

**MAHADAYI WATER DISPUTES TRIBUNAL**

**THE REPORT-CUM-DECISION**

**OF**

**THE MAHADAYI WATER DISPUTES TRIBUNAL**

**(Under Section 5(2) of The Inter-State River Water Disputes Act, 1956)**

**IN THE MATTER OF**

**REFERENCE NO. 1 OF 2011 RELATING TO WATER DISPUTES  
OF THE INTER-STATE RIVER MAHADAYI AND THE RIVER  
VALLEY THEREOF**

**BETWEEN**

**THE STATE OF GOA**

**AND**

**THE STATE OF KARNATAKA**

**AND**

**THE STATE OF MAHARASHTRA**

**VOLUME - VI**

**(V O L U M E S I - XII)**

**New Delhi**

**14<sup>th</sup> August 2018**

# **REPORT OF THE MAHADAYI WATER DISPUTES TRIBUNAL**

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# **REPORT OF THE MAHADAYI WATER DISPUTES TRIBUNAL**

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**EVALUATION OF THE ORAL EVIDENCE LED BY THE THREE PARTY-STATES CONTD.....**

**Evaluation of oral evidence of AW-3 Dr. Shamila Monteiro for the State of Goa**

500. Dr. Shamila Monteiro also deposed as a witness on behalf of the State of Goa, on the aspects relating to the adverse consequences, which would ensue in case of the proposed water diversion plans of the States of Karnataka and Maharashtra, being given effect to. Dr. Monteiro has obtained advance academic degrees in the field of fisheries and has undertaken research on life cycle, behavior, population dynamics and fish catching trends on various varieties of fish found in Goa. In her affidavit Dr. Monteiro has emphasized the importance of flow of organic materials from the fresh water of river Mahadayi in the estuaries and coastal regions in the State of Goa. She has extensively deposed as to how the flow of such organic material, minerals and nutrients impact the salinity of water conditions, climatic conditions, terrestrial and soil conditions, availability of phytoplankton and consequently impact, amongst other things, the feeding and breeding patterns of varieties of fish in the estuary coastal regions. According to Dr. Monteiro, in the natural variations in the mixing of fresh water of the river with the saline

water of the Arabian sea in these steroid regions, significantly impacts both the progeny of these fish varieties, and also fishery techniques and the quantum of fishing, which is undertaken by the local population in the State of Goa. According to her, approximately 71,000 kg. of fish is caught by the local fishermen only during the non-monsoon season. This catch goes up to about 1.00 lakh kg. during monsoon season. According to Dr. Monteiro, the abstraction/diversion of water by the State of Karnataka will severely impact the survival of these fish, both for the purpose of maintenance of natural habitats, and also on the livelihood of local consumption of fish by the local population, especially in the villages surrounding these regions. Dr. Monteiro has categorically stated that the consumption of fish by the local population in Goa is higher than the national average, so as to signify the importance and relevance of the fish in daily diet habits of the local population.

501. Few questions were put to the witness by the learned Counsel for the State of Karnataka. The attention of the witness was drawn to page No. 55, paragraph 5.6.4 of Volume-I of the Master Plan of Goa (Annexure 120 of Volume 31), wherein the water requirement for salinity control in the estuary is

mentioned as 158 Mcum (5.58 tmc) and, therefore, it was pointed out to the witness that the estimation made in the Master Plan is on the liberal side, compared to what is calculated by the State of Karnataka in its Worksheet, MARK-KA/17. Having drawn the attention of the witness to the above stated facts and suggestions, it was put to the witness that she should at least accept, what is stated in the Master Plan.

The response of the witness was that the Master Plan, Volume I, GOA, was prepared in the year 1999 and, therefore, the figure mentioned therein did not relate to the salinity required by the aquatic biodiversity, because, perhaps at that point of time, the aquatic biodiversity may not have been considered.

502. Thereafter, Shri Mohan V. Katarki, learned Counsel for the State of Karnataka stated that he had no further questions to ask to this witness in her cross-examination and, as such, he closed his cross-examination.

503. Thereupon, Shri D.M. Nargolkar, learned Counsel for the State of Maharashtra was requested to cross-examine the

witness. Shri Nargolkar, learned Counsel for the State of Maharashtra had put only one suggestion to the witness that her claim that diversion of 2.83 tmc by the State of Maharashtra, outside the Mahadayi basin, which is relatively a small fraction of the total yield of the basin, would change the flow of the river affecting fisheries, biodiversity and aquatic habitat is not ecologically sound and is without any justification and basis and is based on wrong assumption. The witness had denied this whole suggestion.

504. Thereafter, few questions were put to the witness by the Tribunal to elicit better particulars from her. It was put to the witness that whether had she studied the impact of relatively lesser availability of water, during the year or during the cycle of years with less flows. Another question, which was put to the witness, was as to whether she had studied, the impact of relatively higher availability of water, during a year or during a cycle of the years with higher flows. Her answers were that she had collected the statistical data of fish production, as per the CMFRI method and had observed that there is higher production, post a very good rainfall, especially, with respect of Sardine Fishery and Shrimp Fishery.

505. The Tribunal wanted to know, from the witness as to whether she had undertaken or been part of the socio-economic evaluation of various schemes/projects related to utilization of water for various purposes. She was also requested to give her opinion as to what should be the permissible limit for abstraction of water, which is being used and which will be continued to be used as well as utilization is likely to increase in future, to meet the social need.

In her answer, she mentioned that, she has only collected the water requirement for aquatic biodiversity in the Mahadayi Basin. She expressed her opinion by stating that pristine areas such as biodiversity hot spot, etc. in upstream reaches, need to be protected to its natural flow for future generations.

506. The Tribunal finds that the methodology or the data collected pursuant to such methodology has not been assailed/ challenged by the learned Counsel for the State of Karnataka or the State of Maharashtra. The Tribunal, therefore, concludes that the statement, data and the assessment of quantum of water requirement to maintain the fisheries under the present

condition, provided by Dr. Monteiro are reliable and should be taken into account while computing the water requirements of the State of Goa.

**Evaluation of oral evidence of AW-4 Shri Rajendra P. Kerkar for the State of Goa**

507. Shri Rajendra P. Kerkar, AW-4, is examined, as an Expert Witness, on behalf of the State of Goa, on the topic of “Environment, Ecology and Forest”. Shri Kerkar, is presently, working in the awareness of environment, wildlife and forest related issues in the State of Goa and border areas, since more than last 50 years. His works and contribution in the above mentioned fields, are enumerated, in his Affidavit-in-Evidence filed on 13<sup>th</sup> November, 2017. Therefore, having regard to his expertise, the State of Goa had requested Shri Kerkar in April 2013, to depose before the Tribunal as an Expert Witness, on Environment, Ecology and Forest, on behalf of the State of Goa.

508. Shri Kerkar has filed his Affidavit-in-Evidence on 13<sup>th</sup> November, 2017. In the said affidavit Shri Kerkar has highlighted several environmental issues, to show that the Western Ghats

and especially the Mahadayi River Drainage area, is of a highly sensitive region, and any disturbance, by any activity, namely, diversion of the Mahadayi waters, will inevitably destroy, its rich habitat vis-à-vis its ecological balance. He has stated that any abstraction or diversion of the river, which flows through six Sanctuaries, should be prevented, so as to protect these Sanctuaries, and also to maintain the precious ecology.

509. Shri Kerkar has also filed, an Additional Affidavit-in-Evidence before the Tribunal on 17<sup>th</sup> November, 2017. Annexure I, to the said Additional Affidavit-in-Evidence, contains a Table prepared by him, which shows the impact that would take place, on account, of the proposed diversions/ abstraction of water, on the Wildlife Sanctuaries. He has stated that, the coastal economy system is a fragile eco-system generally, and it, being an integral part of the Western Ghats, any diversion of water, would increase the salinity, thereby adversely affecting, the coastal eco-system, which is a fragile eco-system. The witness states that, requirement of e-flow, in the wildlife sanctuaries would be much higher, and that the water coming into a wildlife sanctuary, cannot be diverted at all, in view of the complete bar contained in section 29 of the Wildlife (Protection) Act, 1972.



510. The witness was cross-examined by Shri Mohan V. Katarki, learned Counsel for the State of Karnataka. In response to question No.5, Shri Kerkar denied the suggestion that when one applies water to land, more than its requirement, it becomes saline and water logged, and when the land is deprived of the minimum necessary requirement of water, it becomes a degraded or barren land. According to him, in case, excess water is supplied to some lands, then in the absence of forest cover, the land would become saline.

511. The testimony of Shri Kerkar indicates that he had visited the areas of Malaprabha basin in Karnataka and according to him, the adverse situation, namely scarcity of water is, due to mismanagement of available water resources, and degradation of catchment area of the river Malaprabha in the State of Karnataka, through the activities of deforestation. This becomes evident, if one refers to his answer to question No.8, put to him, on behalf of the State of Karnataka. The witness has further established the effect of scarcity of water for the people residing within Malaprabha basin is, because of opting for water guzzling cash crop like sugarcane. In answer to question No. 13 put to

him, Shri Kerkar has explained the e-flow in monsoon and non-monsoon seasons, based on the software, developed by the International Water Management Institute, as according to him, he has found the methodology used by the said Institute, more reliable. In answer to question No. 14, Shri Kerkar has vehemently asserted that the Mean Annual Flow, calculated by him, is completely reliable. From answer to question No. 15 put to him, it becomes evident that Shri Kerkar has used, the yield study done by Shri Chetan Pandit and the Water Balance Analysis done by Shri S.T. Nadkarni. It is also evident that, for operating software, he has taken assistance of the officials of the Water Resources Department of the State of Goa. In answer to question No.16, Shri Kerkar has firmly, stated that, he has not taken into consideration, the CWC (2003) Report, as according to him, the figures mentioned in the said Report are unrealistic.

512. Shri Kerkar has asserted that the e-flow, is not less than 25.4 tmc for 10 Sub-Basins in Mahadayi. In this context, a suggestion was made on behalf of the State of Karnataka that even if, it is assumed that 25.4 tmc is reserved towards requirement of e-flow, even then there would not be any injury to environment and ecology in Goa, because if the total available

water, estimated by the CWC in its Report is considered, there would be sufficient water, to accommodate the total planned diversion of Karnataka of 14.98 tmc, out of 75% dependable flow. The Tribunal notices that Shri Kelkar has vehemently denied this suggestion and stated that Mahadayi basin is water deficient.

513. In response to question No. 19, Shri Kerkar has denied the suggestion made on behalf of the State of Karnataka, that Karnataka is planning diversion from Kotni, out of surplus flow and has firmly stated that so called surplus flow at Kotni will hardly, be available. In response to question No. 20, the witness has stated that 75% dependable yield as computed by the State of Karnataka is unrealistic, whereas in response to question No.21, the witness has asserted that DHI (India) Water and Environment Pvt. Ltd. is a well known and renowned developer, of highly Sensitive and Precise Engineering Software MIKE series, for simulation of engineering data and that the Report of DHI is reliable. In question No.22, Shri Kerkar's expertise and competence to analyse and support or defend the study conducted by DHI (India) Water and Environment Pvt. Ltd. was questioned, since he lacks the qualification in Science. However, Shri Kerkar has firmly answered that, while he does not have the

basic qualification of a degree in Science, he does have the ability and interest to understand the subject matter and interact with the qualified persons.

514. Further, Shri Kerkar has clarified, while answering questions put to him, on behalf of the State of Karnataka that, in the context of the unique eco-system, like Myristca Swamps, there are no guidelines or norms duly approved, by the competent authority. He has suggested that in cases where the non-monsoon flow is, to the tune of maximum of 2% of the monsoon yield, the environmental flow should be 100%. The witness has vehemently stated that these are red-listed and relics of pre-historic vegetation, when human beings were not there on the earth. The witness has further emphasized that there is a need to identify such areas, in various parts of India and provide a mechanism of protection and conservation.

515. After the cross-examination of the witness on behalf of the State of Karnataka, was over, a question was put to the witness, by the learned Counsel for the State of Maharashtra. In answer to question No.1, put to the witness, on behalf of the State of Maharashtra, the witness has strongly denied the

suggestion that the diversion of 2.83 tmc, by the State of Maharashtra, outside the Mahadayi basin would not result in irreversible damage to the environment, destruction of the rich habitat and disruption of its ecological balance.

516.        Thereafter certain questions were put to the witness by the Tribunal.

517.        On being questioned about his stand, on diversion channel constructed by the State of Karnataka at Kankumbi, Shri Kerkar has reiterated that the said construction has interrupted, the downstream flow of river Kalasa and he has been witnessing, the death of the pristine tributary, going in the direction of the Madei Wildlife Sanctuary in Goa, right from, inception of Kalasa canal, since 2006. The witness has further mentioned that during the last two seasons, the perennially flowing Surla waterfall dries up by the end of the month of May and the base flow at the swamps has dwindled, to an alarming level.

518.        Further, the Tribunal notices that contrary to the testimony of Shri Kerkar, the Master Plan of 1999 acknowledges the projects, within the State of Goa, that would utilize up to 94.4

tmc of water from Mahadayi basin, though according to the State of Karnataka the present utilization of the State of Goa is 9.395 tmc of the Mahadayi water. The Tribunal notices that the storage facilities, which may be created, in respect of water available, would have an environmental impact, which is balanced against the developmental needs. Further the testimony of Shri Kerkar shows that there are more than 200 different approaches to estimate the e-flow and on being asked as to why he had used a particular software to calculate the e-flow, he could not give specific reasons for preferring the software that he had used, but simply stated that the methodology used by the International Water Management Institute is more reliable, without assigning any reason as to why and how the said methodology is more reliable compared to other methodologies. Further Shri Kerkar has stated that he has 'Biophilic Feelings' (para 4). Thus the Tribunal finds that his evidence lacks the objectivity and has no scientific basis. In fact, in response to question No.23, the reply given by the witness, indicates that, Goa plans to utilize 72.4 tmc for irrigation, and has stated that he would always make the attempts to understand the need of the hour and if the plans are against the wildlife and ecology, he would always oppose the same as he had opposed in the past and shall continue to oppose

the same in future also. Thus impact of proposed utilization of 72.4 tmc, by Goa, on wildlife and ecology is not examined by this witness. Further the Tribunal notices that the Tribunal had brought to the notice of the witness, the observations of the Research Paper 107 of IWMI, wherein, it is, inter alia, stated that the data which have been acquired and used were, primarily from publicly available sources, and data are outdated and no conclusions on the accuracy or even origin of the data could be made. The Tribunal notices that the witness could not offer any cogent reasons given in Research Paper 107 of IWMI.

519. In view of the above inconsistencies and deficiencies, which are found by the Tribunal, in the evidence adduced by Shri Rajendra P. Kerkar, the Tribunal does not consider it to be prudent to rely upon the same.

**Evaluation of oral evidence of AW-5 Shri Subrai T. Nadkarni for the State of Goa**

520. Shri Subrai T. Nadkarni, (AW5), is an expert witness, examined on behalf of the State of Goa on “Hydrology”. Shri Nadkarni is holding the post of Chief Engineer, Water Resources Department, Government of Goa. Therefore, Shri Nadkarni is

examined before the Tribunal as an expert witness on Hydrology and other related aspects, especially to prove Goa's needs and projects.

521. Shri Nadkarni has filed his Affidavit-in-Evidence dated 14.11.2007 (Volume 208). Along with his Affidavit, Shri Nadkarni has relied upon the following documents:-

- i. CV of Shri Nadkarni, produced at Annexure I,
- ii. Water Demand and Availability for Mahadayi Basin and its Sub Basins, which is a report prepared by Shri Nadkarni, and is produced at Annexure II.

522. Shri Nadkarni has also produced a report of the Western Ghats Ecology Expert Panel, submitted, to the Ministry of Environment and Forests, Government of India.

523. The witness has further produced "A REPORT OF THE HIGH LEVEL WORKING GROUP ON WESTERN GHATS", issued by the Ministry of Environment and Forest, Government of India, on 15.04.2013.



524. From his testimony, it is evident that, Shri S.T. Nadkarni has worked out the water availability, in the sub- basins in respect of utilizable catchment area, in the Mahadayi Basin. The attempt of the study, undertaken by Shri Nadkarni, is to emphasize that the Mahadayi Basin, is water deficient basin, taking into consideration, the demands of the State of Goa. The table, which has been worked out by Shri Nadkarni, is to be found on page 15 of his evidence and the same reads as under:

| Basin      | Availability<br>in Mcum (75%<br>dependable) | Demand in Mcum |                     |
|------------|---|----------------|---------------------|
|            |   | Recommended    | Minimum<br>required |
| Ragada     | 465.40                                      | 338.69         | 254.59              |
| Khandepar  | 803.10                                      | 835.29         | 689.59              |
| Kotrachi   | 219.30                                      | 273.28         | 229.38              |
| Valvanti   | 214.90                                      | 183.28         | 144.98              |
| Bicholim   | 210.20                                      | 159.06         | 121.66              |
| Asnora     | 81.70                                       | 130.36         | 114.96              |
| Surla      | 259.90                                      | 204.81         | 151.31              |
| Siquerim   | -   | 19.16          | 19.16               |
| Kudnem     | 77.00                                       | 167.47         | 153.47              |
| Madei stem | 951.80                                      | 1769.02        | 1592.42             |
| Total      | 3283.30                                     | 4080.42        | 3471.52             |

525. From the above mentioned table, it becomes evident that Shri Nadkarni has concluded that the sub-basin wise, water availability, is 115.94 tmc (3283.3 Mcum) and the sub-basin wise demand, which is recommended, is 144.08 tmc (4080.42 Mcum). The table further indicates that, according to Shri Nadkarni, the minimum water requirements are 122.58 tmc (3471.52 Mcum). Further, in his affidavit dated 14.11.2017 (Volume 208), Shri Nadkarni, has worked out following:

- (i) Population projections in paragraph 21 on page 43;
- (ii) Domestic water requirement in paragraph 22 on page 43;
- (iii) Tourist arrivals and stay in paragraph 24 on pages 44-45;
- (iv) Irrigation requirements in para 23 on pages 43-44;
- (v) Industrial requirement in paragraph 25 on page 45;
- (vi) Water requirement for livestock in para 27 on page 46;
- (vii) Sub-basin wise water availability in tables 1 to 8 on pages 47 to 62; and
- (viii) Environmental Flow requirements, as have been estimated by Shri Rajendra P. Kerkar, AW4, on page 41 of his Affidavit dated 11.11.2017 (Volume 211).

526. Shri Nadkarni has also worked out the water requirements in table 10, 11 and 12 and has calculated the water balances in Table 13 of his Affidavit dated 14.11.2017. The same is extracted below:-

(in Mcum)

| Sub-basin     | Human Needs                                |  |  |   | Environment |                                      |
|---------------|--|--|--|---|-------------|--------------------------------------|
|               | Domestic<br>(from Table 12<br>of Vol. 208) | Live<br>stock<br>(from<br>Table 12<br>of Vol. 208) | Irrigation<br>(from<br>Table 11 of Vol. 208) | Total<br>human<br>needs (Sum<br>of Col.2+<br>Col.3+<br>Col.4) | Recommended | Minimum<br>(Table 12<br>of Vol. 208) |
| 1             | 2  | 3  | 4  | 5   | 6           | 7                                    |
| Ragada        | 0.477                                      | 0.07   | 142.21                                       | 142.757   | 195.93      | 111.83                               |
| Khandepar     | 3.962                                      | 0.59   | 491.54                                       | 496.092   | 339.20      | 193.50                               |
| Kotrachi      | 0.616                                      | 0.09   | 170.32                                       | 171.026   | 102.25      | 58.35                                |
| Valvanti      | 0.912                                      | 0.14   | 93.15  | 94.202  | 89.08       | 50.78                                |
| Bicholim      | 1.413                                      | 0.21   | 70.34  | 71.963  | 87.10       | 49.70                                |
| Assnora       | 1.212                                      | 0.18   | 93.15  | 94.542  | 35.82       | 20.42                                |
| Surla         | 0.325                                      | 0.05   | 79.92  | 80.295  | 124.51      | 71.01                                |
| Siquerim      | 2.554                                      | 0.38   | 16.23  | 19.164  | 0.00        | 0.00                                 |
| Kudnem        | 1.980                                      | 0.30   | 132.44                                       | 134.72  | 32.75       | 18.75                                |
| Madei<br>Stem | 22.521                                     | 3.38   | 1162.43                                      | 1188.33   | 411.20      | 234.60                               |
| Total         | 35.97                                      | 5.39   | 2451.73                                      | 2662.58*  | 1417.84     | 808.94                               |

(\*Total human needs includes 50 Mcum of water for Forest Management, 23.07 Mcum of water for Tourism and 96.42 Mcum of water for Industries)

527. Shri Nadkarni was cross-examined by Shri Mohan V. Katarki, learned Counsel for the State of Karnataka.

528. From the answer given by the witness to question No. 1, put on behalf of the State of Karnataka, it is evident that the witness has utilized the processed data of Shri Chetan Pandit and used his regression equation to arrive at the 75% dependability of yield in the Sub-basin.

529. Further, in his answer to question No. 1, he has declined the suggestion that Shri Chetan Pandit's regression analysis is misleading and cannot be accepted and that he has failed to carry out the consistency check on the rainfall data.

530. The witness has stated that Surla River flows through the Mahadayi Wildlife Sanctuary and that any diversion of water, flowing into or outside, is not permissible as per Section 29 of the Wild Life (Protection) Act, 1972.

531. In answer to question No. 9, the witness has mentioned that it does not matter whether a rain-gauge station lies in or outside a basin, but the only relevancy is that it should have influence on the basin.

532. In answer to question No. 13, the witness has stated that the area of 509 sq.km., is the area, which excludes the saline reaches of Mahadayi river and its tributaries and even small rivulets falling directly into the sea/ saline reaches.

533. In his reply to question No. 16, the witness has stated that he has only considered the regression equation, generated by Shri Chetan Pandit to arrive at 75% dependable availability of sub-basin wise.

534. In question No. 16, the attention of the witness was drawn to the alternate study Report on Sonal-I Hydro-Electric Project [Volume 103(ii), page 64], filed by the State of Goa and a suggestion was put to the witness that barring one or two years, the correlation is quite good and that there is consistency between runoff and rainfall at Ganjim site. In answer thereto, the

witness has stated that he does not subscribe to the observations made by NHPC.

535. In question No. 19, the witness was confronted with a list, wherein projects contemplated and proposed by the State of Goa, in the area of 509 sq.km. are mentioned. Having drawn the attention of the witness to the said list, a question was put to the witness to the effect that if the water generated in the zone of 509 sq.km. is not utilizable and cannot be treated to be a part of yield, then how the State of Goa has planned these projects. The answer given was that many of the projects listed therein, either do not lie in the 509 sq.km., but some minor schemes like very small bandharas, ponds are included in the said 509 sq.km. zone and that the small quantum of water available is mainly used for protective irrigation. The witness has further stated that the projects listed at serial Nos. 1, 2, 3, 5 and 7 are lift irrigation schemes and all the water supply schemes, do not lie within the 509 sq.km. zone.

536. From the assessment of the evidence, tendered by Shri Nadkarni, it is evident that, in answer to question No. 1, put to him by the learned Counsel for the State of Karnataka, he has

analyzed CWC Study (2003), and also the Study conducted by Shri Chetan Pandit and his observations, on the same, are reflected in his study (Annexure II), in paragraph 9 on pages 31-32 and in paragraph 12 thereof on pages 39-42. According to him, what he has done is that, he has utilized the processed data of Shri Chetan Pandit and has used, his regression equation, to arrive at 75% dependability of the yield in sub-basin. It was put to the witness that the total utilization planned by the States of Karnataka and Goa is 5.82 tmc in Surla Sub-basin and, therefore, even after considering his calculation of Surla Sub-Basin, as 9.20 tmc and even after considering the utilization of 5.82 tmc, planned by both the States, there would be, still a surplus of 3.38 tmc for meeting the needs of environment concerns and, therefore, there would not be any damage or adverse effect on the ecology and environment in the Surla valley, on account of diversion, planned by the State of Karnataka. The response of the witness was that what is being compared is only the irrigation requirement in Table 11, which is on page 64 and he reiterated that, Surla River, flows through the Mahadayi Wild Life Sanctuary and any diversion of water, flowing into or outside, is not permissible in view of Section 29 of the Wild Life (Protection) Act, 1972. According to him, though some surplus water looks

apparent, the whole Mahadayi system has to be looked into as a whole, before deciding about any diversion. The Tribunal notices that while dealing with the question of diversion, the witness speaks of whole Mahadayi system, whereas for his assessment of the yield, the witness has divided Mahadayi Basin into sub-basins, which is a contradiction in itself.

537. Before putting question No. 13, the witness was shown extent of saline area, in the State of Goa, as indicated in the National Wetland Atlas, prepared by the Space Application Centre, Indian Space Research Organization, Ahmedabad. It was put to the witness that the wetland in Goa is not more than 8,486 hectares and as compared to geographical area of 3,70,200 hectares, as indicated in MARK-KA/22, it forms only 2.29% and on this basis, the saline area, comes to only 36.18 sq.km. Having brought the relevant facts to the notice of the witness, it was put to the witness that Goa is unjustified in claiming exclusion of 509 sq.km. (50,900 hectares), from consideration, in the estimation of the total yield of Mahadayi basin and response of the witness was sought, by the learned counsel for the State of Karnataka.



In answer, the witness has stated that the area of 509 sq.km. is absolutely justified to be deducted from consideration, in the estimation of the total yield of Mahadayi basin. The witness has further stated that he had extensively moved in basin, especially in the estuarine region and the area of 509 sq.km. is the area which excludes the saline reaches of Mahadayi river and its tributaries and even small rivulets falling directly into the sea. The witness further has mentioned that the Atlas, MARK-KA/21, is regarding the wetlands, identified by the National Wetland Atlas and, in no way, it delineates, the saline reaches, in the State of Goa and especially in the Mahadayi basin.

538. In question No. 15, it was pointed out to the witness that the water utilization planned by Goa, in the Master Plan, is 2050 Mcum (72.4 tmc), but the DPRs, filed by the Goa, are only in respect of 62 projects, for utilization of 29.72 tmc, as shown in MARK-KA/23. Therefore, it was put to the witness that by failing to file DPRs, in respect of 42.68 tmc, the Goa has abandoned its claim to that extent and the response of the witness was sought regarding this aspect of the matter.

In answer, the witness mentions that the demand of Goa, go well, beyond the DPRs of 61 projects envisaged in the Master Plan. However, the witness could not give any details to demonstrate that the demands of the State of Goa, go well beyond the DPRs of 61 projects. As a matter of fact, the witness, in reply to question No. 6, put by the Tribunal, has stated that “the State of Goa intends to meet the demand for major uses through the 61 projects identified by Panel of Experts”. He further stated that in case of some of the demands, it is not possible to prepare the DPRs, such as environment demands, tourism demands etc. and that attempts are being made to identify more projects, especially like abandoned mining pits, construction of bandharas, etc. for fulfilling the demands.

539. In answer to question No. 16, the witness has stated that he had only considered the regression equation, generated by Shri Chetan Pandit, to arrive at the 75% dependable availability sub-basin wise, adopting the processed rainfall data.

540. In answer to question 19, the witness has mentioned that he has gone through the list of projects, completed and also proposed, by the State of Goa in the area of 509 sq.km., which

are listed in the document MARK-KA/24,, which was handed over to him, and he has stated that many of the projects listed therein, either do not lie in the 509 sq.km. area and some minor schemes like very small bandharas, ponds are included in the said 509 sq.km. zone. The witness has further stated that the small quantum of water available, is mainly used, for protective irrigation. The witness has further added that, the projects listed at Sl. No. 1, 2, 3, 5 and 7, are lift irrigation schemes. The Tribunal notices that though the witness has claimed that some minor schemes like very small bandharas, ponds etc. are included in the said 509 sq.km. zone, the witness has failed to bring to the notice of the Tribunal, the particulars, such as, storage capacity of bandharas, ponds etc. and in which manner the so called small quantum of water available, is used for protective irrigation. On the basis of information, provided by the witness, in answer to question No. 19, the exclusion of 509 sq.km. area does not stand justified at all.

541. After the cross-examination by Shri Katarki was over, certain questions were put to the witness by Shri D.M. Nargolkar, the learned Counsel for the State of Maharashtra. After cross-

examination, on behalf of the State of Maharashtra, was over, certain questions were put to the witness by the Tribunal.

542. Some questions were also put to the witness by the Tribunal to elicit better information. In question No. 1 it was put to the witness that, has any scientific study been undertaken and/or completed, by the Government of Goa, to examine the impact of diversion of water, outside the basin and/or extraction of water within the basin by co-basin States including the State of Goa, for meeting the demand of water, for various purposes, such as drinking water, irrigation, power generation, industrial needs, navigation etc. The Tribunal notices that answer of general character is given by the witness and he has failed to point out that any scientific study was undertaken and/or completed, by the State of Goa to examine the impact of diversion of water, outside the basin, and/or extraction of water, within the basin, by co-basin States.

543. In question No. 3, put by the Tribunal, the witness was asked as to why he had undertaken sub-basin wise assessment of water availability at 75% dependability to arrive at a new yield figure for the Mahadayi basin. The answer of the witness was

that he had carried out the arithmetic by adding up the 75% dependable figure to find overall excess/deficiency. He has further stated that for the whole basin, the overall 75% dependability, will be the effect of 13 Stations, as evaluated by Shri Chetan Pandit, and he stands by the yield determined by Shri Chetan Pandit, at 113.5 tmc, for the whole basin. The witness has further mentioned that he had undertaken, sub-basin wise study, as he wanted to evaluate as to what would be the effect of availability and demands in each sub-basin. The witness could not furnish any reason why he wanted to evaluate as to what would be the effect of availability and demands, in each sub-basin. The Tribunal notices that sub-basin study has many drawbacks and is likely to mislead one, who reads the same.

544. In question No. 4, the attention of the witness was drawn to Table mentioned in paragraph 30, which is on pages 14 and 15, and to Table No. 13, which is on page 65 of his Affidavit dated 14.11.2017 and, thereafter a question was put to the witness as to why he had computed the demand of water for various purposes for the State of Goa only. It was also brought to the notice of the witness that, for proper appreciation of the water balance, of different sub-basins of Mahadayi basin, it is

essential to assess the water availability for each of the sub-basins, after considering the total area of the sub-basin, as also the complete demand of water, for each of the sub-basins, irrespective of the State boundaries. Having drawn the attention of the witness to the above mentioned facts, a question was put to him as to why he did not choose to consider the total area of the sub-basin, falling in all the co-basin States. It was also pointed out to him that it was noticed by the Tribunal that the overall demand for water is more than the availability of water and that all the identified demands cannot be fully met.

The answer of the witness was that his study was, basically to study, the demands of each sub-basin. The witness has mentioned that the in-basin demands of Karnataka were 1.857 tmc and that of Maharashtra were 3.53 tmc, as envisaged in the respective Statements of Claim. He has further stated that he had tried to find out sub-basin wise details, but he could not find the same in the documents and, therefore, he had restricted himself, to the in-basin demands, of the State of Goa itself.

545. The Tribunal finds that the approach adopted by the witness, relating to yield, on the basis of sub-basin, is totally incomplete and lopsided. Further, the reason given by the witness, for not computing sub-basin wise demand of water, for the area lying in the States of Karnataka and Maharashtra, does not represent a correct picture of the water balance of the sub-basin. The non-consideration of the total area of the sub-basin, falling in all the co-basin States, for assessment of water availability, as well as demands of water, for various purposes, makes his exercise futile and is of no assistance to the Tribunal and does not project the correct picture of the water balances of the sub-basins. The Tribunal further notices that the demand for various sub-basins, as mentioned by the witness, does not indicate the names of identified projects/ schemes for meeting the identified demands, as was done by the Panel of Experts, constituted by the State of Goa. The Tribunal is of the opinion that the identification of projects/ schemes, is necessary because, only then, it will be possible to assess the usable water, out of the available water. The Tribunal also notices that no reasonable explanation could be given by the witness as to why assessment of sub-basin wise water availability and water demands, instead of assessment of project-wise water availability and water

demand was considered necessary. The Tribunal also notices that restricting the planning to sub-basin will put severe restrictions in planning, for optimal utilization of water resources of Mahadayi basin. No reasons are given by the witness at all as to how and why restricting the planning to sub-basin will not put severe restriction in planning, and for optimal utilization of water resources, in Mahadayi basin. As admitted by the witness himself, while indicating water demands of Goa in Mahadayi basin, in respect of domestic supply, the live stocks, tourism, industries, irrigation, forest management, and environment in the territory of Goa, the witness has not mentioned the water requirements of Goa for Hydropower development at all.

546. In answer to question No. 13, the witness has mentioned that the Government of Goa has not carried out any scientific study relating to sea level increase and increased salinity ingress in coastal areas of Mahadayi river.

547. The witness has, further, in answer to question No. 14, admitted that in-depth scientific evaluation of prioritization was not undertaken by him, for various uses of water, with due consideration to social, economical and environmental aspects.



548. Further, in answer to question No. 16, the witness has stated that Government of Goa has not examined and/or undertaken scientific studies about the effect of diversion of water by States of Karnataka and Maharashtra, on the agriculture of Mahadayi River Basin in the State of Goa.

549. The witness has also admitted, in answer to question No. 17 that the State of Goa has not commissioned any scientific studies, regarding the impact of diversion of water by the States of Karnataka and Maharashtra, on the ground of water flow pattern.

550. The Tribunal finds that the testimony of witness Shri Nadkarni is full of inconsistencies and does not provide necessary information, which would be important from the view point of determining the issues raised by the Tribunal. The witness has admitted that at least six proposed projects of Goa fall within the Madei Wild Life Sanctuary but has failed to inform the Tribunal as to what is the nature of those projects and what quantity of water would be needed for those projects and whether the Madei Wild Life Sanctuary would be adversely affected or not.

The assessment of yield of Mahadayi basin, on the basis of sub-basin yield and that too by using the regression equation developed by Shri Pandit for the catchment area, upto Ganjim, is not recognized in any approved literature on Hydrology. On overall view of the matter, the Tribunal finds that the testimony of Shri Nadkarni is of little assistance to the Tribunal in adjudicating the disputes, which are framed and, therefore, the Tribunal finds that it is not prudent to act upon the testimony of Shri Nadkarni.

**Evaluation of oral evidence of RW-3 Shri S.M. Jamdar for the State of Karnataka**

551. Shri S.M. Jamdar, RW3, witness for the State of Karnataka, has deposed before the Tribunal, with respect to the topic 'Drought Prone Areas and Hydro Power Projects'. From his testimony it is evident that he is a retired Indian Administrative Service Officer, allotted to the Karnataka Cadre and in Karnataka, he held the post of Principal Secretary to the Government of Karnataka, in the Revenue Department from 2004 to 2008 and in the Home Department in the year 2012.

552. It is further evident from his affidavit that he had occupied the post of the Managing Director of the Karnataka Power Corporation Ltd. and, therefore, he was requested by the Government of Karnataka to depose before the Tribunal, in this Inter-State Water Dispute with regard to Mahadayi River.

553. Shri Jamdar has filed his Affidavit-in-Evidence dated 09.11.2017, on behalf of the State of Karnataka. In his Affidavit-in-Evidence, he has stated that he is deposing on three questions, namely:-

- (1) Whether, the Taluks of Bailhongal, Ramdurg and Saundatti of Belagavi District, Badami Taluk of Bagalkot District and Ron Taluk of Gadag District are drought prone areas?

He has stated that Bailahongal, Ramdurg, Saundatti and Ron are drought prone areas and one Taluk of Badami is a desert area. The witness has relied on a chart, of various Taluks, declared as drought affected, by the Government of Karnataka, in the Malaprabha Basin.

- (2) Whether, by transfer of 5.527 tmc of Mahadayi water, more power can be generated on the existing infrastructure of Kali Hydro Electric Project.

Shri Jamdar states that at present in Karnataka, there is severe shortage of power availability and that this shortage has been mounting steadily.

- (3) Whether, the Mahadayi Hydro-Power Project (Kotni HEP), which is non-consumptive, is feasible for augmenting the power, to meet the peak demand in Karnataka.

554. Along with his affidavit dated 09.11.2017, Shri Jamdar has also relied on following documents:

- (a) A Chart of rainfall data prepared by the Karnataka State Natural Disaster Management Centre, Bengaluru, showing, the percentage of departure, from normal, in South West Monsoon available in Malaprabha Basin.
- (b) A chart of various Taluks stated to be declared as drought affected, by the Government of Karnataka, in Malaprabha Basin, from 2001 to 2016, and stated to

have been prepared by the Karnataka State Natural Disaster Management Centre, Bengaluru.

555. The witness was cross-examined by Shri Dattaprasad Lawande, the learned Advocate General for the State of Goa with regard to, inter alia, his affidavit and documents relied upon by him. The witness was, further put, certain questions by the Tribunal to elicit the best information from the Witness.

556. On assessment of the evidence of Shri Jamdar, the Tribunal finds that, Shri Jamdar presents a completely different picture with regard to drought prone areas and drought affected areas, in his cross-examination. The Tribunal also notices that Shri Jamdar has neither examined nor specified, the reason for shortage of power availability and why faulty planning and mismanagement could not be one of the reasons, for the same. The Tribunal further finds that the witness has also neither examined nor shown to the Tribunal whether there is any other source that can be tapped or utilized for augmenting the power needs of Karnataka nor he has shown how and why only trans-basin diversion, can suffice such a need.

557. On perusal of the cross-examination, the Tribunal notices several inconsistencies and errors, in the answers given by the witness, in his cross-examination. The same are in stark contrast to the case put forth by the State of Karnataka and presents a completely different picture than that depicted by the State of Karnataka, before the Tribunal. The Tribunal enumerates the same below:

- (a) In the Affidavit-in-Evidence of Shri Jamdar, as well as in response to question No. 1, asked by the Tribunal to Shri Jamdar, he has categorically stated that the proposed diversion from the Mahadayi Basin, to the Malaprabha Basin, is for the purpose of overcoming shortfall in irrigation to the drought prone area and not for drinking water purposes as claimed by the State of Karnataka.
- (b) Shri Jamdar was specifically asked question No. 12 by the State of Goa, about the apparent contradiction in the case put forth, by the State of Karnataka. The contradiction is that, the State of Karnataka has claimed a quantum of 7.56 tmc, as drinking water requirement for Hubli-Dharwad twin city, but, in the revised DPR of Malaprabha Reservoir Project [Volume

33(B)], it is said that the provision for drinking and industrial purpose, when taken together, is only 0.216 tmc. In response to this, Shri Jamdar admitted that he had not examined the drinking water requirements of the twin city. To say the least, this is something which is shocking the conscience of the Tribunal.

- (c) In response to question No. 2, asked by the Tribunal, Shri Jamdar has admitted that the diversion of Kotni Dam water, was not intended for drinking water supply. The Tribunal finds that, Kotni Dam Project is basically for power generation and protective irrigation in the drought prone areas, as claimed by the State of Karnataka. A small, but very important question that arises here, is that, if the Kotni Dam is surplus in nature and not deficient, then why is the water not used for drinking water purpose in the drought prone area and is, instead being used, for the purpose of power generation and protective irrigation, in complete disregard of National Water Policy of 2012, which in no uncertain terms mandates that drinking water is the first priority amongst all the priorities.

- (d) Further, the Tribunal finds that in response to question No. 2 itself, Shri Jamdar has stated that he has referred to the definition of “drought”, given in National Irrigation Commission, 1972, adopted by the Task Force, appointed by the Government of India, Ministry of Agriculture, under the Chairmanship of Dr. Hanumantha Rao, to examine the areas in the country, prone to drought and desertification. The Tribunal notices that the Irrigation Commission has defined an area as drought prone, if it fulfills three conditions viz. rainfall of less than 1000 mm; or less than 750 mm over a period of 20% or more of the given time series; and lastly less than 30% irrigated area. Using this definition, the Irrigation Commission has identified 12 districts in the country as drought prone and some Taluks thereunder. Under this classification, the former Bijapur District, which is now bifurcated into Bagalkot and Bijapur District, was included and Badami Taluk, which is now in Bagalkot District was defined as a drought prone. This District and Taluk, are the part of the Malaprabha command area. The Tribunal finds that in the light of above



mentioned answers, it is evident that the State of Karnataka was aware of the Malaprabha being a drought prone area ever since the year 1972 and yet, it has implemented faulty planning and allowed water guzzling crops such as sugarcane to be cultivated, which definitely worsens the situation. It is, thus very clear that the so called drought situation in the Malaprabha Basin is the creation of entirely faulty planning and mismanagement of the whole situation by the State of Karnataka .

- (e) The evidence tendered by Shri Jamdar, on behalf of the State of Karnataka , on the basis of his Affidavit-in-Evidence (Volume 206), dated 14.11.2017 and his answers in the cross-examination are ridden with inconsistencies and create a lot of doubt in Tribunal's mind. This is because the picture projected by the witness in its cross-examination, is not at all in consonance with the claims and averments made by the State of Karnataka in its pleadings. The Tribunal firmly finds that Shri Jamdar, as a witness for the State of Karnataka, has failed to establish the case of the State of Karnataka, and has rather contradicted and

to a certain extent, disproved the case of State of Karnataka

558. Thus, the Tribunal finds that the evidence given by Shri Jamdar, witness for the State of Karnataka , cannot be relied upon at all.

**Evaluation of oral evidence of RW-4 Shri G.M. Madegowda for the State of Karnataka**

559. Shri G.M. Madegowda (RW-4), witness for the State of Karnataka has deposed before the Tribunal on behalf of the State of Karnataka. His testimony shows that he had, inter alia, occupied the post of Chief Engineer, in the Karnataka Urban Water Supply & Drainage Board at Bangaluru and Mysuru in Karnataka from April 2016 to December 2016. His testimony further shows that he was working with the Karnataka Urban Water Supply & Drainage Board since the year 1983 and has retired since. In his Affidavit-in-Evidence dated 10.11.2017, Shri Madegowda has stated that the Water Resources Department of the State of Karnataka had requested him to depose before the Tribunal as an Expert Witness on the “Report on the Drinking

Water Demand of Hubli-Dharwad and en route Villages, etc. from Malaprabha Reservoir” and Water Supply Requirements.

560. Shri G.M. Madegowda filed his Affidavit-in-Evidence dated 10.11.2017 before the Tribunal. He has prepared a “Report on the Drinking Water Demand of Hubli-Dharwad, and en route Villages etc. from the Malaprabha Reservoir”. He states that the said Report was prepared under his authority as the Chief Engineer, North Zone, Dharwad. In conclusion to the said Report, Shri Madegowda has submitted that Hubli-Dharwad and en route villages and towns etc., require about 7.56 tmc of water by the end of 2044 AD.

561. Along with his affidavit dated 09.11.2017, Shri Madegowda has also relied upon, the following documents:-

- (a) Annexure-1 to the Affidavit:- Report of Energy Audit conducted and reported by Tata Energy Research Institute (TERI), 2002, under Municipal Energy Efficiency Outreach Program, Hubli-Dharwad.

- (b) Annexure-2 to the Affidavit:- Report from Karnataka Urban Water and Sanitation Sector Improvement Project of May, 2003.
- (c) Annexure-3 to the Affidavit:- List prepared by Chief Engineer, K.U.W.S.&D. Board showing various measures undertaken for improvements to bulk water supply and distribution of Hubli-Dharwad etc.
- (d) Annexure-5 to the Affidavit:- Communication dated 12.08.2015 written by the Chief Engineer (North), Karnataka Urban Water Supply & Drainage Board to the Commissioner of Police, Hubli-Dharwad Twin city, Navanagar, Hubballi.
- (e) Annexure-6 to the Affidavit:- Chart, prepared by Chief Engineer, K.U.W.S.&D. Board, Dharwad, indicating the Population Projection by Geometric Projection method.

562. This witness was cross-examined by Shri Dattaprasad Lawande, the learned Advocate General for the State of Goa, with regard to, inter alia, his Affidavit and the documents relied

upon by him. Certain questions were also put by the Tribunal to the witness to elicit the best information.

563. As noticed earlier, Shri Madegowda has submitted that Hubli-Dharwad and en route villages and towns etc. require about 7.56 tmc of water by the end of 2044 AD. This statement made by the witness completely destroys the case put forth by the State of Karnataka at Para 5(i)(e) on page 8 of the letter of complaints dated 22.06.2010 that the need for 7.56 tmc to meet the urgent necessity of drinking water and also claimed as urgent and imminent in the interim application, which was filed for seeking permission of the Tribunal to divert 7 tmc of water from Mahadayi Basin to Malaprabha Basin.

564. The inconsistencies, which are apparent from the answers given in cross-examination by Shri Madegowda, are identified by the Tribunal and they are as under:

- (a) The State of Goa questioned Shri Madegowda regarding using the Neerasagar Reservoir as a source of water and tried to know from him as to whether the storage capacity for the said Reservoir was over

estimated by the State of Karnataka. Shri Madegowda did not deny the suggestion included in the question to the effect that the storage capacity for using the Neerasagar Reservoir as a source of water was over estimated by the State of Karnataka, and, instead gave a very evasive answer, which the Tribunal thinks, did not provide, a sufficient explanation relating to the subject matter of the question asked, at all. In fact, the Tribunal expected that the witness must be knowing, the basic fact mentioned in the question, namely the storage capacity, for using the Neerasagar Reservoir, as a source of water, was over estimated by the State of Karnataka, because since April, 2016, he was discharging duties as Chief Engineer, North Zone, which also includes Hubli-Dharwad twin city.

- (b) Shri Madegowda was then questioned about the mismanagement of water in the Hubli-Dharwad area, of which he was the Chief Engineer. The same has been highlighted in the Final Report dated May 2003, titled as "Karnataka Urban Water and Sanitation Sector Improvement Project Demonstration Projects

and Priority Investments”, which is Annexure-2 to his Affidavit-in-Evidence (Volume 207). The Tribunal notices that in this Report, it is mentioned that, alleged shortage of water is not on account of non-availability of water in the twin city but is in fact due to complete mismanagement of available water resources by the Karnataka Urban Water Supply and Drainage Board. A further scrutiny made by the Tribunal, of the said Report, invariably shows that the actual consumption of water in Hubli-Dhawad twin city, has no proper system of metering of any type and thus no records exist pertaining to the domestic consumption of water in the said region. Again, the Tribunal finds that despite occupying the post of Chief Engineer (Hubli-Dhawad), Shri Madegowda could not give satisfactory explanation relating to mismanagement of water in Hubli-Dhawad city.

- (c) What is important to notice is that, in the above mentioned report, it is mentioned that, the water pipe lines in the said region are not maintained properly, which has resulted into several instances of

breakdown and leakages on account of the pipe bursting. The Tribunal finds that this is a complete waste of water, which is very important and scarce from view point of the principles and guidelines enunciated in National Water Policy, 2012 and that too in a drought prone area. In reply to question No. 9, put to the witness by the Tribunal, the witness has mentioned that, the joints of the pipes are leaking because the pipes are incrustated, corroded. It has come on the record of the case, pumps utilized to drain the water are broken and, as such, not working properly, at all. The Tribunal is of the firm opinion that, this unequivocally, demonstrates that, the State of Karnataka has totally failed to take care and use the water resources efficiently, which are scarce in nature. Such wastage of water, due to faulty water management can hardly justify the claim of State of Karnataka that it is in need of diversion of 7.56 tmc of waters from Mahadayi Basin for meeting the drinking water needs of Hubli-Dharwad twin city.



- (d) In his evidence, Shri Madegowda has stated that, the drinking water needs for the Hubli-Dharwad area, is 7.56 tmc for the year 2044 AD. However, in Question No. 3, Shri Madegowda was confronted with the letter dated 30.03.2002, addressed by the Secretary, Water Resources Department, Government of Karnataka to the Secretary, Ministry of Water Resources, Government of India, wherein it was stated that there was, an imminent need of 7.56 tmc of water, to meet the needs of Hubli-Dharwad area. In response to this question, Shri Madegowda clearly admitted that, there is no imminent need of 7.56 tmc for drinking water requirements and that this is the need for the year 2046 AD. Thus, the Tribunal finds that the State of Karnataka is in the habit of blowing its case, out of proportion and has claimed diversion of 7.56 tmc of water as an imminent and urgent need, without any factual basis.
- (e) In question No. 4, the State of Goa had confronted Shri Madegowda with regard to the sudden jump in the population of the Hubli-Dharwad area since the

population, from 1981 till 2011 (30 years), has increased, by only about 4 lakhs, whereas from 2011 to 2051, the increase in population, projected is of about 18 lakhs. On reading the testimony of this witness, it becomes evident that Shri Madegowda was unable to provide the Tribunal with a reasonable explanation as to how the sudden jump in population of Hubli-Dharwad is estimated. Therefore, the Tribunal is of the firm opinion that the projection of increase of the population in the Hubli-Dharwad area, is highly inflated, just to increase and justify the demand of water made by the State of Karnataka without any actual basis for such estimation, which is erroneous and cannot be accepted by the Tribunal.

- (f) The witness Shri Madegowda, in his evidence, has also mentioned that, round the clock police protection is required for the water supply infrastructure for Hubli and Dharwad and, according to him this is, because the farmers are agitating as they want to grow various crops and that their livelihood is affected. From this answer, it becomes absolutely clear that what is being

projected as a shortage of water for drinking purposes, is in fact, need for irrigation and there is a tussle for water between the powerful farmers on one hand and the hapless city residents on the other.

565. In the light of the above discussion, the Tribunal finds that the evidence given by Shri Madegowda, on behalf of the State of Karnataka , on the basis of his Affidavit-in-Evidence (Volume 207), dated 09.11.2017, clearly establishes, the mismanagement of the scarce water resources, by the State of Karnataka. Shri Madegowda has been unable to demonstrate that due care is being taken for proper management and utilization of, already available water resources. According to the Tribunal, it is more than clear that the water shortage in Karnataka is man-made and would not exist if the available water resources are properly managed and utilized. The Tribunal also finds that projection of population of Hubli-Dharwad twin city is on very very high side and is not based on any scientific principles which are being adopted while carrying out census of the country, by agencies of Central Government. The Tribunal finds that the testimony of Shri Madegowda fails to prove, the case of the State of Karnataka and rather, he has, to an extent,

disproved the case of the State of Karnataka. Therefore, the Tribunal does not think it prudent, to place reliance on the testimony of Shri G.M. Madegowda, which is full of inconsistencies, as pointed out earlier.

**Evaluation of oral evidence of MW-2 Shri B.C. Kunjir for the State of Maharashtra**

566. The Tribunal finds that Shri B.C. Kunjir, MW-2, witness for the State of Maharashtra, has deposed, before the Tribunal, with respect to the topic, “Water Needs of Maharashtra in Mahadayi Basin”. From his testimony, it is evident that he had worked as Chief Engineer, Konkan Region and had also officiated as Executive Director, Konkan Irrigation Development Corporation between October 2013 and May 2015. He had also served as a Chairman and a Member of few committees, constituted by the Government of Maharashtra, to look into specific issues, in Water Resources Development and Management. From the details made available by the witness to the Tribunal, it is evident that he was appointed by the Government of Maharashtra, vide G.R. dated 1st August, 2017, as an Expert Witness on behalf of the State of Maharashtra and to

depose before the Tribunal about the “Water Needs of Maharashtra in Mahdayi Basin’.

567. Shri B.C. Kunjir has filed his Affidavit of Examination-in-Chief, dated 27.10.2017, before the Tribunal on 14.11.2017. From the said Affidavit, it is evident that, he has conducted a study regarding expected population of Hubli-Dharwad twin city in 2051 and domestic, irrigation, evaporation losses and industrial needs of Maharashtra. The said study is annexed by him as “A Study in respect of Water Needs of Maharashtra in Mahadayi Basin.”

568. Along with his Affidavit dated 27.10.2017, Shri Kunjir has also relied upon and produced, the following documents:-

- (a) Relevant page of the Report of Maharashtra Water & Irrigation Commission, Government of Maharashtra of June, 1999, volume I, APPROACH, marked as MARK-MAH/6.

- (b) Study conducted by him in respect of Water Needs of Maharashtra in Mahadayi Basin dated 27.09.2017 and produced as EXH. MAH/MW2/1.
- (c) The relevant page of the Report of Maharashtra Water & Irrigation Commission, Government of Maharashtra of June, 1999, Volume I, APPROACH, marked as MARK-MAH/7(Colly.).
- (d) A copy of the Report dated 06.10.2017 prepared by him in respect of visit by him, of Maharashtra Basin on 2<sup>nd</sup> and 3<sup>rd</sup> October, 2017, which is marked as EXH. MAH/MW2/2.

569. The witness was cross-examined on behalf of the State of Goa, by Shri Dattaprasad Lawande, the learned Advocate General for the State of Goa, in respect of the matters mentioned in his affidavit and the documents relied upon and produced by him. Some few questions were also put to the witness, by the Tribunal, to elicit better information.

570. On the perusal of the aforementioned cross-examination, the Tribunal finds that the witness Shri Kunjir, has been unable to really prove and substantiate the case put forth by the State of Maharashtra. The Tribunal notices that, the witness has not been able to demonstrate and prove completely and fully, the specific claims and the averments made by the State of Maharashtra in its pleadings. The Tribunal proposes to list them hereunder:-

- (a) The State of Maharashtra and its witnesses claim compensation, from the share of water of Tillari basin, given to the State of Goa, under the Agreement, by way of diversion of water, from Mahadayi Basin. However, the Tribunal notices that, when asked about the same, by the State of Goa in question Nos. 1 & 2, Shri Kunjir, in answer has stated that, the Tillari Agreement does not contemplate any such clause relating to the fact that the State of Maharashtra should be compensated by way of diversion of water from Mahadayi Basin. The Tribunal finds that the answers given by the witness to the above mentioned questions prove that there is no legal or substantial

basis for the claim of compensation advanced by the State of Maharashtra.

- (b) Shri Kunjir, not only in his Affidavit-in-Evidence dated 27.10.2017, but also in answer to Question No. 4, asked by the State of Goa, has explicitly stated that Tillari basin is not a deficit basin but is rather a surplus basin and is abundant in waters. Thus, the testimony of this witness establishes that there is no shortage of water in Tillari basin and, therefore, diversion of water sought for, by the State of Maharashtra, from Mahadayi Basin, has no legs to stand.
- (c) In question No. 7, a suggestion was put to Shri Kunjir, by the State of Goa, that, in his study, he has over-exaggerated the domestic requirements, arrived at by him in paragraph 4 of his Report, wherein, he has estimated, requirements according to urban requirements, which are completely unrealistic to the rural villages, for which the same is actually calculated. The Tribunal notices that Shri Kunjir was unable to justify, his calculations of requirements of



water. Shri Kunjir stated that he had taken into account the transition of a rural society, into an urban one, but the Tribunal is of the opinion that, this response, is completely unrequited and defeats the purpose of any differentiation between urban and rural areas. The Tribunal, thus, finds that the domestic requirements have been over-exaggerated by the witness Shri Kunjir, as suggested by the State of Goa and estimates of water requirements made by him, cannot be accepted by the Tribunal.

- (d) The Tribunal further notices that in Question No. 4, which was posed by the State of Goa to the witness, as to whether the witness has referred to or relied upon any water balance study, with respect to the availability of total water, in Tillari basin, vis-à-vis, the needs and requirements of Tillari basin, the Tribunal notices that Shri Kunjir, candidly said no and further stated that his study and Report are restricted to Mahadayi Basin only.

- (e) The Tribunal further finds that even with regard to observations made by Shri Kunjir, on siltation and sedimentation in the estuaries, in study, he has admitted that those observations are not based on any scientific study and/ or report. The same fact is admitted by him, in answers to Questions Nos. 3 & 4, posed to him, by the Tribunal. The Tribunal is of the opinion that response of this sort by an expert witness would lead the Tribunal to conclude that the witness has really not taken the data and analyzed it separately, but has merely relied upon and reproduced what is stated in the CWC (2003) Report.

571. In fact, the Tribunal expected from Shri Kunjir that, as an expert, he would conduct a thorough and independent study with regard to the water demand, based on principles recognized. The Tribunal finds, absence of such concentration and precision in the report, submitted by Shri Kunjir and, therefore, the Tribunal is of the opinion that it is difficult for the Tribunal to rely upon the statements made by him, which are quite unknown to the basic principles of assessment of water demand and water resources planning.

572. Under the circumstances, the testimony of Shri B.C. Kunjir, MW-2, is not found to be acceptable by the Tribunal and the Tribunal is of the firm opinion that the same cannot be acted upon.

### **DECISION AND FINDINGS BY THE TRIBUNAL ON IMPORTANT QUESTIONS**

#### **Prejudice**

573. One of the foremost, almost a preliminary, submission has been raised by Shri Mohan V. Katarki, learned Counsel appearing for the State of Karnataka, and later on, during the course of arguments has been even reiterated by Shri Shyam Divan, the learned Senior Counsel, appearing for Karnataka, that under section 3 of the Act, one of the basic requirements for adjudication of a water dispute is that complainant party must plead and disclose that it is being “affected prejudicially.” It has been asserted that the aforesaid requirement is the basic requirement for affording a cause of action to the complainant party, and in the absence of the pleadings to that effect the

complaint filed by the complainant State cannot be entertained. On that basis, it has been maintained that the complaint filed by the State of Goa, and even the Statement of Claims filed on the basis of the aforesaid complaint, lack the aforesaid ingredient and as such is not legally maintainable.

574. The aforesaid contention raised on behalf of the State of Karnataka has been vehemently contested by the State of Goa through its Senior Counsel Shri Atmaram N.S. Nadkarni.

575. It has been pointed out by the learned Senior Counsel that the complaint contains all the relevant facts, as are required to be stated in the complaint under section 3 of the Act, and even the Statement of Claims filed by Goa contains all the necessary pleadings, disclosing all the material facts, which indicate an injury to the State of Goa, and also show that its interests have been prejudicially affected.

576. Before noticing the details of the pleadings of the parties, in this regard, it would be absolutely necessary to notice the relevant provisions of the Inter-State River Water Dispute Act, 1956 (Act).

The preamble of the Act reads as under:

“An Act to provide for the adjudication of disputes relating to waters of inter-State rivers and river valleys.”

Some of the relevant provisions of the Act are as follows:

Section 2(c) “water dispute” means any dispute or difference between two or more State Governments with respect to –

- (i) the use, distribution or control of the waters of, or in, any inter-State river or river valley; or
- (ii) the interpretation of the terms of any agreement relating to the use, distribution or control of such waters or the implementation of such agreement; or
- (iii) the levy of any water rate in contravention of the prohibition contained in section 7”

Section 3: “If it appears to the Government of any State that a water dispute with the Government of another State has arisen or is likely to arise by reason of the fact that the interests of the State, or of any of the inhabitants thereof, in the waters of an inter-State

river or river valley have been, or are likely to be, affected prejudicially by-

- (a) Any executive action or legislation taken or passed, or proposed to be taken or passed, by the other State; or
- (b) The failure of the other State or any authority therein to exercise any of their powers with respect to the use, distribution or control of such waters; or
- (c) The failure of the other State to implement the terms of any agreement relating to the use, distribution or control of such waters; the State Government may, in such form and manner as may be prescribed, request the Central Government to refer the water dispute to a Tribunal for adjudication."

Section 4(1): "When any request under section 3 is received from any State Government in respect of any water dispute and the Central Government is of opinion that the water dispute cannot be settled by negotiations, the Central Government shall, within a period not exceeding one year from the date of receipt of such request, by notification in the Official

Gazette, constitute a Water Disputes Tribunal for the adjudication of the water dispute.

Provided that any dispute settled by a Tribunal before the commencement of Inter-State Water Disputes (Amendment) Act, 2002 shall not be re-opened.”

Section 5(1): “When a Tribunal has been constituted under section 4, the Central Government shall, subject to the prohibition contained in section 8, refer the water dispute and any matter appearing to be connected with, or relevant to, the water dispute to the Tribunal for adjudication.

(2) The Tribunal shall investigate the matters referred to it and forward to the Central Government a report setting out the facts as found by it and giving its decision on the matters referred to it within a period of three years:

Provided that if the decision cannot be given for unavoidable reasons, within a period of three years, the Central Government may extend the period for a further period not exceeding two years.”

577. As noted above, “water dispute” has been defined as any dispute or difference between two or more State Governments with respect to the use, distribution or control of the waters of, or in, any inter-State river or river valley. In any such case, when the Government of State realises that there is

any dispute or differences between it and some other States with regard to any inter-State river or river valley, it would make a request to the Central Government detailing out the aforesaid facts and the nature of dispute or differences between two or more States. On receipt of such letter of request, the Central Government is required to make an attempt to settle the aforesaid dispute by negotiations and if even after making the aforesaid attempt, the dispute cannot be resolved, the Central Government shall constitute a Water Disputes Tribunal for adjudication of the water dispute.

578. Section 3 of the Act provides that a letter of request can be made by a State Government to the Central Government for constitution of Water Disputes Tribunal, only in a case when it appears to the said State Government that a water dispute has arisen or is likely to arise, on account of which the interest of the said State in the water of an inter-State river or river valley have been or are likely to be affected prejudicially. Apparently, section 3 is in two paras. The first part deals with a situation when the Government of any State feels that a water dispute with another State Government has arisen. The second part of the section deals with a situation when it appears to the Government of a



State that a water dispute with another State Government is likely to arise. Thus, the provision deals with not only the disputes in *presenti*, which exist on a date when the letter of request is sought to be addressed by the State Government, but also deals with such future disputes which are likely to arise between two or more States. In anticipation of any water dispute, the State Government would be well within its rights to address a letter of request to the Central Government. However, a common factor in both the situations is that such a water dispute has or is likely to affect prejudicially the interests of the complainant State. The definition of water dispute under section 2 (c) is very broad, in as much as, it provides that any dispute or difference between two or more State Governments with respect to the use, distribution or control of the waters of, or in any inter-State river or river valley would constitute a water dispute. The definition includes certain other situations also, which are not relevant for the present controversy. Further, section 3 entitles a State Government to address a letter of request to the Central Government, when "it appears to the Government of any State". Thus, it is the satisfaction of the complainant State Government, that any water dispute has arisen or is likely to arise, with another State Government, with regard to an inter-State river

water or river valley, which has, or is likely affect prejudicially the interests of the complainant State Government or its inhabitants, that the letter of request can be addressed by it to the Central Government. Apparently, there are no riders on the discretion of the complainant State Government to come to its satisfaction that the requirement of section 3 have been duly met before it addresses a letter of request to the Central Government. The satisfaction of the State Government, with regard to the existence of the water dispute or likely thereof, affecting prejudicially, the interests of the State Government or its inhabitants cannot be questioned by the opposite State Government.

579.        Thereafter, after the process of negotiations has been gone into by the Central Government to settle the aforesaid water dispute between the two State Governments through negotiations and in a situation when the aforesaid negotiations have failed, the Central Government is required in law to constitute a Water Disputes Tribunal. When such a Tribunal has been constituted by the Central Government, a reference of the water dispute shall be made to the Tribunal for adjudication and the Tribunal has been given the powers to investigate the matter

referred to it, and forward to the Central Government the report of its findings and its decision.

580. The language of section 5 of the Act, reproduced above, clearly indicates that it is not the letter of request addressed by the State Government to the Central Government, which is referred for adjudication to the Tribunal so constituted, but it is the water dispute and any matter appearing to be connected with, or relevant to the water dispute, which shall be referred to the Tribunal by the Central Government for adjudication. The Tribunal has also been granted the power to investigate the aforesaid water dispute, and even the connected matters thereto, and thereafter adjudicate the same and forward its report to the Central Government.

581. In view of the aforesaid legal provisions, it would be pertinent to notice that the State Government of Goa has protested against the proposed projects of the State of Karnataka, inter alia, on the ground that any diversion of the waters from river Mahadayi, by Karnataka outside Mahadayi basin, will adversely impact environment, navigational flow, ecology, fisheries and wildlife in the State of Goa. Some of the

relevant paragraphs of amended Statement of Claims of Goa, (Volume 131), may be extracted as below:

“190C(xix). Without prejudice to the aforesaid, the State of Goa respectfully states that any activity of diversion of water of Mhadei River of whatsoever nature including for a dam would drastically affect the wildlife in the Mhadei Wildlife Sanctuary. Any reduction in the flow of water in Kalsa River (Surla River) would damage the delicate eco-system and consequently, completely damage the biodiversity. As stated above, Surla River is responsible for maintaining the macroclimate which ultimately serves diverse flora and fauna. If the inflow of water is reduced, the whole Wildlife Sanctuary project would be lost causing degradation in ecology. Any disturbance in the fragile ecology of this valley will have adverse affect on vegetation on hill slopes and displace the wildlife population. Any migration of wildlife would give rise to the conflict between the man and animals. The same would result in social chaos. The social economic life of the local community living around the Sanctuary, both in the State of Karnataka and the State of Goa would be completely jeopardized. ”

“ 190C(xx). The State of Goa states that the proposed diversion of water by the State of Karnataka and State of Maharashtra would increase the salinity of water, there will be increase in the tidal base water flow. The residents living on the banks of Surla River, i.e. Villages of Surla, Derodem, Codal, Vainguinim within the

villages of Nanoda and Uste, besides the Sanctuary, would suffer immensely on account of depletion of River water. In addition, the source of underground water would also be completely depleted. There is every possibility that the increase of salinity levels in the river would consequently affect ground water of these Villages which would also go high in saline content. For all these reasons, the abstraction of water in Mhadei in this regard is not at all justified, or permitted. ”

“190C (xxvii). The State of Goa states that the Doctrine of Public trust and Precautionary Principle, by no standard of imaginations, the State of Karnataka and State of Maharashtra can be permitted to carry on their construction and divert the water from Mhadei River into any other basin or for that matter, to divert any water from Mhadei River. The same would have devastating effect on the ecology, sociology and the economy of the people and the State of Goa. Any such Projects or intentions on the State of Karnataka and State of Maharashtra cannot be allowed or permitted at the cost of the ecology. ”

582. Besides the above pleas, the State of Goa has also pleaded that the aforesaid diversion of water of Mahadayi River by the State of Karnataka would have disastrous consequences on the natural flow of the water and would adversely affect the navigation channels in the State and that, it would also cause loss

of water resources for cheap and environmentally clean hydro-power potential within the State of Goa. A plea has also been raised with regard to adverse consequence on the natural flow of water to the biological hotspot in the Western Ghat, Wildlife Sanctuaries and other precious species.

583. However, at this stage, it would not be necessary to go into detail of all the facts pleaded by Goa with regard to adverse consequences of the diversion of water, proposed to be undertaken by Karnataka. However, it would be appropriate to notice that all the aforesaid pleas raised by Goa have been vehemently controverted and denied by the State of Karnataka. For the determination of the present issue, it will be wholly unnecessary to notice the aforesaid pleas of Karnataka, inasmuch as, at this stage merely it has to be determined as to whether the pleadings and averments of the State of Goa are covered by the provisions of sections 2 and 3 of the Act or not.

584. It would also be pertinent to refer to a portion of the cross-examination of Shri A.K. Bajaj, RW-2, an expert witness, produced by the State of Karnataka. Question No. 7 was asked to the said witness as to whether some transboundry impact was

likely to be experienced by the State of Maharashtra and Goa, pursuant to the project intended by the State of Karnataka , the witness replied as follows:

“Ans. Yes, I agree that there will be some impact on the downstream States due to the projects being taken up by the upstream State. However, the question is the quantum of such impact. I have also seen the location of the project which Government of Goa is proposing from their pleadings before this Hon’ble Tribunal. The Government of Karnataka has indicated, in their pleading before this Hon’ble Tribunal, that diversion from Mahadayi, more particularly, the Bhandura, Haltara/Kalasa, and Kotni/Bailnadi/Irti Projects will be during the monsoon only. The diversion from the other projects to Kali basin are very small quantity of 0.604 TMC, 1.102 TMC and 2.613 TMC, respectively, which may or may not be taken during the monsoon only. Thus, as per the State Government of Karnataka, the withdrawal by the Government of Karnataka be only during the monsoon months, when there is plenty of water in the river, the small quantity being withdrawn will not have any major effect. The answers to the further questions are as follows: -

- (a) Yes, there will be limited impact of reduced flow immediately downstream of the point from where the water is proposed to be withdrawn in any stream, but there will be regeneration

of water in the stream from within the stream itself and the tributaries joining the stream thereof.

- (b) The eight projects of Karnataka referred in the question are by no stretch of imagination massive projects. As per the standard classification of projects of the Government of India, they would be categorized as minor projects. As I have clarified, the impact is only on the immediate downstream and that also during the non-monsoon period, when flows are low. The working of the Ganjim weir seen by me is that no water is detained at the weir in the monsoon period as the gates are kept open and there will be no impact on the Ganjim weir of the withdrawal by the Government of Karnataka. As I am not aware of the location of the Opa drinking water project, I will not be able to comment on the effect of the Karnataka projects on this project of Goa.
- (c) As brought out in my Report, out of the 63 projects proposed by the State of Goa, only 8 projects, as indicated on page 17 of my Report, will be somewhat affected.
- (d) As already replied, in my answer to question 7 and sub-question (a) of the



present question, there will be a minor impact of the diversion by Government of Karnataka and no severe impact can be envisaged.

- (e) Many efforts have been made to define e-flows, but still there is no consensus and no values have been fixed for the same. I am not an environmental engineering expert and will not be able to say what impact there will be on the six wildlife sanctuaries in the Mahadayi basin. That can only be ascertained by carrying out an Environment Impact Assessment study.”

585. It is thus clear from the pleadings of Goa contained in its Statement of Claims, and the statement of RW-2 Shri A.K. Bajaj, that the State of Goa has clearly brought such material on the record, which would indicate that it has appropriately shown that Goa would be “prejudicially affected” by the diversion of water by the State of Karnataka from Mahadayi river to outside Mahadayi basin in the State of Karnataka.

586. It would also be pertinent to notice the history/background of the dispute, as it emerges out of the respective pleadings of the parties.

587. It appears that plan for utilization of the water of the inter-State river Mahadayi in Karnataka started in the year 1980. A protest was raised by Goa. Number of inter-State meetings were held between the State Governments of Goa and Karnataka. However, the party States did not reach any agreed conclusion. On 16.4.2002, the State of Karnataka wrote a communication to Ministry of Water Resources, Government of India, seeking an 'in principle clearance' for diversion of 7.56 tmc of water from Mahadayi basin, claiming to be for drinking water needs of Hubli-Dharwad cities. The Central Government appears to have given the 'in principle' clearance on 30.04.2002 to Karnataka. An objection was taken by the State of Goa in the matter and intervention of the Prime Minister was requested. Apprehended that the State of Karnataka may proceed with the project, a request letter dated 9.7.2002 was filed by Goa to the Central Government for setting up a Water Disputes Tribunal under section 3 of the Act. According to Goa, on account of various objections taken by it, the Ministry of Water Resources of Government of India, on 19.02.2002, placed the aforesaid 'in principle' clearance accorded to the State of Karnataka in abeyance. Goa has maintained that because of the fact that the

Central Government did not constitute a Water Disputes Tribunal, it approached the Supreme Court of India by filing an original suit on 15.09.2006. An injunction was sought against the State of Karnataka not to proceed with any planning, construction and water resolution of any project in the Mahadayi river basin, and till all the inter-State disputes were adjudicated and decided by the Tribunal. The aforesaid civil suit was contested by the State of Karnataka, by filing a counter affidavit. The various pleas taken by the State of Goa were denied.

588. Proceedings continued before the Supreme Court till the year 2010, when the Central Government, in exercise of its powers under section 4 of the Act, issued a notification dated 16.11.2010, constituting the MWDT for adjudication of water disputes relating to the inter-State Mahadayi river valley. Subsequently, on 11.1.2011, a reference was made to the Mahadayi Water Disputes Tribunal for adjudication of inter-State river dispute concerning the States of Goa, Karnataka and Maharashtra, regarding inter-State river Mahadayi and the river valley, thereof. Consequently, the aforesaid original suit was disposed of and it was observed by the Supreme Court that all

the issues raised in the suit were to be raised before the Tribunal for adjudication and decision.

589. In view of the aforesaid background, it is evident that the parties have been at a constant and contentious dispute with regard to the aforesaid water dispute between them.

590. In the aforesaid background of the matter, it would be advantageous to notice certain observations made by the Apex Court in the case of the State of Karnataka by its Chief Secretary Vs. the State of Tamilnadu by its Chief Secretary and Ors. (2018) 4 Supreme Court Cases 1, as follows:

“159. Relying on the said provision, it is urged by Mr. Nariman that there is no assertion with regard to either the State of Tamil Nadu or its inhabitants being prejudicially affected in any other manner except the agreement and, then, the conditions precedent as postulated in clauses (a), (b) and (c) of Section 3 are not met with. He has referred to issues 8, 10, 40 and 43 by the Tribunal on prejudicial affectation and stated that the Tribunal has not recorded any finding that the State of Tamil Nadu has been prejudicially affected within the sphere of Section 3. On the contrary, it has held that the issue regarding prescriptive right of Madras has become academic and the injury caused to each State at one

stage or the other by the conduct of the other State has become a matter of history and it is not easy to assess any injury in an irrigation dispute. Learned senior counsel would further submit that the State of Tamil Nadu did not plead for a claim to any right which is conferred on it by the two agreement either in its complaint or on the statement of case before the Tribunal. The complaint deserves to be dismissed in the absence of proven injury. Mr. Naphade and Mr. Dwivedi, learned senior counsel being assisted by Mr. G. Umapathy, learned counsel, in their turn, would contend with vehemence that such a contention at this stage is absolutely specious and should not engage the attention of this Court even for a moment. They would submit that the series of meetings and the correspondence that had commenced in the beginning of the 70s of the last century would speak eloquently about the inhabitants being prejudicially affected and further the various issues raised clearly exposit the grievances of the inhabitants of the State of Tamil Nadu. Additionally, it is contended by them that even if a finding is returned that the agreements have expired, rights had been created under the agreements and till they remain in force and also thereafter till the date of reference and more so when such a plea was not raised when reference was made to this Court under Article 143 of the Constitution, the said plea should be negatived.

160. The aforesaid submission advanced by the State of Karnataka should not detain us for long. On

a perusal of the complaint, it does not contain the words “prejudicially affected” but the antecedents of the complaint, the view of the Central Government while referring water dispute and the expression of opinion of this Court In Re: Presidential Reference (Cauvery Water Disputes Tribunal) (supra). In the backdrop of the language of the 1956 Act, the expiration by the efflux of time and the role of this Court, we are not inclined to entertain such a plea. We must say without any hesitation that it may, in the first blush, have the potentiality to invite the intellectual interaction but the same fails to gain significance when one perceives the controversy from a broader perspective and the various orders passed from time to time by the Tribunal and by this Court. Therefore, the matter deserves to be adjudicated on merits.”

591. A similar objection raised by the State of Karnataka, that there was no assertion with regard to either the State of Tamil Nadu or its inhabitants being prejudicially affected in any other manner was not accepted by the Supreme Court, by observing that the antecedents of the complaints, the view of the Central Government while referring water dispute and the view taken by the Supreme Court In Re: Presidential Reference (Cauvery Water Disputes Tribunal) 1993 (Supp)(1) SCC 96.

592. The facts and background of the present controversy clearly indicate that in this case also, a very long standing dispute between the parties has remained pending and despite a long drawn process of negotiations for settlement of the same, the same has remained unresolved. Consequently, at this stage, the State of Karnataka cannot be heard to claim that the complaint of the State of Goa, dated 09.07.2002, does not contain the specific words “prejudicially affected”. Filing of application under Section 3 of the Act of 1956 will itself demonstrate and prima facie prove that the interests of the State or any of the inhabitants thereof of the State making the complaint, have been or likely to be affected prejudicially.

593. Before parting with this aspect of the matter, it would be necessary to notice that at the initial stage of the arguments, the learned counsel for the State of Karnataka took up a specific objection that though the requirement of “affected prejudicially” under section 3 of the Act is the basis of the cause of action and there is no express averment in the complaint of the State of Goa that “interests” of the State of Goa or its inhabitants “have been or are likely to be, affected prejudicially”, by the acts and omissions of the State of Karnataka. The arguments were

addressed on the basis of the aforesaid objection, which was taken almost as a preliminary objection. The aforesaid objection was forcefully met by the learned senior counsel for the State of Goa, by taking up the legal pleas, as well as by drawing our attention to the factual aspects of the matter and pleadings of Goa. However, later on, during the course of the continued arguments, the State of Karnataka appears to have shifted its stand that the evidence on the record indicated that since the total available water in Mahadayi river was more than the quantum of water claimed by Goa and quantum of water claimed by the upstream State of Karnataka and Maharashtra, then the grievance of Goa that it is likely to be “affected prejudicially” would not survive for consideration.

594. Suffice it to say that this Tribunal has elsewhere recorded findings of fact that the diversion of 7.56 tmc of water from Mahadayi River to Malaprabha sub-basin would prejudicially affect environment, navigational flow, ecology, fisheries, wildlife, increase in the salinity of water, deletion of water flow in River Mahadayi, underground water of the villages Surla, Derodem etc., situated in the State of Goa. Thus, the question of prejudice, as raised by the State of Karnataka, has



become academic in nature and no longer survives. However, at this stage, while determining the maintainability of the complaint filed by the State of Goa, as well as the statements of claims filed by the State of Goa, it is not necessary to dwell into details about the above stated findings recorded by the Tribunal. The aforesaid aspects of the matter are dealt with by the Tribunal at the appropriate stage.

595. Consequently, the preliminary objection raised by the State of Karnataka against the maintainability of the complaint, as well as the adjudicability of the statements of claim made by Goa, is devoid of merits and is, therefore, hereby rejected.

**Effect of Deletion of Paras 28(Iv) and 28(V) from Goa's Complaint dated 09.07.2002**

596. It is mentioned in Statement of Claim filed by the State of Goa, that Karnataka is in a position to meet, Hubli-Dharwad water requirements, from locally available water resources and that there are other alternative sources available to Karnataka, such as the Kali, the Bedti, the Ghataprabha etc., from which water supply needs of Hubli-Dharwad towns can be met as a higher priority than irrigation and hydro power needs in

those basins, whereas the State of Karnataka has mentioned that the State of Goa, is barred, in raising such pleas in view of deletion of para 28(iv) and 28(v) of its complaint dated 09.07.2002, vide its letter dated 10.01.2007, addressed to the Secretary, Union Ministry of Water Resources. In view of rival pleadings of the parties on this aspect of the matter, Issue 38 is framed by the Tribunal:

**Issue No. 38:**

“Whether the State of Karnataka establishes that the effect of unequivocal withdrawal of the contentions in para 28(iv) and 28(v) of its complaint dated 9.7.2002 vide letter dated 10.1.2007 addressed by the State of Goa to the Secretary, Union Ministry of Water Resources, New Delhi bars the State of Goa from objecting to drinking water needs to the twin cities of Hubli-Dharwad, including villages en route etc. (including Kundagol town) from Malaprabha Reservoir?”

597. The State of Karnataka has vehemently maintained that the State of Goa had filed the original complaint under section 3 of the Inter-State Water Disputes Act, 1956, before the Government of India, for referring the water disputes between the two States viz. the State of Goa and the State of Karnataka to constitute a Water Disputes Tribunal. Later on, the State of Goa

had deleted paras 28(iv) and 28(v) from the aforesaid complaint in view of the letters dated 21.11.2006 and 04.01.2007 of the Government of India, Ministry of Water Resources. On that account, it is maintained by the State of Karnataka that after the deletion of the aforesaid two paragraphs, the State of Goa cannot raise any plea that Karnataka is able to meet, Hubli-Dharwad drinking needs from locally available water resources, nor the Tribunal should consider such a plea raised by the State of Goa.

598. The aforesaid objection raised by the State of Karnataka has been strongly contested by the State of Goa. It has been maintained that the deletion of the aforesaid two paragraphs from the complaint of the State of Goa was without any prejudice to any other contents of the complaint of Goa, and further as per the clear understanding given by the Central Government through the Ministry of Water Resources, all the contentious issues with regard to the water dispute arising from Mahadayi river basin, river valley thereof, sharing of Mahadayi river waters, its equitable distribution and extra basin diversion and other connected issues relevant thereto, are still required to be adjudicated by this Tribunal.

599. For appreciation of the aforesaid controversy between the parties, it would be relevant to notice that the State of Goa had been raising a protest, and had also filed a complaint with the Central Government, with the grievance that the State of Karnataka had been making a constant and persistent attempt for outside basin diversion of the limited Mandovi river waters generated from the catchment area of Mahadayi river in its territory. It was mentioned in the complaint that the Mandovi is a short length river on the Western Coast of India, in a very fragile environment and there is existing navigation on the river for about 40 KMs of the river in the final reach and sufficient flow and draught (depth) is needed for the survival of the aforesaid navigation. It was also stated therein that, a very fragile balance exists between the sufficient water flow and the sea tidal ingress and salinity and the action being undertaken by the State of Karnataka for diverting the Mahadayi river water to Malaprabha basin would cause an irreparable loss and damage to the general population of the State of Goa, its navigational activities, its biodiversity and environment etc. With the aforesaid details, the State of Goa filed the above said complaint dated 09.07.2002 to

the Central Government. The following prayers were made in para 28:

- “(i) To adjudicate and decide correctly the available utilizable water resources of the Mandovi basin at 75% dependability at various points in the basin and at Karnataka's disputed project sites.
- (ii) To adjudicate and decide the equitable shares of the three co-basin states in the above quantity of water taking into consideration the long term in basin needs of the three States for the beneficial uses of water (water supply, irrigation, hydro-power generation, navigation, pisci-culture and environmental protection, etc.)
- (iii) To adjudicate and decide whether in basin needs to be given priority over any contemplated extra basin diversions and whether there is any surplus left for extra basin diversions after adequately providing for long term in basin needs.
- (iv) To adjudicate and decide whether Karnataka cannot meet Hubli/Dharwad water supply requirements from locally available water resources.
- (v) To adjudicate and decide whether there are no other alternative sources available to Karnataka, such as the Kali, the Bedti, the Ghataprabha etc., from which water supply needs of Hubli/Dharwad towns could be met as a higher

priority than irrigation and hydropower needs in those basins.

- (vi) To adjudicate and decide specific restraints or restrictions to be placed on the upstream riparian states with regard to construction and regulation of their project~ during each water year for beneficially using their allocated equitable share of the Mandovi river basin waters.
- (vii) To adjudicate and decide the machinery to implement the decision of the Tribunal.”

600. It is evident from the record, (Volume 38), that on 21.11.2006, the Government of India, through the Secretary of Ministry of Water Resources, responded to the State of Goa’s complaint through the following communication:

“No. 5/4/2005-BM  
GOVERNMENT OF INDIA  
MINISTRY OF WATER RESOURCES

Dated: 21.11.2006

To

The Secretary (WR),  
Government of Goa,  
Secretariat, Panaji,  
GOA

Subject:- Request for appointment of River Water-Disputes Tribunal under Section 3 of the Inter-State River Water Disputes Act, 1956 as amended.

Sir,

I am directed to refer to Govt. of Goa's letter No. 68-4/CE-WRD-EO-2002-03/208 dated 9.7.2002 on the above subject and to say that in accordance with the provisions of Section 4(1) of the Inter-State River Water Disputes (ISRWD) Act, 1956, the Ministry of Water Resources is of the opinion that water dispute contained in the aforesaid request cannot be settled by negotiation. Therefore, Central Govt. intends to take further action in the matter in accordance with the provisions of the said Act.

It is further stated that the aforesaid request has been examined by Central Government and it is found that the request at para 28(iv) & 28(v) contains references to basins other than Mahadayi also. As per Section 3 of the ISRWD Act, 1956, the dispute/complaint in connection with a particular inter-state river or river valley can be referred to the tribunal and not for multiple basins. As such, the aforesaid request of the Govt. of Goa, in the present form cannot be referred to the Tribunal for adjudication of the dispute.

In view of the above, Government of Goa is requested to send a revised request to the Central

Government containing references to Mahadayi basin only for taking further necessary action.

Yours faithfully,  
Sd/-  
( S. Manoharan)  
Addl. Secretary (WR)”

601. The Government of Goa replied to the aforesaid communication vide letter dated 13.12.2006, (Page 130 of Vol. 38). It was maintained that inclusion of the aforesaid paras 28(iv) and 28(v) is very important, because the diversion of water from Mandovi basin to water surplus Malaprabha basin is the main issue in this water dispute. Various facts, in support of the aforesaid stand of the State Government of Goa, were given. Consequently, it was maintained that there was no question of revising its request dated 09.01.2002.

602. The record shows that on 04.01.2007, (Volume 38 page 135), the Government of India, Ministry of Water Resources issued a letter to the Government of Goa with regard to reference of the water disputes to a Tribunal. The relevant portion of the aforesaid communication is as under:



“3. The arguments advanced by the Government of Goa in respect of para 28(iv) and 28(v) are based on merit consideration. However, the views of Central Government which were conveyed to the Government of Goa on para 28(iv) and 28(v) in November, 2006 are based on legal consideration. As such, the aforesaid request of Government of Goa, in the present form cannot be referred to the Tribunal for adjudication of the dispute.

4. Reference has been made in the letter of Govt. of Goa about referring the issue of possibility of augmentation of Krishna river by diversion of inter-state Godavari river and other inter-state river waters to the Krishna Water Dispute Tribunal (KWDT) by the Government of India. It is informed that KWDT has framed the following issues on this aspect:

“Whether on augmentation of water in river Krishna by diversion from any other river is entitled to contestant State to claim greater share in augmented water? ”

A bare reading of the issue framed by KWDT and the issues included in the request of Government of Goa at para 28(iv) and 28(v) clearly indicate the vast difference between them. The issue framed by KWDT does not in any way entitle it to have jurisdiction over the other river basins. The issue framed by KWDT is basically to decide the share of the contestant State on diverted water, if any, from other basins.

5. Thus, the issue before KWDT is basically the share of basin States in the diverted water. Whereas, the issues included in the request of Goa at para 28(iv) and 28(v) entitle the proposed new tribunal on Mahadayi to have jurisdiction over a portion of Krishna river basin and a portion of the other river basins, as the issues are basically to adjudicate and decide the matters contained in the above points of references, which will lead to the conflict over the jurisdiction with existing KWDT which is not permitted under the provisions of the ISRWD Act, 1956. The Act clearly bars Supreme Court or any other court (tribunal is a kind of Court) to have or exercise jurisdiction over a dispute which is referred to a tribunal under the provisions of the Act. In view of this, the request made by Govt. of Goa does not conform to the provisions of the ISRWD Act, 1956 on this count.

6. In view of the above, Government of Goa is again requested to send a revised request to the Central Government containing references to Mahadayi basin only for taking further necessary action in this regard.”

603. It is further clear from the record that on 10.01.2007, the State Government of Goa accepted the revision of its complaint dated 09.07.2002 and agreed to delete the paras 28(iv) and 28(vi) from its complaint. The letter dated 10.01.2007 reads as under:

“No. CE/Mandovi Basin/2006-07/198  
Office of the Chief Engineer (M.B.)

Water Resources Department  
GPD 1-3 & 1-4 D Type Quarters  
Porvorim-Goa  
Dated: 10/1/2007

To

The Secretary,  
Ministry of Water Resources,  
Government of India,  
Shram Shakti Bhavan,  
Rafi Marg,  
New Delhi

Attention: Shri S. Manoharan, Additional  
Secretary (MOWR).

Sub: Request for appointment of Interstate  
River Water Dispute Tribunal under  
ISRWD Act, 1956

- Ref: 1. This Office letter 68-4/CE-WRD-EO-  
2002-03/208 dated 9/7/2003.
2. Your letter No. 5/4/2005-BM dated  
21/11/2006.
3. This Office letter No. CE/Mandovi  
Basin/2006/178 dated 13/12/2006
4. Your letter No. 5/4/2005-BM  
dated 4/1/2007

Sir,

After due consideration your request vide letter dated 4/1/2007 by the Government of Goa, I am directed to inform you that the Goa's request for appointment of Tribunal under ISRWD 1956 may be

processed by deleting the para 28(iv) & 28(v) without prejudice to any other contents in the Goa's request letter of 9/7/2002.

Yours faithfully,  
Sd/-  
(Raajiv Yaduvanshi)"

604. Since the water dispute was between the State of Goa and the State of Karnataka and also the State of Maharashtra, therefore, it emerges that even the State of Karnataka had a grievance in the matter, and on 22.06.2010 filed its own complaint under section 3 of the Act, raising a water dispute against the State of Goa, and requested the Central Government "to constitute a Water Dispute Tribunal, and refer to the Tribunal so constituted for adjudication and decision, the water disputes and matters connected with, or relevant to the water disputes, (as well as interim measures), emerging from the letter of complaint and the Annexures hereto for adjudication and decision of water disputes and matters connected with or relevant to the water disputes (as well as interim measures) emerging from this letter of complaint and the Annexures hereto."

605. The relevant portion of the aforesaid complaint filed by the State of Karnataka are extracted hereunder:

“1.1 The Government of State of Karnataka is of the opinion that a Water Dispute has arisen by reason of the fact that the interest of the State of Karnataka and its inhabitants in the waters of the Inter-State Water river Mahadayi and its valley have been or are likely to be prejudicially affected by:

(a) The executive actions of the Government of the State of Goa resulting in denial of equitable share to the State of Karnataka in the available waters of the interstate river Mahadayi and its valley, which is not less than 45 tmc (consumptive use of 24.15 tmc).

(b) The executive actions of the Government of State of Goa in protesting against the attempting to prevent works undertaken for diversion of 7.56 tmc of water in the interstate river Mahadayi by the Government of Karnataka under the Kalasa-Bhanduri project (a Drinking Water Project for inhabitants of Hubli-Dharwad and towns and villages en route).”

### 3. SPECIFIC MATTERS IN DISPUTE:

(i) The following matters inter alia would arise for adjudication and consequent decision of the Tribunal:

- (a) Whether, the available water for allocation in the interstate river Mahadayi and its valley is not less than 220 tmc at 50% dependability?
- (b) What is the available water at Haltar Dam, Kalasa Dam, Kotni Hydro-power Dam, Bail Nadi Dam site, Bhandura Dam site and entire catchment in Karnataka and Ganjim G & D site on main river, Khandepar at Colem G & D site and entire catchment up to mouth of the Sea of Goa in the interstate river Mahadayi and its valley?
- (c) What is the contribution of water of each of the riparian States of Karnataka, Goa and Maharashtra to the available water of interstate river Mahadayi and its valley?
- (d) On an equitable apportionment of the waters of the inter State river Mahadayi and its valley, whether, the equitable share of the riparian State of Karnataka is not less than 45 tmc annually (consumptive use of 24.15 tmc)?
- (e) Whether the State of Karnataka is entitled to execute the Kalasa-Bhanduri project (Drinking Water Project) and divert 7.56 tmc of waters every year of the interstate river Mahadayi to the Malaprabha river in the Krishna basin?
- (f) Whether, the inhabitants of twin city of Hubli-Dharwad, towns and villages have a right to

drinking water from the waters of inter State river Mahadayi diverted under the Kalasa – Bhanduri project? If so, does not such right have a higher priority over other uses of the waters of the said river?

(g) Whether, the State of Karnataka would be justified in diverting waters of the interstate river Mahadayi and its valley to the Kali rive for augmenting the generation of electricity under the existing Kali Hydro Power Project? If so, what extent of diversion is just and reasonable?

(h) Whether, the State of Karnataka is entitled to execute Kotni hydro power project on the interstate river Mahadayi for generation of electricity on a main river Mahadayi? If so, to what extent?

(i) As alleged, whether, the State of Goa and its inhabitants would be prejudicially affected by the executive actions of the Government of State of Karnataka in the waters of Inter-State river Mahadayi and its valley?

#### 5. EFFORTS MADE, IF ANY, TO SETTLE THE DISPUTE:

(i) There have been continuous discussions and correspondence at Officers' and Ministers' level between the State of Goa and Karnataka for many long years. The list of dates along with compilation of documents is prepared and enclosed (to this complaint) as Annexure-B (Colly.) which shows that:

.....

.....

(e) As part of its equitable share, Karnataka, as an emergent measure proposed Kalasa and Bhanduri projects for diversion of only 7.56 tmc of water to meet the urgent necessity of drinking water requirements to twin cities of Hubli-Dharwad, which again was objected to by the State of Goa. When this project was cleared 'in principle' on 30.04.2002 by the Ministry of Water Resources, GOI, State of Goa objected and filed a complaint dated 9th July, 2002 under the ISWD Act. In view of that complaint, the Government of India kept the 'in principle' clearance in abeyance in its letter dated 19th September, 2002. Thereafter Suit No. 4 of 2006 was filed by the State of Goa against Karnataka for referring the alleged water dispute concerning diversion for drinking water purposes to a Tribunal, which was resisted by the State of Karnataka and this suit remains pending and the next date fixed is 26.07.2010.

#### REQUEST:

(i) .....

(ii) refer to the Tribunal so constituted for adjudication and decision, the water disputes and matters connected with or relevant to the water disputes (as well as interim measures) emerging



from this letter of complaint and the Annexures hereto.”

606. The Tribunal finds that prior to the reference of the present water dispute to this Tribunal, an Original Suit bearing OS No. 4 of 2006 was filed by the State of Goa before the Hon'ble Supreme Court of India. All the grievances were raised in the said civil suit by the State of Goa, which have been pleaded before this Tribunal by the said State in its Statement of Claims. A specific grievance was raised with regard to diversion of water from Mahadayi basin to Malaprabha basin, through Kalasa Bhanduri project. A prayer was made in the aforesaid civil suit for constituting a Water Disputes Tribunal.

607. The aforesaid Original Suit was contested by the State of Karnataka. All the pleas taken by the State of Goa were controverted by the State of Karnataka, and a similar stand was taken by the Karnataka before the Hon'ble Supreme Court, which has been taken by it before this Tribunal. During the pendency of the aforesaid civil suit before the Hon'ble Supreme Court, the Central Government constituted the present Mahadayi Water Disputes Tribunal, vide a Notification dated 16.11.2010, and

thereafter a reference dated 11.01.2011 was made by the Government of India to this Tribunal, which reads as follows:

**“REFERENCE**

In exercise of the powers conferred by sub-section (1) of section 5 of Interstate River Water Disputes Act, 1956 (33 of 1956), the Central Government hereby refers to the Mahadayi Water Disputes Tribunal for adjudication, the water dispute regarding the Inter-State river Mahadayi and the river valley thereof, emerging from letter Nos. 68-4/CE-WRD-EO-2002-03/208 dated 09th September, 2002 & letter No. CE/Mandovi Bassin/2006-07/198 dated 10th January, 2007 from Government of Goa, letter No.WRD-8-KMD-09 dated 26th June, 2010 from Government of Karnataka and letter No.Mandovi-2010/CR-247/WRP dated 13th September, 2010 from Government of Maharashtra.”

608. However, on account of a typographical error in a date in the aforesaid reference Notification, a Corrigendum dated 09.02.2011 was issued for correcting the said error, which reads as under:

**“CORRIGENDUM**

In the REFERENCE made to the Mahadayi Water Disputes Tribunal vide this Ministry letter of even no. dated 11th January, 2010, the date of letter no. 68-

4/CE-WRD-EO-2002-03/208 may be read as 09th July, 2002.”

609. On 20.01.2011, when the aforesaid Original Suit was taken up for hearing by the Hon'ble Supreme Court, the matter of issuance of Notification dated 16.11.2010, issued by the Central Government, constituting the Tribunal to decide the aforesaid water disputes between the party states was brought before the Hon'ble Supreme Court. Accordingly, the aforesaid Original Suit filed by the State of Goa was disposed of by the Apex Court by passing the following order was passed:

#### “O R D E R

In our order dated 22nd November, 2010, we referred to and recorded regarding issuance of the Notification dated 16.11.2010, issued by the Central Government, constituting a Tribunal to decide the water dispute relating to the inter-State River Mahadayi and the River Valley.

However, besides the said Notification a separate Notification was also required to be issued by the Union of India by way of referring the entire disputes to the said Tribunal. Two weeks' time was granted to the Central Government for doing the needful in the matter.

Pursuant to the said order a further Notification is issued by the Union of India under Notification dated 16.11.2010 for adjudication of the water dispute regarding the inter state River Mahadayi and the River Valley thereof. In the said order, the Central Government has referred to the Tribunal the request and complaints received from the Government of Goa, Government of Karnataka and Government of Maharashtra regarding the water dispute but while mentioning about the letters of request in the notification, there is some clerical mistake.

Be that as it may be, since there has been request of the aforesaid three State Governments for referring the water dispute to the Tribunal, we take the aforesaid Notification on record whereby all the disputes regarding the inter-State River Mahadayi and the River Valley thereof are referred to the aforesaid Tribunal for adjudication and decision. In view of this order, all the issues, that have been raised in this suit, could be effectively raised before the aforesaid Tribunal in accordance with law.

In view of the aforesaid order, nothing survives in this Original Suit, which stands disposed of accordingly.

All the applications also pending, stand disposed of in view of this order.

(Dr. MUKUNDAKAM SHARMA) J

( ANIL R. DAVE) J

NEW DELHI,  
JANUARY 20,2011.”

610. It would also be relevant to notice that the State of Maharashtra, though not a contesting party against the State of Karnataka, at that stage, was also impleaded as a party respondent in the proceedings before the Supreme Court.

611. After the present Tribunal was constituted, and the reference was received from the Government of India, the cognizance of the matter was taken and the proceedings were initiated. The parties were directed to file their respective Statements of Claims.

612. A Statement of Claim was filed by the State of Karnataka on 02.01.2013 (Volume 10). Besides, taking up various pleas and besides setting up its own claims in this water dispute, and taking up the pleas in that regard, an objection was also raised regarding the effect of deletion of paras 28(iv) and 28(v) from Goa's complaint dated 09.07.2002. The aforesaid objection raised by the State of Karnataka is in paras 4.1 to 4.10, (Page 58, Volume 10) and is extracted as below:

“C. Effect of deletion of paras 28(iv) and 28(v) from Goa's complaint dated 09.07.2002;

4.1 The State of Goa filed its Complaint dated 09.07.2002 (amended) urging the Central Government; Secretary, Ministry of Water Resources, Government of India to immediately constitute a Judicial Tribunal as provided under Section 3 of the Inter State Water Disputes Act, 1956 as amended and to refer for adjudication the following:

"28.

(i) To adjudicate and decide correctly the available utilizable water resources of the Mandovi basin at 75% dependability at various points in the basin and at Karnataka's disputed project sites.

(ii) To adjudicate and decide the equitable shares of the three co-basin states in the above quantity of water taking into consideration the long term in basin needs of the three States for the beneficial uses of water (water supply, irrigation, hydro-power generation, navigation, pisci-culture and environmental protection, etc.)

(iii) To adjudicate and decide whether in basin needs to be given priority over any contemplated extra basin diversions and whether there is any surplus left for extra basin diversions after adequately providing for long term in basin needs.

(iv) To adjudicate and decide whether Karnataka cannot meet Hubli/Dharwad water supply requirements from locally available water resources.

(v) To adjudicate and decide whether there are no other alternative sources available to Karnataka, such as the Kali, the Bedti, the Ghataprabha etc., from which water supply needs of Hubli/Dharwad towns could be met as a higher priority than irrigation and hydropower needs in those basins.

(vi) To adjudicate and decide specific restraints or restrictions to be placed on the upstream riparian states with regard to construction and regulation of their project~ during each water year for beneficially using their allocated equitable share of the Mandovi river basin waters.

(vii) To adjudicate and decide the machinery to implement the decision of the Tribunal”.

4.2 The State of Karnataka by its letter dated 12.01.2010 requested the Union Government to "delete reference of Kalasa Bhandura project to the proposed Tribunal' on the ground that drinking water requirement has the highest priority among the various uses of water and therefore such "requirement should be seen as an issue relating to right to

livelihood under Article 21 of the Constitution rather than as regular water Disputes under the provision of the Inter-State River Water Disputes Act, 1956”.

(A copy of the letter dated 12.01.2010 by the Chief Minister of Karnataka to the Prime Minister of India, is annexed hereto and marked as Annexure-46).

4.3 On 26.03.2010, the Union Government replying to the above letter dated 12.01.2010 stated that –

"As regard to deleting reference of Kalasa Bhandura project to the proposed Tribunal; the Govt. of Goa vide its letter dated 10.1.2007 has deleted the reference to the issues related to providing water to Hubli and Dharwad Cities from the complaint to be referred to the Tribunal."

(A copy of the letter dated 26.03.2010 by the Minister, Water Resources to Chief Minister, Government of Karnataka is annexed hereto and marked as Annexure-47).

4.4 Till that date the State of Karnataka was not aware nor made aware of letter dated 10.1.2007 by Goa. It appears that by letter dated 10.01.2007, the State of Goa had agreed to delete paras 28(iv) and 28(v) in its complaint dated 09.07.2002 filed under Section 3 of the Act of 1956. The letter is extracted below:



"After due consideration your request vide letter dated 4/1/2007 by the Government of Goa, I am directed to inform you that the Goa's request for appointment of Tribunal under ISRWD 1956 may be processed by deleting the para 28(iv) & 28(v) without prejudice to any other contents in the Goa's request letter of 9/7/2002."

(A copy of the letter dated 10.01.2007 by Office of Chief Engineer, Water Resources, Goa to the Ministry of Water Resources, GOI is annexed hereto and marked as Annexure-48).

4.5 The deleted paras viz., para 28(iv) and 28(v) of the complaint dated 09.07.2002 filed by Goa are extracted below:

"28 (iv) To adjudicate and decide whether Karnataka cannot meet Hubli/Dharwad water supply requirements from locally available water resources.

(iv) To adjudicate and decide whether there are no other alternative sources available to Karnataka, such as the Kali, the Bedti, the Ghataprabha etc., from which water supply needs of Hubli/Dharwad towns could be met as a higher priority than irrigation and hydropower needs in those basins'.

4.6 The Complaint of Goa was, along with the complaints of other two States, referred to the Mahadayi Water Disputes Tribunal on 11th January, 2011 on the following terms:

"In exercise of the powers conferred by sub-section (1) of section 5 of the Inter-State River Water Disputes Act, 1956 (33 of 1956), the Central Government hereby refers to the Mahadayi Water Disputes Tribunal for adjudication the water dispute regarding the Inter-State river Mahadayi and the river valley thereof emerging from letter Nos. 68-4/CE-WRD-EO-2002-03/208 dated 10th September 2002 and letter no. CE/Mandovi Basin/2006-07/198 dated 10th January, 2007 from the Government of Goa, letter no. WRD-8- KDM-2009 dated 26th June 2010 from Government of Karnataka and letter No. Mandovi-2010/CR-247/WRP dated 11<sup>th</sup> October, 2010 from Government of Maharashtra".

4.7 It will be appreciated that since specific reference is made to the letter of Government of Goa dated 10.01.2007 there can be no adjudication with respect to whether Karnataka cannot meet the Hubli-Dharwad water supply requirements from locally available water resources as had been contended by Goa or that the water supply needs of Hubli-Dharwad towns being of highest priority over irrigation and hydro-power generation under the projects in Kali, Bedti and Ghataprabha basins. With the deletion of para 28(iv)

and 28(v) of the complaint and these items being dropped from the reference, the case must proceed on the basis that the water supply requirements for drinking water can only be met from Mahadayi river.

4.8 The State of Karnataka submits that after the deletion of paras 28(iv) and 28(v) from complaint dated 09.07.2002 as discussed above, it is not open to the State of Goa to plead against the diversion of 7.56 tmc of water under the ongoing Kalasa Bhandura project.

4.9 Goa has waived its right to agitate against Kalasa Bhandura project or the drinking water requirement of Hubli Dharwad twin cities. Goa is also barred either by estoppel or waiver from re-agitating against the Kalasa Bhandura project or the drinking water requirement of Hubli Dharwad twin cities. As submitted above, Goa had specifically agreed and/or not objected to the Kalasa project of Karnataka in the interstate meetings held on 10.09.1996 and 04.10.1996 and the deputy Chief Minister of Goa had specifically appreciated the project as a "good project and it can be beneficial to both the States" in the Interstate meeting held on 10.01.2000. Even, the Union Ministry of Water Resources while granting "in-principle clearance" by its letter dated 30.04.2002 had proceeded on its understanding that Goa has no objection to the Kalasa Bhandura project (see the "abeyance" letter dated 19.09.2002). Karnataka submits that if Goa cannot plead on these issues, then it is no longer open to question the Kalasa Bhandura project.

4.10 However, without prejudice to the above contentions on the effect of deletion of paras 28(iv) and 28(v) by Goa from its complaint, Karnataka has dealt with drinking water needs of Hubli-Dharwad in the Statement of Claims.”

613. The State of Goa also filed its Statement of Claims on 04.02.2013 (Volume 28). The history of the water dispute, various pleas taken by the State of Goa, and also the objection to the diversion of water from Mahadayi basin to Malaprabha basin, through Kalasa-Bhanduri project, have been detailed.

614. The State of Karnataka filed its reply to the Statement of Claims filed by the State of Goa, vide its reply dated 18.3.2013, (Volume 33). In the aforesaid reply, the State of Karnataka denied the various pleas raised by the State of Goa, and also raised an objection to the adjudication of the claims made by Goa on account of deletion of paras 28(iv) and 28(v) from Goa’s complaint dated 09.07.2002. The relevant extract, from the reply filed by the State of Karnataka, vide Volume 33, is reproduced below:

“(xii) After the deletion of paras 28 (iv) and 28(v) from its Complaint dated 09.07.2002 vide letter dated 10.01.2007 to make it maintainable for the reference

under Sec. 5(1) of the Act of 1956, Goa is estopped from raising the issues by pleading against or questioning the legality of diversion of 7.56 tmc of water under the ongoing Kalasa Bhanduri project for meeting the drinking water requirement of twin cities of Hubli-Dharwad etc.

(Complaint of Goa dated 09.07.2002 is attached as Annexure R-3 to the reply filed by Karnataka to Goa's I.A. No. 1 of 2012 before this Tribunal at pages 51-91 and Annexure R-6 to the said Reply is attached the letter dated 10.01.2007 at page 98).

2.90 In Re: Para 153 – The contents of para 153 are vehemently denied. It is denied that the State of Karnataka has illegally proceeded with the works and that it is an attempt to create a 'fait accompli'. It is also denied that "an attempt is being made to justify diversions, citing alleged need of Hubli-Dharwad drinking water requirement when the entire attempt is to divert water for irrigation purposes". It is submitted that Goa had agreed to the deletion of paras 28(iv) and 28(v) of its complaint dated 09.07.2002 which relate to the Kalasa Bhanduri project planned by Karnataka for meeting the drinking water requirement of Hubli-Dharwad and thereafter estopped from raising the said issue. It is further denied that the water available in the Mahadayi basin is being mismanaged and misutilized. It is further denied that the entire attempt is to put into jeopardy the very sustenance of Mahadayi River and the Mahadayi River Basin."

615. The State of Goa also filed a reply to the Statement of Claims of Karnataka, (Volume 10), through its reply dated 14.05.2013, (Volume 38). The objection taken by the State of Karnataka with regard to deletion of paras 28(iv) and 28(v) was also strongly contested. The following pleas were taken by the State of Goa in the aforesaid reply:

“56. In Re. Para 4.1 to 4.10 of the Statement of case of Karnataka dated 02/01/2013: State of Goa states and submits that what has been stated by State of Karnataka in the said paragraphs are mere contentious averments alleged to be the effect of the deletion of paras 28 (iv) and 28 (v) from Goa's complaint letter dated 09/07/2002. State of Goa admits that by a communication dated 10/01/2007, they have agreed for deletion of paragraph 28 (iv) & 28 (v) of their complaint letter dated 09/07/2002. State of Goa's justification for doing so, are inter alia is submitted as under:-

1. It took Goa almost nine long years to get this important dispute matter concerning its vital interests referred to a judicial tribunal for justice as provided under the law.
2. Karnataka's case for deletion of Goa's reference for Tribunal's adjudication of Kalasa Bandura project's proposals for outside-the-basin diversion is on that ground that drinking water has the highest priority among the various uses of water and therefore such requirement should be seen as an

Issue relating to livelihood under Article 21 of the Constitution of India, rather than a regular Water Dispute under the provision of the Inter-State Water Dispute Act, 1956.

3. The State of Goa denies the aforesaid contention of Karnataka. If water supply is of higher national priority as contended, it is inconceivable as to why Karnataka cannot reduce its own irrigation use of 27 tmc from Malaprabha or Hydropower generation on Kali Nadi to meet the priority requirement.

4. It has to be clarified that Goa Government did not agree to deletion of its demands in para 28 (iv) & 28 (v) for reference to this Tribunal because of any of the reasons as alleged by the State of Karnataka in their present Statement of Case. Goa government had to agree to this deletion due to following legal constraints:--

a. Hubli -Dharwad are located in Krishna Basin in Malaprabha, Ghataprabha and Tungabhadra sub basins. The local availability of water in these basins and the reasonable needs for various uses to be granted are under dispute before the Krishna Water Dispute tribunal. The Krishna Tribunal's hearings are still under progress. Therefore, the contention of MoWR as manifested from the Letter dated 21/11/2006 was that it would not be legally permissible for the Mahadayi River Water Dispute Tribunal to adjudicate on issues pending before another Judicial Tribunal and being adjudicated. It was

under this legal constraint that Goa agreed to delete the said paras 28(iv) & 28(v).

b. If it is Karnataka's contention that Goa is estopped from arguing against Karnataka's outside the basin diversion because of deletion of clauses 28(iv) and 28 (v), then it would be Goa's contention (without prejudice to the aforesaid submission) that Karnataka is estopped from arguing about the water supply needs of Hubli-Dharwad as they are located in Krishna Basin and the needs and availability of water for these needs are under adjudication before the Krishna Water Dispute Tribunal.

c. As already explained, Goa Government agreed for deletion of specific reference of clauses under 28(iv) and 28(v) before this Tribunal due to this legal constraints and the fear that if insisted upon by it, the matter may go to Supreme Court and the constitution and proceedings of the Mahadayi Dispute Tribunal may get further delayed enabling Karnataka to make its outside basin diversion a fait accompli.

d. Without prejudice to the aforesaid submission, it is respectfully submitted by the State of Goa that the issues covered by the Paragraphs 28(iv) & 28(v) can very well be agitated/raised before the present tribunal as the same issues are also covered in Karnataka's complaint dated 22/06/2010 [and more



particularly issue No. (f)] which is also a specific matter of dispute before this Hon'ble Tribunal.

From the aforesaid facts, the double standard of the Union Ministry of Water Resources (MoWR) is also apparent as the MoWR vide letter dated 21/ 11/2006 directed the State of Goa to delete Paras 28(iv) & 28(v) on the grounds that that it would contain references to basins other than the Mahadayi Basin. However, identical issues concerning Hubli-Dharwad region have been allowed to be retained in Karnataka's complaint dated 22.06.2010, which has been referred to the present Hon. Tribunal for adjudication.

It is humbly submitted that in spite of the above legal constraint Karnataka if permitted by this Hon'ble Tribunal to plead its needs for Hubli-Dharwad water supply which is in Krishna basin, then the State of Goa may also have to be permitted to plead before this Hon'ble Tribunal the water resources available in Krishna basin (Ghataprabha, Malaprabha, Thungabhadra) and how it is adequate to meet these needs. Under these circumstances, Goa reserves its right to further add and elaborate its reply to paras 4.1 to 4.10 during the course of detailed arguments after the correct position is known. The entire correspondence in this respect between Goa Govt. and Central Govt. are enclosed herewith as Annexure 19 collectively.

It is further submitted that Maharashtra has pleaded in their Statement of Case, that if Karnataka is

permitted by the Hon. Mahadayi Water Dispute Tribunal to divert Mandovi River waters to Malaprabha sub basin in Krishna Basin, then they would consider it as an augmentation of the available Krishna water yield and claim a share in Krishna Basin. In that case Andhra Pradesh will also step in and claim a share. This will open up a whole Pandora's box of complications and endless disputes dragging the small State of Goa into a long legal battle after depriving it of its in basin needs."

616. On 15.07.2013, the State of Karnataka filed a rejoinder to the reply filed by the State of Goa, to the Statement of Claims filed by Karnataka. In the aforesaid rejoinder, (Volume 46), the State of Karnataka again reiterated its objection with regard to the deletion of the paras 28(iv) and 28(v) by the State of Goa as follows:

"4(30) In re: Paras 56 and 57: Karnataka does not admit any of the contentions raised by Goa in paras 56 and 57 of the Reply. Karnataka reiterates its contentions made in paras 4.1 to 4.10 of its Statement of Claims. The suggestion for reduction of irrigation under Malaprabha project to provide drinking water to Hubli- Dharwad is not a justified solution at all. Karnataka has already cut down its irrigation in Malaprabha from 44 tmc to 27 tmc, which is about 38.60% of the planned irrigation. The existing facility of farmers to receive waters from Malaprabha project acquired from 1970 onwards cannot be deprived.

The Mahadayi water of 220 tmc at 50% dependability and 199.6 tmc at 75% dependability, a large part of which is going as waste to sea at present, is the only solution to meet the drinking water needs of Hubli-Dharwad. The State of Karnataka reserves its right to refer to paras 13.2 to 13.14 of the Statement of Claims in support of its argument.”

617. In the aforesaid Rejoinder (Volume 46), the relevant portion of the pleas taken by Karnataka in para 4(46) (page 54) may be noticed as below:-

“....Karnataka submits that it requires about 7.56 tmc by 2044 to meet the requirement of projected population of 21,27,878. Karnataka denies that the requirement of Hubli-Dharwad, etc., may be met from Kali nadi or Malaprabha by reducing the existing requirements therein. Karnataka submits that diversion from Kali is not a feasible proposition at all. Kali is a deficit basin. The cost of diversion from Kali to Hubli-Dharwad is almost five times more than the cost of diversion of Mahadayi water to Malaprabha basin as planned. Therefore, it is considered as totally uneconomical. Similarly, other alternatives suggested by Goa in the Complaint from Bedthi is also not feasible. Bedthi is a deficit basin and the cost of diversion is more than three times than the cost of diversion of Mahadayi water to Malaprabha basin as planned. Karnataka reserves its right to lead evidence in this regard. ...”

618. On 16.04.2014, a rejoinder, (Volume 77), was filed by the State of Goa to the reply filed by State of Karnataka to the amended Statement of Claims by Goa. The State of Goa reiterated its stand on the aforesaid objection raised by Karnataka as follows:

“C) The State of Goa denies the aforesaid contention of Karnataka. If water supply is of higher national priority as contended, it is inconceivable as to why Karnataka cannot reduce its own irrigation use of 27 TMC from Malaprabha or Hydropower Generation on Kali Nadi to meet the priority requirement. It is submitted that the State of Goa did not agree to deletion of its demands as contained in paras 28(iv) & 28(v) on account of any reasons as alleged by the State of Karnataka as aforesaid. The State of Goa had to agree to this deletion due to following legal constraints:

- (i) The Ministry of Water Resources of Government of India addressed a letter dated 21.11.2006 to the Government of Goa stating that paragraphs 28(iv) and 28(v) of the complaint dated 9.07.2002 filed by the State of Goa was examined by the Central Government and it was found that the same contained references to basins other than Mahadayi. It was further stated therein that as per Section 3 of the Interstate Water Disputes Act, 1956, the dispute/complaint in connection with a particular interstate river or river valley

could be referred to the Tribunal and not of multiple basins. In the said letter, it was further stated that the request of the Government of Goa in the present form could not be referred to the Tribunal for adjudication of the dispute. It was under this legal constraint that the State of Goa agreed to delete the said paras 28(iv) and 28(v) from its complaint dated 9.07.2002.

- (ii) Without prejudice to what is stated herein above, it is respectfully submitted that if the State of Karnataka's contention is that Goa is estopped from arguing against the Karnataka's outside the basin diversion because of deletion of the aforesaid paragraphs 28(iv) and 28(v), then likewise the State of Karnataka would also be estopped from arguing about the water supply needs of Hubli-Dharwad as they are located in Krishna Basin and the needs and availability of water for these areas are under adjudication before the Krishna Water Disputes Tribunal.
- (iii) As already explained, the State of Goa agreed to the deletion of the specific reference of paragraphs 28(iv) and 28(v) before this Hon'ble Tribunal due to this legal constraint and the fear that if insisted upon by it, the constitution and proceedings of the Mahadayi Dispute Tribunal may get further delayed enabling the State of Karnataka to make its outside basin diversion and present a fait accompli in the matter.

- (iv) Without prejudice to the aforesaid submission, it is respectfully submitted by the State of Goa that the issues covered by the paragraphs 28(iv) & 28(v) can very well be agitated/raised before this Hon'ble Tribunal as the same issues are also covered in the State of Karnataka's complaint dated 22.06.2010 [and more particularly issue No. (f)], which is also a specific matter of dispute before this Honourable Tribunal.
- (v) Without prejudice to the aforesaid contention, it is submitted that clauses (i), (ii), (iii), (vi) and (vii) of the letter dated 9.07.2002 addressed by the State of Goa amply entitles the State of Goa to seek directions from this Honourable Tribunal in respect of the impugned projects.
- (vi) From the aforesaid facts, the double standard of the Union Ministry of Water Resources is also apparent as the Ministry of Water Resources vide letter dated 21.11.2006 directed the State of Goa to delete paras 28(iv) & 28(v) on the grounds that it would contain references to basins other than the Mahadayi basin. However, identical issues concerning Hubli-Dharwad region have been allowed to be retained in State of Karnataka's complaint dated 22.06.2010, which has been referred to this Honourable Tribunal for adjudication.
- (vii) In any event of the matter, deletion of paras 28(iv) and 28(v) from the reference is different and distinct from raising an argument to counter

the diversion based on issues arising in Hubli – Dharwad region, wherein, in pleadings, and in evidence as also while arguing it is always open to the State of Goa, to raise the same as and by way of arguments and counter reply to Karnataka.”

619. The State of Karnataka on 20.04.2015 filed an amended Statement of Claims, (Volume 129). In the aforesaid Statement of Claims, Karnataka reasserted and reiterated its objection with regard to the maintainability and adjudication of the claims made by the State of Goa, on account the deletion of paras 28(iv) and 28(iv) from its complaint. Identical pleas were taken in this amended Statement of Claims, as well, by the State of Karnataka , as were taken by it in its original Statement of Claims (Volume 10) filed on 02.01.2013.

620. A reply was filed by the State of Goa, (Volume 134), on 05.05.2015, to this amended Statement of Claims by Karnataka. The State of Goa, in the said reply, has specifically stated that “it repeats and reiterates all the averments and contentions raised by the State of Goa in its Reply dated 14.05.2013 (Sl. No. 38 of the List of Documents maintained by this Hon'ble Tribunal) to the

Statement of Claim filed by the State of Karnataka as if the same are specifically reproduced herein.”

621. An amended Statement of Claims, (Volume 131), having been filed by the State of Goa on 23.04.2015, the State of Karnataka also chose to file a reply thereto, (Volume 138), on 25.05.2015. Once again, Karnataka took up an objection with regard to the adjudication of the dispute to the claims made by the State of Goa on account of the deletion of the aforesaid paras from its claims. It would be also relevant to notice the aforesaid objection taken in the reply filed by the Karnataka as Volume 138, as follows:

“2.1 The respondent State of Karnataka submits that this Hon'ble Tribunal was constituted vide Notification dated 16.11.2010 issued by the Central Government under Sec. 4 of the Interstate Water Disputes Act, 1956 (Act of 1956). By order dated 11.01.2011 headed ‘REFERENCE’ the Central Government referred the Water Dispute to this Hon'ble Tribunal for adjudication in the following terms:

“REFERENCE

*In exercise of the powers conferred by sub-section (1) of section 5 of Interstate River Water Disputes Act, 1956 (33 of 1956), the Central Government*



*hereby refers to the Mahadayi Water Disputes Tribunal for adjudication, the water dispute regarding the Inter-State river Mahadayi and the river valley thereof, emerging from letter Nos. 68-4/CE-WRD-EO-2002-03/208 dated 09th September, 2002 & letter No. CE/Mandovi Bassin/2006-07/198 dated 10th January, 2007 from Government of Goa, letter No. WRD-8-KMD-09 dated 26th June, 2010 from Government of Karnataka and letter No. Mandovi-2010/CR-247/WRP dated 13th September, 2010 from Government of Maharashtra."*

Note: Letter No. 68-4/CE-WRD-EO-2002-03/208 dated 9th September 2002 was corrected vide corrigendum dated 09.02.2011 as "09th July 2002. "

2.2 The letter of 09.07.2002 as corrected in the corrigendum dated 09.02.2011 was the complaint filed by the State of Goa wherein in paragraph 28, the Government of India was strongly urged (by the State of Goa) to appoint a judicial tribunal as provided for under Section 3 of the Interstate Water Disputes Act, 1956 as amended and refer the following matters for adjudication and decision:"

"28

*i) To adjudicate and decide correctly the availability utilizable water resources of the Mandovi basin at 75% dependability at various points in the basin and at Karnataka's project sites.*

ii) *To adjudicate and decide the equitable shares of the three co-basin states in the above quality of water taking into consideration the long term in basin needs of the three States for the beneficial uses of water (water supply, irrigation, hydro-power generation, navigation, pisci-culture and environmental protection, etc.,)*

iii) *To adjudicate and decide whether in basin needs to give priority over any contemplated extra basin diversions and whether there is any surplus let for extra basin diversions after adequately providing for long term in basin needs.*

iv) *To adjudicate and decide whether Karnataka cannot meet Hubli/Dharwad water supply requirements from locally available water resources.*

v) *To adjudicate and decide whether there are no other alternative sources available to Karnataka, such as the Kali, the-Bedti, the Ghataprabha etc., from which water supply needs of Hubli/Dharwad towns could be met as a higher priority than irrigation and hydropower needs in those basins.*

vi) *To adjudicate and decide specific restrains or restrictions to be placed on the upstream riparian states with regard to construction and regulation of their projects, during each water*

*year for beneficially using their allocated equitable shares of the Mandovi river basin waters.*

*vii) To adjudicate and decide the machinery to implement the decision of the Tribunal.”*

2.3 Subsequently by an official letter dated 10.01.2007 to the Secretary, Ministry of Water Resources, the Government of India stated:

“After due consideration your request vide letter dated 4/1/2007 by the Government of Goa, I am directed to inform you that the Goa’s request for appointment of Tribunal under ISRWR 1956 may be processed by deleting para 28(iv) & 28(v) without prejudice to any other contents in the Goa’s request letter of 9/7/2002.”

2.4 It was therefore, clear that the dispute referred for adjudication emerging from letter No. 68-4/CE-WRD-EO-2002-03/208 dated 9th July 2002 from the Government of Goa the following matters were voluntarily deleted viz.

*“28. iv) To adjudicate and decide whether Karnataka cannot meet Hubli/Dharwad water supply requirements from locally available water resources.*

*v) To adjudicate and decide there are no other alternative sources available to Karnataka, such*

*as the Kali, the Bedti, the Ghataprabha etc., from which water supply needs of Hubli/Dharwad towns could be met as a higher priority than irrigation and hydropower needs in those basins.”*

The amended Statement of Claim, however, includes matters which had been unilaterally deleted. The averments in paragraphs inter alia 170, 171, 172, 174 & 193 of the Statement of Claim filed by Goa are clearly outside the scope of the reference made to the Hon'ble Tribunal and it is submitted that these paragraphs fall within items 28(iv) and 28(v) which have been deliberately and unilaterally deleted from the complaint (and correspondingly from the reference) by letter dated 10.01.2007. In each of these paragraphs, the Government of Goa has specifically referred to alternative locally available water resources to meet drinking water requirements of Hubli-Dharwad etc. and has entered pleas about alternative sources allegedly available to State of Karnataka such as the Kali, the Bedti, the Ghataprabha and Malaprabha etc. from which the water supply needs of Hubli-Dharwad towns can be met.

2.5 The respondent State of Karnataka submits that, the jurisdiction of this Hon'ble Tribunal to adjudicate water disputes is circumscribed by the provisions of the Act of 1956. The Tribunal being a Court of limited jurisdiction cannot adjudicate on issues which are not part of the Reference of the Central Government under Sec. 5(1) of the Act of 1956. The Respondent

State of Karnataka further submits that the amended Statement of Claim filed by the State of Goa inter alia in paragraphs 154A, 154D, 154E, 154F, 154H, 154I, 154K, and 183A are entirely outside the scope of the reference and cannot form the subject matter of adjudication.

2.6 The respondent State of Karnataka further submits that the State of Goa can only plead in its Statement of Case that which is circumscribed by reference letter dated 11.01.2011 read with corrigendum dated 09.02.2011 issued under Sec. 5(1) of the Act of 1956.”

622. It would be relevant to notice that a full rejoinder, (Volume 144), was filed by the State of Karnataka on 24.06.2015 to the replies filed by the State of Goa to the two Statements of Claims filed by State of Karnataka. In the aforesaid rejoinder also, the objection with regard to the adjudication of the claims of State of Goa were repeated by the State of Karnataka.

623. It would also be pertinent to notice that a total of 70 issues, were framed by this Tribunal, arising from the pleadings of the parties. The relevant issue No. 38, framed by the Tribunal is already reproduced earlier

624. During the course of arguments, the objection raised by the State of Karnataka with regard to deletion of paras 28(iv) and 28(v) by Goa has been vehemently argued by Shri Ashok Desai, its learned Senior Counsel and Shri Mohan V. Katarki, the learned Counsel, and it has been maintained that after the said deletion, and consequential reference by the Central Government after the aforesaid deletion, this Tribunal cannot go into the allegations/averments of availability or alternate resources or locally available resources, to meet the drinking water requirement of Hubli-Dharwad, and that the water supply needs of Hubli-Dharwad could be met as a high priority than irrigation and hydro-power needs in those basins. It has been further stressed that the State of Goa is estopped from re-agitating again issues deleted from the terms of reference. A strong reliance has been placed by the learned Senior Counsel on the letter dated 04.01.2007, of the Government of India, addressed to the State Government of Goa, whereby the State was asked to revise its request letter, and delete paras 28(iv) and 28(v). It has also been pointed out that in pursuance to the aforesaid communication by the Government of India, the State Government of Goa issued a revised request letter on

10.01.2007, and revised its complaint by deleting the aforesaid two paragraphs. The learned Senior Counsel has maintained that on account of aforesaid deletion, there is no question to adjudicate the controversy involved under Issue No. 38 and as such the determination of Issue No. 38 has to be against Goa.

625. The aforesaid contentions raised on behalf of the State of Karnataka have been vehemently contested and opposed by Shri Atmaram N.S. Nadkarni, the learned Senior Counsel appearing for the State of Goa. The learned Senior Counsel has referred to the history/background facts leading to the reference for constitution of this Tribunal. It has been pointed out that complaint under section 3 of the Act was sent by the Government of Goa to the Central Government on 09.07.2002, with the request to constitute a Water Disputes Tribunal, to adjudicate and decide the water dispute between the State of Goa, Karnataka and Maharashtra. Later on, a communication dated 21.11.2006 was issued by the Government of India to the Government of Goa, whereby the Central Government required the Government of Goa to delete paras 28(iv) and 28(v) from the complaint, since it contained “references to basins other than Mahadayi also. As per Section 3

of ISRWD Act, 1956, the dispute/complaint in connection with a particular inter-State river or river valley can be referred to the Tribunal and not for multiple basin, as such, the aforesaid request of Government of Goa, in the present form cannot be referred to the Tribunal for adjudication of the dispute". In the circumstances, the Government of Goa was requested to send a revised request for taking further action in the matter.

626. It has also been pointed out by the learned Senior Counsel for Goa that through a letter dated 13.12.2006, the Government of Goa replied to the said communication of the Government of India, and maintained that since the basic principle was that the water needs of the basin should be met before considering any diversion outside the basin, therefore, water should not be diverted outside the water deficient Mandovi/Madei basin to surplus Malaprabha basin. The detailed facts were given in the said communication, and the request was repeated to constitute the Tribunal immediately.

627. It has further been pointed out by the learned Senior Counsel that in response to the said communication of the Government of Goa, the Government of India wrote another



letter dated 04.01.2007, whereby the Government of Goa was again requested to send a revised request by deletion of paras 28(iv) and 28(v). The learned senior counsel has brought to our pointed attention that Government of India maintained that since the augmentation of water in river Krishna was already a matter of adjudication before the Krishna Water Disputes Tribunal, therefore, the prayers made in paras 28(iv) and 28(v) would lead to conflict over the jurisdiction with existing KWDT, which was not permitted under the provisions of the Act. The learned Senior Counsel points out that it was in that background, and keeping in view the urgency of the matter, that the Government of Goa had written the letter dated 10.01.2007, whereby the paras 28(iv) and 28(v) were deleted from the complaint dated 09.07.2002. However, the learned Senior Counsel emphasizes that it was specifically maintained by Goa that the aforesaid deletion of the paras 28(iv) and 28(v) was “without prejudice to any other contents in the Goa’s request letter of 09.07.2002.”

628. In the aforesaid background, the learned Senior Counsel argued that the deletion of paras 28(iv) and 28(v) from the complaint of Goa cannot be looked into in isolation, but the

entire background/history of the case has to be kept in mind for doing so, more so, when a specific right had been reserved by Goa that the aforesaid deletion was without prejudice to any other contents of the Goa's request letter dated 09.07.2002. To stress the aforesaid contentions, the learned Senior Counsel has taken us through the entire complaint dated 09.07.2002 filed by Goa. Our pointed attention has been drawn to various facts stated in the complaint, wherein specific pleas have been taken with regard to diversion of water from Mahadayi basin to Malaprabha basin which, inter-alia, include paras 8, 12.8 and 25.0 of the complaint.

629. The learned Senior Counsel for the Goa has also referred to two other letters, which are appended as Annexure 20 and Annexure 21 to Volume 38, (at pages 137 & 138 respectively), being dated June 2, 2010 (Annexure 21) and April 9, 2013 (Annexure 20). It has been pointed out that the matter of deletion of paras 28(iv) and 28(v) from complaint of Goa was taken up by Goa with the Central Government, and the Central Government had clarified that "the issue of deciding available utilizable water resources of Mahadayi basin, its equitable

distribution and extra basin diversion are still part of the complaint.”

630. Before proceeding any further, it will also be appropriate for the Tribunal to notice the aforesaid communications. The said two communications are extracted as follows:

“Annexure-21

PAWAN KUMAR BANSAL  
Minister of Parliamentary Affairs  
& WATER RESOURCES  
GOVERNMENT OF INDIA

NEW DELHI-110001  
D.O.No.5/4/2010-BM 2 JUNE 2010

Dear Shri Basavaraj Bommai,

Kindly refer to your letter dated 19th April, 2010 regarding the reference of providing water to Hubli & Dharwad cities from Mahadayi river by State of Goa.

I have had the matter examined. The Government of Goa vide its letter dated 10.1.2007 (copy enclosed) has deleted the Para 28(iv) and 28(v) of its complaint dated 9.7.2002 (copy enclosed) having reference to the issue related to providing of drinking water to Hubli & Dharwad

cities as the matter contained in these paras were linked to the river basins other than Mahadayi river basin. However, the issue of deciding available utilizable water resources of Mahadayi basin, its equitable distribution and extra basin diversion are still part of the complaint.

The Central Government has approved the construction of Mahadayi Water Disputes Tribunal in this regard on 10.12.2009 and the whole issue will be adjudicated by the Tribunal.

With regards,

Yours sincerely,  
Sd/-

(PAWAN KUMAR BANSAL)

Shri Basavaraj Bommai,  
Minister for Water Resources  
(Major & Medium Irrigation)  
Government of Karnataka,  
Room No. 327, 3rd Floor,  
Vidhana Sudha,  
Bangalore-560001."

"Annexure-20

Harish Rawat

Minister of Water Resources,  
Government of India

F.No. No.5/4/2010-BM

09 APR 2013

Dear Shri Parrikar Ji,

Kindly refer to your letter dated 18.10.2012 wherein this Ministry was requested to inform Government of Karnataka regarding the factual stand of Goa Government on inter-State Mahadayi Water Disputes Tribunal which does not delete any references of Kalsa-Bhandura Project.

I have had the matter examined. The Goa Government vide letter dated 10.1.2002 has deleted only the paras 28(iv) and 28(v) of its complaint dated 9.7.2002 having reference to the issue related to drinking water requirements assessment of Hubli & Dharwad cities as the matter contained in these paras were linked to the river basins other than Mahadayi basin. However, the issue of deciding available utilizable water resources of Mahadayi basin, its equitable distribution and extra basin diversion including Kalsa Bhandura Project are still part of the complaint. The Government of Karnataka has already been informed on the same issue by this Ministry, vide letter dated 2.6.2010 (Copy enclosed).

Since the Central Government has constituted Mahadayi Water Disputes Tribunal in this regard, vide notification dated 16.11.2010. The whole issue has been referred to the Tribunal, vide letter dated 11th January 2011 and 9th February, 2011. The matter is now to be adjudicated by the Tribunal.

With regards,

Yours sincerely,  
Sd/-  
(HARISH RAWAT)

Shri Manohar Parrikar

Hon'ble Chief Minister of Goa,  
Government of Goa  
Goa Secretariat  
Panjim (Goa)."

631. Further, Shri Nadkarni, the learned Senior Counsel for Goa has submitted that the State of Karnataka had also filed a complaint dated 22.06.2010, under section 3 of the Act raising a water dispute before the Central Government. The Tribunal has been taken through the contents of the aforesaid complaint of Karnataka, more specifically para 3 (page 30 Volume 62A) (already reproduced above), wherein Karnataka has claimed that it is entitled to execute the Kalasa Bhandura project (Drinking Water Project), and divert 7.56 tmc of water every year to the Malaprabha river, and had also raised an issue as to whether the inhabitants of twin city of Hubli-Dharwad town and villages have a right to drinking water from the waters of inter-State River Mahadayi diverted under the Kalasa-Bhandura project. The learned Senior Counsel draws Tribunal's attention to the reference made by the Central Government to this Tribunal, wherein the aforesaid complaint filed by Karnataka was also referred and also forms a part of adjudication, along with another

complaint dated 13.9.2010 filed by the Government of Maharashtra, raising its own claims in the water dispute.

632. The order dated 20.1.2011, passed by the Hon'ble Supreme Court of India, in original Suit No. 4 of 2006, filed by State of Goa, in the matter, has also been strongly relied upon. It has been pointed out by the learned Senior Counsel for the State of Goa that in the proceedings before the Hon'ble Supreme Court, all the pleas, which have been raised in the present proceedings before this Tribunal by Goa, had been taken, and the matter was being contested by the State of Karnataka. During the pendency of the proceedings before the Apex Court, this Tribunal was constituted by the Central Government, and accordingly the aforesaid civil suit was disposed of on 20.1.2011. Operative portion of the order of the Hon'ble Supreme Court is as under:

“Be that as it may be, since there has been request of the aforesaid three State Governments for referring the water dispute to the Tribunal, we take the aforesaid Notification on record whereby all the disputes regarding the inter-State River Mahadayi and the River Valley thereof are referred to the aforesaid Tribunal for adjudication and decision. In view of this order, all the issues, that have been raised in this suit, could be

effectively raised before the aforesaid Tribunal in accordance with law.

In view of the aforesaid order, nothing survives in this Original Suit, which stands disposed of accordingly.

All the applications also pending, stand disposed of in view of this order.”

633. Thus, the learned Senior Counsel maintains that the Hon'ble Supreme Court had disposed of the suit and directed that “all the issues, that have been raised in this suit, could be effectively raised before the aforesaid Tribunal in accordance with law.” It is thus argued that the directions of the Hon'ble Supreme Court were very clear that all the issues which had been raised before the Supreme Court by the parties, could be raised before this Tribunal and as such were to be adjudicated.

634. In these circumstances, it is vehemently asserted by Shri Nadkarni, the learned Senior Counsel appearing for Goa, that the objection raised by the State of Karnataka on the basis of deletion of paras 28(iv) and 28(v), from the complaint of Goa is of no consequence and is liable to be rejected.



635. The Tribunal has given due and thoughtful consideration to the aforesaid contentions raised by the learned senior counsel for the State of Karnataka and the State of Goa, respectively, and has also considered the record of the case on this aspect of the matter.

636. It is not a matter of any dispute between the parties that the original complaint dated 09.07.2002 filed by the State of Goa did contain paras 28(iv) and 28(v), when the request was made to the Central Government for the appointment of a Tribunal. Later on, as already noticed, because of the view of the Central Government that the aforesaid paras may result in a conflict of jurisdiction of the two Tribunals, viz. Krishna Water Disputes Tribunal, which was already adjudicating a water dispute with regard to Krishna River Water, and the Mahadayi Water Disputes Tribunal, which was yet to be constituted at that point of time, Goa agreed to delete paras 28(iv) and 28(v) of the complaint. However, while deleting the said paragraphs, a right was specifically reserved that the aforesaid deletion would be without prejudice to any other contents in the Goa's request letter of 09.07.2002. It is thus clear that although there was a deletion of paras 28(iv) and 28(v) of the complaint, but the

remaining contents of the complaint, which contained detailed facts with regard to the disputes between the parties, the grievance of the State of Goa with regard to diversion of water through Kalasa Bhanduri project etc., remained intact, and vide the reference dated 11.1.2011 by the Central Government to this Tribunal, the aforesaid complaint, with the deletion of only those two paragraphs, was referred for adjudication. In view of the aforesaid reference made by the Central Government and keeping in view the disputes between the parties, the Tribunal is duty bound in law to adjudicate all the pleas raised by the State of Goa in its Statement of Claims, which is primarily based upon the aforesaid complaint dated 09.07.2002.

637. It may also be relevant to notice here that the Central Government had asked the State of Goa to delete those two paragraphs from its complaint, merely to avoid a possible conflict of jurisdiction between KWDT and this Tribunal, which was yet to be constituted at that point of time. However, the aforesaid situation cannot possibly remain alive now on account of two reasons. Firstly, the Krishna Water Disputes Tribunal has already concluded its proceedings and had given its final Award on 20.12.2010. Secondly, the various pleas/facts stated by Goa in its

complaint dated 09.07.2002, and various pleas taken by it in the Statement of Claims, do not indicate any objection of the State of Goa with regard to water from any source/diversion augmenting river Krishna. In such a situation, the “question of any conflict of jurisdiction” between this Tribunal, or any other Tribunal/Court would not arise. The State of Goa is primarily aggrieved against the proposed diversion of water from Mahadayi river to Malaprabha Reservoir i.e. outside the Mahadayi basin.

638. Still further, as already noticed above, the State of Karnataka had also filed its complaint under section 3 of the Act on 13.10.2010, raising a water dispute against Goa, with regard to Mahadayi river and its basin. The aforesaid dispute has also been referred for final adjudication to this Tribunal, along with the water dispute raised by the State of Goa. The facts contained in the complaint of Karnataka have already been noticed above. It is clear that Karnataka has also raised a grievance against the Government of Goa, in protesting against and attempting to prevent works undertaken for diversion of 7.56 tmc of water in the Inter-State Mahadayi River with regard to Kalasa-Bhanduri project, and has also claimed that it is entitled to execute the Kalasa Bhanduri project, which is stated to be a drinking water

project, and has further claimed that inhabitants of twin city of Hubli-Dharwad town and villages, have a right to drinking water from the waters of inter-State river Mahadayi, diverted under Kalasa Bhanduri project. The aforesaid pleas have also been raised by Karnataka in its Statement of Claims. The said claim of Karnataka has been contested by State of Goa. In this view of the matter, and the controversy between the parties, and as per the issue arising before this Tribunal for adjudication, and also as per the reference made to this Tribunal by the Central Government, the said controversy has to be adjudicated.

639. On the basis of the aforesaid facts, it cannot be suggested that on account of mere deletion of paras 28(iv) and 28(v) by Goa from its complaint, this Tribunal has any restricted jurisdiction to adjudicate on the said aspect of the controversy.

640. It would also be relevant to take note of the two communications dated 02.06.2010 and 09.04.2013, (Annexures 21 and Annexures 20, respectively) (Volume 38) whereby the Central Government, while responding to the communications from the Government of Goa, had clearly maintained that the issue of deciding available utilizable water resources of Mahadayi

basin, its equitable distribution and extra basins diversion, including Kalasa-Bhanduri project, are still part of the complaint. Accordingly, on that basis also, the Tribunal finds that all the matters emerging from the water dispute between the parties are required to be adjudicated by this Tribunal, and deletion of any part of the complaint by Goa has no consequential effect upon the powers of this Tribunal.

641. At this stage, it would be appropriate to notice that in para 2.24 of its Statement of Claims dated 02.01.2013, (Volume 10), Karnataka has referred to an inter-State meeting which was convened on 27.03.2002, under the aegis of the CWC, inter-alia, to consider the proposal of Karnataka for the clearance of Kalasa-Bhanduri projects. The minutes of the aforesaid meeting have been reproduced in the said paragraph. It would be appropriate to notice the relevant portion of the minutes of the Inter-State Meeting:

“3.0 Item No. 2: Hydrological studies for assessment of yield of the Madei/Mandovi river

.....  
 .....  
 .....

Secretary (WR), Government of Karnataka highlighted the drinking water problems in Hubli-Dharwar towns where water supply situation had become precarious due to falling ground water level and supply had become possible only once in 10 days or so. He requested that clearance be given for diversion of 7.5 TMC from Madei to Malaprabha reservoir through Kalsa and Bhanduri nala diversion schemes for supply drinking water to the twin towns.

Secretary (WR), Government of Goa stated that requirements of the Madei basin should be first met before considering outside diversion. He referred to the Krishna Water Tribunal Award in this context, where certain restrictions had been placed by the Tribunal on Maharashtra for diversion of Krishna waters outside the basin. He was of the view that Karnataka should examine other options like diversions from Kali to meet the shortage in Maharashtra. Since drinking water was the first charge, Government of Karnataka should curtail irrigation supplies at Malaprabha.

In response, Advisor, Government of Karnataka stated that they had examined all options and the only technically and economically feasible solution was diversion by gravity from Madei.”

642. The State of Karnataka has also annexed as Annexure 61, a report on “Drinking Water Demand of Hubli-Dharwad, En-route villages, etc., from Malaprabha reservoir” (Volume 16).

Relevant portion of para 4 of the aforesaid report is extracted below:

“4. Comparison of Alternative Water Sources Apart from present Malaprabha Dam Source, there are more sources namely, Kali River near Dandeli, Tungabhadra Dam, Almatti Dam and Bedthi naala. A Comaprative assessment of all these five sources has been done to decide the most feasible sources for meeting drinking water requirement of Hubli-Dharwad (Table 4).”

643. In view of above, the State of Karnataka concluded as under:-

“Hence, among all the four sources, Malaprabha dam source has the lowest capital cost, minimum power requirement, least expenditure on operation and Maintenance and lowest water tariff. Hence, it may be concluded that Malaprabha reservoir source is the most feasible source in all respects for meeting the drinking water demand of Hubli-Dharwad and surrounding towns/villages.”

644. During the course of evidence, the State of Karnataka has produced Shri G.M. Madegowda, as an expert witness, as RW-4. The aforesaid witness had filed his affidavit dated 9.11.2017 (Volume 207), as his examination-in-chief. It would be

appropriate to notice certain portion from the aforesaid affidavit of this witness:

“13. Malaprabha source was identified because of its proximity to Hubli-Dharwad and also because of availability of source storage and as per the instructions of Government. Water supply from Almatti dam, Super dam, Tungabhadra dam and Bedhti river are Techno-economically not feasible as revealed in the “Report on Drinking Water demand of Hubli-Dharwad, Enroute villages etc., from Malaprabha Reservoir” filed on 02.01.2013.”

645. Further, the witness stated as follows:

“In conclusion, I submit that Hubli-Dharwad and en route villages and towns etc. require about 7.56 tmc of water by the end of 2044 AD. The State Government has improved the water supply infrastructure and at present the works undertaken would ensure supply of 5.20 tmcft of water on 24x7 basis if Malaprabha dam is augmented by Mahadayi waters to the extent of 7.56 tmc. The diversion from Mahadayi is necessary to relieve the burden on the existing water of Malaprabha dam, which is required for meeting the requirements of command areas, etc.”

646. It is, thus, apparent that the State of Karnataka, had a long standing dispute with the Goa with regard to aforesaid



Kalasa - Bhandura project, and the diversion of water from Mahadayi river basin to Malaprabha basin. In various inter-State meetings held between the two States, the issue was always taken up for resolution but has remained unresolved so far. It is further apparent that the witness of the State of Karnataka, RW-4, has himself stated that the aforesaid diversion from Kalasa Bhandura project was being adopted, as it was financially more viable. Therefore, at this stage, it cannot be suggested by the State of Karnataka that the State of Goa was in any manner precluded from raising the aforesaid controversy before this Tribunal for adjudication.

647. It would also be beneficial to note, as already noticed above also, that before constitution of this Tribunal by the Central Government, Goa had filed an original suit before the Hon'ble Supreme Court of India. All the pleas, which had been raised in the complaint and which are a part of the Statement of Claims before us also, had been raised before the Apex Court as well. In those proceedings, the matter was being contested by the State Government of Karnataka. The prayer made by Goa before the Hon'ble Supreme Court was to direct the Central Government to constitute a Water Disputes Tribunal. During the

pendency of the proceedings before the Hon'ble Supreme Court, the Central Government issued a notification, whereby the present Mahadayi Water Disputes Tribunal was constituted, and accordingly the original suit filed by the State of Goa was disposed of by passing the order dated 20.01.2011. The detailed order passed by the Apex Court has already been extracted above, and even the operative portion thereof has been emphasized during the course of arguments by the learned senior counsel for Goa. It would be pertinent to notice the operative portion of the order, once again, for ready reference:

“Be that as it may be, since there has been request of the aforesaid three State Governments for referring the water dispute to the Tribunal, we take the aforesaid Notification on record whereby all the disputes regarding the inter-State River Mahadayi and the River Valley thereof are referred to the aforesaid Tribunal for adjudication and decision. In view of this order, all the issues, that have been raised in this suit, could be effectively raised before the aforesaid Tribunal in accordance with law.

In view of the aforesaid order, nothing survives in this Original Suit, which stands disposed of accordingly.

All the applications also pending, stand disposed of in view of this order.”

648. It is thus clear that the Hon'ble Supreme Court has directed that all the issues that had been raised in the suit by the parties could be effectively raised before the Tribunal. Accordingly, it does not now lie in the mouth of the State of Karnataka that the claim made by Goa, or any portion thereof, cannot be adjudicated by this Tribunal, or there is any other bar on the State of Goa in raising the said claim.

649. In view of the aforesaid discussion, the Tribunal has no hesitation in holding that deletion of paras 28(iv) and 28(v) from the complaint dated 09.07.2002, vide letter dated 10.01.2007, addressed by Goa to the Secretary, Ministry of Water Resources, Government of India, does not in any manner bar the State of Goa from raising the objection to the diversion of water from Mahadayi River basin to Malaprabha reservoir.

650. At this stage it would be appropriate to notice two issues framed by this Tribunal. Issue No. 39 and Issue No. 43(a)(i), framed by the Tribunal are as under:

ISSUE NO.39:

“Whether the State of Karnataka establishes that the State of Karnataka is not in a position to meet its Hubli-Dharwad water supply requirements from locally available water resources as initially contended by the State of Goa and that there are no alternative sources available to the State of Karnataka from which the water supply needs of Hubli-Dharwad could be met.”

ISSUE NO. 43.a.(i):

“Whether the State of Karnataka proves that out of its total claims of 24.15 tmc of consumptive use of water:  
a. it is entitled to consumptive and/or diversion of 15.009 tmc of water to be drawn from flow of 75% dependability (i) through diversion of 7.56 tmc to provide drinking water to Hubli-Dharwad twin cities under the Kalasa-Bhanduranala Projects,”

651. Intrinsic in the larger issue, namely, whether Karnataka is entitled to diversion of 7.56 tmc to provide drinking water to Hubli-Dharwad cities under the Kalasa Bhandura nala Projects, is the issue, namely, whether the State of Karnataka is not in a position to provide drinking water to Hubli-Dharwad twin city from locally available water resources.

652. The issue, whether the State of Karnataka proves that it is not in a position to provide drinking water to Hubli-Dharwad twin city, from locally available water resources, is in-built in the issue whether the State of Karnataka is entitled to divert water of 7.56 tmc to provide drinking water to Hubli-Dharwad twin city.

653. As mentioned above, the State of Goa has asserted by firmly stating that the State of Karnataka is in a position to provide water drinking needs of Hubli-Dharwad from locally available water resources. Therefore, inspite of deletion of paragraph 28(iv) and 28(v) of its complaint dated 09.07.2002 vide letter dated 10.01.2007, addressed by the State of Goa, to the Secretary, Union Ministry of Water Resources, New Delhi, the Tribunal will have to decide the question, whether the State of Karnataka proves that it is not in a position to supply water for drinking to Hubli and Dharwad twin city, from locally available water resources.

654. Thus, the Tribunal finds that deletion of paragraph 28(iv) and 28(v) of its complaint dated 09.07.2002, does not bar the State of Goa from urging before the Tribunal that the State of

Karnataka is in a position to provide drinking water to Hubli and Dharwad twin city from locally available water resources.

655. Issue No. 38 is, accordingly, decided against the State of Karnataka.

**Findings on whether the CWC Report of March, 2003, is to be treated as Report of Central Water Commission**

656. One of the documents, Volume 15, which has been filed as Annexure-29, to its Statement of Claims, by the State of Karnataka on January 2, 2013, is titled as “Central Water Commission (CWC) Report of March, 2003” on the Yield Studies in Mahadayi Basin.

657. The aforesaid document is a matter of major controversy between the three contesting States. Whereas the State of Karnataka, who has filed this document, has maintained that the aforesaid document is the Report of CWC of March, 2003 on the Yield Studies in Mahadayi Basin, the State of Goa has vehemently contested the said factual position and has maintained that, in fact, the said document is not at all any Report of Central Water Commission, but is merely a study

prepared by some officials of the Central Water Commission, and there is absolutely nothing to suggest that either the said study was ever approved by CWC, checked by CWC or in any manner was authenticated by the CWC in any of the Commission's meetings. On that basis, the State of Goa, during the entire proceedings before the Tribunal, without referring to the said document as a CWC Report has merely referred to it as "So-called CWC Report". However, the State of Maharashtra has chosen to rely upon the said document and has also termed it as CWC Report of 2003. The expert witnesses of the three States, during their Examination-in-Chief, while preparing their respective studies/analysis, and during the course of their respective cross-examination by the opposite side, have also chosen to refer to the said document. While the witnesses Shri A. K. Gosain, RW-1 and Shri A. K. Bajaj, RW-2, appearing for the State of Karnataka, and Shri S. N. Huddar, MW-1, appearing for the State of Maharashtra, have strongly supported the said document as a CWC Report of the year 2003, and based their respective studies/report on the same, Shri Chetan Pandit, AW-1, appearing for the State of Goa, though has also repeatedly referred to the said document as CWC Report in his Affidavit dated 04.08.2016 (Volume 191), and at times has even supported the portions of

the said study, he has by and large, referred to the same as “so-called CWC Report,” during the course of his cross-examination.

658. Since a serious doubt has arisen about the existence, authenticity and preparation of the said Report, by the CWC, and its consequential approval by the CWC in its official capacity, the said issue needs to be resolved by the Tribunal for appropriate adjudication of the matter, at the initial stage of the present Report.

659. Section 9 of the Inter-State River Water Disputes Act, 1956, (Act) provides for the powers of a Water Disputes Tribunal, constituted under the Provisions of the Act. Section 9(1)(ba), lays down that the Tribunal shall have the powers for “requisitioning of any data as may be required by it.”

660. In view of the serious controversy between the parties with regard to the said document in Volume 15, as noticed above, this Tribunal in exercise of its powers under Section 9(1)(ba), wrote a communication dated May 01, 2018 to the Chairman, CWC, New Delhi, seeking information with regard to the procedure generally followed by Central Water Commission



for conducting a technical study and preparation of Report, particularly a report on hydrological studies, whenever a State Government or a project authority requests CWC for such study/report; the present status of the said Report prepared by Hydrological Studies Organisation, Hydrology (South) Directorate of March, 2003 filed by State of Karnataka as Annexure-29 of its Statement of Claims; and whether the said Report titled “Study on Yield of Mahadayi River Basin” has been approved or accepted by the competent authority, and if so, by which authority and when.

661. It would be appropriate to extract below the aforesaid communication dated May 01, 2018 addressed by the Tribunal to the Chairman CWC as below:

“MAHADAYI WATER DISPUTES TRIBUNAL  
MINISTRY OF WATER RESOURCES  
River Development and Ganga Rejuvenation  
GOVERNMENT OF INDIA  
(Email: mwdt2011@gmail.com)

5th Floor, ‘A’ – Wing,  
Janpath Bhawan, Janpath,  
New Delhi–110001 – Tel. No. 011-23329577  
Dated: 1<sup>st</sup> May, 2018

The Chairman,  
Central Water Commission,  
Sewa Bhawan, R.K. Puram,  
New Delhi-110066

Sir,

The State of Karnataka has filed a report titled “Study on Yield of Mahadayi River Basin” of March 2003 by the Hydrological Studies Organization, Hydrology (South) Directorate, as Annexure-29 of its Statement of Claims before this Tribunal. The said document is described as CWC (2003) Report. In this regard, it is pertinent to note that the State of Goa has claimed that there is no such CWC (2003) Report and has always described the said document as “so called CWC (2003) Report”.

In this regard, I am directed to seek following information from Central Water Commission at the earliest.

- a. What is the procedure generally followed by Central Water Commission for conducting a technical study and preparation of Report, particularly a report on hydrological studies, whenever a State Government or a project authority requests CWC for the such study/report?
- b. What is the present status of the said Report titled “Study on Yield of Mahadayi River Basin” by the Hydrological Studies Organization,

Hydrology (South) Directorate of March 2003 filed by the State of Karnataka as Annexure – 29 of its Statement of Claims?

- c. Whether the above said Report titled “Study on Yield of Mahadayi River Basin” by the Hydrological Studies Organisation, Hydrology (South) Directorate of March 2003 filed by the State of Karnataka as Annexure-29 of its Statement of Claims, has been approved or accepted by the competent authority? If so, by which authority and when?

Please send the requisite information along with authenticated copies of relevant documents including Note-Sheets, at the earliest.

Yours faithfully,  
Sd/-  
(M.R. Kondle)  
Registrar”

662. Vide a communication No.7/Karn-49/91-Hyd (S)/111-112 dated May 02, 2018, the Director, CWC, with the approval of its Chairman, responded to the request made by the Tribunal and provided the requisite information, as sought by the Tribunal. Along with the aforesaid communication, the relevant note-sheets were also enclosed.

663. It would be relevant to extract the aforesaid communication, dated May 02, 2018, along with its enclosures, addressed by the Director, CWC, New Delhi, to the Registrar of this Tribunal, as follows:

“Government of India,  
Central Water Commission,  
Hydrology (South) Directorate

7th Floor (S), Sewa Bhawan,  
R.K.Puram, New Delhi-110066  
Phone/Fax 011-29583507  
Email: [hydsouth@nic.in](mailto:hydsouth@nic.in)

No.7/Karn-49/91-Hyd(S)/III-112 Dated: 02.05.2018

To

The Registrar  
Mahadayi Water Dispute Tribunal  
MoWR, RD & GR, 5th Floor, A Wing,  
Janpath Bhawan, Janpath, New Delhi-1100 01

Ref: Office of Chairman letter no. 1290 dated 01.05.2018

Sir,

With reference to above mentioned letter of Mahadayi Water Disputes Tribunal, the information available with CWC are as under:

| Sr. No. | Information sought by Registrar  | Material for Reply  |
|---------|--|---|
| A       | What is the procedure generally followed by Central Water Commission for conducting a technical study and preparation of report, particularly a report on hydrological studies, whenever a State Government or a project authority requests CWC for the such study/report? | The cases are initiated by Assistant Director (AD) /Assistant Director-II (AD-II), checked by Deputy Director(DD), put up to Director, for finalization and thereafter approved by Chief Engineer(CE). In general majority of references/issues are disposed of at the level of Chief Engineer when no policy matter is involved. When policy matters are involved, approval of concerned Member/Chairman, CWC is obtained before disposal. |
| B       | What is the present status of the report titled "Study on Yield of Mahadayi River Basin" by the Hydrological Studies Organisation, Hydrology (S) Directorate of March 2003 filed by the State of Karnataka as Annexure-29 of its Statement of Claims?                      | In the Interstate Meeting convened by the Hon'ble Minister for Water Resources on 20 <sup>th</sup> December 2002 with Chief Minister of Goa, Minister of Water Resources of Goa, Minister for Major and Medium Irrigation Projects, Government of Karnataka and other participants on Mahadayi/Mandovi/Madei  |

|  |  |   |
|--|--|---|
|  |  | <p>Water Dispute, it was decided that CWC will carry out yield study of this Basin as per Standard Guidelines and procedures for confirming the water availability in association with the party States after reconciliation of data. The assessment of the yield was required to be completed by 31/3/2003. The discharge data of CWC site Ganjim were collected from published water year books of CWC and used in the study. The rainfall data was collected by CWC from IMD.</p> <p>The Govt. of Goa, Karnataka, Maharashtra and NWDA were requested to send their representatives for conducting the joint study. Karnataka and NWDA sent their representatives and fully associated themselves with the study. Maharashtra did not respond. Goa initially sent a representative but later withdrew him saying that they have to compare the rainfall data received from IMD by CWC with the rainfall data</p> |
|--|--|---|

|   |  |   |
|---|--|---|
|   |  | <p>Goa received separately from IMD and also because they were not given access to the raw data of observations by CWC at Ganjim.</p> <p>The study report was drafted in CWC in March 2003 by the Group consisting of members NWDA and Government of Karnataka, wherein Goa did not participate.</p>  |
| C | <p>Whether the above said report titled the "Study on Yield of Mahadayi River Basin" by the Hydrological Studies Organisation, Hydrology (S) Directorate of March 2003 filed by the State of Karnataka as Annexure-29 of its Statement of Claims has been approved or accepted by the Competent authority? If so, by which authority and when?</p> | <p>In pursuance to the decisions taken in the meeting dated 20<sup>th</sup> Dec, 2002, the study report prepared by the group titled the "Study on Yield of Mahadayi Basin" was sent by Chairman, CWC to the Ministry of Water Resources through then Commissioner (RR). Though the report was prepared without the participation of Goa, which had some doubts on basic data also.</p> |

Further, as desired the authenticated copy of the report titled "Study on Yield of Mandovi River Basin" and relevant note sheets are enclosed.

This issues with the approval of Chairman, CWC.

Encl: As Stated Above.

Yours faithfully,  
Sd/-  
(S.K.SINHA)  
Director

Copy for information to:  
Director, D&R (C), CWC”  
ENCLOSURES (Note-Sheets):

“No.7/Karn-49/91-Hyd(S)  
Central Water Commission  
Office of Chief Engineer (HSO)

Subject: Yield Study of Mahadayi River Basin.

In the Interstate Meeting convened by the Hon’ble Minister for Water Resources on 20<sup>th</sup> December 2002 with Chief Minister of Goa, Minister of Water Resources of Goa, Minister for Major and Medium Irrigation Projects, Government of Karnataka and other participants on Mahadayi/Mandovi/Madei water dispute it was decided that CWC will carry out yield study of this basin as per standard guidelines and procedures for confirming the water availability. The assessment of the yield was required to be completed by 31.03.2003.

The basic problem in the assessment of water availability of Mahadayi basin was authentication of rainfall data to be used in the study. Since the rainfall data was collected independently by NWDA, Karnataka and Goa from different offices of IMD at different



times, reconciling these data became a bottleneck. Therefore after the Ministerial level meeting it was decided that CWC should independently obtain authenticated rainfall data directly from IMD, Pune for carrying out the study.

The discharge data of CWC site Ganjim were collected from the published Water Year Books of CWC and used in the study.

With the above basic data study on yield of Mahadayi basin was carried out during March 2003 and report finalised. The study report is placed below:

The yields worked out are as under:-

|                         |           |
|-------------------------|-----------|
| 50% dependability yield | 6234 Mcum |
| 75% dependability yield | 5652 Mcum |

The Government of Goa, Karnataka and Maharashtra and NWDA were requested to send their representative for conducting the joint study. Karnataka and NWDA sent their representatives and fully associated themselves with the study. Maharashtra did not respond. Goa initially sent a representative but later withdrew him saying that they have to compare the rainfall data received from IMD by CWC with the rainfall data Goa received separately from IMD and also because they were not given access to the raw data of observations by CWC at Ganjim.

A copy of the rainfall data received by CWC from IMD was given to Goa.

The practice of CWC is to supply only processed and published discharge data to the Users. Raw data is not supplied. In this connection a copy of letter dated 5.2.90 of MOWR is placed below restraining the supply of raw data. They are being informed that they may visit the site and go through the observational procedures of data collection and processing procedures. Chief Engineer, KGBO, Hyderabad inspected the Ganjim site recently and confirmed that the observations are being done satisfactorily. A copy of his report dated 26.3.2003 is at Annexure-IX of the Study Report.

Sd/-

(V.R. Sastry)

Chief Engineer (HSO)

Member (RM), CWC

For perusal please.

Sd/-

10.4.03

Chairman,CWC: Authenticated /Published discharge data of CWC site has been used. Rainfall data has been collected afresh from IMD. Representatives of NWDA, Karnataka & Goa Govts.were invited. While the first two co-operated in the study, Goa raised objections regarding both rainfall data of IMD and discharge data of CWC site, restraining any further study to be made by CWC for assessing water availability.

Collection of data from different offices of IMD took time (about two months). But, the study was completed in due time.

Brief report of the yield study is sent herewith for perusal of Secretary (WR).

Sd/-

10/04/2003

Commissioner (PR), MoWR

SJC(BM)

Sd/-

10/4

Subject: Yield studies of inter-State Mahadei River Basin.

Government of Goa has sent a complaint to Union Government in July 2002 to constitute a Tribunal to adjudicate the dispute on the inter-state river Mahadei. As per the provisions of the Inter-State River Dispute Act, 1956, a Tribunal is to be constituted within a year of the receipt of the complaint to adjudicate the river water disputes in case the negotiations to resolve the dispute does not succeed. Minister of Water Resources had convened a meeting on bringing consensus by negotiations among the States of Goa, Karnataka and Maharashtra on the inter-State river water dispute on the sharing of waters of river Mahadei on the complaint filed by the State of Goa. During the meeting taken by the Minister of Water Resources, it was decided that the Government of Goa and CWC officials may make joint efforts to reconcile the discrepancies in the data and yield figures through a study carried out as per the standard

guidelines and procedures for confirming the water availability by March 2003.

The CWC along with the representative from Government of Karnataka and NDWA made joint study to work out the yield of the river. The Government of Maharashtra did not nominate any representative for the joint studies. The rainfall data collected by CWC from IMD and the discharge data of CWC at site Ganjim as published in the water year book of CWC were used in the study.

The yield of the river has been computed as follows by the joint studies:

50% dependability - 6234 MCUM  
75% dependability yield - 5652 MCUM

The Government of Goa withdrew their representative from the joint study saying that the raw data of discharge observations at CWC site must be made available to them. The Government of Goa has been informed by the CWC that the raw data cannot be supplied to them, however, they may visit the site and go through the observational procedure of data collection and processing procedure. It is, therefore, anticipated that though the negotiations efforts to resolve the Mahadei river water dispute may be fruitful but it will take considerable long time for which the CWC and the basin States have to proceed further to overcome the points of disagreement on the dependable yield of river Mahadei. This effort may take considerable long time and hence it may not be

possible for the Union Government to assume that the negotiation efforts have failed and the constitution of the Tribunal is the only available remedy to adjudicate the water dispute on the river Mahadei. The schedule time frame to constitute the Tribunal by July 2003 is, therefore, not practical and it will be appropriate that the Union Government requests the Government of Goa to withdraw their request for constitution of Tribunal so that full efforts can be made towards negotiating the dispute among the Government of Goa and Karnataka on the yield studies of river Mahadei. A letter addressed to Government of Goa requesting them to withdraw their complaint has been submitted separately for approval.

(M. S. GUPTA)  
SJC (BM) / 17.04.03

Commissioner (PR)

CWC has completed yield studies of inter-State Mahadei River Basin. However, Goa still has some doubts on basic data. CWC and Goa may have to continue further efforts for arriving at the accepted yield figures. This needs further time. Thus we may request Government of Goa to withdraw their earlier request of July 2002 for setting up a Tribunal. Efforts for arriving at yield figures mutually acceptable to the State may be continued. Draft letter to Goa Govt. requesting to withdraw their complaint has been put up earlier.

For kind information of Secy. (WR) pl.

Sd/- 18/4

Secy (WR):  
Sd/- 21/4

C (PR):

Sub: Yield study of Madei River Basin.  
Reference notes on pre-page

In the Inter-State meeting convened by Minister of Water Resources on December 20, 2002, it was decided that Govt. of Goa and CWC may take joint efforts to reconcile with the discrepancies in the data and yield figures. In the meeting, Union Secretary (WR) stated that study may be carried out as per the standard guidelines and procedures confirming the water availability.

In April, 2003, Govt. of Goa has been requested to with-draw their request of July, 2002 regarding constitution of tribunal for adjudication of the Madei Water dispute with a view to find out negotiated settlement of dispute. The reply from Govt. of Goa is awaited.

CWC in its note of 10.4.2003 has observed that Govt. of Goa are being informed that they may visit the site and go through the observational procedures of data collection and processing procedures in view of the restrictions placed by Ministry of Water

Resources for supplying of raw data, CWC, therefore, may proceed further in the matter and convince Goa Govt. about the data collection procedure followed by CWC at Ganjim Site. Further a meeting of the engineers of the two States may be called in CWC to reach an agreement on the studies done by CWC.

Sd/-  
(R. K. Sharma)  
Commissioner (PR)

Secretary (WR):

Sd/-  
21/5/2003

Chairman (CWC)."

664. The aforesaid correspondence between this Tribunal and the CWC, along with enclosures thereto, constitute Volume 242 of the record of this Tribunal.

665. It would be pertinent to mention here that the document (Volume 15), Annexure-29 alongwith its Statement of Claims, filed by the State of Karnataka as Central Water Commission Report (CWC) is shown to be of March, 2003,

whereas enclosures of the office note-sheets appended with the communication dated May 02, 2018 from the Director, CWC to this Tribunal, indicate that the matter was under constant discussion and processing even in the months of April and May, 2003, in as much as the State of Goa had originally taken certain objections, during the course of conducting joint study between the Governments of Goa, Karnataka, Maharashtra and NWDA, and later on when the State of Karnataka and NWDA had sent their representatives and associated themselves with the study, the State of Maharashtra did not respond and the State of Goa, initially sent a representative, but later withdrew him on account of certain differences. Later on, the aforesaid matter was forwarded by Chief Engineer, H.S.O., to the Ministry of Water Resources of Government of India through appropriate channels. After consideration of the entire matter at the Ministry level, it was observed that since the scheduled time frame to constitute the Tribunal was up to July, 2003, which was not practical, at that point of time, therefore, it would be appropriate that the Union Government requested the Government of Goa to withdraw their request for constitution of a Tribunal, "so that full efforts can be made towards negotiating the dispute among the



Government of Goa and Karnataka on the Yield Studies of river Mahadayi”.

666. The note-sheet, enclosed with the above said communication of CWC, addressed to this Tribunal, contains a noting of the Commissioner (PR), that “further a meeting of the Engineers of the two States may be called in CWC to reach an agreement on the studies done by CWC.” The aforesaid noting seems to have been put up before the Secretary, Water Resources, who also had approved the same. The notings are dated May 20, 2003 and May 21, 2003, by the Commissioner (PR), and Secretary, WR respectively.

667. It is, thus, clear that in the month of March, 2003, when the aforesaid Report is stated to have been prepared by CWC, there was no such Report ever having been finalized at the CWC level and, in fact, the matter was yet under consideration and discussion with the State Government of Goa. The notings on the file further show that the said study was merely conducted at the Chief Engineer, H.S.O level.

668. Along with the document, stated to be CWC Report of 2003, (Volume 15), certain appendices have been attached, which are various Minutes of the Meetings of the Study Group on the Yield Studies of Mahadayi River Basin.

669. Appendix 1 (Page 49 of Volume 15) indicates the presence of the representatives of all the three States, including the State of Goa. The discussion contained in the said Minutes reflects that their being a wide variation in rainfall across the basin, it was decided to consider all the stations, as was done in the preliminary study presented in the first Meeting.

670. Appendix 3 is the Minutes of the second Inter State Meeting dated March 27, 2002 (page 54 of Volume 15), which was again attended by the representatives of all the three States. Item No. 2 thereof reflects that there were certain objections raised on behalf of the Government of Goa. In the light of the aforesaid objections, the Chairman of the Meeting, who was Chief Engineer, H.S.O., asked Government of Goa to carry out the yield studies themselves. The relevant portion of the Minutes of the said Meeting is as under:

“Chairman expressed his regret that Govt. of Goa has so many reservations on the yield studies and even on the data collected and utilized by an independent Expert agency viz., CWC. He indicated that if such doubts exist even in the work carried out by agencies like CWC perhaps the studies cannot progress. Chairman felt that under such circumstances, Govt. of Goa may themselves, carry out this yield studies. It was therefore decided that CWC and NWDA would supply all the hydrological and hydro-meteorological data collected and analyzed by them to Govt. of Goa for carrying out the yield studies. However, he emphasized that Govt. of Goa will have to stick to a reasonable time schedule. Secretary, Water Resources, Govt. of Goa stated that three months’ period is necessary for completing the yield study.”

671. Further, at page 57, the following Minutes were recorded:

“Chairman requested Govt. of Goa to finalize the yield studies for Mandovi basin at the earliest so that the developments in the basin is not hampered and water does not flow waste to the sea and impressed upon the basins States to frequently meet and exchange requisite information regarding the demands of the States so that water resources of the region could be utilized optimally by the basin States.”

672. A summary record of discussions of the Inter State Meeting convened by the Minister,(WR)on December 20, 2002 of representatives of the three States has also been appended in Volume 15 at pages 58-59. The relevant portion of the aforesaid summary is as below:

“After protracted discussions, it was decided that the Government of Goa and CWC officials may make joint efforts to reconcile the discrepancies in the data and yield figures. Union Secretary (WR) stated that the study may be carried out as per standard guide lines and procedures for confirming the water availability. The reconciliation process/assessment of the yield should be completed by March 31, 2002.”

673. From a perusal of the aforesaid documents on the record, and the factual position submitted by the CWC through its communication dated May 2, 2018, addressed to this Tribunal, and the Note-sheets, appended thereto, leave no matter of doubt that the Report contained in Volume 15 submitted as Annexure 29, by the State of Karnataka along with its Statement of Claims, is merely a Study Report prepared in the Meeting convened by the Chief Engineer, HSO, CWC and cannot be termed to be a Report of the CWC, which had ever been duly approved by it, in accordance with law. It is also clear from the

Note-sheets, forwarded by the CWC to the Tribunal that the matter was yet under consideration and discussion at the level of the CWC, as well as Water Resources Ministry of Government of India, in the months of April and May, 2003, respectively, and a proposal was put up on May 20, 2003 at the Ministry level that a Meeting of the Engineers of the two States (State of Goa and the State of Karnataka) may be called in CWC to reach to an agreement on the studies done by CWC.

674. Thus, the Tribunal has no hesitation in holding that the aforesaid Report, Annexure 29 (Volume 15), cannot be said to be a Report of the CWC, but is merely a Study Report of Hydrological Study Organisation (HSO), a wing of the CWC, prepared jointly with the representatives of NWDA, State of Karnataka and with occasional participation of the representatives of the States of Goa and Maharashtra. However, the Annexure 29 of the Statement of Claims of the State of Karnataka which is titled as Central Water Commission Report of March, 2003 (Volume 15) is, subsequently, examined by the Tribunal, in the alternative, from the view point of its technical contents without making any change in the title of the Document filed by the State of Karnataka.

**Determination of Dependability at which Water Availability is to be Assessed.**

675. By order dated 17.07.2015, this Tribunal has reframed voluminous issues, arising out of the pleadings of the parties, which are seventy in number. For the purpose of convenience, to record the findings and also to avoid the repetition of the factual findings, issues Nos. 7, 8, 33 & 53, relating to – as to whether the water availability assessment of the Inter-State River, Mahadayi, should be for 75% dependable flow or for 50% dependable flow or for average flow, at various points in the Mahadayi Basin and that at Karnataka's disputed Projects sites, are being dealt with together.

676. The issues specified, supra, are as under:

“7. Whether the State of Goa proves that the water availability assessment of the Inter-State river Mahadayi should be for 75% dependable flow at various points in the basin and at Karnataka's disputed project site?”

“8. Whether the water availability assessment of the inter-State river Mahadayi should be made for different dependabilities as suggested by the States?”

“33. Whether the State of Karnataka proves that the water availability assessment of the inter-State river Mahadayi should be for 75% dependable flow?”

“53. Whether the State of Maharashtra proves that water availability assessment should be made on the basis of total availability of water in the Mahadayi river basin?”

677. It is needless to say that these issues are important issues and the findings in relation thereto would have impact while deciding the Equitable Distribution and the related aspects of the waters of Mahadayi Basin, between the State of Goa, the State of Karnataka and the State of Maharashtra.

678. Voluminous evidence has been led in by the three party States, and it is sufficient to state that for the purpose of appreciating these crucial aspects, and to arrive at an appropriate decision, the relevant portions of the averments made in the Examination-in-Chief , Affidavits, the relevant answers given to certain questions put in the cross-examination by the adverse State, certain answers given to questions put by the Tribunal as also the Reports and other relevant materials, available on the record, will have to be carefully analyzed and appreciated.

679. It may be mentioned that in its Complaint dated 09.07.2002, addressed by the Government of Goa to the Secretary, Union Ministry of water Resources, Government of India, New Delhi, the State of Goa has specifically stated that the availability of water should be determined at 75% dependability. It is so mentioned in paragraph 12.2 and paragraph 28.0(i) of the above said letter.

680. The State of Karnataka initially mentioned in its letter of Complaint dated 22.06.2010, addressed to the Secretary to Government of India, Ministry of Water Resources, New Delhi, that the available water for allocation in the Inter-State River Mahadayi and its valley should be assessed at 50% dependability. In the pleadings, the State of Karnataka has indicated the water availability for the entire basin at 75% dependability as well as at 50% dependability. However, the Expert Witness Prof. A. K. Gosain, for the State of Karnataka has assessed the water availability at identified project sites at 75% dependability, 70% dependability, 60% dependability and 50% dependability.



681. It is worth noticing that Shri Chetan Pandit, Expert Witness of the State of Goa, in his Report of August, 2016 (Volume 191), and Report of January, 2017 (Volume 196), has estimated yields for the Mahadayi Basin, or for the various projects, at 75% dependability and 50% dependability. However, the Tribunal notices that specific justifications or reasons for assessing the yields at 75% dependability and 50% dependability, have not been mentioned in the two Reports, submitted by him.

682. Prof. A.K. Gosain, Expert Witness of the State of Karnataka , in his Reports of September, 2015 (Volume 166) and May, 2017 (Volume 198 & 198A), has estimated yields for the Mahadayi Basin at 75% dependability and 50% dependability. Further, in his report of November, 2016 (Volume 193), Prof. A.K. Gosain has estimated the yields for the various identified projects sites at 75% dependability, 70% dependability, 60% dependability and 50% dependability. What is worth noticing is that no specific justification or reasons for assessing the yields at 75% dependability, 70% dependability, 60% dependability and 50% dependability have been mentioned in his three Reports, submitted before the Tribunal.

683. Shri S.N. Huddar, Expert Witness of the State of Maharashtra, in his Report of September, 2015 [Volume 163(a)], has estimated the contribution to the Mandovi Basin from Maharashtra's portion in terms of Average Yield and Yield at 75% dependability. In this case also the Tribunal finds that no justifications or reasons, for assessing the Average Yield and the Yield at 75% dependability, have been assigned by Shri Huddar in his Report.

684. The position in law, which emerges from the discussion of evidence of the three witnesses, mentioned herein-above, is that neither the State of Goa, nor the State of Karnataka nor the State of Maharashtra have furnished justifications for assessing the Yield of Mahadayi Basin at 75% dependability or any other dependability and the State of Karnataka has failed to provide justifications for assessing water availability at dependability other than 75% for the Projects located in the State of Karnataka .

685. In answer to question No. 3 put by Shri Dattaprasad Lawande, the learned Advocate General for the State of Goa, pointed attention of witness ShriS.N. Huddar (MW1) was drawn

as to what he had said in paragraph 4.2 on page 19 of his Affidavit dated 13th September, 2015, and a specific question, namely, question No. 3(q) was put to the witness, as to whether, it was checked by the Witness or his team as to what was the determination of 75% dependable yield from the runoff series.

686. The answer given by the witness was that the results are mentioned at the end of proforma (c) to his study at page 41. If one refers to page 41 of his testimony, it is found that no reasons are assigned by the Witness as to why the availability of water was assessed by him at 75% dependability.

687. Further, question No. 4, put to the witness by the learned cross-examiner, on behalf of the State of Goa, was that is there anything in the so-called CWC(2003) Report (Volume 15), that he disagree with, if yes, he was requested to outline each of the points of disagreement.

688. The answer given by the Witness was that he had not scrutinized CWC (2003) Report (Volume 15) in details and the only thing he had looked in this Report was the estimated yield of

5652 Mcum at 75% dependability and had considered that it was a reasonable estimate.

689. Thus, this witness has failed to give any cogent reasons as to why the availability of water should be calculated at 75% dependability.

690. In reply to question No. 40 put to him by the Tribunal on 17.07.2017, inquiring as to why the yield at ten sites was estimated for 60% dependability and 70% dependability, in addition to 50% and 75% dependability, and what was the utility of estimated yield at 60% dependability and 70% dependability for the ten Sites, Prof. A.K. Gosain (RW1), had given the following answer:

“While estimating the yields for various projects, the dependability computations were also made for other values beyond 50% and 75%, such as 60% and 70%, since the worked yields of these projects by the respective organisations were available, and I was trying to find out by how much per cent of dependability the various computed yields by different Departments, will be different from the present value. For example, on page 4 of my November, 2016 Report, it has been mentioned that “the yield at Bhandura dam is estimated by me as 3.7 tmc at 75% dependability,

whereas the yield is estimated as 4.0 tmc at 75% dependability in the detailed project report of 2000(Vol. No. 20). If the yield is 4.0 tmc, the project will operate at 70% dependability". Therefore, the idea was to bring in more clarity in the results."

691. The Tribunal further finds that in its Statement of Claims, as well as in Paragraph 11.1(a) of the amended Statement of claims, filed by the State of Karnataka had suggested that water availability in Mahadayi Basin should be assessed at 50% dependability and, accordingly, as per the order dated 21.08.2013 of the Tribunal, issue No. 16 was framed for determination as under:

"16. Whether the State of Karnataka proves that the water availability assessment of the inter-State river Mahadayi should be 50% of the dependable flow?"

692. However, the State of Karnataka, vide its letter dated 02.07.2015 (Volume 152), requested for revision of the said Issue and ultimately the said Issue was reframed by order of the Tribunal dated 17.07.2015 (issue No. 33), as under:

"33. Whether the State of Karnataka proves that the water availability assessment of the inter-State river Mahadayi should be for 75% dependable flow?"

693. The State of Maharashtra has suggested the estimation of Average Yield of the Basin also in addition to the Yield at 75% dependability.

694. The learned Assessors of the Tribunal have brought to the notice of the Tribunal - Regional Course on Project Hydrology, course material published by the National Institute of Hydrology, Roorkee.

695. On reading “INTRODUCTION” of Chapter-IV: WATER AVAILABILITY ANALYSIS – of the published course material by the National Institute of Hydrology, Roorkee, it becomes evident that in order to ensure the success of a project, it is necessary to plan it as such that desired quantity of water is available on most of the time. It is empathetically stated therein that in India, the normal practice is to plan an irrigation project with 75% dependable flows. On the other hand, the hydropower and drinking water supply schemes are planned for 90% and 100% dependable flows, respectively. The brief guidelines regarding minimum length of data required for some of the projects are given below:

| Type of project                                   | Minimum length of data                  |
|---|---|
| (a) Diversion project                             | 10 years                                |
| (b) Within the year storage project               | 25 years                                |
| (c) Over the year storage project                 | 40 years                                |
| (d) Complex system involving combination of above | Depending upon the pre-dominant element |

696. It is not in dispute that Krishna Water Disputes Tribunal-I (KWDT-I), constituted in the year 1969, determined the water availability at 75% dependability for the apportionment amongst the contesting parties.

697. Likewise, in final order and decision of the Narmada Water Disputes Tribunal (NWDT), constituted in 1969, in clause II – Determination Of The Utilisable Quantum Of Narmada Waters, it is stated as follows:

“At Sardar Sarovar Dam Site. The Tribunal hereby determines that the utilizable quantum of waters of the Narmada at Sardar Sarovar Dam Site on the basis of 75 per cent dependability should be assessed at 28 Million acre Feet (34.537.44 M.cu.m.)”

698. Similarly, in “Further Report and The Report of The Godavari Water Disputes Tribunal (GWDT), in paragraph 97, it is stated as under:

“It was agreed that Orissa will ensure at its border with Madhya Pradesh a flow of 45 TMC. in the Indravathi and its tributaries at 75 per cent dependability for use by Madhya Pradesh.”

699. It is further stated that:

“Both the States agree to joint gauging at suitable points to ascertain the yield data and to ensure the flow of 45tmc at 75 per cent dependability or the proportionately reduced flow in years of shortage that has to flow below the common border.”

700. Thus, GWDT also adopted 75% dependability for the purpose of assessing yield of river Godavari.

701. In the Argument Notes by the State of Maharashtra, filed before the Tribunal on 15.01.2018, at page 9, it is stated as follows:

“DEPENDABILITY CRITERIA FOR DISTRIBUTION OF MAHADAYI BASIN YIELD:



- a) The practice of basin planning of water resources development projects on water availability as per 75% dependability is in vogue all over the country. At the time of implementation of the Second Five Year Plan, Shri Hardikar, the then Chief Engineer of old Hyderabad State, insisted the Planning Commission, to recommend 75% dependability criteria. The Central Water Commission upholds this suggestion. On 31<sup>st</sup> March 1963, the Union Minister for Irrigation & Power had made the following statement in the Lok Sabha (Parliament) in connection with water allocation of Krishna & Godavari.

“In the matter of availability of supplies from overall consideration, a criterion based on 75% dependability has been considered to be most suitable and for the purpose of our project that have to go forward, this criterion of dependability may be adopted.”

- b) In pursuance of the recommendation of the Administrative Reforms Commission, the Union Council of Cabinet Ministers had constituted one sub-group in 1973. The sub-group recommended relaxation of this criterion to 50% dependability in case of drought prone area. Considering all the pros and cons, the Agriculture and Irrigation Ministry and the Planning Commission came out with a suggestion of adopting 75%, 60% & 50% dependability criteria in case of major, medium and

minor projects respectively in drought prone area. A Latitude of relaxing this criteria to 50% for the medium projects of deficit basis was granted.

- c) The Maharashtra Water and Irrigation Commission (Exhibit MAH-6) has observed that a need has arisen to undertake a review of the logic behind the 75% dependability criterion. The veracity of the dependability is to be carried out in the light of criteria of scientific sanctity, tenability and economic stability. These criteria do not lead any basis to the 75% dependability. Statistically an average measure will be scientific in case of variables of varying scatter. It will not be an ad hoc figure like that of 75% dependable quantity. The Krishna Water Disputes Tribunal-I, headed by Justice Bachawat has observed that the average flows in the river basin are the maximum utilizable flows. The Cauvery Water Disputes Tribunal has also studied this aspect and permitted 50% dependability flows to be utilized in the Cauvery Basin. The KWDT-II headed by Justice Brijesh Kumar, recently has permitted utilization of the average flows in the Krishna Basin.
- d) The State of Maharashtra submits that it would be more appropriate to distribute the water available only at 75% dependable flow, as this Hon'ble Tribunal would be distributing the yield for the first time."

702. The above said paragraph makes it more than clear that the State of Maharashtra has given up its case regarding assessment of water on the basis of average yield and has specifically stated that the yield should be estimated at 75% dependability.

703. However, in the case of Ravi Beas, an average flow was used for apportionment. The KWDT, constituted in 1990, adopted 75% dependability for the purpose of assessment of water availability and the same was used for apportionment amongst the party-States. KWDT-II has made apportionment of average water availability, water availability at 65% dependability and water availability at 75% dependability among the party-States.

704. Volume II of the Report of the CWDT, included a complete Chapter, namely, Chapter 2 on “What should be the basis on which the availability of water be determined for apportionment – whether at 50% or 75%”.

705. The background for the need to determine the dependability, at which yield should be estimated for

apportionment, has been discussed in paragraph 6 at pages 82-83, Volume II of the Report of CWDT and the same is reproduced as under:

“6. Before we examine this aspect of the matter as to whether the total yield of river Cauvery should be calculated at 50% dependability or 75% dependability, a special note has to be taken that in none of the disputes relating to sharing of the waters of any particular river in India in respect of which Tribunals have been constituted, there was so much of shortage and scarcity of the total yield of water in those rivers. Cauvery as already observed earlier is a river of blessing for the States including Union Territory of Pondicherry through which it passes before merging in the sea. But because of the very low total yield in comparison to other rivers in India at times it has proved to be a river of sorrow and has led to disputes for sharing of the water of the said river between the different riparian States specially between the States of Mysore/Karnataka and Madras/Tamil Nadu. The dispute is going on for more than 150 years, details whereof have already been given in earlier volume of the report. The first agreement in respect of Cauvery was entered into between States of Mysore and Madras after correspondence between the two States for several years, in the year 1892 referred to above. Then another agreement about sharing of the water of the said river Cauvery and its tributaries was entered into in the year 1924. That agreement is to be reviewed and re-examined for purpose of fresh

allocation of water between the different riparian States in terms thereof. In this background, it has to be determined as to what is the dependable percentage 50% or 75%. It has also to be borne in mind that Tamil Nadu being a lower riparian State is naturally interested in assuring the dependability at 75%.”

706. In para 22 at page 93, Volume II of the Report, the CWDT it is further stated as under:

“.... As the disputes whether the dependability should be fixed at 75% or 50% was settled by an agreement with the aforesaid cases pending before the Krishna Water Disputes Tribunal, Narmada Water Disputes Tribunal and Godavari Water Disputes Tribunal, it can hardly be used as precedents for determination of that question when the party States are not agreeing.”

707. Similarly, the matter relating to choice of average water availability, has been discussed in detail in Report of KWDT II, particularly at pager 305 to 330. While finalizing the choice of dependability for assessment of yield, KWDT-II has explained the concept of dependability at page 306 of the Report as under:

“The ‘percentage of dependability’ is relationship between volume of water available for utilization and the period of time in number of years during which it shall be available. Higher the dependability, lower the

quantity of available water for use and lower the dependability higher the quantity of available water. Obviously, assured higher quantity of water will be available for lesser number of years and vice versa”.

708. The KWDT-II had found that there was increase in the water availability over time and the utilization had gone much higher due to several factors. However, the KWDT-II observed that mere increase in water availability or utilization should not be the sole criteria for adoption of a specific dependability. At pages 321-322 of its report of 2010, KWDT-II stated as under:

“But at the same time, it does not mean that automatically utilization may be switched over to 50% dependability or on the average yield as suggested by Maharashtra and Karnataka i.e. distribution at about 2577 or 2600 TMC or any amount of water around that figure. Availability of more water alone is not the sole criteria for distribution and utilization of the water, rather all of it. The other factors to be considered are the need of requirement, the capacity as may have been built store water as there is need of fairly continuous supply of water for utilization for different purposes.

Further to have some carry over storage capacity to meet at least minimum requirement in deficit or dry years, the users of water must have some confidence of getting certain amount of water for certain

percentage of period of time in number of years. So the dependability factor is very important in deciding how much of the available water may be utilized. Distribution at 50% dependability or an average implies 2 bad years out of 4 years. It must therefore have a good back up of carryover storage to take care of 50% of bad years.”

709. The argument in favour of adoption of 65% dependability are at pages 328 to 330 of their Report as under.

“We find that in the series of 47 years prepared in this Tribunal from 1961-62 to 2007-08, the yield at 65% dependability comes to 2293 TMC. This is a figure which is nearest to the utilization figure 2313.06 TMC in 2006-07. The figures of storage and the utilization which are found as fact are almost matching each other. In such a situation, we find it would be appropriate to distribute the water of river Krishna amongst the three States at 65% dependability. It would mean that out of 100 years 2293 TMC atleast or more would be available in 65 years which will be around, though not exactly, but nearly two years out of three years in place of the availability at 75% in 3 years out of 4 years. But this change which is being made i.e. dependability at 65% will not be resulting in any drastic change. It would be certainly manageable. The distribution of this amount of water and the manner in which it may be utilized may take care of the some difference which may occur due to change in dependability factor. By fixing the said dependability

factor it will also check some wastage of water which has been going waste unutilized in 75% of the years at 75% dependability. The KWDT-1 has also observed as well as the Irrigation Commission that an effort is to be made to utilize as much water as possible. It has become more relevant in the present scenario when an acute scarcity of water is being felt all around, the wastage as far as possible must be checked and steps should be taken by the users of the water to minimize the wastage and maximize the utilization of water, also by adopting new methods of irrigation. Now some water may go waste unutilized in 65 years in place of 75 years out of 100 years but a substantial quantity of more water shall also be put to use. The dependability factor has been reduced only by 10%. 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. Thus, there is a good reason fix dependability factor at 65%. The second limb of issue No.2 is answered in the manner indicated above.”

710. However, it is observed that after detailed examination of the claims of the Party States, KWDT-II also allocated quantum of surplus yield i.e., the difference between the average yield and the yield at 65% dependability for specific projects of Party States. The Clause-I to Clause-VI of the Order of KWDT-II, which specifies the allocation of water at different dependability is reproduced hereunder:



## “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 totalling to 2130 TMC, be maintained and shall not be disturbed.

#### Clause-V

That it is hereby determined that the remaining distributable flows at 65% dependability, over and above 2130 TMC (already distributed), is 163 TMC (2293 TMC minus 2130 TMC = 163 TMC).

#### Clause-VI

That it is hereby decided that the surplus flows which is determined as 285 TMC (2578 TMC minus 2293 TMC = 285 TMC) be also distributed amongst the three States.”

711. From both the Reports it is apparent that choice of average yield or yield at 50% dependability or yield at 65% dependability , in addition to the yield at 75% dependability for the purpose of assessment and apportionment thereof was made in view of the existing utilization level being more than the yield at 75% dependability.

712. The Tribunal finds that in case of Mahadayi Basin, the level of existing utilization is relatively very low.

713. Further, the State of Goa, the State of Karnataka and the State of Maharashtra have suggested the assessment of yield at 75% dependability. The Tribunal further finds that the major task, in process of assessment of yield, is to arrive at the time series of annual yield. The assessment of average yield or yield at 50% dependability or yield at 75% dependability or yield at any other value of dependability, is relatively a very simple process. The adoption of a specific value, either average yield or yield at 50% dependability or yield at 75% dependability, would be crucial for apportionment of the waters amongst the party-States and the process of apportionment would require consideration of several factors, particularly the existing level of utilization, committed water use and proposed projects – not only in terms of quantum of water but also in terms of priority of such uses, and reliability and degree of success of related projects.

714. In view of what is stated above, the Tribunal considers it appropriate to finalise a series of annual yield for the Basin as a

whole and also in respect of specified locations/ project sites and compute the values of corresponding yield at 75% dependability, to be adopted for assessment of water availability of Mahadayi Basin and examining the claims of the three contesting States.

715. As far as environmental flow is concerned, the Tribunal finds that on page 48 of “Standard Terms of Reference (TOR) for EIA/ EMP Report for Projects/ Activities Requiring Environmental Clearance under EIA Notification 2006” of the Ministry of Environment, Forest and Climate Change, published in April, 2015, there is a specific mention about environmental flow release as under:

“ – Environmental flow release should be 20% of the average of the 4 lean months of 90% dependable year during the lean season and 30% of Monsoon flow during monsoon season. For remaining months, the flow shall be decided by the committee based on the hydrology and available discharge.

- A site specific study on minimum environmental flow should be carried out.”

716. It may be mentioned that the above stated Notification of 2006 was brought on the record of the case as “MARK 37” during the cross-examination of Shri Rajendra P.

Kerkar, who was examined on behalf of the State of Goa. In question No. 5, specific attention of the witness was drawn to the Notification of 2006 and a question was asked to him, as to why he had not considered the above-mentioned guidelines included in the “Standard Terms of Reference (TOR) for EIA/ EMP Report for Projects/ Activities Requiring Environmental Clearance under EIA Notification 2006” of the Ministry of Environment, Forest and Climate Change.

717. The answer given by the witness was that he was not aware about the guidelines mentioned in the document “MARK-37” and, therefore, he has no comments to offer.

718. In view of what is laid down in the Notification of 2006, this Tribunal comes to the conclusion that environmental flow release should be 20% of the average of the four lean months of 90% dependable year during the lean season and 30% of monsoon flow during monsoon season.

719. The issues Nos. 7, 8, 33 and 53, accordingly, stand answered.

**Decisions relating to Mandatory Requirements for Project Implementation**

720. It has been maintained by the State of Goa that Mahadayi River flows through Wildlife Sanctuaries and sustains forest and wildlife and also National Parks in the State of Goa, and in the year 1999, part of Mhadei basin has been declared as Mhadei Wildlife Sanctuary under the provisions of Wildlife Protection Act, 1972. It has further been pleaded that the entire area of 208 sq. kms. of Mhadei Wildlife Sanctuary falls within the Mahadayi Basin. Goa maintains that river Mahadayi is the only river which flows through the entire territory of Mhadei Wildlife Sanctuary, as well as the Bhagwan Mahaveer National Park and Wildlife Sanctuary and the Bondla Wildlife Sanctuary. On that basis, it has been maintained that the action of the State of Karnataka, and that of the State of Maharashtra, in diverting the Mahadayi river water would not only be in contravention of the Doctrine of Public Trust but also in violation of the provisions of the Wildlife Protection Act. According to Goa, the entire project has been started by the State of Karnataka without any permission from any of the Statutory Authorities, including the Authorities under the Environment Protection Act, Wildlife Protection Act, Forest Act etc. and, therefore, the aforesaid

action of the State of Karnataka is in utter violation and complete disregard of the provisions of the said Act.

721. The aforesaid plea raised by State of Goa has been contested by the State of Karnataka. Though the pleas of any loss and damage or any type of injury to the State of Goa are denied but it has not been specified in the pleadings as to whether any type of approval or clearances are required for the aforesaid diversion, which is being proposed by the State of Karnataka or have been obtained.

722. Even the State of Maharashtra in its entire pleadings has not specified that it has also obtained any approvals or clearances, as are required under the provisions of various enactments.

723. On the basis of the aforesaid rival pleas raised by the contesting parties, the following two issues, being Issue No.2 and Issue No. 31, arising for consideration, are extracted below:

Issue No. 2:

“Whether the State of Goa proves that as the river Mahadayi flows through three sanctuaries, the State

of Karnataka and the State of Maharashtra require prior clearance of NBWL in addition to all statutory and other clearances?”

Issue No. 31:

“Whether the State of Goa proves that the various projects proposed and or undertaken by the State of Karnataka and Maharashtra require prior permissions under the Environment Protection Act, Forest Conservation Act, Wildlife Protection Act, Investment Clearance from Planning Commission, Permissions from the Central Government, National Board of Wildlife and other necessary permissions?”

724. For the determination of the aforesaid controversy between the parties, it would be appropriate to notice the relevant pleadings of the respective States in this regard.

725. In the amended Statement of Claims dated 23.04.2015 (Volume 131), the relevant pleadings of the State of Goa may be noticed as below:

“21. The Mahadayi River Water sustain forest and wildlife in Wildlife Sanctuaries and National Parks in the State of Goa, like Mahadayi Wildlife Sanctuary in Sattari Taluka; Bhagwan Mahavir Wildlife Sanctuary in Mollem, Sanguem Taluka; and Bondla Wildlife Sanctuary. Any reduction in the Mahadayi waters will



not only decimate the areas covered by Wildlife Sanctuaries and national parks admeasuring about 448.5 sq. km., but further will result in decimating the surrounding forests, particularly within the State of Karnataka since the whole belt is one contiguous belt of forests and wilderness.”

“ 21A. State of Goa submits that the proposed diversion scheme of the State of Karnataka will cause severe and irreparable damage and loss to the forests, wildlife and other organic life in the Mhadei basin particularly in the upstream areas. Goa submits that it is pertinent to note that in the year 1999 part of the Mhadei basin has been declared as Mhadei wildlife sanctuary under the provisions of the Wildlife Protection Act, 1972. The entire area of 208 sq. kms. of the Mhadei Wildlife Sanctuary falls within the Mhadei basin. This is also part of the Western Ghats which are internationally recognised as a region of immense global importance for the conservation of bio diversity. The said region contains areas of high zoological cultural, and aesthetic values and has in fact been notified as one of the bio diversity hot spot. Besides the aforesaid , the water of river Mhadei sustains the forest and wildlife in various other Wildlife Sanctuaries and National Parks in the State of Goa, namely, the Bhagwan Mahaveer Wildlife Sanctuary in Molem; Bondla Wildlife Sanctuary in Ponda Taluka; and Dr. Salim Ali Bird Sanctuary in Tiswadi Taluka. It is pertinent to note herein that River Mhadei is the only river which flows through the entire territory of the Mhadei Wildlife Sanctuary as well as the Bhagwan

Mahaveer National Park and Wildlife Sanctuary and the Bondla Wild Life Sanctuary.”

“190C(xxii). The action of the State of Karnataka and State of Maharashtra would be not only be in contravention of the Doctrine of Public Trust, but also in violation of Wildlife Protection Act. In terms of Section 29 of the Wildlife Protection Act, no person shall destroy any wildlife or destroy or damage the habitat of wildlife by any act or divert, stop or enhance the flow of water from the Sanctuary without the permission of the Chief Wildlife Warden. And such permission cannot be granted without the consultation of the State Government and the Board for better management of the wildlife.”

“190C(xxiii). In the instant case, the provisions of Section 29 of the Wildlife Protection Act are directly attracted. The State of Karnataka is trying to divert the water flowing into the Mhadei Wildlife Sanctuary. The same is being done without any permission from the Chief Wildlife Warden, without the consultation with the National Board of Wild Life (NBWL) and to the satisfaction of the State Government of Goa. Such permission can be granted only for the improvement and betterment of wildlife. The entire activity proposed and part of it being carried out by the State of Karnataka is therefore illegal and in breach of not only the Wildlife Protection Act but also the Environment Protection Act.”

“224-I. There is complete breach of Article 14 of the Constitution of India. The manner in which the State of

Karnataka has acted and conducted itself shows complete disregard to the Rule of Law which is a facet of Article 14 of the Constitution of India. The entire project has been started by the State of Karnataka without any permission from any of the statutory authorities including authorities under the Environment Protection Act, Wildlife Protection Act, Forest Act etc. The untoward hurry and haste which the State of Karnataka has shown in commencing the work at the site without any study and impact on the environment, ecology and people in the Mhadei basin itself shows highhandedness, arbitrariness and unreasonableness. This is in gross violation Article 14 of the Constitution of India.”

726. In reply, the State of Karnataka has denied, though not at all specifically, the aforesaid pleadings of the State of Goa. It would be appropriate to notice the relevant portion of the corresponding paras of the amended reply (Volume 138) dated 25.5.2015, filed by the State of Karnataka.

“5.23 In Re: Para 21 – The contents of Paragraph 21 are denied. It is denied that – “any reduction in the Mahadayi waters will not only decimate the areas covered by Wildlife Sanctuaries and national parks admeasuring about 448.5 sq. km., but further will result in decimating the surrounding forests, particularly within the State of Karnataka since the whole belt is one contiguous belt of forests and wilderness.” As alleged, diversion of water from river

channels or river course as planned by Karnataka does not affect the forest and wildlife. Karnataka submits that the forests are sustained by taking advantage of the water in the catchment. It is only that water, which is not absorbed by the vegetation in the forest that trickles down and contributes to the flows in the stream and river channels. Even the wildlife exists and survives mainly on water in the catchment. Karnataka submits that the MHEP project planned by it would improve summer flows in the river in the downstream reaches- which paragraph 21 does not take into account. Even in the upstream reaches, the back water in the storage dams would provide respite to the wildlife during summer. Karnataka therefore submits that the projects planned by it would advance the growth of forest and wildlife.

5.24 In Re: Paras 21 A, 21 B and 21C: Karnataka does not admit the contents of these paras. There is no nexus between the river flows in Surla and the moisture content of the region. The averment that “the Kalasa River enters Goa as Surla River flows as huge water fall” is misleading. There is no nexus between the river flows in Surla Nala and moisture content of the region. The Mahadayi Wildlife Sanctuary is unaffected by the diversion of flows in Karnataka. The catchment of Karnataka in Surla sub basin (Kalasa Nala is a tributary of Surla River) is 27 sq. km. The yield above Kalasa Dam for catchment area of 15.5 sq. km, based on Inglis formula, was 2.156 tmc (page 10, of K-II/C-3(g)). On this basis, the yield of 27 sq.kms of catchment would work out as 3.75 tmc at 75% dependability. The State of Karnataka will be using

3.56 tmc (including diversion from Surla to Kalasa Dam). The balance of 0.19 tmc will be flowing down to Goa in Surla River which is sufficient for maintaining minimum flows in the river below Kalasa Dam.

Karnataka further submits that the Surla Nala is gauged for 9 years (1991-92 to 1999-2000) and Kalasa is gauged for 7 years (1991-92 to 1997-98). The catchment areas at gauge sites are 6 sq. km and 9.8 Sq.km respectively. The average gauged flow is 2.176 tmc at Surla gauge site and by applying a factor 0.85 the 75% dependable yield would be 1.85 tmc. Similarly the average yield of 3.047 tmc at Kalsa Nala gauge site will be 2.59 tmc by applying a factor 0.85. This factor of 0.85 is derived from 75% dependable yield of 44.15 tmc divided by yield of 51.93 tmc in the State of Karnataka [(Annexure-57 (colly.) at page 240, of document K-II/C-3(a)]. The catchment area up to Kalasa Dam is 15.5 Sq. km and on the basis of catchment area proportion the average flow up to Kalasa Dam will be 4.1 tmc at 75% dependability. The total 75% dependable yield of Surla Nala and up to Kalasa Nala will be 5.95 tmc (1.85 + 4.1). Deducting 3.56 tmc proposed to be used by Karnataka the balance would be 2.39 tmc flowing down to Goa which is sufficient to meet the ecological, flora and fauna requirements.

Karnataka submits that after the construction of Kalasa Dam as per Kalasa DPR 2010, about 0.15 tmc of water would be maintained as downstream flows during the non-monsoon months from December-May at the rate of 10 cusecs per day. At present there are

no flows in the river (pre-construction flows) during the months of January to May as measured by Karnataka Kalasa inter-connecting canal for the water years 1991-92 to 1997-98. The flow tables of the Gauge reading records and yield calculation for Kalasa Nala, Haltara Nala and Surla Nala are hereto marked and annexed as Annexure R-4 at pages 85 to 89. Therefore, the proposal of Karnataka to maintain 10 cusecs per day, which equals to 0.15 tmc at the border during the non-monsoon months would take care of and promote ecology.”

“5.155D In re: Paras 190C(vi) to 190C(xxiv): In response to paras 190C (vi) to 190C (xxiv), the State of Karnataka submits that the contents are vague and general without any material particulars. The State of Karnataka denies that its proposed diversions of flows of Mahadayi River would affect flora and fauna Mahadayi catchment. There is no nexus between the flows in the river and requirement of water for flora and fauna in the catchment. The flows in the river are the net result of the rainfall after accounting utilizations for flora and fauna. In these circumstances, the entire contentions of the State of Goa are misconceived and liable to be rejected.”

“5.190D In re: Paras 224(I) to 224(P): In response to paras 224(I) to 224(P), the State of Karnataka denies the correctness of the legal submission made by the State of Goa in these paras. The State of Karnataka reserves its right to make appropriate submissions on the legal submissions of Goa. The rest of the contentions are denied. There is no law which

necessitates that the upstream States shall obtain the consent of the downstream States for construction of any project. It amounts to bestowing veto power on the downstream State of Goa. In the Judgment of Supreme Court in the matter of O. S. No. 2 of 1997, it has been held by the Constitution Bench that “..... though it may be fully desirable for all the States to know about the developments of the other States but, neither the law on the subject requires that a State even for utilization of its own water resources would take the consent of other riparian States in case of an inter-State river.”

727. The Tribunal has also perused the reply filed by the State of Maharashtra (Volume 68) to the amended Statement of Case of Goa. The corresponding paragraphs of the aforesaid reply may be extracted below:

“7 With reference to paragraphs 21 to 49, 21A to 21H, and 25A to 25E the averments made therein are denied. The State of Goa is put to strict proof of the statements made therein. It is denied that any reduction in the Mahadayi Waters would not only decimate the areas covered by Wildlife Sanctuaries and National Parks admeasuring about 448.5 Sq. Km., but would further result in decimating the surrounding forests. It is denied that Mandovi/Mahadayi River is the virtual lifeline for the entire State of Goa. It is further denied that steps taken by Maharashtra to utilise the waters of Mahadayi River would destroy,

choke, ruin or endanger the sustenance of river and prejudicially affect the State of Goa and its inhabitants by reducing the fresh water flows into the river and basin. It is denied that Mahadayi River/Basin is already a water deficit basin as per the Master Plan prepared by the panel of experts or otherwise.”

“23. With reference to paragraphs 190A to 190C it is submitted that Goa is making belated attempts to inflate its needs for water from Mahadayi basin from those projected by the Panel of Experts in 1999. The State of Goa should not be allowed to make any new demands on account of any new water requirements like that for navigation, environmental flows, depletion of marine resources, wildlife and sanctuary needs etc.”

“31. With reference to paragraphs 206 to 224 the allegations made therein are baseless and therefore are denied in toto. It is submitted that at the time of sanction and starting of construction of Viridi Project Environment Impact Assessment Notification S.O. 60 (E) dated 27.01.1994 was in force and therefore applicable. As per schedule I of the said notification Environmental Clearance from Central Government was required for river valley projects including hydro power, major irrigation and their combination including flood control. Since Viridi Project was a Minor Irrigation Project no such clearance was required. The central Government approval is not mandatory for Minor Irrigation Projects. It is further submitted that provisions existing under the Forest Conservation Act, 1980 did not require approval as no forest land was affected by Viridi Minor Irrigation Projects. Planning



Commission clearance was also not mandatory for Minor Irrigation Project. It is submitted that appropriate method for assessment of yield at project site has been used. It is denied that the project proposed by Maharashtra would destroy the sustenance and existence of the State of Goa and its people. Maharashtra is not taking any undue advantage of its geographical situation.”

728. It would also be pertinent to notice certain provisions of the relevant enactments.

**The Forest (Conservation) Act, 1980 (hereinafter referred to as The Forest Act):**

729. Section 2 of the Forest (Conservation) Act, reads as under:

“2. Restriction on the dereservation of forests or use of forest land for non-forest purpose.- Notwithstanding anything contained in any other law for the time being in force in a State, no State Government or other authority shall make, except with the prior approval of the Central Government, any order directing,-

- (i) That any reserved forest (within the meaning of the expression “reserved forest” in any law

for the time being in force in that State) or any portion thereof, shall cease to be reserved;

- (ii) That any forest land or any portion thereof may be used for any non-forest purpose;
- (iii) That any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organisation not owned, managed or controlled by Government;
- (iv) That any forest land or any portion thereof may be cleared of trees which have grown naturally in that land or portion, for the purpose of using it for reafforestation.

Explanation.- For the purposes of this section “non-forest purpose” means the breaking up or clearing of any forest land or portion thereof for-

- (a) The cultivation of tea, coffee, spices, rubber, palms, oil-bearing plants, horticulture crops or medicinal plants;
- (b) Any purpose other than reafforestation,

but does not include any work relating or ancillary to conservation, development and management of forests and wild-life, namely, the establishment of check-posts, fire lines, wireless communications and construction of fencing, bridges and culverts, dams,

waterholes, trench marks, boundary marks, pipelines or other like purposes.]”

**The Wild Life (Protection) Act, 1972 (in short The Wildlife Act):**

730. The Wildlife Act has been enacted “to provide for the protection of Wile Animals, birds and plants and for matters connected thereto or insalaries or incidental thereto with a view to ensure the colesical an environmental security of the country.”

Section 2(26):

(26) “sanctuary” means an area declared as a sanctuary by notification under the provisions of Chapter IV of this Act and shall also include a deemed sanctuary under sub-section(4) of Section 66.”

Section 29. - “Destruction, etc., in a sanctuary prohibited without a permit. -

No person shall destroy, exploit or remove any wild life including forest produce from a sanctuary or destroy or damage or divert the habitat of any wild animal by any act whatsoever or divert, stop or enhance the flow of water into or outside the sanctuary, except under and in accordance with a permit granted by the Chief Wild Life Warden, and no such permit shall be granted unless the State Government being satisfied in change in the flow of water into or outside the sanctuary is necessary for the

improvement and better management of wild life therein, authorities the issue of such permit:

PROVIDED that where the forest produce is removed from a sanctuary the same may be used for meeting the personal bona fide needs of the people living in and around the sanctuary and shall not be used for any commercial purpose.”

731. It has been specifically pleaded by the State of Goa, as is apparent from its pleadings reproduced above, that in the year 1999, part of the Mhadei basin had been declared as Mhadei Wildlife Sanctuary under the provisions of Wild Life Protection Act, 1972. It has also been specifically pleaded by Goa that the entire area of 208 sq. km of the aforesaid Mhadei Wildlife Sanctuary falls within the Mahadayi Basin. It has further been pleaded that the water of river Mahadayi sustains the forest and wildlife in various other Wildlife Sanctuaries in National Parks in the State of Goa, namely, the Bhagwan Mahaveer National Park and Wildlife Sanctuary in Mollem, Bondla Wildlife Sanctuary in Bondla Taluk and Dr. Salim Ali Bird Sanctuary in Tiswadi Taluka, and river Mhadei is the only river which flows through the entire territory of the Mhadei Wildlife Sanctuary, as well as the Bhagwan National Park and Wildlife Sanctuary, and the Bondla Wildlife Sanctuary. The State of Goa further maintains that any

reduction in Mahadayi water would not only decimate the areas covered by Wildlife Sanctuary and National Park admeasuring 448.5 Sq. Km., but will also result in decimating the surrounding forests, not only in Goa but particularly within the State of Karnataka, since the whole belt is one contiguous belt of forests and wilderness. A specific plea has been taken by Goa that the aforesaid action of the State of Karnataka and State of Maharashtra would not only be in contravention of the Doctrine of Public Trust but also in violation of Wild Life Protection Act, 1972. It has been specifically asserted that the State of Karnataka is trying to divert the water flowing into the Mhadei Wildlife Sanctuary, without any permission from the Chief Wild Life Warden and without any consultation with the National Board of Wild Life. On that basis, Goa has maintained a grievance that the States of Karnataka and Maharashtra have not obtained any approval or permission from any of the authorities under the Wild Life Protection Act, Forest Act and any other relevant enactments. It has also been argued on behalf of the State of Goa that neither the requisite clearances have been obtained from the Competent Authorities under the various enactments, but even the approval/clearances required from the Central Government, and the Planning Commission (now NITI Aayog),

have not been obtained by these two States and, therefore, neither the State of Karnataka nor the State of Maharashtra, are entitled in law to carry out any diversion project from the Mahadayi river/basin, without the aforesaid clearances / approvals.

732. The aforesaid pleas taken by the State of Goa have been controverted by the State of Karnataka by filing a reply to the Statement of Claims. The corresponding paragraphs of the reply filed by Karnataka have already been reproduced above. From the reading of the aforesaid paragraphs, viz., para 5.23 (In Re. Para 21), para, 5.24 (In Re: para 21A), para 155D (In Re: para 190C (xxii) & 190C (xxiii), para 5.190D (In Re: para 224-I), it appears, that although the State of Karnataka has chosen to deny the pleadings of the State of Goa, but as may be clear from the perusal of the corresponding pleas of Karnataka, the facts stated by Goa in the paras extracted above from its Statement of Claims, have not at all been specifically controverted. It has not been denied by the State of Karnataka that Wild Life Sanctuaries, Forests and National Parks are situated within Mahadayi basin and that Mahadayi river flows through Mhadei Wildlife Sanctuary and that the other Wildlife Sanctuaries and Birds Sanctuary are

also in very close proximity of Mahadayi River. The State of Karnataka has merely chosen to generally deny the aforesaid facts, and has maintained that the diversion proposed by Karnataka would have no effect on the wildlife or forests, at all. Although a specific plea has been taken by the State of Goa in Para 2.24(I) of its Statement of Claims (as noticed above) that the State of Karnataka has started the aforesaid project without obtaining any permission from any of the statutory authorities, including the authorities under the Environmental Protection Act, Wild Life Protection Act, Forest Act etc. but in the corresponding para (5.190D), the State of Karnataka has nowhere given any details of any of the approvals/permissions, required under various laws or from the Central Government, having been obtained. It has chosen to remain satisfied by merely stating that there is no law which necessitates that the upstream States shall obtain the consent of the downstream States for construction of any project.

733. Even the State of Maharashtra has not chosen to give any details of any approvals/clearances, which it might have obtained. Consequently, it has to be inferred that even Maharashtra has not obtained any approval from the Central

Government nor has obtained any of the clearances, which are necessary under various enactments.

734. The Tribunal has given its thoughtful consideration to this aspect of the matter and has also gone through the various provisions of law, brought to its notice.

735. At the outset, it would be relevant to mention that in the Original Suit proceedings, filed by the State of Goa against State of Karnataka and Ors., before the Supreme Court of India, the aforesaid plea was taken by the State of Goa. A counter affidavit of one Shri K. Vohra, Senior Joint Commissioner (BM), Ministry of Water Resources, Government of India, on behalf of Union of India, was filed. The aforesaid affidavit is available on record of the Tribunal at page 38 of Volume 6. The relevant portion of the aforesaid affidavit is extracted below, for ready reference:

“(iii) APPRAISAL/INVESTMENT CLEARANCE OF THE PROJECT:

[a] It is submitted that a Committee for recommending projects to be included in the Second Five Year Plan was set up by the Planning Commission



in 1954. Later, Planning Commission constituted an Advisory Committee for Irrigation, Flood Control and Multipurpose Projects in 1976. This Committee was entrusted with the functions of getting the project examined by the Central Water Commission (CWC) and Central Electricity Authority (CEA), as required, to determine their techno-economic viability.

[b] The arrangements for scrutiny of techno-economic viability of irrigation, flood control and multipurpose projects were reviewed by the Government and it was decided that the Advisory Committee constituted by the Planning Commission will be replaced by an Advisory Committee in the Ministry of Water Resources (MoWR) which will scrutinise proposals for major/medium irrigation, flood control and multipurpose projects. The said Committee, accordingly, was reconstituted in November, 1987 with Secretary, Ministry of Water Resources as its Chairman and Chief Engineer, CWC as its Member-Secretary. The Committee has representatives from the Ministry of Finance, Ministry of Energy, Ministry of Environment & Forests, Ministry of Agriculture and Planning Commission.

[c] The function of the Committee is to examine projects proposed by State Governments, Central Government or other organizations and satisfy itself that:

- (i) the schemes have been prepared after adequate investigations;

- (ii) the estimates are complete and correct technically;
- (iii) the financial forecasts and estimates of benefits and anticipated are based on reliable and accurate data; and
- (iv) the need of environment conservation and proper rehabilitation of project-affected persons have been taken into account.

[d] On the basis of the examination conducted by the Committee, the Ministry of Water Resources conveys its decision on techno-economic viability of the projects to the Planning Commission. Their inclusion in the Five Year Plans or Annual Plans, as the case may be, could be decided by the Planning Commission having regard to the objectives and strategy of the Plan. At present, all major and or multipurpose and medium irrigation projects and flood control projects including drainage projects which have inter-State ramification are subject to the techno-economic appraisal in CWC and then approved by the Advisory Committee on Irrigation, Flood Control and Multipurpose Projects in the Ministry of Water Resources. The State Government are empowered to accord investment approval for the major and/or multipurpose and medium irrigation projects and flood control projects including drainage projects which do not have inter-State ramification. Any project which is located on an inter-State river or its tributaries will be deemed to involve inter-State ramifications and as such shall need approval of the Advisory Committee."

(Emphasis supplied)

736. It is thus clear from the perusal of the stand taken by the Union of India, on this aspect of the matter, that a State Government is empowered to accord investment approval for the major and/or multipurpose and medium irrigation projects and flood control projects, including drainage projects, which do not have any inter-State ramification. However, it is specifically asserted by the Union of India that any project which is located on an inter-State river or its tributaries will be deemed to involve inter-State ramifications and as such shall need approval of the Advisory Committee.

737. In the case of State of Karnataka Vs. State of Andhra Pradesh & Ors., (2000) 9 Supreme Court Cases 572, the following observations made by the Apex Court may be noticed with advantage:

“Needless to mention that notwithstanding the allocation of water in River Krishna being made en bloc no State can construct any project for use of water within the State unless such project is approved by the Planning Commission, the Central Water Commission and all other competent authorities who might have different roles to play under different specific statutes. Under the federal structure, like ours, the Central Government possesses enormous power and authority

and no State can on its own carry on the affairs within its territory, particularly when such projects may have adverse effect on other States, particularly in respect of an inter-State river where each riparian State and its inhabitants through which the river flows has its right.”  
(Emphasis supplied)

738. In the case of M.C. Mehta Vs. Kamal Nath & Ors. (1997) 1 Supreme Court Cases 388, the Apex Court held that the notion that the public has a right to expect certain lands and natural areas to retain their natural characteristic is finding its way into the law of the land. The ancient Roman Empire developed a legal theory known as the “Doctrine of the Public Trust”. The Public Trust Doctrine primarily rests on the principle that certain resources like air, sea, waters and the forests have such a great importance to the people as a whole that it would be wholly unjustified to make them a subject of private ownership. The said resources being a gift of nature, they should be made freely available to everyone irrespective of the status in life. The doctrine enjoins upon the Government to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial purposes. There is no reason why the public trust doctrine should not be expanded to include all ecosystems operating in our natural

resources. Our legal system – based on English common law – includes the public trust doctrine as a part of its jurisprudence. The State is the trustee of all natural resources which are by nature meant for public use and enjoyment. Public at large is the beneficiary of the sea-shore, running waters, air, forests and ecologically fragile lands. The State as a trustee is under a legal duty to protect the natural resources.

739. Although the State of Karnataka and the State of Maharashtra have denied the pleadings of the State of Goa with regard to the approvals and clearances required for carrying out respective projects, it is clear from the corresponding pleadings of the two States that no approvals, as required by the provisions of Wild Life Protection Act and the Forest (Conservation) Act appear to have been obtained by these two States of Karnataka and Maharashtra, so far.

740. It is also clear from the perusal of the provisions of Section 2 of the Forest Act that no reserved forest, any forest land or any portion thereof, can be used by any State Government or other authority except with the prior approval of the Central Government. (Emphasis supplied)

741. Section 2(2b) of the Wild Life Protection Act defines “sanctuary” means an area declared as such by a notification under the Act. Section 29 of the said Act specifically lays down that no person shall destroy, explore or remove any wild life including forest produce from a sanctuary or destroy or damage or divert the habitat of any wild animal by any act whatsoever or divert, stop or enhance the flow of water into or outside the sanctuary, except under and in accordance with the provisions of the said Act, which includes a permission to be granted by the Chief Wild Life Warden. (emphasis supplied)

742. AW-4, Shri Rajendra P. Kerkar, who has appeared as a witness on environment and ecology for the State of Goa, has specifically stated that through various RTI applications filed by him, he had come to know that the State of Karnataka has not taken any statutory permission and necessary clearances under Environment Protection Act, Forest (Conservation) Act and Wild Life Protection Act etc. Even RW-2 Shri A. K. Bajaj, RW2, a witness appearing for the State of Karnataka, during his cross-examination, has also admitted while answering to Question No. 65 that “the minimum environmental flows required to be

released in the stream has not been quantified. As such, I have not considered the environmental flows in my report. This aspect will be taken care of by the State of Karnataka at the time of obtaining necessary approval.”

743. Shri S. T. Nadkarni, who had appeared as AW-5, an expert witness for the State of Goa, during the course of his cross-examination was referred to his affidavit dated November 14, 2017, and was asked as to how he had mentioned about adverse impact of diversion of water by the States of Karnataka and Maharashtra from Mahadayi Basin on different aspects, as given in the affidavit. In response, the witness replied that diversion of water by Karnataka and Maharashtra, in their respective territories would be drastic. He maintained that Karnataka had proposed diversion in and around the wildlife sanctuaries, not only in Goa, but also in Karnataka, and a lot of forest area will not only be inundated along with other areas with the installation of pumps of more than 5,000 HP. The witness further stated that in Maharashtra also, there would be definitely an adverse impact on the environment. According to the witness, there would be a cascading damaging effect on the

Wildlife Sanctuaries in Goa, as well as various Wildlife Sanctuaries in the State of Karnataka.

744. It would be relevant to state here that during the course of proceedings before this Tribunal, the State of Karnataka had filed an Interlocutory Application No. 60 of 2015, with Interlocutory Application No. 66 of 2016. An interim prayer was made by the applicant State of Karnataka to be permitted, at its own cost for lifting or pumping of 7 tmc of water annually from Mahadayi basin. The aforesaid applications were rejected by this Tribunal vide a detailed order dated 27.7.2016. The State of Goa, besides taking various other objections, had opposed the said prayer made by Karnataka, by maintaining that necessary clearances/permissions had not been obtained by the State of Karnataka and, therefore, the said interim prayer could not be granted. The following paragraphs of Order dated 27.7.2016 passed by the Tribunal may be relevant to extract here:

“107. Before making such huge construction as mentioned above, no permission as on date, has been obtained by the State of Karnataka, either under the Water (Prevention and Control or Pollution) Act, 1974



or the Environment (Protection) Act, 1986 or Wild Life Protection Act or Bio Diversity Act or from the Central Government or from the Planning Commission.”

“112. Therefore, the statement made by the State of Karnataka, in the present case, to the effect that after permission to transfer 7 tmc of water is granted by the Tribunal, necessary clearances/permissions would be obtained under various provisions of different Acts cannot be accepted by the Tribunal. Such a course cannot be permitted to be adopted by the State of Karnataka.”

“113. It is necessary for the State of Karnataka to obtain relevant clearances under different Acts before seeking lifting or pumping of 7 tmc of water from Mahadayi basin to Malaprabha basin.”

745. Even during the course of final hearing, while addressing the arguments, the State of Karnataka has not shown, at all, that the requisite clearances and approvals have been obtained by it from the various Statutory Authorities, Central Government and the Planning Commission ( now NITI Aayog ).

746. From the material available on the record, and the corresponding pleadings of the parties, and also specific averments contained in the counter Affidavit filed by the Union

of India in the proceedings of the Original Suit in the Supreme Court of India, it is clear that although the approvals and clearances from the Central Government and the Planning Commission (now NITI Aayog), under the various laws are required for the projects being undertaken by the State of Karnataka and State of Maharashtra, such permissions have not been obtained, so far, by any of them.

747. In view of the aforesaid discussion, the Tribunal has no hesitation in holding that the State of Goa has proved on record, as a matter of fact, and also shown in law, that the requisite approvals and clearances required by the State of Karnataka and State of Maharashtra have not been obtained from various Statutory Authorities, Central Government and Planning Commission (Now NITI Aayog).

748. Consequently, Issue No. 2 and Issue No. 31 are decided in favour of the State of Goa and against the States of Karnataka and Maharashtra.

749. At this stage, it would be appropriate to take up another ancillary and connected topic, which arises from the rival pleadings of the parties.

750. In its amended Statement of Case filed by the State of Goa (Volume 131), in para 64, making a grievance against the project proposed by the State of Karnataka and the incidences connected therewith, the State of Goa has maintained that if the aforesaid attempts of State of Karnataka are permitted to be proceeded with, the same will seriously affect the very sustenance of Mahadayi River/Mahadayi River Basin, and, in turn, will affect the very sustenance of the State of Goa and its people. After giving the various details of the damage which the State of Goa apprehended that it would suffer, it maintained that the aforesaid proposals by the State of Karnataka were being undertaken without even considering the disastrous effect on the State of Goa or without obtaining any consent from the State of Goa. (Underlining done)

751. In para 80 of the aforesaid Statement of Case, a reference has been made by the State of Goa to a communication dated April 11, 2001 by the Secretary, Irrigation,

Government of Maharashtra to Secretary, Irrigation, Government of Karnataka, requesting the Government of Karnataka not to unilaterally proceed with any outside basin diversion of water of the Mandovi and Tillari River Basins, without prior consent by Maharashtra, or a concluded inter-State agreement.

752. Similarly, in various paragraphs of the Statement of Case, the State of Goa, and even the State of Maharashtra, have pleaded that the State of Karnataka had not obtained any prior consent, before planning or undertaking the project of diversion of water from Mahadayi River/Mahadayi Basin to outside the basin.

753. The State of Karnataka while filing its reply to the aforesaid stand of Goa and Maharashtra has maintained that no such prior consent or approval by an upper riparian State was required from the lower riparian State.

754. The State of Karnataka has pleaded as follows:

“Para 5.190 D of the reply on behalf of State of Karnataka (Volume 138) has already been reproduced in the above portion and need not be repeated again.

It would be sufficient to notice that the State of Karnataka has specifically maintained that “there is no law which insists that the upstream States shall obtain the consent of the downstream States for construction of any project. It aims to bestowing veto power on the downstream State of Goa.”

755. With regard to the aforesaid controversy between the parties, the Tribunal had framed the following issues:

ISSUE No. 25:

“Whether the State of Goa proves that the State of Karnataka and the State of Maharashtra do not have any right, authority or power to divert the waters of river Mahadayi outside the river basin without the concurrence of the State of Goa?”

ISSUE NO. 26:

“Whether it is proved by the State of Goa that no co-basin State can take up any project on an inter-State river without the consent of the riparian State?”

ISSUE NO. 48:

“Whether the State of Karnataka establishes that it has a right to construct a project unilaterally without consent or concurrence of the co-riparian State as held in the case of State of Karnataka versus State of Andhra Pradesh in (2000) 9 SCC 572 at 640?”

## ISSUE NO.59:

“Whether the State of Maharashtra proves that the State of Karnataka should not be allowed to divert waters outside the basin without the consent of the State of Maharashtra and the State of Goa?”

756. The Tribunal having given its due consideration to the aforesaid controversy between the parties, it would be appropriate to first notice the legal position with regard to the same.

757. In the case of State of New Jersey versus State of New York etc. (283 U.S.336-348.), the Supreme Court of United States made the following observations:

“A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it. New York has the physical power to cut off all the water within its jurisdiction. But clearly the exercise of such a power to the destruction of the interest of lower States could not be tolerated. And on the other hand equally little could New Jersey be permitted to require New York to give up its power altogether in order that the river might come down to it undiminished. Both States have real and substantial interests in the River that must be reconciled as best they may be. The different

traditions and practices in different parts of the country may lead to varying results but the effort always is to secure an equitable apportionment without quibbling over formulas.”

758. Further, in case of **State of Kansas versus State of Colorado (206) US 46**, certain observations made by the Supreme Court of United States, which have also been quoted by the Supreme Court of India in a subsequent case, (to be referred later) are extracted below:

“One cardinal rule, underlying all the relations of the States to each other, is that of equality of right. Each State stands on the same level with all the rest. It can impose its own legislation on no one of the others, and is bound to yield its own views to none...the action of one State reaches, through the agency of natural laws, into the territory of another State, the question of the extent and the limitations of the rights of the two States becomes a matter of justiciable dispute between them and this Court is called upon to settle that dispute in such a way as will recognise the equal rights of both and at the same time establish justice between them.”

“The dispute is of a justiciable nature to be adjudicated by the Tribunal and is not a matter for legislative jurisdiction of one State....”

“The right to flowing water is now well settled to be a right incident to property in the land; it is a right publici juris, of such character that, whilst it is common and equal to all through whose land it runs, and no one can obstruct or divert it, yet, as one of the beneficial gifts of Providence, each proprietor has a right to a just and reasonable use of it, as it passes through his land, and so long as it is not wholly obstructed or diverted, or no larger appropriation of the water running through it is made than a just and reasonable use, it cannot be said to be wrongful or injurious to a proprietor lower down....”

“The right to the use of flowing water is publici juris, and common to all the riparian proprietors; it is not an absolute and exclusive right to all the water flowing past their land, so that any obstruction would give a cause of action; but it is a right to the flow and enjoyment of water, subject to a similar right in all the proprietors, to the reasonable enjoyment of the same gift of Providence. It is, therefore, only for an abstraction and deprivation of this common benefit, or for an unreasonable and unauthorised use of it that an action will lie.”

759. The Supreme Court of India **In the matter of Cauvery Water Disputes Tribunal reported in 1993 Supp, (1) SCC 96 (II)**, while noticing the law laid down by the US Supreme Court in the above quoted case of the State of Kansas versus State of Colorado, made the following observations:



“Though the waters of an inter-State river pass through the territories of the riparian States such waters cannot be said to be located in any one State. They are in a state of flow and no State can claim exclusive ownership of such waters so as to deprive the other States of their equitable share. Hence in respect of such waters, no State can effectively legislate for the use of such waters since its legislative power does not extend beyond its territories. It is further an acknowledged principle of distribution and allocation of waters between the riparian States that the same has to be done on the basis of the equitable share of each State. It is against the background of these principles and the provisions of law we have already discussed that we have to examine the respective contentions of the parties.

The Ordinance is unconstitutional because it affects the jurisdiction of the Tribunal appointed under the Central Act, viz., the Inter-State Water Disputes Act which legislation has been made under Article 262 of the Constitution. As has been pointed out above, while analysing the provisions of the Ordinance, its obvious purpose is to nullify the effect of the interim order passed by the Tribunal on June 25, 1991. The Ordinance makes no secret of the said fact and the written statement filed and the submissions made on behalf of the State of Karnataka show that since according to the State of Karnataka the Tribunal has no power to pass any interim order or grant any interim relief as it has done by the order of June 25, 1991, the order is without jurisdiction and, therefore, void ab

initio. This being so, it is not a decision, according to Karnataka, within the meaning of Section 6 and not binding on it and in order to protect itself against the possible effects of the said order, the Ordinance has been issued. The State of Karnataka has thus arrogated to itself the power to decide unilaterally whether the Tribunal has jurisdiction to pass the interim order or not and whether the order is binding on it or not. Secondly, the State has also presumed that till a final order is passed by the Tribunal, the State has the power to appropriate the waters of the river Cauvery to itself unmindful of and unconcerned with the consequences of such action on the lower riparian States. Karnataka has thus presumed that it has superior rights over the said waters and it can deal with them in any manner. In the process, the State of Karnataka has also presumed that the lower riparian States have no equitable rights and it is the sole judge as to the share of the other riparian States in the said waters. What is further, the State of Karnataka has assumed the role of a judge in its own cause. Thus, apart from the fact that the Ordinance directly nullifies the decision of the Tribunal dated June 25, 1991, it also challenges the decision dated April 26, 1991 of this Court which has ruled that the Tribunal had power to consider the question of granting interim relief since it was specifically referred to it.”

760. Once again, it would be absolutely necessary to notice the law laid down by the Supreme Court of India in the case of

**State of Karnataka versus State of Andhra Pradesh and others,**  
**(2000) 9 Supreme Court Cases 572.**

761. The issue No. 9 of the aforesaid matter, which is identical in part to the present matter in controversy is relevant to be extracted below:-

“9. (a) Whether the construction of the Almatti Dam with FRL of 524.256 m together with all other projects executed, in progress and contemplated by Karnataka would enable it to utilise more water than allocated by the Tribunal? (A.P.)

(b) Whether Karnataka could be permitted to proceed with construction of such a dam without the consent of other riparian States, and without the approval of the Central Government? (A.P.)”

762. The aforesaid question was answered by the Supreme Court (page 641) as follows:

“Needless to mention that notwithstanding the allocation of water in River Krishna being made en bloc no State can construct any project for use of water within the State unless such project is approved by the Planning Commission, the Central Water Commission and all other competent authorities who might have different roles to play under different specific statutes.

Under the federal structure, like ours, the Central Government possesses enormous power and authority and no State can on its own carry on the affairs within its territory, particularly when such projects may have adverse effect on other States, particularly in respect of an inter-State river where each riparian State and its inhabitants through which the river flows has its right.”

Further it was observed as follows:

“Though it may be fully desirable for all the States to know about the developments of the other States but neither the law on the subject requires that a State even for utilisation of its own water resources would take the consent of other riparian States in case of an inter-State river. So far as the second part of sub-issue (b) is concerned, the answer is irresistible that the project of each State has to be approved by the Central Government as well as by other statutory authorities and the Planning Commission, but for which a State should not proceed with the construction of such project. Issues 9(a) and (b) are answered accordingly.” (Underlining supplied).

763. In a recent pronouncement by the Apex Court in the case of **State of Karnataka versus State of Tamil Nadu (2018) 4SCC1**, the following observations, by the Apex Court, may be noticed:

“394. As enunciated by this Court in Cauvery Water Disputes Tribunal, in re, the waters of an inter-State river passing through the corridors of the riparian States constitute national asset and cannot be said to be located in any one State. Being in a state of flow, no State can claim exclusive ownership of such waters or assert a prescriptive right so as to deprive the other States of their equitable share. It has been propound therein that the right to flowing water is well settled to be a right incident to property in the land and is a right *publici juris* of such character, that while it is common and equal to all through whose land it runs and no one can obstruct or divert it, yet as one of the beneficial gifts of nature, each beneficiary has a right to just and reasonable use of it. We endorse the view of the Tribunal in the attendant perspectives that the acknowledged principle of distribution and allocation of waters between the riparian States has to be done on the basis of their equitable share, however contingent on the facts of each case.”

764. From the settled legal position, as noticed above, it is clear that the waters of an inter-State river passing through one or more riparian States constitute a national asset and cannot be said to be located in any one of such States, and being in a State of flow, no State can claim exclusive ownership of such waters or assert a prospective right, so as to deprive the other States of their equitable share. The Apex Court has laid down that right to water of an inter-State river shall be adjudicated between the

riparian States on the basis of their equitable share and distribution, depending upon the facts of each case.

765. In the face of the law laid down by the Apex Court, more specifically in the case of State of Karnataka versus State of Andhra Pradesh (Supra), the settled position of law is that no State can construct any project for use of water within the State, unless such project is approved by the Planning Commission, the Central Water Commission and all other competent authorities, who might have different roles to play under different specific Statutes. Under the Federal structure of the country, the Central Government possesses enormous powers and authority and no State can on its own carry on the affairs within its territories, particularly when such projects may have adverse effect on other States, more particularly in respect of an inter-State river where each riparian State through which the river flows, and its inhabitants, has its right, but no law on the subject requires that a State even for utilisation of its own water resources would require the consent of other riparian States in case of an inter-State river.

766. In view of the aforesaid authoritative pronouncements by the Apex Court, and the settled law on the matter, this Tribunal has no hesitation in holding that the upper riparian States of Karnataka and Maharashtra, though do require requisite clearances and approvals, as required by law and from the Central Government, and the Planning Commission (Now Niti Ayog), but they do not require any prior consent of the lower riparian State of Goa and similarly the State of Maharashtra, being an upper riparian State vis.-a-vis. the State of Goa, also does not require any such prior consent of the State of Goa.

Issues No. 25, 26, 48 and 59 are decided accordingly.