned Counsel for the State of Andhra Pradesh is about being permitted to construct a new Parallel Right Bank High Level Canal at a higher contour from

the fore-shore of Tungabhadra river to enable it to fully utilize its allocated share of water in Tungabhadra project.

The submission is that due to siltation, capacity of Tungabhadra reservoir has reduced by 28.13 TMC. It has reduced the availability of water as a result of which Andhra Pradesh has not been able to draw its full allocation. This aspect of the matter has been considered by this Tribunal by detailed discussion at page 581 to page 592 of the Report. The main grievance is about loss of availability of water in the Right Bank High Level Canal. The allocation to Andhra Pradesh in the Right Bank High Level Canal is 32.5 TMC and the State of Karnataka has been allocated 17.5 TMC out of 50 TMC allocated for Right Bank High Level Canal.

After discussing the facts of the case on the point, which it is not necessary to repeat, the Tribunal recorded a finding at page 588 of the Report that shortfall of availability of water in the Right Bank High Level Canal for the use of Andhra Pradesh would only be near about 3 TMC and so far as Karnataka is concerned, it would be near about 2 TMC.

The learned Counsel for the State of Andhra Pradesh submits that the shortfall in the Right Bank High Level Canal will be 6 TMC and not 3 TMC. The submission therefore is that the Tribunal had considered the amount of shortfall in the Right Bank High Level Canal for the use of Andhra Pradesh, which is the half of the actual amount of loss of storage as 3 TMC instead of 6 TMC. So far this fact as pointed out by the learned Counsel for the State of Andhra Pradesh is concerned is quite correct. The discrepancy appears to have occurred because the allocation of Andhra Pradesh in the Right Bank High Level Canal was taken as 29.5 TMC instead of 32.50 TMC. As a matter of fact, Andhra Pradesh has been allocated 29.5 TMC in the Right Bank Low Level Canal which figure was inadvertently taken into consideration. The entries relating to allocation to Andhra Pradesh in Tungabhadra Project Right Bank Low Level Canal and Tungabhadra Project Right Bank High Level Canal Stage-I and Stage-II are close to each other at Sl.Nos.4 and 7 of the List of Projects for which allocation had been made as indicated at page 188 of the printed Paper Book of the Report of KWDT-I, in Chapter XIV, under the heading “Apportionment of Water of River Krishna”. Therefore, it appears that one figure was inadvertently taken

for the other. True the loss of availability should have been calculated as against 32.5 TMC which would make it a shortage of 6.3716 TMC, as is the case of Andhra Pradesh.

So far the total loss of storage in Tungabhadra Reservoir is concerned, it is said to be about 28 TMC. This loss is shared by Karnataka also and it is not to be borne only by Andhra Pradesh. The grievance, in issue, is in respect of loss of availability of water in Right Bank High Level Canal to the extent of around 6 TMC which is sought to be retrieved by Andhra Pradesh by constructing a Right Bank High Level Parallel Canal. It is not for retrieval of total loss of storage in Tungabhadra reservoir. The proposed canal would be 266 Km long out of which 87 Km falls in the State of Karnataka. It was submitted earlier and again during these proceedings that this canal will be in the interest of both, i.e., Andhra Pradesh as well as Karnataka. Therefore, State of Karnataka should agree to the construction of canal and permit the construction which falls within the territory of Karnataka. It was also submitted that the two States had also entered into some talks about the same, but it appears that it was quite some time back since thereafter no development has taken place at all in the matter.

Learned Counsel for the State of Karnataka also submitted that no such negotiations are going on nor Karnataka is agreeable to such a project.

The detailed reasons for not allowing such a project are discussed in our Report and also as to what interest and whose interest could possibly be served by such a project. In this connection it may be pointed out that even though instead of loss of availability of 6.38 TMC to Andhra Pradesh in Right Bank High Level Canal, which at one place has been mentioned as 3 TMC in our Report, but in totality, this discrepancy has little effect on the merit of the matter, as already decided. Since loss of 3 TMC was considered too small to be retrieved by construction of a 266 Km long inter-State High Level Right Bank Parallel Canal, to which Karnataka too does not agree, even shortfall of 6 TMC will definitely not make any difference. The figure of 3 TMC mentioned at page 588 of our Report as shortfall in the availability of Right Bank High Level Canal may be taken or treated as 6 TMC, but virtually for the decision of the issue under consideration before this Tribunal in the proceedings under sub-section (2) of Section 5 and for that matter even in these proceedings is

hardly material rather irrelevant to deserve any reconsideration of our decision, much less any modification in the Order/Decision dated December 30, 2010 on this point.

Some other suggestions which had been made to increase the storage, e.g. raising height of Tungabhadra Dam by two feet and for widening of the canal do not deserve reconsideration. The reference of the statement of their witness Venkateswarlu and the simulation studies which are said to have been made for raising the height of FRL of Tungabhadra Dam and the statement of Venkateswarlu in paragraph 13.1 of C-III-D-76, 77, these materials hardly lead to any different conclusion that these projects are to be re-considered.

As a matter of fact, besides the difference in the figure of 3 TMC and 6 TMC in the loss of storage in the Right Bank High Level Canal, all arguments which have been raised are as if the matter is in appeal or is being reheard. Reference to some part of the statement of one or the other witness here and there, will make no impact on the main grounds on which such flimsy alternatives, as were suggested, had been rejected.

The prayer for any kind of explanation on the point is rejected.

10. <u>Non consideration of projects of Andhra Pradesh in Tungabhadra K-8 sub-basin:</u>

This Tribunal has allocated in all 40 TMC out of the yield at 65% dependability for 3 projects of Karnataka in K-8 sub-basin namely, For Upper Bhadra Stage I, Upper Tunga and Singatlur LIS. At the end of the first paragraph at page 540 of the Report of the Tribunal, after having made a mention about the above allocation, there is an observation to the effect. "*But so far as State of Andhra Pradesh is concerned, its requirement remains the same, i.e., 127 TMC (rounded off). No fresh requirement was made by the State of Andhra Pradesh for any project*".

Mr. Reddy, ld. Counsel for the State of Andhra Pradesh, submits that a demand for allocation of water in K-8 sub-basin was made and in that connection refers to C-III-D-31 and also APAD-64. There is no doubt that in C-III-D-31 which contains the project notes of some projects, a demand for 3 projects out of them, in K-8 sub-basin was made, which it appears inadvertently escaped notice. Hence, the above quoted

observation at Page 540 of our Report, as pointed out by Mr. Reddy, has been made. It is thus true that while considering the question of allocation of water in Tungabhadra K-8 sub-basin, there was an impression that Andhra Pradesh had no demand in K-8 sub-basin and in absence of consideration of their demand, the allocations have been made for the 3 projects of Karnataka in K-8 sub-basin. If the demand of Andhra Pradesh had also been considered, maybe some water could also be allocated for the projects of Andhra Pradesh, depending upon the merit of each of the 3 projects.

In the above circumstance, it will only be appropriate to consider on merit the 3 projects of Andhra Pradesh as pointed out by Mr. Reddy. He refers to APAD-64 to show that Penna Ahobilam Balancing Reservoir finds place at S.No.12 of list of projects of Andhra Pradesh. It is submitted that additional 10 TMC of water would be required for this project. The project note is at Page 27 of C-III-D-31. This Balancing Reservoir is indicated to have been constructed during 1978-1998 across river Pennar in Anantapur District. It is also to be found in para-1.2 at page-28 of C-III-D-31 that under Penna Ahobilam Balancing Reservoir, besides irrigation, Hydro Power

generation of 40 M.W. is also contemplated depending upon water availability.

Mr. Reddy, ld. Counsel for the State of Andhra Pradesh submits that it will cater to the needs of Anantapur District, which suffers from acute scarcity of water. The reservoir is for Tungabhadra Project High Level Canal Stage-II to cater the need of Pennar basin. It is to be noted that for Tungabhadra High Level Canal Stage-II, 32.50 TMC had already been allocated by KWDT-I. The present demand is additional demand for 10 TMC more.

Looking to the facts indicated above, undoubtedly the additional demand is for the purposes of catering the need of outside the basin area which also includes component of power generation. It has already been noted that a large quantity of water already stands allocated to Andhra Pradesh which caters the need for outside the basin area and over and above that 25 TMC has been allocated by this Tribunal also for Telugu Ganga Project which will also serve the needs of Pennar basin. In the above circumstance, we do not consider it feasible to make any additional allocation for this project. The allocation which has been made for the 3 projects of Karnataka, they are

all for utilization in scarcity area within the basin. Therefore, this demand for Penna Ahobilam Balancing Reservoir cannot be acceded to.

Mr. Reddy then submits for additional allocation of 7.90 TMC for Rajolibanda Right Side Canal Scheme. He refers to APAD-64 page-4 to indicate that a demand for this project was also made. It is at No. 3 at page-54 of C-III-D-31.

The learned Counsel refers to page-54 of C-III-D-31 to show that it will cater the need of tail end areas in Kurnool District, which cannot be supplied with water under Tungabhadra Project Low Level Canal system. It is further submitted that KWDT-I had allocated 17.10 TMC under Rajolibanda Diversion Scheme with benefit of regulated releases of 7 TMC. It is further indicated that 1.20 TMC is for the use of Karnataka and 15.90 TMC for the State of Andhra Pradesh. But all this benefit is for the ayacut lying on left side of the river only, the right side remains neglected. It is submitted that Kurnool District receives very low rainfall. It is further submitted that the requirement of 7.90 TMC can well be met out from the yield between Mallapuram and

Rajolibanda. He also refers to a map at page-76/1 of C-III-D-31.

The demand as has been made by the state of Andhra Pradesh is opposed by the State of Karnataka and it is submitted that the State of Andhra Pradesh should manage the project, if they so want, within the allocations which have already been made and no more water can be allocated to Andhra Pradesh. It is further submitted that in the State of Karnataka, there is still a large area which is scarcity and drought prone area for which no allocations could be made at all.

The learned Counsel for the State of Karnataka has further drawn out attention to paragraph 18 of the Project Note of RDS at page 70 of C-III-D-31 which deals with proposed cropping pattern. It is indicated that it is proposed to irrigate the 40,000 acres of ayacut annually and the entire 40,000 acres is proposed to be irrigated as Kharif Paddy utilizing 7.90 TMC of water. It is submitted that the area is a DPAP area and for such areas, those crops are preferred which require less water rather than crop like paddy which requires a huge quantity of water. He then refers to the statement of Mr. Deokule, who

had appeared as the witness for the State of Maharashtra to point out that according to him ordinarily 1 TMC would irrigate around 12,000 acres for dry irrigated crop. It is submitted that to irrigate 40,000 acres, 3.3 TMC would suffice and 7.90 TMC should not be required. Therefore, it is submitted that first of all, no further allocation is liable to be made and without conceding, in any case the demand is inflated and it is on the higher side.

We have considered all the facts and circumstances as placed before us by the ld. Counsel for the parties. There is no doubt that the area in Kurnool District, which is to be provided water through the project in question, is a water scarcity and drought prone area. It has also been submitted that water cannot be provided to the area through Tungbhadra Project High Level Canal system. The area, it is submitted, lies within the basin. Considering all the facts and circumstances, we feel that it would be just and proper to allocate 4 TMC for Rajolibanda Diversion Right Canal Scheme to cater the need of the Kurnool District out of the availability of water at 65% dependability.

Mr. Reddy then puts forth the demand for Kurnool-Cuddapah Canal for 29.5 TMC from Tungbhadra Reservoir in K-8 sub-basin. The project note regarding Kurnool-Cuddapah Canal is at page 1 of C-III-D-31. KWDT-I had already allocated 39.9 TMC for the said project. It appears that further demand of 20.87 TMC and later 29.5 TMC were also made but they were not acceded to. There is no denial of the fact that the additional allocation which has been put forth is primarily for the purposes of catering the need of the area in Distt. Mahabubnagar and Cuddapah lying in Pennar basin. At page 23 of C-III-D-3, it is mentioned in paragraph-9(iii) that the requirement for the project arose subsequent to the decision by KWDT-I. It is mentioned that due to modernization of K.C. Canal, there is an increase in the ayacut to the extent of 65,000 acres. Since 39.9 TMC already stands allocated for this project for utilization outside the basin, it will not be appropriate to make any further allocation for utilization of water mainly for outside the basin. We don't think that the request made on behalf of the State of Andhra Pradesh for further allocation of 29.57 TMC for K.C. Canal out of Tungabhadra Reservoir can be acceded to. The area need of which is to be catered, as pointed out, lies in Pennar basin.

Water outside the basin can certainly be allocated but it is difficult to do so after a certain limit ignoring the need of within basin area.

In the result, on consideration of all the 3 projects in respect of which demand was raised by Andhra Pradesh for allocation from Tungabhadra K-8 sub-basin, no additional allocation can be made for 2 of them namely, Penna Ahobilam Balancing Reservoir and for Kurnool-Cuddapah Canal as discussed above. However, the demand for Rajolibanda Diversion Right Canal Scheme is accepted and considering all factors we have already found earlier that 4 TMC be allocated for the aforesaid project namely Rajolibanda Diversion Right Canal Scheme.

The 4 TMC of water is to be provided out of the availability at 65% in K-8 sub-basin by curtailing the allocations which have been made for the 3 projects of Karnataka. The allocation for Singatlur LIS is presently 18 TMC which is now curtailed to 16 TMC and similarly 1 TMC each from the allocations made to Upper Bhadra Stage-I and Upper Tunga projects which were allocated 10 TMC and 12

TMC respectively which are now reduced to 9 TMC and 11 TMC.

Consequently, modification in the order of this Tribunal dated December 30, 2010 shall be deemed to have been appropriately made. The total allocation of 72 TMC to Karnataka including 7 TMC for minimum flows, out of the yield at 65% dependability is now stand reduced to 68 TMC and the total allocation of Andhra Pradesh of 39 TMC out of the yield at 65% is increased to 43 TMC.

11. <u>Height of Almatti Dam :</u>

The learned Counsel for the State of Andhra Pradesh then takes up the subject of height of Almatti Dam. In a nutshell, the submission is that the height of the dam is disproportionate to the requirement and in case the height at 524.256m is allowed, it would adversely affect the interest of the people of Andhra Pradesh. It is also submitted that the projects which have been provided for at 75% dependability by KWDT-I would be affected and it will not be possible for Andhra Pradesh to achieve the required success rate of 75%.

As a matter of fact, a number of points and objections which had been taken during the course of the proceedings under sub-section (2) of Section 5 of the Act, have all once again been repeated. In the reply round, the same grounds have once again been pressed. All such points had been dealt with in some detail while dealing with Issue No.XIV relating to height of Almatti Dam in the Report dated December 30, 2010. The discussion on the points is from page 597 of Volume III of the Report to page 662.

Referring to the observations of the Tribunal one of the points which has been taken, is that the capacity of the storage is determined keeping in view the requirement of the project. In this background, it is submitted that the height of Almatti Dam at 519.6m was more than its requirement of 173 TMC and in one of the years, namely, 2006-07, the State of Karnataka had drawn even 210 TMC which is indicative of the fact that even at 519.6m, it has been an over-sized dam for requirement of 173 TMC. According to the learned Counsel, the project UKP Stage III was planned as per C-1-D-12, which document is not admissible. In this connection, he refers to one of our orders dated 18.5.2007 providing for dispensing with the

formal proof of the project reports but so far merits of the projects are concerned, parties could make enquiries from each other in the light of which evidence may be produced by them. It is submitted that by means of letter dated 8.6.2007, Advocate on Record for the State of Andhra Pradesh sought some information pertaining to C-1-D-12 from the Advocate on Record for Karnataka, but the required information was not furnished. We find that reply to the above noted letter was given by the Advocate on Record for the State of Karnataka on 7.7.2007. Thereafter, there was silence on the part of Andhra Pradesh and no dissatisfaction was expressed about the reply. It is submitted by the learned Counsel for the State of Andhra Pradesh that Karnataka should have adduced evidence in respect of its plan UKP Stage III and about its requirement totaling to 303 TMC as well as about the height of dam at 524.256m.

We find that the State of Karnataka had adduced evidence by producing one of its witnesses, namely, Shri D.N. Desai, who made statement in respect of these features and about the requirement and height of the dam also.

The other questions which have been raised are that the sanction granted for height of Almati Dam at 519.6m was also not correct. Arguments have also been advanced about the studies made by the witness of Karnataka, Mr. Ranga Raju using the working tables prepared by Mr. M.S. Reddy, the witness of the State of Andhra Pradesh. It is also complained that those working tables had not been supplied by the State of Karnataka though demanded by the State of Andhra Pradesh. The stand of Karnataka was that simulation studies were made by none else but by Mr. M.S. Reddy who was a witness of Andhra Pradesh. So there would be no difficulty for Andhra Pradesh to have access to the simulation studies and the working tables and there was no occasion to ask for the same from the State of Karnataka.

Yet another argument which has been advanced is that in C-1-D-12, State of Karnataka relied on series from 1948-49 to 1997-98 regarding availability of water at Almatti Dam to utilize 303 TMC. It is submitted that, the said series was not accepted by the Tribunal.

To us all these arguments seem to be futile since the availability of water at the site is not in dispute and on the own

showing of Andhra Pradesh as per its document C-III-D-7, a good amount of water was available at the site of Almatti Dam but after construction of the dam, it is alleged that the flows dwindled. The chart relied upon by Andhra Pradesh in C-III-D-7, was further extended which is well discussed in the Report, for the purpose of showing that construction of Almatti Dam did not make any significant difference and a good amount of water was still available and was flowing down.

The case of the State of Andhra Pradesh in C-III-D-7 has been that with the dam height of 524.256m, the inflows into Andhra Pradesh would be reduced to nil but it has been found to be without any basis and it has been demonstrated that a good amount of water would enter into Andhra Pradesh from the mainstream of river Krishna even after passing through Almatti Dam.

Some averments, objections in this connection have been raised that the figure of huge amount of water which would flow down to Andhra Pradesh is that of average yield whereas it should have been calculated at 75% dependability. It has again been submitted that the quantity which according to the Tribunal would flow down into Andhra Pradesh despite

Almatti Dam, includes the unutilized share of upper riparian States. Hence, the figure about inflows was not correct.

We think, the point which is discussed and demonstrated in the Report has been missed by Andhra Pradesh. The case of Andhra Pradesh that after the height of Almatti Dam is raised at 524.256m, the flows into Andhra Pradesh shall be reduced to nil, is totally incorrect. Even after some allowance is given for unutilized part of the share of the upper riparian States, then also it is evident that a lot of water would flow into Andhra Pradesh. All kinds of adjustments as claimed, if accommodated, even then by no stretch of imagination it can be inferred that the flows into Andhra Pradesh would be reduced to nil.

Again, we find that an objection about the flows into Andhra Pradesh which has been shown in a chart form at pages 655 and 656 of the Report, as 932 TMC, which according to Mr. Reddy would be less by 14 TMC and it would only be 918 TMC, since according to utilization figures of Jurala Project and the measurement figures gauged at C-5(a) should have been added and divided by 26 rather than to calculate the average figure of Jurala Project separately dividing it by 10.

Even if that is accepted, 918 TMC is not a small amount and by no stretch of imagination it can be inferred by reducing 14 TMC out of 932 TMC the inflows into Andhra Pradesh would reduce to nil. It may also be indicated that the Tribunal was not considering the question about availability at 75% dependability while dealing with this point of flows into Andhra Pradesh after construction of Almatti Dam at the height of 524.256 m. As a matter of fact, Andhra Pradesh itself in its chart in C-III-D-7 has not indicated the 75% availability. Therefore, such questions which have been raised have no relevance in the context with the point under consideration. The Tribunal was not ascertaining the availability at 75% dependability. The moot question was whether inflow into Andhra Pradesh would be reduced to nil or not. That case of nil inflows taken up by Andhra Pradesh stands nullified. It has also been submitted that C-III-D-7 was prepared at a time when data was not exchanged between parties and that it was to be reviewed later on. In this connection, it may be pointed out that admittedly no subsequent studies modifying C-III-D-7 had been filed. The learned Counsel in reply to a question put by the Tribunal stated that C-III-D-7 was not modified.

As a matter of fact, the grievance of Andhra Pradesh about the adverse effect on its projects in case height of Almatti Dam is allowed to 524.256 m, no more survives.

The case of Andhra Pradesh is that Karnataka raised the height of Almatti Dam, increasing the reservoir capacity with a view to utilize the surplus flows which had never been allocated to Karnataka. Hence, there was no justification to raise the height in the hope of getting more water. The fact of the matter is that Andhra Pradesh never had exclusive rights over surplus flows which have now been distributed by the Tribunal. KWDT-I had also observed that in case more water is available for distribution, allocation of more water for Almatti Dam should favourably be considered. More water was available and surplus flows have been distributed amongst the three States. Karnataka has also been allocated water out of surplus flows for which storage capacity is also available in Karnataka. Hence there was no reason not to allocate more water, as needed by Karnataka and allow it to store in the available storage in Almatti Reservoir. So far as the other States are concerned, admittedly they have no scope of any further storage.

The main contention of the State of Andhra Pradesh in allowing Karnataka the height of Almatti Dam at 519.6m was that it would spell disaster to the lowest riparian State and the projects planned to utilize 75% dependable yield in accordance with decision of KWDT-I, would fail and it would also be in violation of national policy as stated in para 61 of the reply by Andhra Pradesh C-I-2 to the complaint of Karnataka. As a matter of fact it may be relevant to point out that the Tribunal has already recorded a finding that the success rate of Andhra Pradesh is 75% with height of Almatti Dam at 519.6m.

The main consideration would be as to whether the inhabitants of Andhra Pradesh would be adversely affected by allowing the height of Almatti Dam at 524.256m utilizing 303 TMC or not. Now there remains no ground or reason for any apprehension that by allowing utilization of 303 TMC to Karnataka from Almatti Dam, it would cause any injury to the inhabitants of Andhra Pradesh, since a detailed manner of drawal of water by the parties at different dependability has been provided by means of this Further Report. It is an elaboration of the provisions as contained in the Order of the Tribunal dated December 30, 2010. According to the

elaborated manner of drawal in detail the additional allocation at 65% dependability and on average yield would be drawn only after all the riparian States have drawn their allocation at 75% dependability as allocated by KWDT-I. Clause IV of the Order of the Tribunal dated December 30, 2010 saves and protects the allocation as made by KWDT-I at 75% dependability and which is not to be disturbed. This protection which has been provided by Clause IV indicated above, has done away with any kind of apprehension to the State of Andhra Pradesh. It is to be noted that additional allocation of 130 TMC for Almatti Dam, has been made, out of the water available at 65% dependability to the extent of 25 TMC and the remaining 105 TMC, out of the average flows providing restriction/capping on drawal by Karnataka at different dependability. The State of Karnataka is allowed to draw 25 TMC out of 65% dependability only after Andhra Pradesh has drawn its allocated share of 811 TMC at 75% dependability as allocated by KWDT-I. Similarly only after Andhra Pradesh draws 43 TMC out of 65% dependability over and above 75% dependability and achieves 854 TMC, only then Karnataka is permitted to draw the remaining 105 TMC out of average flows. Therefore, utilization of 130 TMC more from Almatti

Reservoir with a height of 524.256m will have no adverse affect on the inhabitants of Andhra Pradesh. All the projects running at at 75% dependability as per the decision of KWDT-I, would continue unaffected. Therefore, there is no reason of any kind of apprehension that those projects running at 75% dependability would be adversely affected by allocation of more water for Almatti Dam with increased height of 524.256m.

As has been argued before us, the State of Andhra Pradesh was not able to indicate to indicate about the injury and the extent of injury which may be caused on account of raising of the height of Almatti Dam at 524.256m since according to them they are not in possession of the relevant documents and material necessary for the purpose. So from what we have discussed above, it appears that there is no likelihood of any injury to be caused to the projects of Andhra Pradesh at 75% dependability or to its inhabitants. The State of Andhra Pradesh could not point out any such injury to it.

In the absence of any such injury, much less substantial injury, to the lower riparian State, there is no reason to uphold the objection of Andhra Pradesh to the allocation of 130 TMC

more for Almatti Dam with height of 524.256 m. Even if it is assumed that the capacity of the reservoir at the height of 524.256m is more than the requirement that will also not be to the detriment of the lower riparian State since there is a capping and restriction on drawal and storage at different

dependability. Therefore, any extra water over and above the allocated quantity at any dependability has only to flow down. Over and above this, now there is the KWD-IB to see that the decision of the Tribunal is implemented in its true spirit strictly in accordance with the Order of the Tribunal and is not violated by any party.

Therefore, we find no force in the submissions made on behalf of the State of Andhra Pradesh against the height of Almatti Dam at 524.256 m for utilizing 303 TMC as per the allocation now made. It requires no clarification or reconsideration of the matter.

12. <u>Success Rate</u>

Mr. Reddy, learned Counsel for the State of Andhra Pradesh submits that the success rate of State of Andhra

Pradesh comes to 68% only. It is further submitted that it has been incorrectly shown as 73.83%, rounded off to 74% and 76% at page 400 of the Report. It may be mentioned here that the question relating to success rate of Andhra Pradesh has been elaborately discussed in the Report from page 390 onwards detailing all the relevant facts on the point. The submission of the learned Counsel is that the success rate has been considered on the basis of 2060 TMC but on calculating it at 2130 TMC, the success rate would come to 68% only.

In connection with the contention that the success rate of Andhra Pradesh is only 68%, Annexure 34 – Revised to the affidavit of Prof. Subhash Chander, a witness of the State of Andhra Pradesh may be referred to at pages 237-239 of his affidavit. It is worked out on the basis of a series of 104 years from 1901-02 to 2004-05 against utilization of 2060 TMC. The most striking feature is that deductions on account of so called inevitable waste have been made in Column 14 of the Chart from the yield generated in Andhra Pradesh. It has made a major difference in the gross yield leaving a lacunae in the studies of Prof. Subhash Chander. According to the above

noted chart, Annexure 34- Revised at page 239, the success rate of Andhra Pradesh is 68% only.

It may be indicated here that the State of Maharashtra, without prejudice to its case that Annexure 34 –Revised is incorrect otherwise also, prepared a chart C-II-D-162 without deductions of so called inevitable waste, the success rate worked out to 73%. Prof. Subhash Chander in his cross-examination admitted the position as shown in C-II-D-162. The Tribunal also undertook the exercise on the lines of Annexure 34-Revised, but without deducting the so called inevitable waste, with a series of 107 years instead of 104 years, from 1901-02 to 2007-08 since data upto that period, namely, 2007-08 was available. This chart is at pages 397-399 of the Report showing the success rate of Andhra Pradesh as 73.83%, rounded off to 74%. Again by taking two years as not the failure years, since the shortage in the allocated share was too meager to take note of, i.e., to the extent of only 2 TMC and 14 TMC against share of 800 TMC, the success rate worked out to 75.70% which can be rounded off to 76%. So the chart prepared on the similar lines as Annexure 34 to the affidavit of Prof. Subhash Chander without deducting the inevitable waste

belie the case of Andhra Pradesh that its success rate was only 68%.

Apart from what has been indicated above, it is also to be noted that Prof. Subhash Chander made use of the series of 104 years from 1901-02 to 2004-05 which is Annexure 6 B to his affidavit with flow at 75% dependability as 2045 TMC, i.e., even below 2060 TMC the agreed figure. Again it is not understandable as to why in the series of 104 years the data available for the year 2005-06 was not included whereas it was used by the witness while preparing the other series Annexure 6-A. The gross yield of 2005-06 was quite high. Further the 75% dependability, i.e., 2045 TMC would reduce to 1998 TMC by deducting the so called inevitable waste in the series of 104 years as would be evident from Annexure 32 –Revised at pages 231-233 to the affidavit of Prof. Subhash Chander. So this is how the success rate was tried to be brought down to 68% only.

Apart from the evidence which was filed by Andhra Pradesh for the purposes of its success rate as shown above, a new chart has now been passed on during the course of hearing to make a second attempt to show that the success rate is 68%.

It is a chart of 107 years, from 1901-02 to 2007-08. The average yield has been shown as 2426 TMC, at 75% dependability as 2054 TMC whereas the success rate has been worked out for meeting utilization of 2130 TMC. It was contended that utilization figure should not be taken as 2060 TMC but 2130 TMC.

On the argument advanced as noted above, it was put to the learned Counsel that by taking the utilisation as 2130 TMC, the gross yield as per the series of 47 years prepared by the Tribunal should have been taken into consideration which includes the return flows, the storage change, increased utilization in minor irrigation of Karnataka and Maharashtra etc. It has been admitted by the learned Counsel that the data of gross flows of the series of 47 years has not been taken into account in working out the success rate now placed before us. The study now tried to be introduced is fallacious. The success rate of State of Andhra Pradesh if calculated on the flows indicated in series of 47 years would come to much more than 75%. The figures of gross flows shown in the new chart now placed before us are exactly the same in some of the years, otherwise in other years nearer to the figures of gross flows

which would work out in Annexure 34 – prepared on deducting the so called inevitable wastage. In the chart of 47 years' series, the figures of gross flows are much higher after the years 1971-72 since they include return flows etc. also as indicated earlier. If the success rate is to be worked out against 2130 TMC, the latest series of 47 years having higher gross flows and higher 75% dependability must be taken into account. The figure of 2060 TMC became 2130 TMC only after adding return flows to it. So how the return flows can be ignored while finding out gross flows, particularly while success rate is to be worked out on utilization of 2130 TMC.

Therefore, the success rate on the basis of the chart furnished by the learned Counsel, which is apparently wrong, their second and unfair attempt to show that success rate of Andhra Pradesh is 68% also fails. By passing on the new chart, they are trying to disown their evidence on the point viz. the affidavit and Annexures on the point by their witness Prof. Subhash Chander, which was also not found acceptable by the Tribunal.

All the evidence on the record and the facts and circumstances had been fully considered and appraised by the Tribunal in the Report.

In the result, we find no merit in the argument that the decision on the question of success rate of Andhra Pradesh is liable to be reconsidered under Section 5(3) of the Act and the request for the same is rejected.

13. Percentage of Dependability:

The next point argued relates to percentage of dependability. The objection is about lowering the dependability factor to 65% at which availability of water works out to 2293 TMC and the average flows to 2578 TMC as per series of 47 years. The distribution of differential amount of water at 65% and average availability and manner in which it is to be realized is also sought to be clarified and explained.

Shri Dipankar Gupta learned Counsel for the State of Andhra Pradesh, in connection with the above subject, makes a reference to paragraph 9.3 at page 24 of the Reference Petition of Andhra Pradesh. He takes us through the pages 328 to 330

of the Report of the Tribunal where the ratio of storage and utilization has been indicated leading to the conclusion that storage and utilization match to the availability of 2293 TMC at 65% dependability. It is submitted that the total live storage capacity is not 1368 TMC as found by the Tribunal but it is less. We may, however, deal with this aspect a little later.

We may first deal with the point raised as to what would be the appropriate dependability factor and could it at all be lowered to 65% and further if distribution of water could be made at average availability or not. We feel it will also be necessary to examine, in what circumstances, if at all, the dependability factor may be lowered.

It is submitted that in India, 75% dependability is considered to be the established norm for the purposes of agricultural operations. Learned Counsel made a reference to the observations made at page 156, right-hand column, of the Report of KWDT-I that river Krishna is though dependable river than many rivers in India, yet without further study it will be too much to say that the water should be impounded in the Krishna basin to such an extent that 50% dependability be made the basis for division of water.

A reference has also been made to page 318 of the Report of the Tribunal, Vol.II, where the claim of the State of Maharashtra to distribute the water at 50% dependability, on parity with the decision in the Cauvery case has not been accepted, sustaining the objection of the State of Andhra Pradesh that the Cauvery basin stands on a different footing. A reference is then made to the observations of the Tribunal at page 323 of the Report where it has been observed that in distributing the water at 50% dependability, it may be harsh upon the farmers to manage two bad years out of four, without support of any carryover storage.

A reference is again made to the observations in the Report of the Tribunal at pages 329 and 330, where it is held that at 65% dependability, 2293 TMC would at least or more, would be available in 65 years out of 100 years which may be near about in two years out of three in place of three out of four years at 75% dependability. But it has also been observed that it may be manageable and further that there would be some check on water going waste unutilized at 75% dependability in the times of acute scarcity of water, that is being faced now. Our attention is also drawn where it is observed at page 330

that the dependability factor has been reduced by 10% but the plea of Maharashtra and Karnataka to further lower the dependability to 50% or on average will not be feasible without any more carryover storages added to the existing ones. In the background of the above noted observations by this Tribunal, the case of the State of Andhra Pradesh is that distribution of water at 65% dependability and at average yield is self-contradictory with its own findings. It is, however, not so and we propose to deal with this aspect of the matter a little later in this discussion.

On the basis of the observations made by KWDT-I and by this Tribunal and the recommendations of Agriculture Commission etc., it is submitted that availability of water for agricultural operation should not have been lowered below 75% dependability. It violates the established norm, as a result of which, availability of water becomes less than 3 years out of 4, which would adversely affect the farmers.

There can be no dispute that for the purposes of agricultural operations, the availability of the water, as per existing norms, should be at 75% dependability. In this case, nothing different has been done, rather the Tribunal has

maintained the sanctity of norm of 75% dependability. Some water as available over and above 75% dependability has also been put to use, separately from utilization at 75% dependability, which would not affect availability and utilization at 75% dependability at all.

The KWDT-I had distributed the water at 75% dependability which was agreed to be taken as 2060 TMC plus the return flows of 70 TMC. The States have been drawing and utilizing their share accordingly barring a few complaints against each other about some violations here and there which are not to be taken note of for the point under consideration.

It is pointed out here with some emphasis that allocations as made by KWDT-I at 75% dependability have been maintained and in that connection Clause-IV of the Final Order may well be perused at page-801 of the Report of the Tribunal which is quoted below :

"Clause-IV : That it is decided that the allocations already made by KWDT-I 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 totaling to 2130 TMC, be maintained and shall not be disturbed."

It will also be pertinent to peruse Clauses – V and VI of the Order quoted below:

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".

It is thus clear that the additional 163 TMC only has been distributed at 65% dependability and 285 TMC at average flow, amongst the three States. There is no reallocation or redistribution of whole yield 2293 TMC at 65% dependability or the whole availability at average flows of 2578 TMC. It has been kept separate from allocations at 75% dependability which remains maintained and untouched under Clause-IV quoted above. So, the allocation of 2130 TMC at 75%

dependability shall continue to be available in three out of four years. The allocation by this Tribunal is only in respect of limited additional flows under Clauses-V and VI viz. 163 and 285 TMC only, the availability of which will be less than 75% as it is well known. It does make a difference since this allocation is kept separate from distribution at 75% dependability. There should not be any misunderstanding otherwise that by this additional allocation availability at 75% dependability will be affected or lowered in any manner.

A close reading of different clauses of the Order of this Tribunal clearly shows the water at different dependability will be drawn accordingly. That is to say, first of all, at the first instance all the three States shall draw their allocations at 75% dependability as allocated by KWDT-I as it is being presently done under Clause V of the Order of KWDT-I. The additional allocations which have been made by this Tribunal shall be drawn only after all the three States have realized their allocation at 75% dependability. That is to say, realization of allocation at 65% dependability shall be made in the next step and after it has been realized by all the three States, then in the third instance, realization of the shares allocated at average flows shall be realized by the three States. This method of

drawal makes it clear that availability of water distributed at 75% availability by KWDT-I will be safely drawn by all the three States where after water at lower dependability will be drawn and not before. The question as to how the water at different dependability shall be realized has been raised in the Reference Petition of the Central Government and also in the Reference Petition of the State of Andhra Pradesh. This question has also arisen in the minds of the other parties also. It has been dealt with in detail while dealing with the Reference Petition of Andhra Pradesh but in a nutshell, the manner of drawal precisely and in brief is as indicated above. For the full details of the manner of drawal at different dependability, the discussion held on the Reference Petition of the Andhra Pradesh may be seen with Scheme of manner of drawal in two parts. The method which has been evolved to draw water at different dependability, in a self-regulated manner ensures availability of water at 75% dependability first according to the allocations made by KWDT-I.

Therefore, the submissions made on behalf of the State of Andhra Pradesh no more survive since as per norms water at

75% dependability remains available to the farmers of all the States as that arrangement continues undisturbed.

The observations which have been made by KWDT-I and this Tribunal to which our attention has been drawn, have either been made in the background of Scheme-B as framed by KWDT-I envisaging distribution of whole amount of water and the sharing of deficit as well. Hence, the necessity for carry over storages with sluice gate etc. was felt. Else the observations of the Tribunal were in the background of the contention of the States of Maharashtra and Karnataka for distributing the whole water at 50% dependability which was found to be not possible as it would disturb the allocations made by KWDT-1 at 75% dependability and then it would not have been possible to achieve 75% success rate at all, without the support and back up of carryover storages. It was in that context that this Tribunal had made the observations. In case, however, some stray and unguarded observation or sentence finds place in the report of the Tribunal that has only to be taken in the background of Clauses-IV, V and VI of the Order of the Tribunal and the discussions in the preceding paragraphs and main thrust and substance of the Order of the Tribunal and

not literally out of context. So long, 75% success rate remains at 75% dependability, as it is provided in this case, other arguments lose their relevance.

Utilization of additional water at lower dependability is an extra advantage, may be at lesser success rate, as planned without disturbing allocations at 75% dependability. As a matter of fact, water over and above 75% dependability is being utilized by only one State. The allocation of 163 TMC at 65% dependability and 285 TMC at average flows over and above 2130 TMC at 75% dependability is not self-contradictory to its own findings as argued. The realization of allocated shares at different dependability will be made separately one after the other as provided in the manner of withdrawal. It does make a real difference in the two positions one as allocated in this case and the other as was being demanded by States of Maharashtra and Karnataka.

At the time KWDT-I had given its Report, the storage capacity was also less as compared to the existing storage capacity. Almatti Reservoir was not there nor Pulinchintla. The Tribunal was also uncertain about the storage capacity of

Srisailam Reservoir. With those constraints, the observations referred to may have been made by KWDT-I.

Again, it has already been found by this Tribunal that the present live storage capacity of all the three States together comes to 1368 TMC which would make utilization of water with minor irrigation utilizations to the extent of 2293 TMC, which amount of yield is available at 65% dependability at a utilization ratio of 1:1.40 TMC.

We may now see the allocations which have been made, out of the yield at 65% dependability and at average flows. State of Maharashtra has been allocated 43 TMC at 65% dependability. Out of which, 25 TMC is to be diverted for westward utilization at Koyna. Therefore, basically the requirement for irrigation purposes out of allocation at 65% dependability will be reduced to 18 TMC. So far average flows are concerned; its allocation is 35 TMC. The availability of average flows is 58% as per the series of 47 years. This allocation is for drought prone areas in Maharashtra. They are planning projects at 50% dependability as well. So they do not have any high hopes of 75% success rate from the limited allocation of 43 TMC and 35 TMC at 65% and average

dependability. The limit of success rate is known but according to them even this will be useful to them and serve the drought prone area as well to some extent over and above the area covered by allocations at 75% dependability.

So far as Karnataka is concerned, 65 TMC has been allocated at 65% dependability out of which 25 TMC is for Almatti Reservoir and the remaining 40 TMC for its three projects in Tungabhadra Sub-basin for the drought prone water scarcity areas. Out of flows at average, 105 TMC is allocated for Almatti Reservoir. Almatti project has been planned with around 50% success rate. It will also cater to the needs of drought prone area. It will provide storage for water which was not available earlier anywhere in the whole basin, 105 TMC will be available in 58% of the years with support of 25 TMC at 65% dependability, as indicated earlier. Again this too is over and above 75% success rate at 75% dependability. It may suit their planning for drought prone areas etc. It is known beforehand. This extra advantage does not violate any norm, which already stands complied with undisturbed.

Next, coming to Andhra Pradesh, it is to be noted that out of 65% dependability, 39 TMC has been allocated from

which 30 TMC is allocated for carryover storage and 9 TMC for Jurala project. Out of the flows on average availability, 120 TMC is for carryover storage and 25 TMC for Telguganga project. This too is an extra advantage over and above 75% success rate. They have been putting water to use over and above 75% availability and demand more of it. The figures of allocation relating to Karnataka and Andhra Pradesh are subject to changes on allocation of 4 TMC for RDS Right Bank Main Canal.

To repeat once again the figures, which have been indicated in the preceding paragraphs regarding utilization of additional allocation at different dependability, go to show that it is an added advantage over and above the utilization at 75% dependability. No hardship whatsoever is going to be faced by the farmers in so far as existing agricultural operations at 75% dependability are concerned. Therefore, additional allocations with the manner in which they will be drawn after drawal of water at 75% dependability, are in no way going to adversely affect them; rather these allocations will provide some more water, though at lower dependability for some water-starved drought prone areas of the three States. As stated earlier,

Maharashtra and Karnataka have also made some planning in that way. Andhra Pradesh has already been utilizing water over and above 75% dependability. An appropriate planning strategy may also to some extent further help in their operation, e.g. choice of crops, and method of irrigation etc.

We have already indicated in the earlier part of this order that storage capacity has increased, hence there will be no difficulty about the storage of sufficient water. So far as allocation of 120 TMC out of average flows to Andhra Pradesh, for carryover storage is concerned, its availability is around 58% which has to meet the exigency of acute intensity of hardship only in some of the years out of 25% deficit years only. There will be a contribution of 30 TMC at 65% dependability as well for this purpose. Water for carryover storage was already being stored in Srisailam and Nagarjunasagar dam. Out of 25% of deficit years, acute deficit may not be there in each year. Sometimes it may be so but not always.

To sum up, basically the availability and distribution of water is retained and maintained at 75% dependability. The dependability factor has been lowered for limited purpose to

provide some more water for utilizing it to serve water scarcity areas without affecting availability at 75% dependability. The manner of realizing their allocated shares in steps with capping at different stages and dependability ensures availability at 75% dependability first and some amount of water is saved from being drained down to the sea unutilized. It is not self-contradictory to the findings recorded by the Tribunal while dealing with the case taken up by Maharashtra and Karnataka to distribute water at 50% dependability. The two situations are different.

Therefore, this argument on behalf of Andhra Pradesh does not call for any clarification or explanation.

14. <u>Re: Live Storage capacity of Krishna basin and that of Srisailam & Nagarjunasagar Reservoirs – effect of siltation:</u>

We may now deal with the question raised relating to the live storage capacity of the Krishna basin which is found by the Tribunal as 1368.43 TMC but the State of Andhra Pradesh sought it to be explained and clarified as according to them it is less.

It is submitted that due to siltation in Srisailam Dam and Nagarjunasagar Dam, there is a loss of the live storage capacity to the extent of 44.30 TMC, which has not been taken into account by the Tribunal. The next part of the objections is that the live storage capacity of Nagarjunsagar Dam, instead of 202.5 TMC, it has been taken as 233.63 TMC i.e. increased by 31 TMC on account of withdrawals from below the MDDL of Nagarjunsagar Reservoir. It could not be done so as dead storage utilization could not be treated as part of the live storage. It is further submitted that the planned live storage capacity of Srisailam Dam is 202.5 TMC as that of Nagarjunasagar Dam but it has been taken as 249.986 TMC. Thus considering these factors, the live storage capacity would be only 1245 TMC and not 1368.43 TMC as found by the Tribunal.

It is also submitted, as a justification for utilization from below the MDDL that Andhra Pradesh has to supply water to Chennai Water Supply, SRBC etc. so, it has to maintain certain MDDL of Srirailam Dam. It is also submitted that drawals from below MDDL had been possible only for the reason that upper riparian States had not been utilizing their full

allocations. Once full allocations are drawn by the upper riparian States, there would be no water available for drawing from below the MDDL.

Besides referring to para 9.3 of the Reference Petition, he has also referred to the Affidavit of Prof. Subhash Chander and Annexure 39 annexed therewith about the reduced live storage capacity of Nagarjunsagar Dam and for Srisailam Dam. He refers to C-III-D-39A prepared out of C-III-D-117 which is a report prepared by Andhra Pradesh Engineering Research Laboratory, Government of Andhra Pradesh, Hyderabad. Paragraph 18 of APAD-62 in particular, has also been referred in connection with siltation, reducing the live storage capacity of the reservoirs and about operations below the MDDL. Great pains have been taken to show that the siltation has set-in, in the two reservoirs as a consequence whereof live storage capacity of those reservoirs has reduced to the extent of 44.4 TMC, which it is submitted, has now further reduced.

A reference to APAD 65, particularly its paragraphs 12 – 15 relating to drawals from below MDDL from the two reservoirs, has been made. It is submitted that the report has not discussed about reduction in live storage capacity of the

two reservoirs and for taking the live storage capacity of Srisailam Dam as 249.986 instead of 202.5 TMC.

Insofar as the averments made on behalf of the State of Andhra Pradesh in APAD-65, paragraphs 12 to 15, relating to drawals from below the MDDL from Srisailam and Nagarjunasagar Reservoirs are concerned, it may be pointed out that those averments are not relevant for the purposes of the point in question. We have considered the question of drawal from below MDDL, in the light of assessment of the live storage capacity of the basin as a whole. The averment as made in paragraphs 12 to 15 that all that water which was drawn from below MDDL has been accounted for in the final yearly accounting of water drawn, hence it is not going to increase the yield, is besides the point and not relevant at all.

We are not considering here the amount of yearly yield of river Krishna but the capacities built up by the States for utilization of available water and in that connection we have taken into consideration only live storage capacity of different reservoirs and not the gross capacity. But since it was noted as per the Statements Nos.2 and 8 filed by Andhra Pradesh that in case of Srisailam, there have been consistent drawals from

below the MDDL in each and every year, it was found reasonable to conclude that such consistent use of the storage below MDDL each year without exception is to be considered a part of the live storage capacity. Similarly there have been frequent drawals from Nagarjunasagar Dam also. Hence, the average utilization from below the MDDL has been added in the live storage capacity. Otherwise it would be against the ground reality to exclude from consideration such consistent, regular and heavy use of the storage below MDDL, a planned built up storage capacity, to treat it as dead storage whereas it is very much in regular use as live storage.

In the light of the above position, it is clear that the point raised by Andhra Pradesh that all drawals, which have been made from below the MDDL are reflected in the utilizations made, has no relevance. Daily drawal-sheets in respect of the aforesaid two reservoirs have not been made available by Andhra Pradesh to check the other averments.

The analysis which has been made by Andhra Pradesh in paragraphs 12 to 15 of APAD-65 is in respect of only deficit years but those years have not been dealt with where drawals from below MDDL were over and above the allocated share

and water was also available even after presumed full utilization of their allocated share by all the three riparian States.

The case of the State of Andhra Pradesh is that due to siltation, the live storage capacity of Nagarjunasagar Dam has reduced to the extent of 19.5 TMC and that of Srisailam Dam to 24.8 TMC totalling to 44.3 TMC. This contention is sought to be supported by Annexure-39 to the Affidavit of Prof. Subhash Chander, a study undertaken by CWC in the year 1997 in respect of Srisailam Dam, and C-III D-39A has been relied upon about Nagarjunasagar which is a study made by a Research Laboratory, Hyderabad in the year 2003.

The contention is that the live storage capacity of Nagarjunasagar Dam is 202.5 TMC as well as that of Srisailam Dam, totaling to 405 TMC only, but a total storage loss of 44.3 TMC has also occurred on account of siltation. It reduces the storage capacity of the two Reservoirs from 405 to about 360 TMC only.

The siltation, as per the studies referred to above, may have taken place in due course of the life of the Reservoirs but

in the prevailing circumstances, it is not necessary to go into these details of siltation. However, it is to be seen whether the siltation, if it is there, it has made any adverse effect on the actual live storage capacity of the reservoirs or not.

A perusal of statement-2 furnished by the State of Andhra Pradesh would show that huge drawals from below the MDDL have been made from Srisailam Reservoir every year without exception right from 1984-85, like 83.53 TMC in 1986-87, out of which more than 32 TMC in the month of June alone and 25 TMC in May, 1987, it shows the extent to which drawals could be made from below MDDL in a single year. In the year 1991, an amount of 66.16 TMC was drawn from below the MDDL out of which more than 52 TMC in the month of June alone. Again in the year 1993-94, 101.02 TMC was withdrawn out of which more than 34 TMC in the month of March and 36 TMC in the succeeding month of April apart from in other months as well. In the year 1994-95, an amount of 57.80 TMC was withdrawn from below MDDL, out of which more than 33 TMC in the month of April alone. This is the extent to which withdrawals have been made quite close to the year of survey in 1997.

We may now consider the withdrawals which have been made after 1997. In 1998-99, an amount of 33.86 TMC was withdrawn out of which, more than 21 TMC was withdrawn in the month of April alone. In the year 1999-2000, an amount of 57.84 TMC was withdrawn out of which more than 22 TMC was drawn in June, 1999 and more than 34 TMC in the month of May. In the year 2001-02, 48.79 TMC was withdrawn and in the month of July, more than 22 TMC was withdrawn. In the year 2002-03, total withdrawal of 96.19 TMC was made. The drawals were made in 8 months and more than 26 TMC in the month of July alone. In the year 2003-04 total withdrawals were to the extent of 54.58 TMC and 74.74 TMC in the year 2004-05 with withdrawals of more than 23 TMC, and more than 31 TMC in the months of February and March respectively. In the year 2005-06, an amount of 75.52 TMC of water was withdrawn with more than 48 TMC in the month of April, 2006 alone.

The above figures of withdrawals which have been made prior to the survey in the year 1997 and thereafter show no adverse impact of siltation on storage despite the siltation, huge quantities have been withdrawn from below MDDL even in

one single month as late as in April, 2005-06 where total withdrawal is more than 48 TMC, the inflow has been shown in negative, in the statement. Thus, it makes it clear that huge quantity of more than 48 TMC could be drawn in one single month from below MDDL. In the month of May, 2006, withdrawals have been made from RL 807 closing at RL 737. It shows that the extent of depth from which the withdrawals have been made i.e. 70 ft. below the available RL of 807 ft and with MDDL at 834, if it is taken into account, 27 ft. further to be added which makes water available about 100 ft. deep below the MDDL.

The above facts clearly indicate that before as well as after the survey is said to have been made and siltation was found to be there in the year 1997, practically there has been no difference in the availability of water below the MDDL which could be drawn from the alleged dead storage and it is also clear that despite the siltation whatever it may be, they could still draw water up to the RL 737.30 in the month of May, 2006 after siltation whereas earlier, namely in May, 1994, drawal was made from the level of 725.30, which is not far from the year 1997 when the survey was made. And again in April

1995, May 1995, June 1995 and May 1996 i.e. just before the survey water could be withdrawn at the RL being around 737 ft. The above facts clearly show that there is hardly any adverse impact of storage capacity and sufficient water is still available in storage as before the survey in 1997. If the dead storage is not much affected by the amount of siltation as given out, there is no occasion for live storage capacity to be affected at all.

In the year 2002-03, total utilization of Andhra Pradesh was 369 TMC. An amount of 243 TMC is shown to have been drawn from below MDDL of Nagarjunasagar Reservoir as per their Statement No.2. The balance after deducting 243 TMC out of 369 TMC is 126 TMC. An amount of 96.185 TMC of water was drawn from below the MDDL of Srisailam reservoir, thus around 339 TMC was drawn from below MDDL of the two reservoirs. Whereas according to Andhra Pradesh, its planned live storage capacity jointly for the two reservoirs is 405 TMC, i.e. around 202 TMC each, but from Nagarjunasagar Dam alone 243 TMC is drawn from below MDDL which is more than its live storage capacity and even declared dead storage capacity. It is immaterial that it was water scarcity

year; the storage below MDDL was available which was being used regularly irrespective of the fact whether it was lean year or a normal rain year.

The stress on the fact that drawals were made from inflows does not stand to reason. It has already been indicated earlier that in April 2005-06, 48 TMC was drawn from below the MDDL of Srisalam Dam but inflows were shown to be negative. The storage below MDDL in any case is also built up out of the inflows only. It does not reduce the live storage capacity.

The following facts given in tabular form would show the years in which over drawals were made from below MDDL, over and above the allocated share, were not due to any deficit in availability. The water was available even after presumed full utilization by the three States. The position as it regards Nagarjunasagar is as follows:-

Sl. No.	Year	Total utilization	Drawals from below MDDL	Remaining water after presumed utilization of 2130 TMC
1.	2.	3.	4	5.
1	1980-81	886 TMC	10.391 TMC	679 TMC

2	1981-82	912 "	31.547 "	721 "
3	1982-83	912.58 "	93.614 "	153 "
4	1989-90	935 "	21.352 "	837 "
5	1990-91	950 "	13.371 "	789 "
6	1992-93	905 "	49.495 "	71 "
7	1993-94	930 "	69.437 "	494 "
8	1994-95	926 "	59.899 "	1188 "
9	1996-97	887 "	31.482 "	498 "
10	2000-01	916 "	25.860 "	55 "

Note : Figures of Col.4 are born out from the Statement-2 of Andhra Pradesh and that of Col.3 from Series 47 years. Both documents are on record. Yearly gross yield of the year in the chart are also available in the Series of 47 years.

It nullifies the contention raised in paragraphs 5, 6 and onwards in APAD-62 and the table given thereafter. In some other years also drawals were made from below the MDDL but due to lack of data, viz. daily drawal-sheets, the amount of water drawn cannot be ascertained e.g. for the years 1988-89, 1991-92 and 2005-06 etc. In all there have been withdrawals from below the MDDL in 21 years out of 36 years including 8 deficit years.

So far as Srisailam Reservoir is concerned, drawals from below MDDL have been made in each year right from 1984-85 without any exception. It ranges between 11 TMC and 101

TMC. Utilization above the allocated share and the balance after presumed full utilization of 2130 TMC in the years 1984-85, 1988-89 to 1994-95, 1996-97 to 2000-01 and 2005-06 to 2007-08 are shown in the tabular form below:-

Sl.No.	Year	Utilization above allocated share TMC	Balance after full utilization of 2130 TMC
1.	**2.**	**3.**	**4.**
1	1984-85	948.07	63
2	1988-89	948.08	837
3	1989-90	935	472
4	1990-91	950	789
5	1991-92	866	786
6	1992-93	905	71
7	1993-94	913	494
8	1994-95	926	1188
9	1996-97	887	498
10	1997-98	867	359
11	1998-99	1033	1108
12	1999-2000	931	175
13	2000-01	916	55
14	2005-06	993	1494
15	2006-07	1065	1056
16	2007-08	1015	1100

The above position is there for 16 years out of 24 years.

Note: The figures of Col.3 and that of gross flows are available in the series of 47 years.

It is important to note that in paragraph 3 at page 2 of APAD-62, it has been stated *"The available storage below MDDL was also planned for utilization at Nagarjunasagar and Prakasham barrage for drinking and irrigation purposes and also for exclusive power generation particularly during summer months to meet the peak demand in the State and also to maintain the required cycle in the National grid as no power is available even to purchase at higher rate from other States. Krishna delta requires supplementation from Nagarjunasagar reservoir to meet the drinking water needs in the months of May to July and to raise the seed beds in the month of June and consequent puddling operations in the months of June and July -----"* (underlined by us – Prakasham Barrage seems to have been written by mistake in place of Srisailam Reservoir as on other places Srisailam reservoir is mentioned).

It is thus clear on the own showing of the State of Andhra Pradesh that storage below MDDL is a planned storage for regular utilization to meet various kinds of needs. So, the dead storage which is planned for being used in a regular manner, will have to be taken into account while assessing the live storage capacity built up by any State, it is nothing but

practically live storage which cannot be excluded from consideration only because it is demarcated by the planners putting MDDL label on it.

Generally, it is understood that dead storage below the live storage is provided to accommodate siltation in due course of the life of the dam. It is only in extraordinary situation or emergency that drawals may be made out of the dead storage or below the MDDL. The storage below MDDL or the dead storage is a part of gross storage capacity and it is excluded from live storage capacity. It is not be a planned storage for regular utilization for various purposes like irrigation, generation of power and so on and so forth. If it is planned storage for utilization ordinarily in all or majority of the years, as demonstrated in the present case, it has to be made a part of the live storage rather than to label it as dead storage. It would be clear from the IS 5477 (Part-I), C-III-D-6, about fixing the capacities of reservoirs - methods. The term 'Dead Storage' has been defined in Clause 3.5 as quoted below:-

"*It is the storage between the dead storage level (DSL) and the ground level. Generally this is occupied by silt/sediment (see Fig.1).*"

So far as supply of water for different projects is concerned, that comes from the active or conservation storage, which is defined in Clause 4.2.1 as quoted below:-

"Active or conservation storage assures the supply of water from the reservoir to meet the actual demand of the project whether it is for power, irrigation or any other demand of water supply."

The live storage capacity of Srisailam Reservoir is indicated to be 249.86 TMC in Data Exchange Statement No. 8. However, in the Statement No. 2, it was shown to be 202.5 TMC (reason for this discrepancy between two Statements was not indicated except during the arguments before us in review proceedings that in Statement No.8, by mistake, it was mentioned to be 249.86 TMC). It is also clear that no effort was made during all this period by the State of Andhra Pradesh

to set the record straight by making any correction in its Data Exchange Statement No. 8.

On the other hand, in APAD-12, there is a Table 8 at page-48 again showing the live storage capacity of Srisailam Reservoir as 249.986 TMC. The APAD-12 is dated 27.4.2009. But at page-45 of the same APAD-12, the live storage capacity of Srisailam Dam has been indicated as 202.5 TMC.

It was perhaps not noticed by Andhra Pradesh itself that at two different figures of live storage of Srisailam Dam were being used in the same paper namely, APAD-12 as to be found in Statement No. 8 and Statement No. 2. Hence, instead of making any effort to explain the discrepancy, it continued to use different figures at different places.

However, the fact remains that two different figures were indicated in the two Statements namely, Statements No.2 and 8. This Tribunal on scrutiny of Statement No. 2 found that there have been regular drawals from below the MDDL from Srisailam Dam every year without exception. The average of such drawals from below the MDDL came to 48.25 TMC. This average utilization of water from below the MDDL of

Srisailam Dam was added to the live storage capacity shown in Statement No.2. Thus the live storage capacity of 202.5 TMC as shown in Statement No. 2 plus average utilization of 48.25 TMC from below the MDDL, on being added, it comes to around 250 TMC. This figure is very close to the figure shown in Statement No.8, which is 249.86 TMC. This Tribunal, therefore, had taken into account the live storage capacity as shown in Statement No. 8 since there was no significant difference between the figures of live storage as per this Tribunal and as shown in Statement No.8. As the figure in Statement No.8 was being taken into account, all such details as indicated above, were not necessary to be elaborately discussed and mentioned in the Report. Therefore, mere omission to discuss this aspect of the matter in the Report, in the background of the facts enumerated above, leads to no material consequence. If the figure 249.86 as mentioned in Statement No. 8 was not taken into account for the purposes of assessing live storage capacity of Srisailam Dam, it would be 202.5 TMC + 48.25 TMC (average drawal from below MDDL) which exactly comes to 250.75 TMC hardly resulting in any significant difference in the two figures to the detriment of Andhra Pradesh. Therefore, in substance, nothing turns on this

point raised regarding non-discussion of the live storage capacity of Srisailam Dam as was done in the case of Nagarjunasagar, It is a little different factually but results in no material effect at all.

All the facts and figures which have been mentioned have been taken from the statements placed on record by the State of Andhra Pradesh particularly the Statement No.2 and other documents on the record.

In view of the discussions which have been made above, we do not find any merit in the submissions made on behalf of the State of Andhra Pradesh against live storage capacity as assessed by the Tribunal in respect of Srisailam and Nagarjunasagar dams.

15. <u>Built up Storage Capacity should have been based on Average utilization of Ten years:</u>

Another point raised by the State of Andhra Pradesh is that instead of taking into consideration the total utilization of 2313 TMC of all the three States in the year 2006-07 for the purposes of assessing the built-up capacity for utilization, an average of ten years' utilization should have been taken into

account. It is submitted that utilization figure of one year cannot be a decisive factor of its built-up capacity. It is further submitted that State of Andhra Pradesh had utilized 1065 TMC in 2006-07 for the reason that upper riparian States had not utilized their full allocation. Once they do it, it will not be possible for the State of Andhra Pradesh to utilize more than its allocated share. Therefore, utilization figure of 2313 TMC should not have been taken into consideration for distribution of water at 65% dependability.

We have considered the submissions made by the learned Counsel but we find it devoid of any merit. In the year 2006-07, utilization of Maharashtra was 551.65 TMC whereas its allocation was 565 TMC and with return flows, 585 TMC. The utilization of the State of Karnataka was 695.97 TMC whereas its allocation was 700 TMC which was almost achieved through, with return flows it was 734 TMC. The total shortfall of both the riparian States in realizing their allocated share with return flows was around 70 TMC. The over drawal by the State of Andhra Pradesh was to the extent of 254 TMC. Therefore, it is quite clear that even after full utilization of their allocated share by the upper riparian States, the dependable

yield at 65% as available would be 585+734+811+163 (balance yield of 65% availability as distributed) = 2293 TMC, instead, 2313 TMC that was utilized in 2006-07. It may be noted that in the previous year i.e. 2005-06, the utilization of Maharashtra was more than 563 TMC, that is to say, they had almost achieved utilization of their allocated share of 565 TMC, as Karnataka had done in 2006-07, though, of course, without the return flows.

The other argument that 2313 TMC was utilized in 2006-07 since the gross yield was 3186.66 TMC, enabling Andhra Pradesh to utilize 1065 TMC with the help of its storage etc., has no relevance either in relation to availability of water at 65% dependability nor in relation to built-up capacity to utilize 2293 TMC. It rather shows that built-up capacity to utilize 2293 TMC is very much there. It is to be noted that unless gross flows are less than the required yield at a particular dependability, sufficient water would always be available for utilization. It is not necessary that for utilization of 2313 TMC or 2293 TMC, there must always be availability of 3186 TMC as in 2006-07 or in the like amount. Availability of water at 65% dependability, namely, 2293 TMC, will be

there in 65% of the period as in the present case it would be available in 30 years out of 47 years and if 31st year, where the yield is 2283.37 TMC, is also considered, the percentage of availability may even go a little over 65%, though nominally.

The utilizations progress by and by. In the initial years, obviously, it would be less but as the time passes and necessary infrastructure and proper means are available, utilization increases. It may vary year to year. It is to be noted that a year before 2006-07 and in the next following year, the utilizations have been above 2200 TMC. It shows that built-up utilization capacity in the basin had reached almost to the level of 65% dependability, and had even exceeded once. Therefore, for the purposes of making an assessment of built-up utilization capability, decadal average has no relevance. It may not be an indicator of latest built-up capability of utilization. The assessment of built-up capacity cannot be and need not be any exact amount of water capable of being utilized. It may be an assessment of any near about figure or a figure which had been achieved or may be reachable shortly looking to the current utilizations. As indicated earlier, in the last three years, utilization in the basin has exceeded 2200 TMC and once it has

exceeded 2293 TMC, which gives a fair assessment of the built-up capability of storage.

The averages or decadal average may be relevant for some other purposes as may be, but it shall have no use for the purposes of finding out the current built-up utilization capability in the basin. It may also be indicated that utilization in 2006-07 was not the only criteria to arrive at the conclusion that water at 65% dependability can be distributed. The other factor viz. the available live storage capacity has been considered as indicated in the earlier part of this report. We have already found that the available live storage capacity and utilization are matching to availability at 65% dependability. The question of considering any decadal average does not arise nor it is relevant for the purpose.

Again, for utilization on account of minor irrigation in the three States also it has been submitted that decadal average of utilization in the minor irrigation should have been taken into account. We don't find any force in this argument either. The highest utilization as reached by the three States in minor irrigation has been taken into account; it is immaterial that it was in different years in the three States. Again, it is to be

borne in mind that only an assessment of built-up capacity of utilization of water in the basin was being considered, that is to say, it showed that the States are capable of utilizing some near about amount of water as they did earlier. The question of capability, which has been built up to utilize, is different from actual utilization in different years which would, of course, vary but for the purposes of assessing the capability as built up, the highest utilization to which a State could reach in a year can well be rightly taken into account and the question of considering decadal average does not arise for the purpose. The development of the basin regarding storage may be a fact of recent past says two to five years or so, increasing storage capacity, so the average use in last ten years will not be of any relevance. Average use is not to be applied to every situation and purpose.

The objections as raised have no merit in view of discussion held above and no reconsideration/modification as prayed is called for.

16. <u>Distribution of Water at 50% Dependability Cannot be on the same footing as Dependable Flows on Equitable Consideration:</u>

According to the State of Andhra Pradesh, flows at 50% dependability could not be distributed much less on the same footing as dependable flows. In this connection, the learned Counsel refers to the observations of this Tribunal at page 482, Vol.III of the Report, where it has been observed that considerations for distribution of surplus water would be the same as applicable for equitable distribution of water amongst the riparian States.

It is submitted that surplus flows cannot be treated at par with dependable flows nor it can be distributed in that manner since the availability of surplus flows is most uncertain. Such flows normally come in a gush or in torrents for a few days. Therefore, they are not easily trapped and the availability of water is highly variable. It may, however, be pointed out here that at page 482 of the Report of the Tribunal, it is also observed that equitable considerations will have to be applied, i.e. the needs and hardships of the States will have to be kept in mind for distribution of water, as may be available after distribution of dependable flows.

True the availability of surplus flows, which is here the average flows, may not have that degree of dependability as at 75% and 65% dependability but whatever surplus flow is available, that has to be distributed and on some reasonable basis and it is for that reason that it was observed that equitable considerations would apply for its distribution as applied for distribution of dependable flows.

We also find it observed at page 481 of the Report that in case surplus flows are not utilizable because of high degree of variability and uncertainty, how Andhra Pradesh could get an issue framed, Issue No.4 that surplus flows as may be available may be allowed to be utilized by the State of Andhra Pradesh alone. If Andhra Pradesh could utilize surplus flows, the question arises as to why it could not be utilized by other States as well. Therefore, their argument is only self-serving and fallacious.

Mr. Reddy, after referring to point No.5 at page 11 of the Reference Petition No.1 of 2011, regarding distribution of average flows, has particularly raised grievance about allocation made for the carryover storage out of average flows.

We will come to above noted point a little later, since he also refers to the observations made by KWDT-I at page 156 of the Report and our observations at pages 323, 324 and 330 of the Report of this Tribunal, to stress upon the point that distribution of water could not be made at 50% dependability without chain of carryover storages for which no studies have been made by any State.

As a matter of fact, we have already dealt with the above noted observations in the earlier part of this report; it is only a repetition of the same arguments by another counsel for Andhra Pradesh. However, we would like to emphasize once again that such observations relate to a situation where distribution of whole amount of water at 50% dependability had been under consideration and not in respect of a small part of the yield out of the total yield of the river, as presently it is the case here. It is noteworthy that 2130 TMC has been distributed at 75% dependability which has not been touched and it is to be utilized first i.e. in the initial step. Another 163 TMC only has been distributed at 65% dependability over and above 2130 TMC to be utilized in the second step after utilization of 2130 TMC. In the next step thereafter, 285 TMC

has been distributed at average flow which is available at 58% dependability not 50% dependability. This distribution is over and above 2293 TMC. Out of this amount of 285 TMC, 120 TMC is for the carry over storage of Andhra Pradesh which is to be stored in Sirisailam and Nagarjunasagar reservoirs and 105 TMC has been allocated for Almatti reservoir. There then remains only 60 TMC, thereafter out of which 25 TMC has been allocated for Telguganga project for outside the Krishna basin and 35 TMC have been allocated to Maharashtra. In the above circumstances, there is no confusion or reason for having any chain of carry over storages for utilization of 285 TMC in the manner indicated above. Therefore, it is wrong on the face of it to draw the analogy with the reasons which have been given by this Tribunal and KWDT-I for distribution of whole water at 50% dependability. The two situations are entirely different and there is no self-contradictory decision with the observations made earlier while dealing with a different point of distribution of whole water at 50% dependability. The whole argument is misconceived and without taking into consideration the manner in which the water has been allocated.

Now coming to the objection of the State of Andhra Pradesh that 120 TMC has been allocated to Andhra Pradesh for carry over storage out of the surplus flows for the purposes of mitigating the intensity of hardship in 25% deficit years and to make up for the inevitable waste. The Tribunal, however, has found that there is no such inevitable wastage, adversely affecting the allocated share of Andhra Pradesh; yet 150 TMC has been allocated for carryover storage, 30 TMC out of 65% dependable flows and 120 TMC out of the surplus flows i.e. at average flows which is available at 58% dependability and not at 5o% dependability as it has been wrongly understood by Andhra Pradesh. The objection of the State of Andhra Pradesh that allocation of surplus flows at 50% dependability could not be made at par with dependable flows since there is huge variability in the yield leading to the uncertainties about the availability of water.

In support of his contention, the learned Counsel also referred to the statement of Mr. Ramamurty, a witness of Andhra Pradesh, according to whom the variability of flows at 50% is very high, particularly for the State of Andhra

Pradesh. That statement has been challenged in the cross-examination on behalf of the State of Maharashtra, and different variability figures had been put to the witness. The witness agreed to the correctness of the variability figures in respect of Maharashtra but did not agree with respect to Andhra Pradesh. The learned Counsel appearing on behalf of the State of Maharashtra pointed out the fallacy in the calculations of Mr. Ramamurty, who though, did not agree with that suggestion. However, it is noticeable that if the calculation made on behalf of the State of Maharashtra, showing much less variability in the flows at 50% dependability has been accepted by the witness in his cross-examination for one State, it is not understandable why it would not be correct for the other State, namely, for Andhra Pradesh also, unless any different method, could be pointed out to have been applied. There is no such suggestion in the reply to the question. A bare denial is of no consequence.

Mr. Ramamurty, in his cross examination, has indicated the co-efficient of variation of flows in Maharashtra as 24.75%, for Karnataka it is 33.60% and for the State of Andhra Pradesh it is indicated as 51.08%. It has

been worked out on the basis of data in Annexure-XI of his affidavit (C-III-D-98, based on the series of 104 years. During cross-examination, in Question No.1456 on wards, it was put to the witness by Mr. Andhyarujina that co-efficient of variation of Andhra Pradesh comes to 36% and not 51%. In reply, Mr. Ramamurty accepted that according to the calculations put to him by Mr. Andhyarujina, the co-efficient of variation for Maharashtra would be 25% which, according to his calculation, was 24.57%. But for Karnataka and Andhra Pradesh his reply was that he was unable to understand why the figures were altering so much and stated that he had a doubt that there may be some error in the calculations but could not point out any. As a matter of fact, he never denied specifically that the figure suggested was wrong, nor he ever came back after checking it, as stated. Error in calculation of Maharashtra could well be pointed out, if it was there, but that was not done. Other infirmity in the data used by him had also been pointed out. Looking to his cross-examination on all the points, it may be difficult to accept the co-efficient of variability at 51% as pointed out by him for the State of Andhra Pradesh.

As a matter of fact, the availability of water beyond 65% dependability has been considered as the surplus flows. It is not at 50% dependability but at average flows. The average flows are less as compared to the flows at 50% dependability. It may also be indicated that as per the series of 47 years, availability of average flows is 58% and not in 50% of the years. It does make a difference. The availability at average flows is much better as compared to, at 50% dependability. Simply because it has been described as surplus flows, it does not mean that availability will automatically come down to 50 per cent.

We may then consider the fact that out of the carryover storage of 150 TMC, 30 TMC has been allocated out of flows at 65% dependability, that is to say, 20% of the carryover storage would be constituted by the flows at 65% dependability and the remaining 80% out of the average flows available in 58% of years. It is for the purpose of taking care of hardship in 25% deficit years only. There is no reason why carryover storage for which 80% of the water will be available at 58% availability and 20% at 65% availability, would not be able to take care of some years of

acute shortage out of 25% deficit years. No effort has been made on behalf of State of Andhra Pradesh to show that the carryover storage, as provided, will not be able to achieve the purpose. They may not have made any study or if made might not be supporting their stand.

It may also be pertinent to mention here that the flows beyond average flows, namely, beyond 2578 TMC, have been described by us as remaining flows, which have also been allowed, for the time being to be utilized by Andhra Pradesh, without acquiring any right as such in the remaining flows.

The distribution at 75% dependability does not mean that there will be no water at all in 25% of deficit years. There may be some deficiency in some years and in some of the years it may be more comparatively as against other riparian States, thus care was taken to allow carryover storage of 150 TMC to Andhra Pradesh, so that the hardship may be mitigated, though it may not fully disappear which was the position earlier also.

There is nothing wrong in distributing the flows available at 58% dependability confined to the extent of 285 TMC only, leaving apart the availability at 75% dependability untouched. The criteria for distribution of average flows at 58% dependability could very well be equitable consideration i.e. looking to the comparative needs and hardships of the States.

Mr. Reddy, learned Counsel for the State of Andhra Pradesh, has also made a reference to our observations made at page 766 that the carryover storage of 150 TMC has not been disturbed. But, the submission is, that by not allowing use of water to the extent of 150 TMC just after 2130 TMC, the arrangement made for carryover storage by KWDT-I is disturbed. It is submitted that the water should have been distributed, whatever would remain as balance after distribution of 2130 + 150 TMC (for carry over storage) = 2280 TMC. The balance in that case would have been 2578 – 2280 = 298 TMC instead of 448 TMC.

The contention raised on behalf of the State of Andhra Pradesh does not hold water. The KWDT-I had allowed the carryover storage of 150 TMC for the purpose of mitigating

the intensity of hardship in 25% deficit years and to compensate for inevitable wastage. We have already found that there has not been any inevitable wastage adversely affecting the allocated share of the State of Andhra Pradesh. It is a new situation which has emerged. Therefore, obviously, no occasion arises to allow any carryover storage for that part which may have been for the purpose of making up for the inevitable wastage. As a matter of fact, State of Maharashtra came forward with the case that the carryover storage should be reduced to half for this reason, namely, to 75 TMC and the rest of it should be distributed amongst other riparian States, but the Tribunal did not choose to do so and also found that it was difficult to find as to how much of 150 TMC was for mitigating the hardship in the deficient years and how much of it was for inevitable wastage. Therefore, carryover storage of 150 TMC was maintained and it was not reduced or disturbed.

It will also be pertinent to point out that KWDT-I had not allocated 150 TMC to Andhra Pradesh for the purpose of carryover storage out of dependable yield, but they were allowed or permitted to store 150 TMC for carry over storage

out of surplus flows. The arrangement for carryover storage was provided for the time being till the next review. The 150 TMC was not allocated nor made a part of distribution of water out of dependable flows. It was some extra water which was allowed to be stored and used as carryover storage. No reduction, in carryover storage has been made on account of the fact that there is no inevitable wastage adversely affecting the share of Andhra Pradesh. Some part of dependable flow has been allocated to constitute the carryover storage. It would be incorrect to say that purpose of carryover storage would be adversely affected or frustrated as alleged. Some deficit in 25% of years is inherent in distribution at 75% dependability but sometimes it could be more intense in Andhra Pradesh, so the carryover storage was allowed to mitigate it. It is not necessary that in all the years, there may be acute intensity of deficit. In some years, out of 25% of the years, there may only be a nominal deficiency. Availability of 120 TMC at 58% and 30 TMC at 65% dependability is more than enough to take care of some of the years of acute deficiency out of 25% of deficient years.

Therefore, we find no substance in the submissions made by Andhra Pradesh and find that no ground is made out to reconsider the allocation made for carryover storage to Andhra Pradesh, in proceedings under Section 5(3) of the Act, since all relevant considerations on merit had been taken into account while making allocation for carryover storage.

17. <u>About Drought Prone Area In Karnataka & Andhra Pradesh :</u>

One of the points raised by Mr. Sudarsan Reddy, learned Senior Counsel for the State of Andhra Pradesh, is that at page 367 Vol. IV of its Report, this Tribunal has mentioned 52,37,531 hectares (52,375 sq. km.), as in basin drought prone area in the State of Karnataka. It is submitted that the correct figure of the area should be 41,77,702 hectares. (41,777 sq. km.) as arrived at page 16 in col. 8 of the chart, Annexure-D to C-I-D-387, after adjustment of the area falling under Scheme-A as per col. 5 of the said Annexure-D to C-I-D-387.

So far as this fact is concerned, it is correct that at page 763 of the Report, 52, 37,531 hectares (52,375 sq. km.) has been mentioned as DPAP area as indicated in col. 7 of Annexure-D to C-I-D-387. So it was the total DPAP area in

Karnataka falling in Krishna basin which fact finds mention at page 763 of the Report. However, after adjusting the area covered under Scheme-A, as indicated in col. 5 of Annexure-D, the DPAP area would be 41,77,702 hectares. (41,777 sq. km.) in Karnataka as shown in col. 8 of Annexure-D which has been pointed out by State of Andhra Pradesh. This will be the precise position about the gross and net DPAP area in Karnataka.

But it may be pertinent to point out here that 41,777 sq. km. is not the total drought prone area of Karnataka within the basin, since it does not include DDP area which, according to col. 8 of Annexure-D to C-1-D-387 at page 18, Chart of DDP area, is 25,58,704 hectares. (25,587 sq. km.) after adjustment of area covered under Scheme-A. The total drought prone area thus covered under DPAP and DDP within the basin, in Karnataka is 66,670 sq. km. It is after adjusting the area covered under Scheme-A as shown in col. 5 of Annexure-D to C-1-D-387. So, finally the position does not change that drought prone area within the basin in Karnataka is the highest and much more than that of Andhra Pradesh. The State of

Andhra Pradesh while advancing its argument totally ignored to take into account the DDP area in Karnataka..

The learned Counsel next refers to C-1-D-6 page 59 to indicate that according to the Recommendation of the Irrigation Commission, 1972, a Taluk or a similar unit, where 30% or more of the cultivated area is irrigated; such Taluk/Unit should be excluded from the list of drought district. Accordingly, as per calculations now furnished by Andhra Pradesh, the DPAP area in Karnataka would reduce to 34,776 sq.km. instead of 41,777 sq. km. In this connection, suffice it to say that it is a new point which is being introduced in these proceedings at this stage through the papers now passed on to the Tribunal. Mr. Divan, learned Senior Counsel for the State of Karnataka, submits that there has not been any mention about this point in the Reference Petition of Andhra Pradesh and further that new documents are now being introduced which will not be permissible in these proceedings.

Besides the points raised on behalf of the State of Karnataka, which is quite valid and is hereby sustained, we also find that the aforesaid criteria of 30% irrigated area in a Taluk, as suggested by Irrigation Commission, was modified to

40% irrigated area. In para 6.11.3 at page 66 of C-I-D-6 it finds mention that the Task Force On Drought Prone Area Programme (DPAP), Ministry of Rural Development, Govt. of India, has modified the suggestion of Irrigation Commission and provided that Taluks with 40% of the irrigated cropped area, would be excluded from the list of drought prone area. In these circumstances, calculations now made on the basis of 30% irrigated area, by the State of Andhra Pradesh relating to the DPAP area of Karnataka reducing it to 34776 sq. km. cannot be acceptable for this reason also.

Again, if for the sake of argument, even if this figure of 34,776 sq. km. is taken into account, as suggested by Andhra Pradesh, the area covered under DDP programme is also to be added as indicated earlier and by doing so, the drought prone area of State of Karnataka would even then be 60,363 sq. km. within the basin which is still the highest.

Now, coming to the drought prone area in the State of Andhra Pradesh, it may be pointed out that total drought prone area in Andhra Pradesh was indicated, without any bifurcation of inside and outside basin area. Now, another paper has been introduced during the course of argument in an effort to

bifurcate and show that area inside basin, which according to Andhra Pradesh, comes to 44,873 sq. km. It includes both DPAP and DDP area. The interesting part of the calculation made in the document passed on to us by Mr. Reddy on 16.4.2012, is that its Annexure-A and Annexure-B show that the bifurcation and calculations are based on the field records and information obtained from project authorities. There is no doubt that this could not be done and such facts which are basis of the charts Annexure A & B are neither here nor there. The objection raised on behalf of the State of Karnataka against introducing the facts in this manner, is valid and the two documents passed on now cannot be looked into nor can they be used for any purpose. It has been a very unfair way of introducing new facts in this manner.

On their own showing, the State of Andhra Pradesh had not indicated the drought prone area bifurcated in outside and inside the basin of Andhra Pradesh in APAD 60, instead total figure was pointed out. Again on their own showing, there is some discrepancy between APAD-60 and information contained in the letter of AOR of Andhra Pradesh relating to drought prone area.

The argument, therefore, that drought prone area in Andhra Pradesh inside basin is more than that in State of Karnataka within the basin, cannot be accepted and ultimately the position remains unchanged and the same that drought prone area within the basin in State of Karnataka is more than the draught prone area within the basin in the State of Andhra Pradesh. Therefore, even after taking into consideration the net DPAP area in Karnataka as 41,777 sq. km. instead of 52,375 sq. km., as submitted, there is no effect on the finding that in basin drought prone area of Karnataka which includes both DPAP and DDP areas is more than the DPAP and DDP in basin area in Andhra Pradesh. The DDP area of Karnataka within the basin could not be ignored.

Hence, no modification in discussion or finding on the point at page 763 of the Report of the Tribunal would be required; however, at the most that part at page 763 of the Report may be read with this detailed discussion made on the point raised by Andhra Pradesh.

18. Inequitable Distribution

Mr. Reddy, learned Senior Counsel for the State of Andhra Pradesh, next makes a submission to the effect that the distribution of water made by this Tribunal is inequitable. In this connection, he argues that Karnataka has been allocated 170 TMC and Maharashtra 78 TMC but Andhra Pradesh has been allocated only 34 TMC. According to the learned Counsel, the disparity in allocation of water over and above 75% dependability is apparent, hence the allocation which has been made requires to be revised, more particularly, in view of the fact that Andhra Pradesh requires 77 TMC in the projects within the basin, namely for SLBC, Nettempaddu and Kalwakurthy.

We find that the grievance, which has been raised by the learned Counsel about inequitable allocation, has been put a bit too simplistically. Mere overall allocation, as indicated will not give correct picture unless it is looked at separately at different dependability. So far as allocation at 75% dependability is concerned, we have already seen that Andhra Pradesh had been allocated the maximum amount of water, namely, 811 TMC by KWDT-I, whereas the State of Karnataka was allocated 734

TMC and the State of Maharashtra 585 TMC. The KWDT-I itself had observed that on availability of more water, State of Karnataka may be allocated water out of the increased quantity. However, while distributing the water over and above 75% dependability, this Tribunal has taken into consideration several factors relevant for the purpose, e.g. as to whether the area for which requirement has been raised lies within or outside the basin and whether it is drought prone area or otherwise. Amongst others, one of the factors was as to how much area was drought prone in the State. So, considering several factors some of which have been mentioned above, overall assessment was made and the allocations were accordingly made.

Now, coming to the quantities allocated at different dependability. It is to be noticed that Maharashtra has been allocated 43 TMC at 65% dependability; Karnataka was earlier allocated 65 TMC at 65% dependability and Andhra Pradesh 39 TMC but these figures now stand changed to 61 TMC to Karnataka and 43 TMC to Andhra Pradesh on allocation of 4 TMC for RDS Right Bank Canal. The difference thus is not the way it is sought to be shown. Again, the allocation of

average flows to Maharashtra has been to the extent of 35 TMC, Karnataka 105 TMC and 145 TMC to Andhra Pradesh. The allocation made to Andhra Pradesh includes their needs outside the basin as well.

Andhra Pradesh still has the highest total overall allocation. The break-up of the allocation is that at 75% dependability it remains 811 TMC, at 65% dependability it is now 43 TMC in place of 39 TMC earlier and at average flows it is 145 TMC. The total allocation of Andhra Pradesh is now 1005 TMC.

The overall allocation of Maharashtra totals to 666 TMC out of which 585 TMC remains at 75% dependability, 43 TMC out of 65% dependability and 35 TMC out of average flows.

Now, coming to Karnataka we find that its overall total allocation is 907 TMC out of which 734 TMC remains at 75% dependability, 61 TMC at 65% dependability and 105 TMC out of surplus flows.

Thus the allocation of Karnataka only exceeds the allocation at 65% dependability from that of Andhra Pradesh by around 18 TMC. Therefore, the overall picture does not

support the contention raised by Andhra Pradesh pleading inequitable distribution by this Tribunal. The argument has no merit and deserves to be rejected.

So far as the contention that need of Andhra Pradesh in the projects within the basin is to the extent of 77 TMC is concerned, suffice it to say that requirements of all the States in respect of all their projects within the basin do not stand totally fulfilled. There are projects within the basin for which demand has been made by the States of Karnataka and Maharashtra also but it had not been possible to fulfill all their demands. So, in all the three States, there remain projects within the basin in drought prone areas and otherwise which could not be provided for.

This argument also, as advanced by the State of Andhra Pradesh, that their requirement within the basin remains unfulfilled, has no merit and it also deserves to be rejected.

19. Allocation at Different Dependibility : & : Details of Manner of Drawal of Water of Respective Shares :

The State of Andhra Pradesh expressed anxiety in connection with distribution and utilization of water at different dependability. The main apprehension, it appears, on the part

of the State of Andhra Pradesh, had been that perhaps the riparian States would be free to draw water and utilize their respective shares allocated upto average yield, as and when available, which may deprive the State of Andhra Pradesh of its share even at 75% availability in many of the years. This misconception is evident from what has been stated by State of Andhra Pradesh in paragraph 9.4 of its Reference, particularly at pages 35 and 36 of the Reference Petition. It was also averred that the Tribunal has allocated at different dependability without providing for a mechanism to ensure utilization of water to the lower down States.

As a matter of fact, the distribution and manner of drawal thereof, at different dependability is very much to be found there by reading together the different clauses of the Order of the Tribunal. We would come about this particular aspect of the matter in some detail, a little later.

However, considering all the facts and circumstances and the submissions which have been made from time to time by different parties and the point which has been mainly taken up in the Reference Petition of the Central Government also, the Tribunal thought it appropriate to elaborate in detail, the

manner of drawal by the parties at different dependability. During the course of the arguments, particularly, by the State of Andhra Pradesh as well as the Central Government, it was clearly given out by the Tribunal that the water allocated at higher dependability i.e. at 75% dependability would be drawn first by all the parties and after it is done, the allocation at lower dependability shall commence one after the other dependability. The clear observations were made but no party at that stage had anything to say about it.

Since it was felt that some doubts were still lingering on the part of the different parties about manner of drawal and Andhra Pradesh pleaded that the allocation should be at one and single dependability otherwise there may be difficulties in drawal of water, the Tribunal, to clear the doubts, provided to each of the party, a detailed proposed manner of drawal by parties at different dependability. This was provided quite some time back but all the parties wanted to respond on this aspect of the matter later.

The State of Karnataka made its response during the course of its arguments in reply, on 6.5.2013, but other parties

preferred to address later. Therefore, this part of the matter was taken almost at the end of the hearing.

Mr. Katarki, learned Counsel for the State of Karnataka submitted that so far the drawal of water at the first instance is concerned in the proposed manner of drawal that is quite alright and there is no problem with it, that is to say, the three States would continue to draw their allocation at 75% dependability as it was provided by KWDT-I. But about the drawals in the second instance, he had some reservations. It is submitted that the allocation at 65% dependability is to be drawn by the States in the second instance after the lowest riparian State namely, the State of Andhra Pradesh has drawn its allocation of 811 TMC. It is submitted that though not in many years but there may be chances that in some of the years there may arise a situation when Andhra Pradesh may achieve the allocation of 811 TMC late and in that event, despite enough water being available during monsoon season for storing the additional allocation, it will not be possible for the upper riparian States to do so, and by the time Andhra Pradesh would achieve its allocation of 811 TMC, the monsoon season may be over with very little rains to follow. It would deprive

the upper riparian States to realise their allocation at 65% dependability even though water commensurating the allocations made at 65% dependability be available during the monsoon season. That water will flow down to sea but it will not be permissible to the upper riparian States to store unless Andhra Pradesh had achieved its allocation of 811 TMC.

We however feel that if there would be enough water during monsoon, the State of Andhra Pradesh will also achieve its allocation early and not that late and, if at all, it may be an unusual example as suggested by Karnataka.

A different submission, which has then been made, is that sometimes despite availability of water; Andhra Pradesh may not have enough storage capacity to store its full share at 75% dependability at the relevant point of time. In that event also, the water though available to the upper riparian States, it may not be possible to store the same to realise their allocation at 65% dependability. It was pointed out to the learned Counsel that such occasions, as apprehended by the upper riparian States, may also be not many or frequent, if at all.

Considering apprehensions of the likely situations, which may or may not or if it arises then on only a few occasions, an alternative clause in the provision for manner of drawal was suggested by the Tribunal i.e. in certain situations, if the upper riparian States may feel in their assessment that there would be enough water and the State of Andhra Pradesh has not yet been able to achieve its allocation at 75% dependability, the shortfall of Andhra Pradesh at 75% dependability, at that point of time may be made good by releasing the water by the upper riparian States and thereafter the upper riparian States may commence storing their allocation at 65% dependability.

Before taking up the objections raised against the suggested alternative clause and the counter suggestions which have come, first, we may consider an argument which has been raised by Mr. F. Nariman, though in a passing manner, that the condition in the second instance of drawal, that the upper riparian States would be entitled to store their additional allocation “after” the State of Andhra Pradesh achieves its allocation of 811 TMC, curtails the rights of the upper riparian States to the additional allocations which have been made in

the decision of the Tribunal under sub-section (2) of Section 5 of the Act. It is submitted that such curtailment cannot be made in proceedings under sub-section (3) of Section 5 of the Act. The argument was however not elaborated further by the learned Counsel.

We do not find any force in the argument that there is any question of curtailment of right to additional allocation made to the States, for the only reason that it is to be drawn after the initial allocation at 75% dependability is realised by all the States in the first instance. The additional allocations have been made by the decision of the Tribunal rendered under sub-section (2) of Section 5 of the Act. The Tribunal is supposed to provide explanation as well as guidance, if sought, by any of the parties or the Central Government on a matter relating to the decision rendered under sub-section (2) of Section 5. If such explanation/guidance is sought about the drawal of the additional allocations made by the Tribunal at different dependability, such doubts can always be removed by providing explanation/guidance by elaborating the manner in which the additional allocations have been made and how to draw the same.

At the most, if at all, it may be seen as a provision regulating the drawal and utilisation of the additional allocation but by no stretch of imagination it can be termed as deprivation of the right conferred by the decision or the curtailment of such a right to use additional allocation. For the purposes of smooth sharing and drawal of the respective additional allocations, regulatory provision can be made to explain and guide the parties, as to the manner in which they have to conduct themselves in realising their additional allocations. On this aspect having been put to the learned Counsel, his contention was that it could be done if in the decision it was so intended. We feel it could be done even without it. However, it was pointed out to the learned Counsel that it was very much intended in the decision itself that additional allocation shall be available dependability-wise. All the shares and allocations and additional allocations were not to be drawn at one and the same time. We got no response thereafter, neither by the learned Counsel for the State of Karnataka nor were the point supported by the State of Maharashtra or any other party.

A close reading of the Order passed in the decision rendered by this Tribunal would show that additional

allocations were made separate from the allocation at 75% dependability which was in a way set apart. The additional water was assessed at 65% dependability and at average yield and the difference between the yields at different dependability was distributed which we can say block-wise, i.e. in the block of distribution of water at 65% dependability which was difference between yield of 75% dependability and 65% dependability and similarly, in the case of difference between 65% dependability and the average yield. The yields were never mixed up with each other and in connection with the above; it may be beneficial to refer to some of the Clauses of the Order.

Firstly, we may take clause IV of the Order at page 801 of our Report which provides as under:-

> *"That it is decided that the allocations already made by KWDT-1at 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."

(underlined for emphasis)

The above Clause maintains the allocations made by KWDT-I at 75% dependability totaling 2130 TMC. It further provides that these allocations were not to be disturbed.

Next we find Clause V at page 801 of our Report which reads as under:-

"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)."

It determines the distributable water at 65% dependability which has been found to be 163 TMC.

Clause VI of our Report reads as under:-

"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."

The above Clauses separate the distributable flows at different dependability, at 75% dependability it is 2130 TMC at 65% dependability, it is 163 TMC separately. Similarly, the distributable water at average yield was separately assessed 285 TMC.

We find that Clause VII at page 802 of our Report reads as under:-

"That the balance amount of water at 65% dependability i.e.163TMC and the surplus flows of 285 TMC is distributed as given below:

State of Karnataka

Allocation at 65% dependability 65 TMC

Allocation out of surplus flows 105 TMC

Total … .. 170 TMC

Flows made available for Minimum flows in the stream out of 65% dependability 7 TMC

Grand Total … 177 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 39 TMC

Allocation out of surplus flows 145 TMC

Total … 184 TMC

Flows made available for Minimum flows in the stream out of 65% dependability 6 TMC

Grand Total 190 TMC"

We find that the Order distributes the separately found distributable water, namely 163 TMC and 285 TMC separately without mixing them up, in different shares at two different dependability, the distribution in two break-ups.

It is thereafter, i.e. after distributing in parts at different dependability, in the next Clause, i.e. Clause VIII at page 803 of our Report, total allocated amount of water by adding up together has also been indicated but specifying the allocations at different dependability separately. Clause VIII is quoted below:-

"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 65 TMC

Allocation out of surplus flows 105 TMC

Total … 904 TMC

Plus 7 TMC provided for Minimum flows 7 TMC

Grand Total 911 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 3 TMC provided for Minimum flows 3 TMC

Grand Total … 666 TMC

State of Andhra Pradesh

Allocation at 75% dependability with return flows 811 TMC

Allocation at 65% dependability 39 TMC

Allocation out of surplus flows 145 TMC

Total … 995 TMC

Plus 6 TMC provided for Minimum flows out of 65%

Dependability 6 TMC

Grand Total 1001 TMC"

Clause IX at page 804 is quoted below:-

"That since the allocations have been made at different dependability, 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". (Underlined for emphasis)

It is evident that since allocations have been made at different dependability separately, each of the party State is required to utilise strictly in accordance with the allocations. That is to say, the amount of water, which has been separately

allocated at different dependability, would be drawn accordingly. It needs not to be emphasised that the availability of water at different dependability would also be at different points of time. The water, which is allocated at one or the other dependability, will be drawn as and when it is available as per timing of its availability. To further elaborate, it may be pointed out that water allocated at a lower dependability will be available at a later point of time. The availability at 75% dependability will not be mixed up with the availability at average yield or at 65% yield. If that is done, it would violate Clause IV of our Order itself since it would disturb the allocation and its availability at 75% dependability as allocated by KWDT-I.

Clause X at page 804 in respect of Maharashtra only, for an example, is reproduced below, which will also be relevant for the point in question:-

> *"That on change in availability and the allocation of more water, at different dependability, 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 dependability 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."

We thus find that in Clause X restrictions have been placed for utilising not more than certain amount of water in a

65% availability water year or not more than certain amount in availability on average yield.

Similar restrictions as enumerated above about the State of Maharashtra have been provided for the other two States also.

The different provisions which have been quoted above are clear indicator to the fact that distribution at different dependability is in separate and different quantities and the drawal is also to be made as per allocation at different dependability. Needless to emphasise, that the distribution of water is not on the total yield of that dependability. It is clear that it was very much intended that water at a given dependability would be drawn in specified quantity only as and when it is available and not otherwise. It appears that the different Clauses of the Order had perhaps not been closely read nor the implications were properly looked into. As stated earlier Clause IV of the Order which maintains the allocations made by KWDT-I at 75% dependability and further provision in it that it shall not be disturbed, is also clear on the point that it was intended that by drawal of additional allocations, the allocations made by KWDT-I should not be disturbed. If the allocations are mixed up at different dependability, it is bound to disturb the

allocations at 75% dependability which were never intended as is amply shown by the provisions made in different Clauses. As a matter of fact, Clause X of the Order provided a kind of self-regulatory system in which the States were restricted to utilise not more water than allocated at a particular dependability. Such a provision should not have been overlooked while advancing an argument we are dealing with.

Apart from what has been discussed above, we find that Clause XXIV.A of the Further Report of KWDT-I at page 101 also provides for review of its order and says that such review or revision shall not as far as possible disturb any utilisation that may have been undertaken by any State within the limit of allocation made to it. It certainly has persuasive value and the provision is also for logical reasons.

The riparian States have made their submissions in response to the suggested manner of drawal as was proposed by the Tribunal. They have also given their notes making even counter suggestions. So far the Central Government is concerned, no response has been filed to the proposed manner of drawal nor has any submission opposing the same been advanced on its behalf. The Reference Petition of the Central

Government mainly raised the question of drawal of water at different dependability. Apparently Central Government was perhaps satisfied with the proposal/suggestion which was put forth by the Tribunal – copies of which had already been provided to the Counsel for the Central Government also.

The fact which must be borne in mind and realised by all including the three riparian States is that there already exists a Decision of a Tribunal namely, KWDT-I relating to water of river Krishna which holds the field. The KWDT-I finally, after distributing the water to the States also made provision for manner of drawal by putting capping on use of the water confined to the allocated shares of the States. There is also a constraint of Proviso to sub-section (1) of Section 4 of the Act as amended in the year 2002. In this background, this Tribunal had tried to find out, if some more quantity of water could be utilised by all the States to ease the situation in water scarcity and drought prone areas. In that light of the matter, additional distributable water in different quantities was found out at 65% dependability and on average yield. The total distribution of water by KWDT-I amounts to 2130 TMC whereas the additional distributable water as found and distributed is only 448 TMC.

That is to say, near about 1/5th of the water distributed and being drawn by the parties. Therefore, the distribution and the manner of drawal of the additional water has to be in a manner which goes well and adjusts appropriately with the Scheme-A already in operation in pursuance of the decision of KWDT-I. It cannot be possible in these proceedings to introduce absolutely new things which may upset the working of a Scheme-A and the distribution and utilisation of water as provided by KWDT-I. While doing so, the Tribunal has to keep in mind the interest of all the parties. One sided interest of any one party is neither possible nor justified.

Perhaps the parties while responding to the proposed suggestion of manner of drawal made by the Tribunal tried to have a manner of drawal more to their benefit unmindful of the fact that distribution of water and manner of drawal by the parties should be such that it conforms to the Decision of KWDT-I as well as the Order contained in the Decision of this Tribunal dated December 30, 2010. It may not be violative of the order passed by any of the two Tribunals. Since all these matters as indicated above weighed with us, a proposal elaborating the manner of drawal was suggested over which

rethinking was also done after the arguments of the parties and necessary changes in the earlier proposal have also been made and the best possible manner of drawal keeping in view the decision of KWDT-I and that of this Tribunal and all angles, is being provided herein.

We would now proceed to deal with the submissions which have been made on behalf of the different parties in respect of manner of drawal.

So far the State of Maharashtra is concerned, firstly, it was submitted that no restrictions should be placed on drawal of allocations at any dependability and the drawal should be free as provided by KWDT-I. We find here that KWDT-I had also placed restriction by putting cap on drawal that the States shall not use more than the specified quantity of water in any water year. Therefore, if allocations are at different dependability, as in the present case, such restrictions have to be placed at each dependability, as it has been done by KWDT-I also though the distribution was at single dependability. It is then submitted that the allocations should be linked with the basin flows available during the water year than the utilisation of the lower riparian States. Practically, this is what is implied in the manner of

drawal as proposed, and which is being provided. It all is linked with the flows available in the basin. In case lower riparian State achieves its allocation, it only confirms the availability of water in the basin. In the next slot of allocation, at lower dependability, e.g. at 65% dependability, upper riparian States are allowed to draw their share before lowest riparian State. The objection of Maharashtra does not stand to reason.

It is next submitted that KWD-IB should declare the basin availability in each water year and the States may draw water as directed by KWD-IB depending on the declarations made. We do not think there would be any role of KWD-IB in declaring the availability of water in the basin in each water year. Suppose assessment of KWD-IB about yield in any year goes wrong and the rains are not there as expected, that would affect all the projects which would be left in the lurch midway later on. In case depending upon such declaration, upper riparian States draw their allocation at lower dependability also then the lower riparian States are bound to suffer. It also has an implication of sharing of deficit which has not been there in Scheme-A of KWDT-I currently in operation. The present manner of drawal which is being provided is self-regulatory and in keeping with

Scheme-A of KWDT-I in the matter of manner of drawal of the allocated share as well.

Yet another difficulty which has been emphasized by the State of Maharashtra as well as the State of Karnataka is that how will it be known that Andhra Pradesh has achieved its allocation of 811 TMC. It is also submitted that Andhra Pradesh may say otherwise even though it may have achieved its target of 811 TMC. Suffice it to say that system of exchange of data on daily basis, ten daily basis and monthly basis etc. would clearly show the drawal position in respect of all the States including the State of Andhra Pradesh. Taking care of this aspect of the matter in Part II of the manner of drawal, specific provisions have been made about data exchange and the manner in which data has to be communicated amongst parties and the KWD – IB. Therefore, such problems as sought to be projected have been well taken care of.

Yet another question has been raised about the self-generation of yield of Andhra Pradesh at 75% dependability since that would be relevant in calculating the utilisation of Andhra Pradesh in achieving its allocation at 75% dependability. State of Karnataka has also raised this point and it has been

argued by Mr. Nariman that self-generated yield of Andhra Pradesh at 75% dependability has been shown as 352 TMC, in the draft proposal of manner of drawal of water at different dependability. It is submitted that this figure of 352 TMC has been taken from one of the exercises undertaken by Prof. Subhash Chandra which was not accepted by the Tribunal. Therefore, it is not correct to take figure of 352 TMC into account.

Another objection is about figure of 459 TMC occurring in the suggested proposal by the Tribunal. It has been taken by the parties as it is the final figure of shortfall to be flowed down to Andhra Pradesh. It is based on taking the self-generation of Andhra Pradesh as 352 TMC at 75% dependability, but it was made clear that it was given by way of an example in the suggestion of manner of drawal provided to the parties and the figure of 459 was not final nor the figure of 352 TMC as self-generation of Andhra Pradesh. It was more for the purposes of better understanding the suggestion by giving an example. Only that amount of water has to be released which may be found to be short in the allocation of Andhra Pradesh, calculating it in the manner as now provided in manner of drawal Part II.

The figure of 352 TMC as self-generated yield of Andhra Pradesh at 75% dependability has not been accepted but without the figure of self-generation it will be difficult to arrive at a figure of balance of water to make good the allocated share of Andhra Pradesh at 75% dependability. In this connection, suffice it to say that now the State of Andhra Pradesh has indicated its self-generation as 369 TMC at 75% dependability as per the document furnished to the Tribunal on 16.4.2013, working it out on the basis of a series of 47 years. Therefore, 75% self-generated yield of Andhra Pradesh is to be taken as 369 TMC and not that which was found by Prof. Subhash Chander as 352 TMC. Mr. Nariman, while arguing this point on 30.8.2013 stated that Karnataka had no opportunity to check the exercise by Andhra Pradesh as per papers furnished by it on 16.4.2013. It is surprising that such a grievance is being raised now after more than four months of the documents which were furnished by the State of Andhra Pradesh. No one had stopped Karnataka to check the exercise of Andhra Pradesh indicating 369 TMC as self-generated yield in Andhra Pradesh at 75% dependability. The opportunity to do so was very much there but it was choice of Karnataka to avail of the opportunity or not. But it is too late to complain about it at this stage months after

the information was furnished by Andhra Pradesh. No further reply thereafter came forth, from the State of Karnataka.

Neither the State of Maharashtra nor the State of Karnataka raised any objection about self-generated yield of Andhra Pradesh as 369 TMC at 75% dependability which can be well acted upon. Their objection that the figure of self-generation as shown in the draft proposal of manner of drawal was taken from the series prepared by Prof. Subhash Chandra stands got over by the fact that Andhra Pradesh itself had revised the self-generated yield which has been indicated above as 369 TMC.

On behalf of the State of Karnataka it is further submitted that the yearly yield at 75% dependability generated within the State would also differ from year to year. It will then be difficult to find out as to how much balance of water is to be made good to make up the utilisation of Andhra Pradesh at 75% dependability.

The yield at different dependability is worked out after taking into consideration a long series of yearly yield and then it is found out by applying the method provided for it. The self-

generated yield of Andhra Pradesh at 75% dependability denotes that in 75 years out of 100 years, self-generated yield of 369 TMC would be available in the State. Therefore, it is generally taken to be so and used in further working out of the exercise necessary for any purpose to which 75% yield within the State or for the whole basin are relevant. These are the accepted norms by which all subsequent exercises are worked out. However, it may be pointed out that care has been taken for all such anxieties which have been expressed by the parties in the manner of drawal which is being provided by the Tribunal. It may also be relevant to mention here that such questions may not frequently arise to make up the shortfall in allocated share of Andhra Pradesh at 75% dependability except where the upper riparian States may feel and assess that there would be good rains during monsoon and they can realise their additional allocation even after making good the shortfall of the lower riparian States. In most of the years, it may not even be necessary at all.

In a note submitted by Karnataka surprisingly one finds the quest of Karnataka to find out "kharif component" in the additional allocations. We wonder from where this "kharif

component" is tried to be bifurcated from the additional allocations at 65% dependability and on an average yield. It would be very well known that water at lower dependability, namely at 65% dependability and on average would be available later in point of time in case requirement of availability at 75% dependability, is to be fulfilled. It is stated that "kharif component" commences in June itself. How then one expects the water which will be available later in point of time be available in June. What is sought to be asked for appears to be that Karnataka may be allowed to utilise its additional allocation right from the very beginning irrespective of the fact whether water at 65% dependability and at average would be available later on or not, after fulfillment of requirement at 75% dependability. Such a manner of utilisation is not envisaged nor was it intended in the Order passed under sub-Section 2 of Section 5 of the Act. Merely the fact that Karnataka would not exceed its allocation at different dependability is immaterial. The point of time when the water would be available and it is to be drawn is also material.

It may also be made clear, in context with other objection about inflows into Andhra Pradesh from different points in

Karnataka that whatever water may flow into Andhra Pradesh through the State of Karnataka from different points, all that is to be taken into account, and not to be excluded in calculating the balance amount of allocated share which may have to be made good.

As a matter of fact, we do not find any real problem or objection of the States of Maharashtra and Karnataka which can seriously affect implementation of the Order of the Tribunal dated December 30, 2010 as elaborated by the detailed manner of drawal. Care has been taken, nonetheless, to meet such points as raised, in detail in Part-H of the detail manner of drawal. It is also to be noted that Maharasthra and Karnataka did not raise any objection to Clause IX and X of the Order dated December 30, 2010 in their Reference petition, nor asked for any explanation or guidance about it.

So far as the State of Andhra Pradesh is concerned, there does not seem to be any worthwhile objection to the manner of drawal which is being provided by the Tribunal.

Mr. Reddy submits that Maharashtra now opposes the proposal of manner of drawal as suggested by the Tribunal, but

earlier the case of Maharashtra was that it was possible to draw water at different dependability and it could work without any difficulty. In that connection he points out particularly to paragraph 37.5 at page 18 of their Reply to the Reference Petition of Andhra Pradesh where Maharashtra has stated that planning of irrigation project at different dependability is possible and it was not difficult to plan, construct or regulate project at different dependability even though there may be variation of flows from sub-basin to sub-basin. Mr. Reddy has further pointed out Maharashtra's averments that project operators are operating projects even when the availability is less than the planned utilization and that the projects designed for average dependability or 50% can be operated at 65% or 75% dependability. Mr. Reddy submits that now it is being opposed by Maharashtra which is not a fair stand. Mr. Reddy, during the course of his arguments, also referred to Annexure-I of Andhra Pradesh's documents submitted on 16.4.2013 regarding generation of water in Andhra Pradesh.

The objection of Andhra Pradesh relate, however, to different kinds of things in an effort to get some more water and in that connection it has been submitted that they may be

allowed water for carry over storage just after 2130 TMC and further that they may be allowed a further carry over storage to mitigate the hardship in deficient years at 65% dependability and at average as it was provided by KWDT-1 at 75% dependability. We do not find any good reason to allow drawal of water for carry over storage just after 2130 TMC or to make any provision for the additional allocation for any further carry over storage. This contention has no force. It may be worthwhile, however, to mention here that they have been allowed to utilise remaining water whatever may be available for the time being also, till the next review.

We feel it necessary to point out that all the three parties met twice to arrive at some acceptable manner of drawal which may suit to them. But despite two meetings, they remained unsuccessful and not even one common minimum agreement could be arrived at. In such a situation, there was no option but to devise and provide a scheme of drawal of water at different dependability, as best as possible so that the drawal of respective shares of the parties may be in consonance with the provisions of the Decision of KWDT-1 as well as the decision of this

Tribunal. It is a self-regulatory kind of provision requiring the least external interference.

The scheme providing mechanism to draw water by the States at different dependability is hereby provided in two parts to be added after Clause IX of the Order of the Tribunal as Clause IX-A and accordingly the Order dated December 30, 2010 of the Tribunal stands deemed to be modified as follows :-

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 has flowed down, to the extent of 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 KWD-IB 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 unutillized 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 "(iii)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.

The Scheme elaborating manner of drawal of water given above explains the questions raised by the State of Andhra Pradesh relating to drawal of water at different dependability and provides guidance as well for the purposes.

In the result the decision and the Order passed by this Tribunal on December 30, 2010 stands deemed to be modified by addition of Clause IX A in the Order.

20. Sec 6 and 6A : Tribunal's Power to Frame Scheme for Implementation :

A question has been raised by Andhra Pradesh with regard to the jurisdiction of the Tribunal to provide for creation of Implementation Board. This point has been taken in the Reference Petition. In course of submissions, Mr. Dipankar Gupta, learned Counsel for Andhra Pradesh, pointed out that the decision of the Tribunal under Section 5(2) has been challenged in the Supreme Court in which this point has been taken and elaborate arguments would be made there. Before the Tribunal, this point has not been elaborated. However, since the question has been raised touching the jurisdiction of the Tribunal, we are of the opinion that the same should be discussed and our views should be expressed in brief.

It is stated that by reason of Section 6A providing for framing of scheme for implementation by the Central Government without prejudice to Section 6, the scheme can only be framed by the Central Government and not by the Tribunal. The Act does not provide that the Tribunal shall provide for any scheme for implementation of its decision providing provision for review.

The question has to be looked into from the scheme of the Act and the provisions empowering the Parliament to provide for legislation of the Act.

Article 262 of the Constitution of India empowers the Parliament to provide by law to exclude jurisdiction of all courts including Supreme Court in respect of adjudication of Inter-State River Water Disputes (hereinafter referred to as the dispute). In exercise of such power, the Central Government has enacted the Inter-State River Water Disputes Act, 1956 (hereinafter referred to as the Act). Therefore, in respect of Inter-State River Water Dispute (Water Dispute) the power of the Tribunal constituted under the Act cannot be said to be

circumscribed in the exercise of its jurisdiction to adjudicate the dispute under Section 5(2) read with Section 5(3) of the Act.

Section 5(1) requires the Government to refer the dispute to the Tribunal for 'adjudication'. The word 'adjudication' has not been circumscribed by any qualification. The word 'adjudication' means adjudging the dispute between the parties. 'Adjudication' involves finding of fact. In other words it envisages ascertainment of facts out of the rival claims and contentions put forth by the parties and giving decision on the facts found.

The manner of adjudication is provided in Section 5(2) requiring the Tribunal to investigate the matter referred to it and forward a report to the Central Government setting out the facts as found and giving its decision on the matters referred to it. The Report is to contain the facts found and the decision on the dispute given by the Tribunal.

The word 'decision' means to decide the dispute. The Act does not circumscribe or qualify the word 'decision'. The Tribunal is solely empowered to adjudicate and to give decision. Absence of any rider in the exercise of the

adjudicatory process confers widest possible jurisdiction within the scope of the Reference.

Now this adjudication, forwarding of report and decision are in respect of 'water dispute'. Water dispute defined in Section 2(c) means any dispute or difference between States with respect to the use, distribution or control of the water of or in inter-state river or river valley. Under Section 5(2) the Tribunal is called upon to adjudicate the water dispute to the exclusion of all courts in view of Section 11 of the Act. The exclusion clause in Section 11 can not be perceived to circumscribe or curtail or divest the jurisdiction of the Tribunal to the extent of precluding the Tribunal from providing manner of implementation through establishment of Board or Authority with provision for review of Board's decision in course of implementation process.

Section 6A is without prejudice to Section 6 only. If Section 6A is interpreted to mean preclusion of the Tribunal to frame scheme or providing for review within the scope of Section 5(2) and 5(3) in that event Section 6A would be hit by Section 11 read with Section 2(c) of the Act. Section 6A has never been nor can be intended either to trench upon or to affect or eclipse the exclusivity of the jurisdiction conferred on

the Tribunal by reason of Section 11 in relation to section 2(c) of the Act. The jurisdiction under Section 5(2) and 5(3) is all pervasive with respect to Section 2(c). Section 6A can not be interpreted to mean that framing of scheme for implementation providing establishment of Board and making provision for a review authority is outside the scope of water dispute under Section 2(c) which is required to be referred to the Tribunal for adjudication.

In this case the scheme framed by the Tribunal is related to use distribution and control of water, the manner of implementation of which is provided to facilitate resolution of the dispute as far as practicable, can not be subject to Section 6A. The expression 'without prejudice' is to permit the Central Government to provide for matters necessary for implementation of the decision of the Tribunal after the decision becomes binding on the parties on publication. Section 6A is intended to be in aid of implementation by authorising the Central Government to provide for matters necessary for implementation of the decision despite the finality and binding effect conceived under Section 6 for ensuring proper implementation of the decision, without intruding upon the adjudicatory field.

The requirement of adjudication involves investigation and forwarding of Report setting out facts found and giving of decision. Thus the adjudicatory process is intended by the Legislature to provide for complete resolution of the dispute between the parties. The making of the decision binding upon the parties requiring them to give effect to the decision involves rendering of complete remedy by way of settlement of the dispute fully and finally. In other words the intendment is to give full and final adjudication resolving the dispute completely and effectively in all respect in order to be binding on the parties for giving effect to the decision by the parties themselves without any aid or assistance of any forum after the Tribunal cease to exist.

The purpose of Reference is to resolve the dispute between the parties. After the Tribunal is wound up, the parties are left with no forum to approach for any assistance either for the implementation of the decision by the Tribunal or for any other necessary guidance in relation thereto except execution within the scope of deeming force under Section 6(2). On the contrary, under Section 6A once the decision is published the

same becomes final and binding on the parties to the extent that the parties shall give effect by themselves to the said decision. Section 6(2) confers a deemed force of that of an order or decree of the Supreme Court on the decision upon publication.

Section 6A empowering the Central Government to frame scheme or schemes providing for all matters necessary to give effect to the decision of the Tribunal without prejudice to Section 6 since inserted by amendment in the Act in the year 2000 in order to provide a supplement in aid of implementation of the decision in case it is necessary.

The scope of Section 6 is confined to (1) the publication of the decision and (2) deeming the decision of having the force of that of the order or decree of the Supreme Court. Whereas under Section 6A of the Act, without prejudice to either of these two conditions of Section 6, the Central Government may frame scheme providing for matters necessary to give effect to the decision of the Tribunal.

Therefore, the provisions of Section 6A cannot be said to exclude the jurisdiction of the Tribunal nor it can be said that the Central Government can exercise any power in respect of

the dispute, except as provided in Section 6A, trenching upon the exercise of jurisdiction circumscribed by Section 11 excluding all Courts creating sole and exclusive jurisdiction of the Tribunal. Thus Section 6A cannot have the impact of excluding or affecting the jurisdiction of the Tribunal within the scope of Section 5(2) and 5(3) of the Act.

If on a statutorily constituted authority power is conferred for certain purposes, then such power is intended by the Legislature to be exercised for sub-serving the purpose. Therefore it is intended to be exercised for achieving the intended/desired object or purpose. This necessarily implies that all such power as are corollary and incidental to the exercise of the powers intended to be implicit in it. Inasmuch as without such power the purpose of conferring jurisdiction will be incomplete. In such event the legislative intent will be frustrated, particularly when the jurisdiction is in exclusion of all other forum.

Having regard to the scheme of the Act in the context of Article 262, there seem to be no dearth of jurisdiction for the Tribunal to frame scheme for implementation of decision of the

Tribunal as provided in Appendix-1 of the decision. In this regard we find support from the decision of the Narmada Water Dispute Tribunal. The Narmada Water Dispute Tribunal in Chapter XVIII while giving direction regarding setting up of machinery for implementing the decision of the Tribunal, in para 18.2.1.4 the Narmada Tribunal had held that where the Act confers a jurisdiction it also confers by necessary implication the power of doing of such acts or employing all such means as are essentially necessary to its execution. In other words, the Doctrine of Implied Powers can be legitimately invoked when it is found that a duty has been imposed or power conferred on authority by statute and it is further found that that duty cannot be discharged or the power cannot be exercised effectively unless some auxiliary or incidental power is assumed to exist. The Tribunal, therefore, in its opinion, had jurisdiction to give necessary direction for setting up of a machinery with provision for review to ensure that the decision of the Tribunal is faithfully implemented by the parties concerned.

In support of the proposition, we may gainfully refer to the maxim, : *"Quando aliquid mandatur, mandatur, et omne per quod pervenitur ad illud" (11* Rep.52), relied upon by

Narmada Tribunal. Dealing with the Doctrine of Implied Powers, Pollock C.B. observed in MICHEALY PENTON & JAMES FRASER v. JOHN STEPHEN HEMPTON.

> *"The validity of the appellant's argument must depend as my decision also must depend upon the application of the legal maxim: 'Quando lex aliquid concedit concedere vide-ture et illud sine quo res ipso esse non potest'. It becomes therefore all important to consider the true import of this maxim, and the extent to which it has been applied. After the fullest research which I have been able to bestow, I take the matter to stand thus: Whenever anything is authorized and especially if, as a matter of duty, required to be done by law, and it is found impossible to do that thing unless something else not authorized in express terms be else done, then that something will be supplied by necessary intendment."*

Section 6A simply means that the function or power of the Central Government does not end with the publication of the decision of the Tribunal under Section 6(1) and the decision on publication becomes binding on the parties who are also under obligation to give effect to it. Section 6A has been introduced without prejudice to Section 6. Section 6A

empowers the Government to further discharge a function of framing scheme or schemes to give effect to the decision.

Now the question is as to whether framing of scheme is within the exclusive domain of the Central Government and outside that of the jurisdiction of the Tribunal.

Section 6A is without prejudice to the provisions of Section 6. Section 6 provides only for publication and the deeming force of that of the decree or order of the Supreme Court. Therefore, the expression 'without prejudice' being confined to Section 6, Section 6A cannot have any impact on the jurisdiction of the Tribunal conferred under Section 5(2) read with Section 5(3) of the Act. By reason of this phrase 'without prejudice to the provisions of Section 6', it is provided that the Central Government may not be precluded from framing any scheme necessary for implementation of the decision due to the provisions of Section 6 providing binding effect of the decision rendered under Section 5(2) of the Act having the force of order or decree of the Supreme Court. It is provided only to empower the Central Government to provide for scheme for implementation of the decision without

prejudice to the effect of the provision of Section 6. Whereas the Tribunal's jurisdiction under section 5(2) and 5(3) having not been limited or circumscribed, it is to frame a scheme in the decision itself for facilitating the parties to discharge their legal obligation to give effect to the decision. Still a provision is necessitated by reason of the fact that the Tribunal is not a permanent body and once de-notified, in case of necessity the Central Government is empowered to frame such scheme in order to serve the void only to the extent of effectively implementing the decision.

FURTHER REPORT

This is apprehended in view of the situation which may arise later requiring some additional measures depending upon the new developments for over-coming helplessness in the absence of the Tribunal for smooth implementation of its decision for which the Central Government may frame scheme. Section 6A is introduced to empower the Central Government to frame scheme or schemes in order to supplement the implementation of the decision of the Tribunal providing for matters necessary therefore with a view to extend aid to the parties in giving effect to the decision in terms of Section 6(1).

Section 6A cannot be treated as exclusive domain to make necessary provisions for giving effect to the decision of the Tribunal. Under Section 6A Central Government may frame scheme or schemes for giving effect to the decision of the Tribunal. But it is not necessary that in all cases the Central Government must frame a scheme. If sufficient provisions have been made in the decision itself to help out the parties to discharge their obligation to give effect to the decision, it may not be necessary for the Central Government to frame any scheme. In other situations where some supplementing provisions may be felt necessary for giving effect to the decision of the Tribunal, provisions have been made in the absence of any provision for implementation in the decision of the Tribunal by empowering the Central Government to frame such scheme or schemes.

Section 6A may necessitate framing of scheme in a case where no scheme may be framed by the Tribunal in its decision or later on where it may be necessary to supplement.

The power to frame scheme under Section 6A is not thus mutually exclusive. On the contrary, the provisions contained in Section 6 and 6A are mutually inclusive.

It is incongruence to read in the provisions of the Act that an outside agency would be entitled to frame a scheme to the exclusion of the Tribunal exercising jurisdiction for adjudication of the dispute and giving decision. Section 6A by no means of imagination take away the jurisdiction inherent or implicit in the Tribunal to make provisions for the parties to comply with the implementation of the decision.

Section 6A speaks of scheme or schemes. Therefore, there can be more than one scheme and all can operate simultaneously. But the requirement of framing a scheme is for implementation of the order if it is felt necessary. If the order by the Tribunal itself contains provisions for implementation, the Central Government may, if necessary, supplement the same. The legislature could never intend nor had ever intended to exclude the jurisdiction of the Tribunal. Such interpretation cannot be conceived in view of the legislative intent implicit in the enactment in the context of Section 11 of the Act.

It may be mentioned that Narmada Water Dispute Tribunal had framed the scheme when Section 6A was not introduced. KWDT-1 refrained from framing scheme not due to lack of legality or jurisdiction but only on the ground of propriety. The KWDT-1 found that the Tribunal has

jurisdiction to frame a scheme. Such jurisdiction cannot be divested of the Tribunal by reason of Section 6A. In other words, Section 6A had never intended to divest the Tribunal of its jurisdiction when the exercise of jurisdiction, in respect of Inter-State River Water Dispute is controlled by Article 262 in terms whereof the Act was enacted with Section 11 providing exclusion of jurisdiction of all Courts. This Section 6A can be read within the scheme of the Act as supplementary and any scheme framed by the Central Government shall complement the scheme, if any, framed by the Tribunal. Section 6A is an enabling provision in both events where the decision provides scheme or where it does not contain any.

Thus we are of the opinion that the question of jurisdiction regarding framing scheme of Implementation Board providing provision for review cannot be sustained and as such it does not call for any explanation or clarification.

CHAPTER – V

Central Government.
Reference Petition No.4 of 2011.

Mr. Wasim Qadri, learned Counsel for the Union of India, has taken us through certain pages of the Report relating to the issues which had been framed and the findings recorded thereon. He has also referred to the distribution of water made to different States and in that connection submits that additional water has been allocated to the specific projects, which require explanation.

Clarification – Para 1(a) :

Referring to para-1(a) of the Reference Petition of the Central Government, he has drawn our attention to the averments made therein and a relevant part of which is extracted below :-

".....planning of projects at a specific site is governed by the characteristic of flow series at the site, topographical and other constraints

etc. Therefore, the allocation of water to specific site on the basis of difference arrived at for the basin as a whole between 65% dependable yield and 75% dependable yield or that between average yield and 65% dependable yield may have certain impact on efficacy and performance of the project".

It is then submitted that due to subsequent changes in the characteristic of flow series, on account of distribution of additional water, certain degree of flexibility would be necessary in utilisation of water at specific project sites within the overall allocation, considering the restrictions and conditions which are to be strictly adhered to by the concerned States. Ultimately, his submission is to the effect in case of change in situation later on, the consequential adjustment may be allowed with the permission of the KWD-IB within the limit of allocation.

In connection with the submissions made by the learned Counsel as pointed out above, it is necessary to be clear that water has been allocated on principles of equitable distribution, taking into account the demands made and/or the need of the

States which related to specific projects or the areas, where they wanted to utilise the water. The allocation has not been made just by earmarking some share in water at random, only on the "basis" as averred, that certain additional amount of water was available in the basin. The requirements of the projects and the needs of the State have to be taken into consideration, and the allocation very much depends on it. Almost all the projects in respect of which allocations have been made are already planned projects from before, at different dependability and it can obviously be taken that while planning their projects, the States must have taken into account all the relevant factors necessary for the purpose, including availability of water at the site. Therefore, the assumption that the water may have been allocated simply on the basis that it was additionally available in the basin as a whole, is wholly unfounded, as well as the apprehension that the allocated water may not be available at the site at which the States had planned their projects. The Tribunal has not suggested or directed to the States to have any project at any particular site. The States would, normally, not choose site for a project where water may not be available and other relevant parameters may be lacking.

As a matter of fact, the additional allocations have been made for Upper Krishna Project, i.e., Almatti Reservoir, Koyna Project, for carry over storage of Andhra Pradesh in Sirisailam and Nagarjunsagar Dam, for Telguganga, Jurala Project, for Upper Tunga, Upper Bhadra, Singatalur, Kukadi Project etc. which are operational or planned projects. Almost all additional water goes to such projects. In this factual background, the kind of question raised in Para 1(a) hardly deserved to be raised.

The other implied apprehension as may perhaps be about adverse impact on existing projects, in that connection suffice is to say that all allocations at 75% dependability as provided by KWDT-I have been saved by Clause (IV) of the Order of the Tribunal. Therefore, the existing projects would not in any way be affected as the allocations at 75% dependability shall be continued to be drawn first, as before and allocations at lower dependability are to be drawn thereafter. This fact was made clear to the learned Counsel at the time of his arguments and it has also been provided in the scheme of drawal of water at different dependability. Therefore, there would be no

adverse impact on the existing projects operational at 75% dependability.

The other argument is that in case of change in characteristics of flow series later on, consequential adjustment may be allowed with the permission of the KWD-IB. In this connection, it may be pointed out that the question raised is about subsequent changes in the characteristic of flow series on the assumption that the additional water has been allocated to the specific projects which are not projects which have been planned according to the requirements of project planning and unmindful of the fact as to whether water at the site for the project would be available or not and that the other parameters required for the purpose may be lacking or they do not conform to the project requirement. In this connection, it may be pointed out that we have already discussed the matter in the earlier paragraph even naming the projects for which water has been allocated. They are all running or the projects planned by the respective States.

The other factor which seems to have weighed while taking up the point relating to subsequent changes in the characteristic of flow series, is allocation at different

dependability in excess of yield at 75% dependability. It has been made clear that as per the manner of drawal as provided in this Further Report, that the drawal at different dependability will be in steps dependabilitiwise. Therefore, the reasons which seem to have influenced in taking up the ground that there may be subsequent changes in the characteristic of flow series because of additional allocation, are not substantiated.

Generally speaking, possibility of change in characteristic of any flow series cannot be ruled out before or subsequent to commencement of a project. That situation will be different and applicable generally to all projects anywhere and at whatever dependability they may be operating. But that does not seem to be the case taken up here. The objection is about the facts of this case, some of which have been misconstrued.

For the reasons we have indicated above, we find no good ground for any explanation or clarification on the point of any adjustment on account of unspecified and imaginary apprehension of subsequent changes in characteristics of flow series; it being a very vague and unsubstantiated ground.

Clarification – Para 1(b) :

Referring to Clause (b) of para-1 of the Reference Petition, it is submitted that no sharing of water has been provided for, in case availability is less than 2130 TMC in any water year or for that matter when it is less than 2293 TMC and 2578 TMC or it is more than 2130 TMC but less than 2293 TMC and so on. Suffice it to point out that no such provision for distress sharing had been made by KWDT-I while allocating 2060 TMC at 75% dependability and the return flows amounting to 70 TMC in case the yield in any water year is less than 2060 TMC or 2130 TMC. The Scheme-A as provided by KWDT-I is in operation and holds the field since long right from the beginning. The amount of additional water which has been distributed by the Tribunal is 448 TMC which is near about 1/5th only of the water distributed by KWDT-I. No new system is required to be introduced for this amount of additional water. It is also not possible to set aside and change the whole pattern of drawal of allocation as provided by KWDT-I and introduce new system which may turn all the existing projects topsy turvy resulting in almost a near chaos

These are not proceedings in appeal against the decision of KWDT-I.

The water may be drawn by the States according to their allocations, as it comes, on the same pattern as under the scheme-A provided by KWDT-I. This aspect of the matter has been elaborately discussed while dealing with the Reference of the State of Andhra Pradesh under the caption "Scheme of Manner of Drawal of Water at Different Dependability".

Clarification – Para 1(c) :

During the course of the arguments, it was made clear to the leaned Counsel, in respect of sub-para 1(b) and (c) that States would get their allocation at 65% dependability after the lower riparian States had achieved their allocation at 75% dependability, ie. it was in the next instance that the drawal at 65% dependability would commence and similarly thereafter at average yield. Such suggestions as made in sub-para1(c) have no justification.

The Scheme elaborating manner of drawal as suggested by the Tribunal was also provided to the Counsel for the

Central Government as well; but no response thereto had been made nor has any submission, in that regard, been made opposing the same.

Clarification – Para 1(e) :

However, so far as the request which has been made for extending the period for nominating the Members of the Board and the Board becoming operational, we find that it may be feasible to extend the period from three months to six months for nominating the Members of the Board by the Central Government and the State Governments. Consequentially, Clause XVIII of the Order of the Tribunal stands deemed to be modified in the terms indicated above.

Clarification – Para 1(f) :

Apart from the above submissions, the only other argument which was made by the learned Counsel for the Central Government was in regard to the discrepancy which according to him occurred at page 292 of the report of the Tribunal viz., 32.34 TMC has been mentioned there which

figure at page 293 is shown as 32.24 TMC, as utilisation in minor irrigation.

The discrepancy as indicated seems to be correct. The correct figure is 32.34 which is the figure of utilisation of Maharashtra in minor irrigation as given out and stated by Mr. Andhyarujina. The order passed by the Tribunal dated March 29, 2010 mentions the same figure, i.e. 32.34 but it is rightly pointed out that at page 293 and we find at page 294 as well, this figure has been shown as 32.24 from serial number 1 to 33 of the chart. It appears to be an accidental slip. The result however would be that for the 33 years, the upstream utilisation would increase by 0.10 TMC in the yearly yield of those years.

The State of Karnataka in its reply has stated that the difference between the two figures is very small and no adverse inference can be drawn from such a minor difference. The State of Maharashtra states in its reply that it requires no reply on the point. So far as the State of Andhra Pradesh is concerned, it has not adverted to the discrepancy which has been pointed out by the Central Government.

Let us, however, examine the impact of this discrepancy. It would mean that in 33 years, from 1972-73 to 2004-05, upstream utilisation has been taken less by 0.10 TMC for each year. This figure of 0.10 TMC would still become less on being divided by 47 years of the series. That is to say, the non-inclusion of 0.10 TMC in upstream utilisation for 33 years will impact the series of 47 years by less than 0.10 TMC in the yearly yield of series of 47 years. It will make little difference when it comes to be divided amongst three States.

Thus, looking in totality, it clearly emerges that it would serve no purpose by making any modification in the figure 32.24 to 32.34 on pages 293 and 294 of the Report since it hardly makes any significant impact on the distributed amount of water amongst the three States. The yearly average in a series of 47 years of this amount of 0.10 TMC would come to 0.702 TMC. Its distribution amongst three States would hardly be of any value and as a matter of fact, none of the three States, for that reason, it appears, have come forward with the case for distribution of this amount of water as well. The State of Karnataka has already stated that it is an insignificantly small amount. The State of Maharashtra has also chosen not to reply

on this point and the State of Andhra Pradesh has left it untouched.

In the result, this insignificant slip does not require any modification in the order.

No other submission had been made by the learned Counsel except those indicated above.

Conclusion:

In the Result the References no. 1 of 2011, 2 of 2011, 3 of 2011 and 4 of 2011of the respective three States and the Central Government, as referred to the Tribunal by the Central government under Section 5(3) of the Act, are disposed of accordingly as in Chapter I to V of this Further Report.

Accordingly the Report and Decision dated 30th December, 2010, under Section 5(2) of the Act, by the Tribunal, shall stand explained and/or clarified in the manner indicated in this Further Report. The list of the deemed modifications under Section 5(3) are enumerated in Schedule I and the Decision and the Order deemed modified by adding Clause IXA, XIIIA and XVA and changes made in Clause VII,

VIII and X and addition of Clause 14A in Appendix I, incorporated in the Decision/Order, as shall be read finally, are enumerated in Schedule II to this Further Report.

Before we part with the matter, we may record our appreciation that it is a great pleasure to acknowledge the able assistance of the Learned Senior Counsel appearing on behalf of all the three States, being ably assisted by other learned counsels and the officers of the respective States and the staffs. It all required devotion and very hard work on their part. The arguments of the Learned Senior Counsels and the materials placed by them helped us immensely in preparing this Further Report.

The valuable help that we got from the Assessors assisted by the Executive Engineer cannot go unnoticed. They have worked hard and always extended their help in preparation of the report readily and unreservedly.

The personal staff and the officers and staffs of the Registry have unhesitatingly extended their full cooperation and support in accomplishing this work. Without the

cooperation and the able assistance from all, it would not have been possible to prepare this Further Report.

We express our deep appreciation to all concerned and thank them all.

(JUSTICE B.P. DAS)
MEMBER

(JUSTICE D.K. SETH)
MEMBER

(JUSTICE BRIJESH KUMAR)
CHAIRMAN

Dated this the 29th day of November 2013.

FURTHER REPORT

SCHEDULE – I

Reference No. 1 of 2011; Reference No. 2 of 2011; Reference No. 3 of 2011 & Reference No. 4 of 2011

Further Report : Deeming Effect : Enumerated:

The Further Report, as given herein before in Chapter I to V having the deeming effect of modification of the decision dated December 30, 2010 by the Tribunal, for the sake of convenience, the list of explanation, clarification and guidance, in the Report are enumerated below.

Schedule of Amendments

KARNATAKA

Modification/clarification/explanation of orders incorporated.

Pages - 46-47 (Vol-I) :

Point No.2 (i):

(A). Sub-paragraph of Clause X(3) at page 807 of the Order of the Tribunal relating to remaining water is explained and substituted as follows :

> "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 or consideration by any Competent Authority under the law. It will be open to, all the parties to raise its claim to the remaining water before the Competent Authority as it may consider it necessary and that no right to accrue to Andhra Pradesh over the remaining water on the ground of its user under this clause."

Page- 69-70 (Vol-I) :

(B). Point No. 2(v) – Validity of clearance already given in respect of UKP is explained and clarified as follows :

The expression "let fresh consideration of clearance take place by the authorities, on being moved by the State of Karnataka", under Issue No. 15 at page 674 (Vol. IV last 2nd and 3rd lines from bottom) is explained and clarified by adding clarification below to be read as the concluding part of the discussion on Issue No. 15 as follows :

"We therefore, explain and clarify that the three clearances in question as discussed above, which according to Karnataka, have already been cleared, would not be rendered invalid merely for the reason of

observations made by the Tribunal at page 674 of the Report on Issue No. 15 to the effect 'Let fresh consideration of clearance take place by the authorities, on being approached by the State of Karnataka.' However, it is further clarified that the State of Karnataka shall place the relevant papers, regarding those three clearances, before the appropriate authorities, who shall look into those clearances as claimed by Karnataka to have been cleared and arrive at a conclusion as to whether those clearances, if already given, still hold good or not".

Maharashtra

Clarification and explanation

Page – 104-105 (Vol-I):

Clarification No.VI

A. The allocations are en bloc with restrictions as provided.

B. After Clause X(1)(d) at page 805 Vol.IV of the Order of the Tribunal Dated December 30, 2010 the following Clause X(1)(e) is added as follows :

"(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.

Page- 108-109 (Vol-I):

Clarification No.VII

(B). In Clause X(1)(a) at page 805 Vol.IV of the Order of the Tribunal Dated December 30, 2010 – the expression "Bhima sub-basin(K-5)" in the last line be substituted by the expression "the main stream of river Bhima". Accordingly Clause X(1)(a) shall be read as follows :

"Maharashtra shall not utilize more than 98 TMC in 65% dependable water year (it includes 3 TMC allocated for Kukadi Complex) and 123 TMC in an average water year from the main stream of river Bhima."

Pages-125-127 (Vol-I):

(C). Clarification No. X

After clause 14 of Appendix 1 of the Order dated December 30, 2010 of the Tribunal at Page 5, Clause 14.A is added as follows :

(14A) **Review Committee** : The resolution/direction of the Krishna Water Disputes Decision Implementation Board shall be reviewable on application of any party State and the decision of the Review Committee on the review petition, if any preferred, shall be final and binding on all the parties.

(i) The Minister for Water Resources, Govt. of India, shall constitute the Single Member Review Authority.

(ii) The Review Authority while dealing with the review petition and taking a decision on it shall take assistance of a panel of three designated personnel consisting of :-

(1) The Secretary, Ministry of Water Resources, Government of India ;

(2) The Secretary, Ministry of Agriculture, Government of India ;

(3) The Chairman, Central Water Commission.

The Review Authority shall take the assistance of the aforesaid panel any time before hearing of the parties, during the course of review proceedings and after that before rendering its decision.

The Secretary, Ministry of Water Resources shall be the Convener of the Review Authority.

(iii) The Review Authority shall give opportunity of hearing to all the parties to the Review Petition, before taking any decision in the matter.

(iv) The Review Authority may also, if necessary, call for the records and the comments of the implementation Board on the Review Petition.

(v) The decision shall be recorded in writing.

The provision as made in the preceding paragraphs shall be added as Clause (14A) of the Appendix-1 to the decision relating to the Implementation Board.

Page- 134-135 (Vol-I):

(D). Clarification NO. XII

After Clause XIII at page 807 Vol. IV of the Order Dated December 30, 2010 of the Tribunal, Clause XIII-A shall be added as follows :

" 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."

Page- 138-139 (Vol-I):

(E). Clarification No. XIV

At page 808 Vol. IV of the Order Dated December 30, 2010 of the Tribunal after clause XV clause XV-A shall be added as follows:

"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 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".

ANDHRA PRADESH

Pages-230-231 (Vol.II):

On Allocation of 4 TMC for RDS Right Bank Main Canal from Tungabhadra Reservoir.

The total allocation of 72 TMC to Karnataka including 7 TMC to Karnataka including 7 TMC for minimum flows, out of the yield at 65% dependability is now stand reduced to 68 TMC and the total allocation of Andhra Pradesh of 39 TMC out of the yield at 65% is increased to 43 TMC.

(A). At page 802 (Vol. IV) of the Order Dated December 30, 2010 of the Tribunal in clause VII related to State of Karnataka, the figure 65 TMC against allocation at 65% dependability is replaced by the figure 61 TMC and the total 170 TMC is replaced by the figure 166 TMC and the figure 177 TMC is replaced by the figure 173 TMC against Grand Total.

(B). At the same page 802 in clause VII related to State of Andhra Pradesh, the figure 39 TMC is replaced by the figure 43 TMC against 65% dependability and the figure 184 TMC is replaced by 188 TMC against Total and the figure 190 TMC is replaced by figure 194 TMC against Grand Total.

(C). At page 803 (Vol. IV) of the Order Dated December 30, 2010 of the Tribunal in clause VIII related to State of Karnataka, the figure 65 TMC is replaced by the figure 61 TMC against allocation at 65% dependability and the figure 904 TMC is replaced by 900 TMC against Total and the figure 911 TMC is replaced by the figure 907 TMC against Grand Total.

(D). At page 804 (Vol. IV) of the Order Dated December 30, 2010 of the Tribunal in clause VIII related to State of Andhra Pradesh. The figure 39 TMC is replaced by the figure 43 TMC against the allocation of 65% dependability, the figure 994 TMC shall be replaced by the figure 999 TMC against Total and the figure 1001 TMC shall be replaced by the figure 1005 TMC against Grand Total.

(E). At page 806 (Vol. IV) of the Order Dated December 30, 2010) of the Tribunal the figure of 360 TMC at the first line of clause X.2(a) is replaced by the figure 356 TMC and the figure 40 TMC in the 3rd line thereof is replaced by figure 36 TMC.

At the same page, the figure 799 TMC in Clause X(2)(c) thereafter (1st line) is replaced by the figure 795 TMC and the figure 904 TMC (2nd line) is replaced by the figure 900 TMC.

(F). At page 806 (Vol. IV) of the Order Dated December 30, 2010 of the Tribunal in clause X(3) before the existing Clause X(3)(a) renumbering the same as Clause X(3)(b), a new Clause X(3)(a) shall be added as follows :

"3(a) – That the State of Andhra Pradesh shall not utilize more than 860 TMC in 65% dependable year (it includes 30 TMC for carry over in Sri Sailam and Nagarjuna Sagar Project in K-7 sub-basin, 9 TMC for Jurala Project, 6 TMC for Right Main Canal of RDS Project and 6 TMC towards minimum flows)."

(G). At page 806 (Vol. IV) of the Order Dated December 30, 2010 of the Tribunal the existing Clause X(3)((a) be renumbered as clause X(3)(b) and in the second line thereof the figure 1001 TMC shall be replaced by figure 1005 TMC.

On the point relating to drawal of water at different dependabilities:

Pages 337 – 348 (Vol.II):

At page 807 (Vol. IV) of the Order Dated December 30, 2010 of the Tribunal after clause IX Clause IX-A shall be inserted providing detailed mechanism to draw water by the States at different dependability in two parts as follows :

"Clause IX-A. Detailed Mechanism for Drawal of Water by the States:

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 Ahdhra 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.

Reference No. 4 by Central Government

Page- 371 (Vol-II):

(A). Clause XVIII at page 809 (Vol. IV) of the Order Dated December 30, 2010 of the Tribunal the words "Three months" (in line 3 from bottom) shall be substituted by the words "Six months".

SCHEDULE – II

Reference No. 1 of 2011; Reference No. 2 of 2011; Reference No. 3 of 2011 & Reference No. 4 of 2011

Further Report : Order Deemed Modified : Enumerated :

Thus, after incorporation of deemed modifications as a result of Further Report under Section 5(3) of the Act, the Decision/Order dated December 30, 2010 of the Tribunal passed under Section 5(2) of the Act, shall be finally read as under :

FURTHER REPORT

O R D E R

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 totaling 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:

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 3 TMC provided for Minimum flows	3 TMC
Grand Total	666 TMC

State of Andhra Pradesh

Allocation at 75% dependability with return flows	811 TMC
Allocation at 65% dependability	43 TMC
Allocation out of surplus flows	145 TMC
Total	999 TMC
Plus 6 TMC provided for Minimum flows out of 65% dependability	6 TMC
Grand Total	1005 TMC

Clause-IX

That since the allocations have been made at different dependability, 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 dependability, 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

dependability 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 the main stream of river Bhima.

(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 356 TMC from K-8 Tungabhadra sub-basin in a 65% dependable water year (it includes allocation of 36 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 installments 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 indicted 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 Rajolibanda 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. Neither 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 six 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 9thAugust, 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) MEMBER **(JUSTICE D.K. SETH) MEMBER** **(JUSTICE BRIJESH KUMAR) CHAIRMAN**

Dated this the 29th day of November, 2013

APPENDIX-I

(To the Decision dated December 30, 2010)

(As Deemed to be Amended)

APPENDIX-I

KRISHNA WATERS DECISION – IMPLEMENTATION BOARD.

1. There shall be a permanent "Krishna Waters Decision – Implementation Board", 'hereinafter referred to as the Board' which will have five Members out of which one Member each shall be appointed by the three riparian States and the remaining two Members shall be nominated by the Central Government (Government of India).

2. The riparian States shall appoint Members on deputation or on re-employment basis, a person who should be a High ranking Engineer not below the rank of Chief Engineer or has

held the office of Chief Engineer having experience in the field of Irrigation Engineering, Hydrology and Water Management.

3. The Central government shall nominate two Members for the "Krishna Waters Decision – Implementation Board" who shall be High ranking Engineer having experience in the field of Irrigation Engineering, Hydrology and Water Management from Central Government services or any organization under the Central Government, one of whom shall be holding or has held the post not below the rank of Joint Secretary and the other not below the rank of Additional Secretary to the Government of India. The latter shall be the Chairman of the Board The nominated Members shall be either on deputation or on reemployment but shall be from any State other than the riparian States of the Krishna river basin and shall have no connection, direct or indirect, with any of the three States.

4. The services of the Members including the Chairman of the Board as well as Officers and employees of the Board shall be subject to the Service and Disciplinary Rules applicable to the Central government Officers and employees except the Members and other Officers and employees serving on deputation who shall be governed by the Service Rules and Disciplinary rules of the parent cadre of the concerned State.

5. On any vacancy occurring in the offices of the Members of the Board, the Central government or the concerned State government, as the case may be, shall appoint on deputation or re-employment basis a suitable person as against the vacant office.

Provided that in case of temporary absence due to illness or for any cause whatever the Central government or the State government by whom he was appointed, as the case may be, appoint, on deputation or re-employment basis or on officiating basis a suitable person as 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 will be entitled to indemnities of the Member, in whose stead he so acts.

6. The Members of the Board shall have a tenure upto 'five years' each but or beyond the age of 70 years, whichever is earlier.

7. The Board will hold meetings regularly. The data collected as envisaged hereinbelow shall be placed before it in its meetings for appropriate orders/ directions and necessary action.

8. The Board shall record its directions/guidelines by a resolution at a meeting in which the Chairman and the Members are present as provided hereinafter.

9. The Board in its meeting in which all its members are present shall frame its Rules of business, categorize any part of the business of the Board as of a formal or routine nature.

10. The permanent "Krishna Waters Decision – Implementation Board" with five Members as aforesaid shall

be for implementing and carrying out effectively the decision/ orders and directions issued by the this Tribunal including the decision/ orders and directions issued by K.W.D.T.-I which have not been reviewed or modified by this Tribunal.

11. This "Krishna Waters Decision – Implementation Board" shall be a body orporate having perpetual succession and common seal and could sue or be sued and can hold and dispose of properties.

12. No Member, Officer or employee of the Board shall be liable for loss, injury or damage resulting from an action taken by such Member, Officer or employee in good faith and without malice even though such action is later on determined to be unauthorized.

13. The purpose and function of the permanent "Krishna Waters Decision – Implementation Board" shall also be to establish and maintain cooperation between the riparian States to the development of waters in the Krishna river in particular within the limits prescribed by this Tribunal and to ensure compliance of its orders and the directions including the orders

and directions of K.W.D.T.-I which have not been reviewed or modified by this Tribunal.

14. Any question which arises between the riparian States concerning any activity by a riparian State which is claimed by a riparian State to be against the decision and direction of this Tribunal or of the order and direction issued by K.W.D.T.-I which have not been reviewed or modified by this Tribunal, having an adverse effect on that State shall be examined by the Board which will first endeavour to resolve the question amicably but in case no amicable settlement is possible the Board shall solve the question raised by a resolution, by majority, giving reasons in a meeting where all the Members are present and that resolution/direction shall be communicated to the riparian States and will be binding on them.

(14A) **Review Committee** : The resolution/direction of the Krishna Water Disputes Decision Implementation Board shall be reviewable on application of any party State and the decision of the Review Committee on the review petition, if any preferred, shall be final and binding on all the parties.

(i) The Minister for Water Resources, Govt. of India, shall constitute the Single Member Review Authority.

(ii) The Review Authority while dealing with the review petition and taking a decision on it shall take assistance of a panel of three designated personnel consisting of :-

(1) The Secretary, Ministry of Water Resources, Government of India ;

(2) The Secretary, Ministry of Agriculture, Government of India ;

(3) The Chairman, Central Water Commission.

The Review Authority shall take the assistance of the aforesaid panel any time before hearing of the parties, during the course of review proceedings and after that before rendering its decision.

The Secretary, Ministry of Water Resources shall be the Convener of the Review Authority.

(iii) The Review Authority shall give opportunity of hearing to all the parties to the Review Petition, before taking any decision in the matter.

(iv) The Review Authority may also, if necessary, call for the records and the comments of the implementation Board on the Review Petition.

(v) The decision shall be recorded in writing.

15. That the Board shall also be authorized to look into 'any such activity suo moto, on the part of any State which appears to be against the decision and direction of this Tribunal or order and directions issued by KWDT-I which have not been reviewed or modified by this Tribunal and such activity of any State adversely affecting the interest of the other States. All other provisions of para 12 shall be applicable in suo moto action taken by the Board.

16. The quorum to constitute a meeting of the Board for routine business shall be the Chairman or the other nominated Member by the Central Government and the two Members out of the three appointed by the riparian States.

17. The Board shall further ensure that the Dead Storage shall not be depleted except in an unforeseen emergency or

acute urgency. If so depleted, it will be replenished in accordance with the conditions of its initial filling.

18. The Board shall proceed to determine the questions raised with the following definitions in mind for the purposes of this scheme:

(i) The term 'tributary' of a river means any surface channel, whether in continuous or intermittent flow and by whatever name called, whose waters in the natural course would fall into the river, e.g. a tributary, a torrent, a natural drainage an artificial drainage, a nadi, a nallah, a nali. The term also includes any sub-tributary or branch or subsidiary channel, by whatever name called, whose waters, in the natural course, would directly or otherwise

flow into that surface channel.

(ii) 'Reservoir Capacity' means the gross volume of water which can be stored in the reservoir.

(iii) 'Dead Storage Capacity' means that portion of the Reservoir Capacity which is not used for operational purposes and' Dead Storage' means the corresponding volume of water.

(iv) 'Live Storage Capacity' means the Reservoir Capacity excluding Dead Storage Capacity, and 'Live Storage' means the corresponding volume of water.

(v) "Flood Storage Capacity' means that portion of the Reservoir Capacity which is reserved for the temporary storage of flood waters in order to regulate downstream flows, and 'Flood Storage' means the corresponding volume of water.

(vi) 'Surcharge Storage Capacity' means the Reservoir Capacity between the crest of an uncontrolled spillway or the top of the crest gates in normal closed position and the maximum water elevation above this level for which the dam is designed, and 'Surcharge Storage' means the corresponding volume of water.

(vii) 'Conservation Storage Capacity' means the Reservoir Capacity excluding Flood Storage Capacity, Dead Storage Capacity and Surcharge Storage Capacity, and 'Conservation Storage' means the corresponding volume of water.

(viii) The term 'Agricultural Use' means the use of water for irrigation, except for irrigation for household gardens and public recreational gardens.

(ix) The term 'Domestic Use' means the use of water for:-

(a) drinking, washing, bathing, recreation, sanitation (including the conveyance and dilution of sewage and other wastes), stock and poultry and other like purposes;

(b) household use including use for household gardens and public recreational gardens; and

(x) Industrial purposes (including mining, mining and other like purpose and industrial waste); but the term does not include agricultural use or use for the generation of hydroelectric power.

(xi) The term "Non-consumptive Use" means any control or use of water for navigation, floating of timber or other property, flood protection or flood control, fishing or fish culture, wild life or other like beneficial purposes,

provided that exclusive of seepage and evaporation of water incidental to the control or use the water (undiminished in volume within the practical range of

measurement) remains in, or is returned to the same river or its tributaries.

(xii) The term "Interference with the Waters" means –

(a) Any act of withdrawal therefrom; or

(b) Any man-made obstruction to their flow which adversely affects or causes prejudice to any riparian State or causes a change in the volume (within the practical range of measurement) of the daily flow of the waters. Provided however an obstruction which involves only an insignificant and incidental change in the volume of the daily flow, for example, fluctuations due to afflux caused by bridge piers or a temporary by-pass, etc., shall not be deemed to be an interference with the waters.

(xiii) "Damage" includes -

(a). Loss of life or personal injury;

(b). Loss of or injury to property or other economic losses;

(c) Environmental harm; and

(d) The costs of reasonable measures to prevent or minimize such loss, injury, or harm.

(xiv) "Drainage basin" means an area determined by the geographic limits of a system of interconnected waters, the surface waters of which normally share a common terminus.

(xv) "Ecological integrity" means the natural condition of waters and other resources sufficient to assure the biological, chemical, and physical integrity of the aquatic environment.

(xvi) “Environment” includes the waters, land, air, flora, and fauna that exist in a particular region at a particular time.

(xvii) “Environmental harm” includes -

(a). Injury to the environment and any other loss or damage caused by such harm; and

(b). The costs of the reasonable measures to restore the environment actually undertaken or to be undertaken.

(xviii) “Flood” means a rising of water to levels that have detrimental effects on or in one or more basin States.

(xix) “Flood control” means measures to protect land areas from floods or to minimize damage therefrom.

(xx) “Hazardous substances” means substances that are bioaccumulative,

carcinogenic, mutagenic teratogenic, or toxic.

(xxi) “Management of waters” and “to manage waters” includes the development, use, protection, and control of waters.

(xxii) “Pollution” means any detrimental change in the composition or quality of waters that results directly or indirectly from human conduct.

(xxiii) “Vital human needs” means waters used for immediate human survival, including drinking, cooking, and sanitary

needs, as well as water needed for the immediate sustenance of a household. For the expression not defined hereinabove, the Board shall take into consideration the definitions provided in the related Indian Standard Code (I.S. Code).

19. The Board shall employ a Secretary who shall be an Engineer having experience in Hydrology and water management. The appointment shall be on deputation or on re-employment basis not beyond 65 years of age.

20. The Board shall appoint either directly or on deputation or on re-employment basis other officers/ employees in such numbers as may be found necessary to efficiently carryout the functions of the Board.

On the vesting of the functions and duties of the Tunga Bhadra Board in the "Krishna Waters Decision – Implementation Board", the existing staff of Tungabhadra Board may be retained as employees of the "Krishna Waters Decision – Implementation Board" as per requirement and need.

21. The Board shall appoint a qualified and experienced Accounts Officer on deputation or on re-employment basis not beyond 65 years of age.

22. The Board shall ensure that the following data in respect to the flows and utilization of the waters of river Krishna are recorded and exchanged between the riparian States and a copy of the same shall also be furnished by the States to the Board in the same manner.

(a) Daily gauge and discharge data relating to the flow of the river at all observation sites duly established by the Central Water Commission and the States.

(b) Daily extractions for the releases from the various reservoirs maintained by the riparian States.

(c) Daily withdrawals at the heads of all canals including link canals operated by the riparian States.

(d) Daily escapages from all canals including the link canals.

(e) Daily deliveries from link canals.

(f) That the party States namely State of Maharashtra, State of Karnataka and the State of Andhra Pradesh shall prepare the Rule Curves for operation of their Reservoirs of all major projects using more than 3 TMC in a water year. All party

States shall regularly prepare 10 daily Working Tables in every water year. The Rule Curves and the 10 daily Working Tables shall be prepared keeping in view the allocations made to and restrictions imposed on the riparian States at different level of dependability and on an average basis.

23. It shall also be ensured that the States furnish the copies of the Working Tables at 10 daily basis and the Rule Curve to each other. The States shall also furnish such copies to the Board. The Board may vet the Rule Curve and the 10 daily Working Tables to check and ensure that they are prepared in consonance with the provisions of the decision of this Tribunal and the decision and directions of KWDT-I which have not been amended, modified or reviewed by this Tribunal. In case it is found that the 10 daily Working Tables or the Rule Curve does not conform to the decision, order and the directions of this Tribunal or the decision and directions of KWDT-I which have not been amended, modified or reviewed, the Board may make necessary modifications which shall be binding on all the parties.

24. The Board shall be charged with the power and shall be under a duty to do all things necessary and sufficient and expedient for the implementation of the order/ directions of this Tribunal including the decision/ orders and directions of K.W.D.T.-I which have not been reviewed or modified by this Tribunal with respect to –

(i) storage, apportionment and regulated control of the Krishna waters,

(ii) regulated releases from the reservoirs as directed by this Tribunal including the decision and directions of K.W.D.T.-I which have not been reviewed or modified by this Tribunal.

(iii) any other matter incidental to the carrying out and implementation of the order/ direction of this Tribunal including the decision and directions of

K.W.D.T.-I which have not been reviewed or modified by this Tribunal.

(iv) The Board shall make use of the data of the gauging sites already established or as may be established by the Central Water Commission or

cause to be established either by itself or through the Central Water Commission.

(v) Record shall be kept of the flow of the Krishna river at all stations considered necessary by the Board.

25. The Central Water Commission or any riparian States shall not abolish or downgrade any existing gauging sites except in consultation with the Board.

26. The Board shall ensure that the capping and restrictions imposed by this tribunal or directed by the K.W.D.T.-I which have not be reviewed or modified are adhered to by the riparian States and shall check that the flow as directed is maintained.

27. The Board shall collect from the States concerned data for the areas irrigated by Krishna waters in each season of withdrawals for irrigation, domestic, municipal and industrial or any other purposes and of water going down the river from the project.

28. In case, however, it is found that any State is not following the instructions of the Board or is violating the directions or the decision of the Tribunal or any State over utilizing or fails to make regulated releases the Board may

depute any of its responsible Officer/ Engineer for the purposes of the joint operation of any reservoir.

29. The Board shall determine the volume of water flowing in the river Krishna and its tributaries in a water year i.e. 1st June to 31st May.

30. The Board shall check from time to time the volume of water stored by each State in its reservoirs and other storages and may for that purpose adopt any approved and tested device or method.

31. It shall be ensured by the concerned States that the following reports of the water accounts are prepared and submitted to the Board for consideration:-

(a) South West monsoon 1st June to 30th September.

(b) Full water year 1st June to 30th May.

32. The control over the maintenance and operation of the entire Tungabhadra dam and all the canals on the Right and Left side of the Bank as well as reservoir and the spillway gates on the entire Left and Right side including the operation of

Rajolibunda Diversion Scheme (RDS), shall be the responsibility of the Board. The Board shall carry out the contour surveys of the entire reservoir from time to time with a view to ascertain whether its storage capacity has been reduced due to silting and prepare revised capacity tables if necessary.

The Board shall have the charge for the works on or connected with the Tungabhadra project and all the powers of the Tungabhadra Board shall vest in the Board.

33. The Board shall prepare and transmit to each of the three riparian States before the end of the current water year (1st June to 31st May of the next year) an Annual Report covering the activities of the Board for preceding year and to make available to the Central Government and to the Government of each of the riparian States on its request any information within its possession in time and always provide access of its records to the Central government and to the government of each riparian States and their representatives.

34. The Board shall keep a record of all its 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 Central government and the Government of each of the riparian States or their representatives at such time and under such regulations as the Board may determine.

35. The Board shall determine the place of its headquarters and locations at Central and suitable places for its Regional and Sub-regional Offices as the need be.

36. The resolution of the Board on all matters referred to hereinabove shall be binding on all the parties.

37. The Board shall be funded by the Government of India and all capital and revenue expenditure as may be required shall be incurred.

38. The Board shall in the month of September each year prepare detailed estimate of the amount of money required for the twelve months i.e. for the following financial year for the purposes of its own establishments and as may be required to carry out its functions and duties under the scheme.

39. The Board shall on or before 15th of October forward such detailed estimate to the Government of India, Ministry of Water Resources and the Chief Secretary of all the three riparian States.

40. The Central Government shall pay to the Board the amount for the purpose indicated above before or by the last date of February of the ensuing year.

41. The Central Government will get reimbursement of the expenditure incurred by it on the Board from the three States i.e. the State of Maharashtra, the State of Karnataka and the State of Andhra Pradesh in equal shares or it may, if so, think fit realize the estimated amount in advance from the aforesaid three States.

42. The Board shall maintain detailed and accurate accounts of all the receipts and disbursement and shall after the close of each financial year prepare an annual statement of accounts and shall send the copies thereof to the Comptroller & Auditor-General of Government of India (CAG), Accountant-Generals as well as the concerned Chief Secretaries of the three riparian

States. The form of the annual statements of the accounts shall be such as may be prescribed by the Rules framed by the Board. The accounts maintained by the Board shall be open for inspection at all reasonable time by the Central government and the governments of the party States through their authorized representatives. The Board shall make disbursement from its funds only in such manner as may be prescribed under Rules framed by it. It may, however, incur such expenditure as it may think fit to meet any emergency in the discharge of its function.

43. The Board shall get its accounts audited every year by the Comptroller & Auditor-General of Government of India (CAG) or through any other agency as may be nominated by CAG.

44. The Board shall prepare its Annual Report covering the activities of the Board including the audited Account Report for the preceding year and submit the same to each party State. After approval of the Board in its meeting it will also be submitted to the Central government.

45. The Board or its any other duly authorized 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 Krishna water. Each state through its appropriate department shall render all cooperation and assistance to the Board and its authorized representative in this behalf.

(JUSTICE D.K. SETH) (JUSTICE B.P. DAS) (JUSTICE BRIJESH KUMAR)
MEMBER MEMBER CHAIRMAN

Dated this the 29th day of November, 2013.

C O R R I G E N D U M

1. At page 384 in Volume III, the duplication of the words "to Karnataka including 7 TMC" occurring in the second line of second para be omitted.

2. At page 385 in Volume III, in para (D) fourth line ending with the figure "994" be read as "995".

3. At page 386 in Volume III, in para (F) third line, the word "(a)" after X (3) be omitted.

4. At page 386 in Volume III, in para (G) the second line, the words "(a)" after X(3) be omitted.