महाराष्ट्र जलसंपत्ती नियमन प्राधिकरण

Maharashtra Water Resources Regulatory Authority (MWRRA)

9th Floor, Centre-1, World Trade Centre, Cufffe Parade, Mumbai - 400005. Tel.: 2215 2019 Fax.: 2215 3765 E-mail: mwrra@mwrra.org

Case No. 1 of 2014

In the matter of

The Release of Water into the Jayakwadi Reservoir from Upstream Reservoirs for the Equitable Distribution of Water in the Godavari sub-basin

Shri Prashant Bansilal Bumb (MLA),
Plot No. 3-B, Chabada Building,
Opposite Gurudwara, Sindhi Colony,
Jalna Road, Aurangabad - 431 005
Through his Advocate Mangal Bhandari
Veena Taikalwadi, L J Road, Mahim, Mumbai - 400016.

.....**Petitioner**

Versus

1. The Principal Secretary (WRM & CAD),
   Water Resources Department,
   Madam Kama Marg, Hutatma Rajguru Chowk,
   Mantralaya, Mumbai - 400032

2. The Executive Director, Godavari Marathwada Irrigation Development Corporation, Sinchan Bhavan, Jalna Road, Aurangabad - 431 005

.....**Respondents**

3. The Sanjivani (Takali) Sahakari Sakhar Karkhana Ltd at Sahjanand Nagar through Advocate Pramod N. Patil, 8-B, 2nd Floor, 35 Ambalal Doshi Marg, Opp. Hamam House, Fort, Mumbai - 400 023

.....**Caveator No.1**

4. Sanjay Daulatrao Hon through Advocate Pramod N. Patil, 8-B, 2nd Floor, 35 Ambalal Doshi Marg, Opp. Hamam House, Fort, Mumbai - 400 023.

.....Caveator No.2

5. i) Vishwasrao S/o Laxman Aher ii) Balasaheb S/o Devram Ghumre iii) Karbhari S/o Pandharinath Jadhav, through Advocate Shri. Kamlesh P. Mali, C/o. Shri Ranjit A. Thorat, 102, Rehman House, Nadirshah Sukhia Street, Behind Mahesh Lunch Home, Fort, Mumbai - 400 001

.....Caveator No.3

6. i) Machindra S/o Tukaram Rohmare ii) Kakasaheb S/o Raibhan Jawale iii) Karbhari S/o Maruti Agwan iv) Balasaheb S/o Appasaheb Barhate v) Sachin S/o Ramrao Rohmare through Advocate Shri. Kamlesh P. Mali C/o. Shri Ranjit A. Thorat 102, Rehman House, Nadirshah Sukhia Street, Behind Mahesh Lunch Home, Fort, Mumbai - 400 001

.....Caveator No.4

7. Dashrath Vithoba Pise through Advocate Umesh D. Latmale, A. N. Complex, Statue Karmavir Chowk, Ward No. 1, Behind Ram Zerox, Shrirampur - 413 709, Tal - Shrirampur, Dist - Ahmednagar

.....Caveator No.5

8. Bhausaheb Vitthal Dound through Advocate Umesh D. Latmale, A. N. Complex, Statue Karmavir Chowk, Ward No. 1, Behind Ram Zerox, Shrirampur, Pin- 413 709, Tal - Shrirampur, Dist - Ahmednagar

.....Caveator No.6

9. Ashok Sahakari Sakhar Karkhana Ltd through Advocate Umesh D. Latmale, A. N. Complex, Statue Karmavir Chowk, Behind Ram Zerox, Shrirampur, Ward No. 1, Pin - 413709, Tal-Shrirampur, Dist. - Ahmednagar

.....Caveator No.7

10. Shri. Y. R. Jadhav, Ramayan, Visawanagar, Nanded – 431602,

..... Intervener

11. Godavari Kalave Pani Bachav Sangharsh Samiti, C/o Rajendra Bhimaji Bavake, At Post- Sakuri, Tal-Rahata, Dist. - Ahmednagar, - 423 107

.....Intervener

12. Shri. Abhijit Durgadasrao (Joshi) Dhanorkar, R/o. Krushisarathi Colony, Basmat Road, Parbhani.

.....Intervener

13. The Executive Director, Padamshree Dr. Vitthalrao Vikhe Patil Sahakari Sakhar Kharkhana Limited, R/o. Pravaranagar - 413 712, Tal. Rahata, Dist. Ahmednagar (Ph. No. 02422-252301)

.....Intervener

14. Comrade Rajan Kshirsagar, Communist Party of India, Sangharsh, Behind Tahasil Office, University Road, Parbhani-431 401.

.....Intervener

15. Harshchandra Sahakari Pani Puravatha Sansthanche Sahakari Federation Ltd, Amrutnagar, Post. Sangamner S.K. - 422 068.

.....Intervener

ORDER

CORAM : Smt. CHITKALA ZUTSHI, MEMBER
Shri. S.V.SODAL, MEMBER

Date: 19th September 2014

Representations have been received from Shri. Prashant Bhansilal Bumb vide letter dated 15.1.2014 and Shri. Y R Jadhav vide letter dated 26.4.2014, seeking equitable distribution of water available in Godavari Basin so as to meet the scarcity of water in the Jayakwadi Dam/Reservoir. We have treated these representations as Petitions filed before us and have conducted proceedings in relation thereto in accordance with the Order dated 5th May 2014 of the Hon'ble High Court of Judicature at Bombay in PIL No.173 of 2013 and batch of other Writ Petitions. We feel that it would be appropriate to

provide the extracts of the Hon'ble High Court's aforesaid Order, which reads as follows:

"7.0 In view of the above and having regard to the urgency for an early resolution of the dispute raised before the Regulatory Authority, it is directed that:-

(i) The above two applicants before the Regulatory Authority shall serve copies of their representation to the above mentioned nine opponents and the State Government within one week from today, if they have not already been served;

(ii) The above nine parties opposing the applications pending before the Regulatory Authority, shall file their reply / further reply before the Regulatory Authority within three weeks from today. Copy of such reply / further reply shall also be served upon the Advocates appearing for the two applicants before the Regulatory Authority and upon the State Government;

(iii) The State Government shall file its response to the applications and to the oppositions within two weeks from the receipt of the application and reply of the opponents;

(iv) Rejoinder, if any, may be filed before the Regulatory Authority within two weeks from the date of receipt of the reply / further reply;

(v) The Regulatory Authority shall commence hearing of the applications in the first week of July 2014 and none of the parties shall ask for an adjournment;

(vi) If, for any reason an Advocate is not in a position to appear before the Regulatory Authority on the date it is listed, alternate arrangement shall be made. It is made clear that all parties shall keep available their lawyers on the appointed date and if not available, will make alternate arrangement to be represented on the scheduled date. The Regulatory Authority will not grant any adjournment at the request of any party or any Advocate for any purpose;

(vii) The Regulatory Authority shall complete the hearing as expeditiously as possible and preferably by 31 August 2014; and

(viii) Pendency of any Writ Petitions before this Court, challenging the constitutional validity of the provisions of the MWRRA Act or any other

statutory provisions shall not come in the way of Regulatory Authority applying provisions of the Act or orders of MWRRA Act as they stand on the date of hearing and on the date of passing its order.

9. Our attention is also invited to two ad-interim orders dated 31 October 2013 and 5 November 2013. In the order dated 31 October 2013 – this Court recorded that statement made on behalf of the Executive Engineer, Nashik Irrigation Department that except for drinking purpose, there would be no release of water from Darna and Gangapur Dam until further orders and for any irrigation purpose, water would be released through canal and not through river bed. By subsequent orders of this Court, the above ad-interim arrangement has been continued.

On 5 November 2013, this Court passed an order that till next date of hearing, respondents were restrained from releasing the water from Mula and Bhandardhara dams, except for the purpose of drinking and irrigation purposes through the canal and not through river bed. This ad-interim order dated 5 November 2013 was also extended from time to time.

10. Now that we are leaving the matter to be decided by the statutory Regulatory Authority, it would not be proper to fetter the discretion of the Regulatory Authority to pass appropriate orders during pendency of the applications before it. Therefore, we make it clear that the above two ad-interim orders dated 31 October 2013 and 5 November 2013 will continue to operate for a period of two weeks from today.

11. In the meantime or thereafter, it will be open to the Regulatory Authority to give appropriate directions to the State Government and other authorities of releasing water from all concerned dams after two weeks from today in such quantity, for such period and in such manner as the Authority considers it appropriate. For such interim arrangement, if any of the parties wants to submit any representation to the Regulatory Authority, it shall be done within one week from today (such written requirement regarding interim arrangement of a party shall not exceed four pages in double spaces). It is further made clear that the Regulatory Authority is not required to give an opportunity of personal hearing to the parties to decide the interim arrangement unless it requires some clarification/assistance".

2. In view of para 11 of the aforesaid Order of the Hon'ble High Court dated 5.5.2014, we heard the parties on 23.5.2014 on the issue of interim arrangement regarding the release of water from upstream reservoirs to the Jayakwadi reservoir for the year 2013-14 and passed the following order on 28.5.2014:

"MWRRA's Observations & Directions :

1. *"Looking to the information and analysis thereof it is clear that the entire committed drinking water and industrial requirement till 31/7/2014 for Jayakwadi (at Paithan Dam site) can be met from the present storage available in Jayakwadi reservoir. Also it needs to be noted that there is no commitment on the part of the Government to give water for Hot Weather irrigation in the Jayakwadi command in this season of 2013-14. There are some reservoir groups upstream of Jayakwadi viz. Gangapur and Mula from which about 1.58 TMC (45 million cubic meter) of water is available for release into the Jayakwadi reservoir. However, considering past experience, this quantum is so small that it may not reach Jayakwadi reservoir due to transit losses. Therefore, this Authority feels that against this background the release of water from dams upstream of Jayakwadi will not be of any use to the users downstream of Jayakwadi at present."...*

With these findings and observations, the issue regarding the release of water from upstream reservoirs to the Jayakwadi reservoir for the year 2013-14 stands disposed of".

3. Subsequently, we have heard the parties on 09.07.2014, 31.07.2014, 11.08.2014, 13.08.2014, 20.08.2014 on the issue of equitable distribution of water in the Godavari Basin from upstream reservoirs to the Jayakwadi Reservoir. We have also heard the Interveners and the Caveators regarding their objection to the release of water from upstream dams to the Jayakwadi Dam. On behalf of the Respondents that is Water Resources Department of the Government of Maharashtra, the Joint Secretary and on behalf of the River Basin Agency that is the Godavari Marathwada Irrigation Development Corporation, the Executive Director, have been heard.

4. We have considered the written and oral submissions made before us by the parties. The submissions made by the various parties through their respective Counsels are briefly narrated as follows:

4.1 PETITIONER:

The Petitioner has requested us in his application dated 15.1.2014 to carry out "Equitable Distribution of Water" as per the provisions contained in Section 12 (6) (c) of the MWRRA Act, 2005, so that the distress in the sub-basin is shared. He has also suggested some approximate plan for equitable distribution by starting releases of water each year from July onwards.

4.2 SHRI. Y. R. JADHAV .....INTERVENER:

Shri. Y. R. Jadhav, Ramayan, Visawangar, Nanded, Intervener, also requested us vide his letter dated 26.5.2014, (as in his earlier letter dated 26.4.2014) that "Equitable Distribution of Water" is a statutory right provided in Section 12 (6)(c) of the MWRRA Act, 2005. This should be implemented in letter and spirit.

According to the Intervener, at the time of planning of the Jayakwadi Project in 1965, it was estimated that 196.5 Thousand Million Cubic Feet (TMC) of water could be made available at the Paithan dam site if no dams / obstruction existed upstream of the Paithan Dam. Out of this virgin yield, 115.5 TMC of water could be utilized in upstream projects and 81 TMC was proposed to be utilized at Jayakwadi (Paithan Dam) to irrigate 2.78 Lakh Hectares of land. He has also made a reference to the Para No. 2.8 of the State Water Policy of Maharashtra which states that distress in water availability during deficit period shall be shared equitably among upstream and downstream users. He has also pointed out to the provisions in Para No. 3 of State Water Policy according to which the water resources of the State shall be used, conserved and managed to provide maximum economic and social benefits for the people of the State and in a manner that minimizes regional imbalance. There is no pre-condition (of setting aside of water for drinking or industrial use or delineation) in implementation of section 12(6) (c) of the MWRRA Act, 2005.

According to the intervenor, the say of the MWRRA contained in their affidavit dated 27.11.2012 made before the Aurangabad bench of the High Court of Bombay needs review and revision and suitable modification.

4.3. CAVEATORS NO. 1 & 2:

Caveators No. 1 & 2 have pointed out that MWRRA's affidavit dated 27.11.2012 made before the Aurangabad bench of the High Court of Bombay to the effect that delineation is required before Section 12(6)(c) of MWRRA Act could be implemented is causing injustice to farmers in Nashik and Ahmednagar districts.

4.4. CAVEATORS NO. 3 & 4:

Major talukas in the upstream areas of the Jayakwadi Project, that is Kopargaon, Sangamner, Rahata, Rahuri, Shreerampur and Newasa, are in the rain shadow area which has less rainfall as compared to Jalna, Aurangabad, Beed, Parbhani and Nanded of Marathwada. These districts of Marathwada also have the benefit of the returning monsoon, unlike the upstream areas. The Government has filed an affidavit on 18.12.2012 before the Bombay High Court (Aurangabad bench) on the basis of a study carried out in 2004 stating that the net water available at Jayakwadi is 23.73 TMC. The British Government constructed the Darna Dam in 1905 and Bhandardara Dam subsequently to cater to the needs of farmers in the area of Niphad, Yeola and Sinnar in Nashik district and Kopargaon, Rahuri, Shrirampur in Ahmednagar districts. Subsequently, on the assumption of assured supply of water from Darna and Bhandardara Dam to these Talukas of Nashik and Ahmednagar districts, only 18 acres of land were allowed to remain with each farmer under the provisions of the Ceiling Act of 1961. In other words, these lands were treated as irrigated lands. Farmers in these districts (Nashik and Ahmednagar) who were affected by the Ceiling Act cannot now be denied water in the hot weather season, that is, in the months of March, April, May. Besides this, in the year 2012-13, when water was released from dams in Nashik and Ahmednagar districts into the Jayakwadi dam for drinking purpose, there was unauthorized use of this water for

irrigation. This fact was also mentioned in the High Court Order of 29.4.2013. The High Court had given directions to discontinue the unauthorized use of water from the Jayakwadi project. However, no action was taken by the Government on this. Thus the Government was causing an injustice to those farmers who were dependent upon the dams constructed in Nashik district. Moreover, water was being provided to the beer and liquor industries from the Jayakwadi Reservoir. The Petitioner's demand for the release of water from upstream dams would cause an injustice to farmers in Nashik and Ahmednagar districts.

4.5. <u>CAVEATORS NO. 5, 6 & 7:</u>

According to Caveators, the petitioner's demand for releasing water from upstream dams in Nashik district from the start of the monsoon would negatively impact the storage of these upstream dams. If there is no rain fall in the later monsoon months, the water availability in the upstream areas of Jayakwadi would be considerably reduced. The sharing of distress in water availability among upstream and downstream users has no legal base. Issues raised by the Petitioner in his application are not sound. The construction of the Darna Dam was started in 1899 for giving assured water to the scarcity hit areas in the rain shadow region of Ahmednagar district. The Caveators therefore requested that the petitioner's request may not be considered and his application be rejected.

4.6 <u>GODAVARI KALAVE PANI BACHAV SANGHARSH SAMITI ..... INTERVENER:</u>

According to the Intervener, the farmers in the command of Godavari Kalave will be affected badly if Section 12(6) (c) of MWRRA Act, 2005 is implemented. They have planted Gauvas, Pomegranate, Chikoo, Custard Apple and Grapes. These horticulture plants require water during all the 3 seasons. If Section 12(6) (c) is implemented, water will not be available during the season of hot weather. These horticulture plants are planted with huge investment. If they do not receive water during the hot weather they will dry up and will cause heavy losses to the farmers.

4.7 MANAGING DIRECTOR DR.VIKHE PATIL SSK,PRAVARA-NAGAR .....INTERVENER:

According to the Intervener, the Darna Dam was planned to give perennial irrigation to "blocks" in those areas of Ahmednagar which were initially scarcity areas. Great development has taken place in the command areas of upstream projects in terms of agricultural based industries, providing employment to lakhs of people. Farmers in this area have been provided with assured irrigation "blocks" from before Independence. As per the Central Water Commission practice, irrigation projects have to be reviewed after every 10 years of completion. This is necessary as the ground situation and the pattern of rain fall keep changing. Besides this, many new dams have come up upstreamof the Jayakwadi dam. The demand and use of water for different categories has also increased. It is necessary to study these aspects from all angles. A new policy for equitable distribution should be evolved.

The Intervener requested that the "block" system in the Godavari, Mula and Pravara command areas as defined by the Government in Rules brought into effect in 1934, be protected. According to the block system, which is made applicable to only 3 canal systems in Maharashtra, namely Neera, Prawara and Godavari canals, the farmers drawing water from these canal systems were assured of perennial supply of water to 1/3rd of their respective areas. This was revised in 1975 to 1/4th of their areas.

4.8 HARSHCHANDRA SAHAKARI PANI PURAVATHA SANSTAHNCHE SAHAKARI FEDERATION LTD. ... Intervener:

This applicant represents Akola in Sangamner taluka which falls under the rain shadow area. The applicant stated that Mhaladevi Dam (Nilwandhe) was planned to be constructed by the British in 1882. This was a part of the 115.5 TMC of water planning at the time of sanction of Jayakwadi Project in 1965.

4.9 ABHIJIT DURGADASRAO (JOSHI) DHANORKAR ... INTERVENER:

This Intervener is a representative of the Majalgaon Dam, which is a part of the Jayakwadi Project Stage-II. According to him, at the time of the planning of Jayakwadi Project, 12 TMC water was to be released from the Jayakwadidam to Majalgaon Dam. However, in a period of 37 years, water has been released from the Jayakwadi Dam only 7 times. This has caused great injustice to those farmers who depend on the Majalgaon project. His request is for the release of water into the Majalgaon Dam as per the original planning of the Jayakwadi dam.

4.10 COMRADE RAJAN KSHIRSAGAR ... INTERVENER:

His main plea is that theGovernment has constructed more projects (totaling a capacity of 156 TMC) upstream of the Jayakwadi dam as compared to what was projected (115 TMC) at the time of planning of the Jayakwadi dam. This has affected the water availability at the Jayakwadi dam, and in turn is affecting the farmers in 183 villages in Parbhani District and a command of 87000 hectares. The MWRRA should therefore give directives as per the relevant provisions in the MWRRA Act, 2005 and the benefits as planned in the Jayakwadi project should be made available to the farmers.

4.11 STATE GOVERNMENT:

State Government has mentioned in its affidavit dated 18.12.2012 in PIL/100 Case before the Aurangabad bench of the Hon'ble High Court of Bombay that*"Government will formulate these regulations on the principles of approximate equal distribution of water by coordinated approach taking into account the release restrictions from upstream dams, utilization in kharif and water losses due to evaporation and transmission"*. In pursuance to this, Governmentappointed a study group for the formulation of regulations for the integrated operation of the reservoirs for the upper Godavari Basin. The study group submitted its report to the Government in August, 2013. The Government had asked the views of the Authority (MWRRA) on this Godavari Study Group (GSG) Report.

4.12 We took cognizance of the fact that the Water Resources Department of the Government of Maharashtra vide Marathi resolution No. MISC-2012(891/12)/2012 IM(P) Dated 29.1.2013 has constituted the Godavari Study Group (GSG) for formulation of regulations/guiding principles on integrated operation of reservoirs in the Upper Godavari (upto Paithan Dam) sub basin with the following Terms of References:

1. *To formulate guidelines for integrated operation of reservoirs during filling period in Upper Godavari (upto Paithan dam) sub-basin so that likely water scarcity situation in Paithan dam may not be attained.*

2. *To develop mechanism for effective implementation of such guiding principles.*

3. *To suggest reforms about the technical, financial and management aspects thereof.*

This was done by the Government in compliance with the commitment made by the Government in their Affidavit dated 18.12.2012 in PIL 100/2012 before Hon'ble High Court regarding formulation of the regulations/guidelines for integrated operations of the reservoirs.

The GSG consists of the Director General, Water And Land Management Institute, (WALMI) Aurangabad as a Chairman and five other members who are the Sr. Chief Engineers from Nashik, Aurangabad, Pune, the Executive Director, Aurangabad and Chief Engineer (Hydrology).

The GSG conducted 8 meetings starting from 13th February, 2013 to 8th May, 2013. At the outset, the GSG has gathered voluminous relevant data from the regional Chief Engineers and got this duly validated by the Executive Director, Godavari Marathwada Irrigation Development Corporation (GMIDC), Aurangabad.

The objective of this study is to balance the water availability considering the different probabilities of inflows and the various demands adopting the sub basin as a unit. The concept of the integrated operation of reservoirs in the sub basin is to achieve approximate equal distribution of water.

The GSG has also conducted literature review and studied various norms and regulations relevant to the topic. The GSG has studied the hydrological aspect of catchment at the time of planning of the Jayakwadi Project (1965) and its present status (2012). Rainfall characteristics and inflows in various reservoirs in the sub basin are also reviewed.

4.13 Therefore, as this study specifically pertaining to the equitable distribution of water in the Godavari Sub-Basin has been commissioned by the Government and as the study report is available, we have deemed it appropriate to seek the views of the parties in the present case on the findings of the said Report.

Soft copies of the GSG Report were given to the parties on 9.7.2014 and their views on the same were sought.

5. HEARING ON 31.07.2014

The views of the Petitioner, Respondent, Caveators and Interveners on the Godavari Study Group Report (GSGR) were heard on 31.7.2014. Their views are as follows:

5.1 <u>PETITIONER:</u>

The petitioner has more or less concurred with the recommendations of the GSGR. His reservations however are as follows:

(a) The provision for the mandatory live storage of upstream reservoirs will have an effect on the water to be released to Jayakwadi.

(b) Drinking water and industry water supply should be through closed pipe lines.

(c) Release of water from upstream dams into the Jayakwadi dam be started from July onwards instead of from September. There is no monitoring mechanism to look after the theft or pilferage of the water in upstream areas. Such a mechanism should be put in place.

He has proposed the inclusion of two representatives (MLAs) from the upstream areas and two from the downstream areas in the proposed monitoring group.

5.2 **SHRI. Y.R.JADHAV, ... INTERVENER:**

The recommendations made by GSG Report for equitable distribution of water are contradictory to the provisions of Section 12(6)(c) of the MWRRA Act, 2005. Therefore the MWRRA should not consider the report of the GSG Report of August, 2013.

5.3 **COMRADE RAJAN KSHIRSAGAR .. INTERVENER:**

He has raised objections to the recommendations of the GSG Report. The main objection is that the GSG Report has not taken the cognizance of Irrigation Act 1976 wherein "block system" prevalent from British period has been discontinued. He has suggested that a monitoring mechanism be set up following an agreement to be made between the upstream and the downstream users and Government to resolve the issue of equitable distribution of water in the Godavari Sub-basin upto the Paithan Dam. He has also raised objections regarding the over use of water in the Kharif season in the upstream project areas. The release of water from upstream dams should start only from the 15th August.

5.3 **SHRI.ABHIJIT D.(JOSHI) DHANORKAR .. INTERVENER**

He has stated that the recommendations of the GSG Report be considered. However, the release of water from Jayakwadi Project to Majalgaon Dam should take place as originally planned. Reservoir regulation be started from July/August instead of September as proposed by GSG Report.

5.4 **VIKHE PATIL S.S.K. ... INTERVENER:**

Their objections to the report are as below:

(a) The entire focus of the GSG Report is on the release of water into the Paithan Dam from upstream Dams. The study group has not taken into consideration the grievances of the beneficiaries located on upstream dams in Nashik and Ahmednagar districts.

(b) The Study group has not given proper attention to the situation of upstream projects.

(c) The agriculturalists in the upstream areas have had to give up their land under the Ceiling Act of 1961 on the presumption that they would get assured water all the year round for their "block" system of irrigation. Their lands were classified as irrigated lands. They were to get the benefit of irrigation for the complete year that is, for all 3 seasons. The original availability of water for non-irrigation use in Nashik and Ahmednagar districts (upstream areas) was 8.72 TMC. At present, the non-irrigation use of water as per the Central Design Organization Data is 34.47 TMC. This shows a tremendous increase in non-irrigation use of water to the extent of 25.74 TMC. This has greatly affected the water availability at Paithan.

(d) The upstream utilization of water at the time of planning of the Jayakwadi project was 115.51 TMC. At present the actual upstream use is 160.89 TMC. Out of this, 15.71 TMC of water is used for Marathwada through the Nandur Madhmeshwar Canal. Therefore, the effective water available for irrigation in the upstream areas of Nashik and Ahmednagar districts is [160.89-(34.47+15.71)] = 110.7 TMC.

(e) As per the 1965 project reportof Jayakwadi, the water availability considered at Paithan was 196.3 TMC with upstream utilization of 115.5 TMC. However, the Central Designs Organisation, in its 2004 report has worked out the water availability at Paithan as 157.02 TMC and the upstream utilization as 143.87 TMC. This has resulted in allowing at Paithan Dam a net yield of only 23.72 TMC. It is very clear therefore that all parameters of the Jayakwadi Reservoir need to be revised before any principle of equitable distribution can be applied here.

5.5 HARISHCHADRA SAHAKARI PANI PURAVATHA S.S. FEDERATION LTD. SANGAMNER... INTERVENER:

They have also objected to the recommendations of the GSG Report as follows:

(a) The Jayakwadi Dam project is based on incorrect data and information.

(b) GSG Report is biased in favour of the Marathwada Region.

(c) Illegal allotment of water by the State Government has been given to India Bulls for non-irrigation use (Thermal Station).

(d) GSG Report has not taken cognizance of this illegal allocation. This diversion of water to India Bulls is affecting the availability of water for irrigation.

(e) The report has not taken into account the possibility of diverting the west flowing rivers and rivulets into the Godavari Basin to increase water availability for irrigation.

(f) The impact of the Ceiling Act has drastically affected the agriculturists in upstream areas. This aspect is also not considered by the GSG Report.

(g) Measures are not proposed in the report to deal with the unauthorized utilization of water from the Jayakwadi Reservoir.

5.6 CAVEATOR NO. 1 & 2:

Their main objections are as below:

(a) The said committee has not taken into consideration the provisions contained in the amended Section 31(B) of the MWRRA Act, 2011.

(b) Protection to the "blocks" given under Section 77(ii) of Maharashtra Management of Irrigation Systems by Farmers Act Act, 2005 (MMISF) is not considered in the report.

(c) Provisions of Clause 2.2.2 of the State Water Policy, 2003 and subsequent amendment by G.R. dated 18.5.2011 and of the Maharashtra Irrigation Act, 1976 are not considered in the report.

(d) The MWRRA Act, 2005, is only applicable to 246 projects under the Maharashtra Water Sector Improvement Project (MWSIP) World Bank Assistance Programme.

(e) Darna, Gangapur and Bhandardara are not included in this list. Hence, the MWRRA Act, 2005 is not applicable to these old projects.

(f) Clause No.2.2.2 of the Water Policy has protected the "block system" on Pravara and Darna Canals. This aspect is not considered by the GSG Reprot.

(g) The Ceiling Act, 1961 has reduced the land holdings of the agriculturists who are getting the benefit of the block irrigation system. This is not considered by the GSG Report.

(h) Regarding water availability at Paithan, they have raised the same views as raised by VIKHE PATIL S.S.K..

(i) The regulation of the water in reservoirs is proposed by the GSG Reportfrom September onwards, which is contradictory to the provisions of Section 12(6)(c) of the MWRRA Act, 2005.

5.7 <u>CAVEATOR NO. 3 & 4:</u>

Their views are similar to the views expressed by Harishchandra Sahakari Pani Puravatha S.S. Federation Ltd., and Caveator No. 1 & 2 vide para No. 4, 6, & 4.7.

5.8 <u>CAVEATOR NO. 5, 6& 7:</u>

He has also objected to the implementation of the recommendations of the GSG Report as follows:

(a) The report has been prepared on the basis of incomplete and incorrect data.

(b) The report has not been accepted by the Government

(c) The report has been prepared keeping in view the interests of the Jayakwadi dam beneficiaries only.

(d) The report has not taken into account old projects such as Bhandhardhara, Darna and Mula which were constructed prior to the Jayakwadi project.

(e) The Talukawise water use under the Bhandardara project was finalised by the Government as 52% for Rahata and Shrirampur, 30% for Sangamner and Akole, 3% for Newasa and 15% for Rahuri. This aspect has not been considered by the study group. Beside this, the report is not yet approved by Government.

In view of the above, the recommendations of the study group be not considered by the MWRRA.

6. HEARING ON 11/08/2014

6.1 The Respondent Water Resources Department have submitted their views on the proposal framed by the Godavari Study Group Report and also comments on the views expressed by other parties, that is, Caveators, Petitioners and Interveners.

6.2 Government's views on the Godavari Study Report are as below :-

"The Guiding Principles suggested for the synchronization of storages in the sub basin need to be formulated after carrying out detailed realistic review of water availability and water planning of whole sub basin which can be concurrently done with the development of the computerized decision support system. It will be appropriate to follow the guiding principles thereafter. Until such time that decision support system is in place, the review of status of filling of the reservoirs in the sub basin shall be taken by the end of the October every year. It is not therefore possible at this stage to take categorical decision on the report."

6.3 The Government's views on the application of the petitioner, interveners, caveators, are as below :-

(i) The Government feels that although the upstream water use at the time of planning of the Jayakwadi Project in 1965 was 115.5 TMC, there was subsequently an increase in the demand of drinking water and industrial water. Therefore, additional projects such as Gautami,

Godavari, Kashyapi and Valdevi were implemented. Additional minor irrigation projects were also constructed in Nashik and Ahmednagar districts. The present upstream planned water use of all projects (upstream of Jayakwadi project) is 160.993 TMC. All these projects were taken up only after the administrative approval was given by the Government

At the time of planning of the Jayakwadi project, it was assumed that water available at 75% of dependable yield at the dam site would be 196 TMC. The water use planning for Jayakwadi was 81 TMC. The upstream water use was of 115.5 TMC.

(ii) For the integrated operation of reservoirs and equitable distribution of water in the Godavari basin up to Paithan dam, the Government had constituted a Godavari Study Group under the Director General, Water And Land Management Institute, (WALMI). The report of the Study Group is under the consideration of the Government

(iii) Under its letter of 5.3.2012 the Government has given extension to the "block system" up to 30/06/2012 with the condition that the block holders should form Water Users Associations (WUAs). Government has directed that no extension be granted to the blocks from 2012-13 onwards (vide Government letter dated 14/12/2012).

(iv) Compensation has been paid for acquisition of the excess land under the Ceiling Act and this excess land has been distributed to landless persons in the State. There was a reduction in the extent of agricultural land holdings in the entire State and not only in Nashik and Ahmednagar districts.

(v) The provision of feeding water into Majalgaon dam through the Paithan Right Bank Canal of Jayakwadi project is as below :-

i) Bad year - 19.77 TMC
ii) Good year - 12.36 TMC
iii) Normal year - 8.47 TMC

Government has released water from Jayakwadi to Majalgaon dam only for 8 years through the Paithan Right bank canal. During the remaining years, no water was diverted to Majalgaon dam.

(vi) Government has constituted the Study Group for formulating regulations for operation of the reservoirs in Godavari sub basin.

(vii) Government's views on the Canal Advisory Committee is for the project level planning. This is not meant for basin level planning.

(viii) Affidavit filed by the Government before the Aurangabad bench of the Hon'ble High Court on 18/12/2012 shows upstream water use as 143.87 TMC. This is on the basis of the Central Design Organisation, Nashik, report. But the Godavari Study Group Report was prepared subsequently and they have updated the figure of upstream utilization to 160 TMC.

A High Power Committee of the Government has taken a decision to grant 3 TMC Nashik sewage water to Indiabulls (thermal station) which is to be first treated by them. This permission given to Indiabulls is for the generation of Thermal Power to meet the shortage of electricity supply in the State.

The quantum of water to supply to the beer and liquor industry is very meager at 2.65 Mm^3 (0.09TMC).

(ix) Government has also framed a co-ordination committee to study the possibility of diversion of surplus west flowing water into the Tapi and Godavari basins. A total of 27 schemes (7.91 TMC) have been identified and out of these, physical works on 17 schemes (1.8 TMC) are in progress.

(x) There is a provision for Hot Weather crops in the approved cropping pattern (7.5%) for which water requirement considered is 8.84 TMC.

(xi) There is a provision of the 26 TMC of water for the Pravaranagar complex within the total upstream utilization of 115.5 TMC considered at the time of the planning of the Jayakwadi project.

6.4 All parties were directed to submit their views on the State Government's reply by 13/08/2014.

7. HEARING ON 13/08/2014

7.1 Caveator 1 to 7 and Interveners requested for time for giving their views on the Government's reply. Accordingly, the final hearing was kept on 20/08/2014.

8. HEARING ON 20/08/2014

In the hearing, the submissions of the petitioner, the Caveators and the Interveners on the reply filed by the State Government were considered, which are briefly stated, as follows:-

8.1 PETITIONER :

(a) The provision under Section 31(B) of the MWRRA Act covers the permissions granted to "blocks" before 17/09/2010. Since Government has decided vide letters dated 5/3/2012 & 14/12/2012 that no extension to "blocks" is to be given beyond 30/06/2013, no "blocks" exist today.

(b) An integrated multi-sectoral approach and river basin approach is to be adopted for water resources planning and management on a sustainable basis taking the river basin and sub basin as a unit. The management of water resources of the State should be decentralized to the last practical level on the basis of hydrological units. Therefore basin and sub basin planning has to be carried out first. Project planning within the sub basin will follow subsequently.

8.2 CAVEATOR 1 & 2:

The upstream utilization of water of 160 TMC, as stated in Government affidavit, is not for Nashik and Ahmednagar districts only. The Nandur Madhameshwar express canal with 15 TMC water use is benefiting Gangapur and Vaijapur talukas of the Marathwada region. In addition there are medium projects with water use of 8/10 TMC on Shivana river a tributary of Godavari, which also benefits the Marathwada region.

The "Block system" on the Godavari and Pravara Canals has legal support as per the Bombay Irrigation Act 1879 and Bombay Canal

Rules, 1934. These "blocks" are also saved by Section 131(b) of the Maharashtra Irrigation Act 1976 and Section 77(ii) of the MMISF Act, 2005.

The provisions under section 77(ii) of the MMISF Act, 2005 prevail over section 12(6) (c) and section 11(a) to (c) of the MWRRA Act, 2005.

8.3 CAVEATOR 3 & 4:

In addition to the contentions raised regarding the blocks similar to the contentions raised by the Caveator 1 & 2, it has been submitted that because of the diversion of 3 TMC of Nashik Municipal Sewage water to the Indiabulls thermal station, there will be a reduction in the water availability for irrigation on the downstream side. This will effect about 10000 ha irrigation in the Nashik and Ahmednagar Districts.

The non-irrigation use has increased since initial planning by an extra 42%.

It will be seen that the agricultural use of water for upstream projects of Nashik and Ahmednagar districts does not exceed 115 TMC, which was as planned for the Jayakwadi project. What has increased in the upstream area is in the non irrigation sector and due to the additional planning of Nandur Madhameshwar express canal and medium project on the Shivana river in Aurangabad district (upstream of Jayakwadi).

8.4 CAVEATOR 5, 6 & 7:

The main issue raised is that blocks cannot be cancelled by Government letter dated 14/12/2012 simply by writing to the Chief Engineer. There is a legal provision provided in the Bombay Canal Rules 1934, Section 27, for giving 12 months notice to block holders before cancellation. This procedure will first have to be followed.

8.5 The parties have also made the following submissions:

8.5.1 EQUITABLE DISTRIBUTION UNDER SECTION 12(6) (C) OF MWRRA ACT:

a) The Equitable distribution of water in each sub-basin is to be carried out so as to share the distress in the sub-basin as per provisions under Section 12(6) (c) of the MWRRA Act, 2005.

b) The release of water from upstream projects to be started from July onwards.

c) The implementation of Section 12(6) (c) will cause injustice to farmers in Nashik and Aurangabad districts.

d) Equitable distribution of water from July onwards will have an adverse impact on the availability of water in the upstream dams.

e) The concept of distress in water availability to be shared equitably among upstream and downstream users has no legal base.

f) Horticulture crops requiring water in the hot weather will be affected badly and will result in heavy loss to farmers in Ahmednagar district if Clause 12(6) (c) of the MWRRA Act, 2005 is implemented.

g) GSG Report - Regulation of water proposed from September is contradictory to the provisions under Section 12(6) (c) of the MWRRA Act, 2005.

h) The decision of the canal advisory committee should be taken into consideration while implementing Clause 12(6) (c).

i) An integrated multi sectoral approach and river basin approach as provided under State Water Policy 2.1.1 be adopted for water reservoir planning and management with each river basin as the unit.

j) The Authority's Affidavit in the Aurangabad bench of the Hon'ble Bombay High Court on 27.11.2012 in Case No. 100 of 2012 stated that delineation as per Section 33(A) is required for implementing Section 12(6) (c) of the MWRRA Act, 2005.

k) Delineation of command area is required under Section 31(A) of the act. Projects considered in the petition are not delineated, and therefore the provisions of the MWRRA Act do not apply to the upstream projects.

l) There is no direction from the High Court for appointment of the Godavari Study Committee for resolving these issues i.e. reservoir operation in Section 12(6) (c). Hence, the MWRRA should not consider the GSG Report.

m) The Committee was not appointed by the MWRRA for resolving the issues in Section 12(6) (c). Hence, the recommendations of the GSG report should not be considered by the MWRRA.

8.5.2 WATER PLANNING OF JAYAKWADI PROJECT & UPSTREAM UTILISATION:

a) Hydrological reports at the time of planning of the Jayakwadi project and their current authenticity.

b) Increase in the non-irrigation use of water in upstream projects.

c) Majalgaon project should get water from Jayakwadi project as per 1965 planning.

d) 183 villages in Parabhani district get water from the Jayakwadi project as per 1965 planning.

e) The non-irrigation use of water from upstream projects has increased from 8.72 TMC at the time of planning to 34.47 TMC as of today.

f) Upstream utilization in Nashik and Ahmednagar districts is less than what it was planned in 1965.

g) Upstream utilization has increased because ofincreased unplanned non-irrigation uses. The additional planning of Nandur Madhameshwar express canal and medium projects on the Shivana & other tributaries in Aurangabad district has benefitted upstream farmers falling in the Marathwada region.

h) Increased Kharif use on upstream projectis more than the planned utilization.

i) Increased water usage in upstream projects by way of flood canals filling storage tanks, etc.

j) Should new projects be taken upstream of the Jayakwadi project?

k) There should be some upper limit on non-irrigation water use. Government has not taken any measures for restoring the irrigation quota of water.

l) Government should have made efforts to restore the availability of water to those users who are deprived of irrigation water because of the diversion of water to non-irrigation purposes.

8.5.3 "BLOCK SYSTEM" UNDER OLD PROJECTS VIZ, NEERA, PRAVARA AND GODAVARI CANALS

a) "Blocks" have protection under Section 31(B) of the MWRRA Act, 2011 and Clause No.2.2.2 of State Water Policy and Section 77 of MMSIF Act and Section 131(ii) of 1976 Act.

b) Water will not be available in Hot Weather for "Blocks".

c) "Blocks" in Nashik and Ahmednagar districts have protection as per the Bombay Irrigation Act, 1897, under Section 131 (b) of the 1976 Act and also under Section 77(ii) of MMISF Act and para 2.2.2 of the State Water Policy.

d) Talukawise Water quota was given by Government under Bhandardara Dam (Pravara Canal).

e) "Block" system is not in existence any more as per the Government letter of 14.12.2012.

f) "Block" system has legal support as per the Bombay Irrigation Act, 1879, the Bombay Canal Rule, 1934 and Section 131(b) of 1976 Maharashtra Irrigation Act and Section 77(ii) of the MMISF Act.

g) Blocks cannot be cancelled without giving 12 months notice to each block holder as per Section 27 of Bombay Canal Act, 1934.

h) MWRRA Act is not applicable to old projects of Bhandardara and Darna.

i) Darna and Bhandardara projects were planned in pre-independence period with a view to give benefit to the then scarcity hit areas of Nashik and Ahmednagar districts.

8.5.4 IMPACT OF CEILLING ACT:

a) Impact of The Maharashtra Agricultural Lands (Ceiling on Holdings) Act, 1961 on Nashik and Ahmednagar districts has to be considered.

b) Compensation has been paid for excess land under this Ceiling Act and excess land has been distributed to the land less people in the State.

8.5.5 UNAUTHORISED LIFTING FROM THE JAYAKWADI RESERVOIR:

a) The aspect of unauthorized use of water by farmers from the Jayakwadi reservoir must be considered.

b) There has been no action from the Government for controlling unauthorized use of water from the Jayakwadi Reservoir.

c) Permissions for lifting from the back water of the Jayakwadi reservoir are given as per provision of the Irrigation Act 1976.

8.5.6 OBSERVATIONS ON THE GODAVARI STUDY GROUP REPORT:

a) GSG Report has not considered grievances of upstream users.

b) The Report has not taken cognizance of the illegal allotment of Nashik sewage water to India Bulls, affecting the irrigation needs of about 10000 hectares in Nashik and Ahmednagar districts.

c) The report has not considered the possibility of the diversion of West Flowing water to the Godavari basin to increase water availability.

d) No measures proposed to deal with the problem of unauthorized utilization of water from the Jayakwadi project.

e) GSG Report does not take into account the effect of the return rainfall in the Jayakwadi command area. The upstream area lies in the rain shadow zone while there is good rainfall in the command area of the Jayakwadi project.

f) In the study group, only officers from the downstream side were appointed. No representation was given to upstream people.

g) Good suggestions are made in GSG report about use of drip and sprinkler systems of irrigation.

h) The GSG report has not taken cognizance of the type of soil in the irrigation commands of upstream projects and Jayakwadi command.

i) The table given in GSG report viz, table 5, 6 and 7 are not really prepared on the basis of principles laid down under section 12(6)(c) of MWRRA Act, 2005. Equalization of the reservoir is recommended irrespective of reservations for drinking and industrial use.

8.5.7 MONITORING COMMITTEE FOR IMPLEMENTING EQUITABLE DISTRIBUTION:

a) The proposed monitoring committee for release of water from upstream projects should consist of 2 MLAs each from upstream and downstream areas in addition to Officers.

b) The monitoring mechanism should be in the form of anagreement between the downstream and upstream users and Government.

8.5.8 VIEWS IN GENERAL

a) Projects need to be reviewed as per Central Water Commission guidelines and new parameters of water planning be fixed on the basis of the ground reality.

b) Drinking and industrial water supply should be in closed pipe lines only to avoid wastage of water.

c) Water is provided by MIDC to beer and liquor industries from Jayakwadi reservoir.

d) The quantum of water given to the beer and liquor industry is meager.

We have heard the learned counsels for the parties. We have closely examined the evidence and other material available on record including the written submissions filed by all the parties.

9. OUR ANALYSIS WITH REASONS

After hearing the parties and after considering the materials placed on record, we are of the view that the following issues arise for consideration in the present matter:

(1) Whether the equitable distribution of water should be made under section 11 (c) or under section 12(6)(c) of the MWRRA Act, 2005?

(2) Would the equitable distribution of water in the Godavari Basin take away the protection accorded to the "block system"?

(3) Whether the GSG Report can be considered as the basis for the equitable distribution of water in the Godavari Basin?

(4) Whether the equitable distribution of water in the Godavari Basin can be decided by the MWRRA?

Before dealing with the questions framed above, it would be useful to give an overview, for a proper appreciation of the matters in question. The source for this is the Godavari Study Group Report.

The Maharashtra State is geographically divided into 5 river basins, namely the Godavari, Krishna, Tapi, Narmada and the West flowing rivers of Konkan. A river basin is a hydrological natural unit within the territorial limits of which all activities relating to water are interdependent. A Sub-basin is a hydrologic sub-unit of a river basin within the State. The river Godavari originates near Trimbakeshwar in Nashik district in the Sahyadri hill ranges. It flows down into Andhra Pradesh after having crossed the districts of Ahmednagar, Aurangabad, Nanded etc. and empties itself into the Bay of Bengal near Rajmahendri. The total geographical area of this basin is 312812 sq. km. of which 152811 sq.km. falls within Maharashtra.

Water, a prime natural resource, is used for domestic, irrigation, industry, power generation, navigation and other uses. Water was once abundant but has now become a scarce resource. The distribution of water resources is uneven over a large part of the State.

The State Water Policy formulated by the Government of Maharashtra in 2003 envisages that the water resources of the State shall be planned, developed, managed with the river basin and the sub basin as the unit. This policy states that the distress in water availability during deficit periods shall be shared equitably amongst different sectors of water use and also amongst upstream and downstream users.

Initially, the Jayakwadi Project planned on the Godavari River, was administratively approved in 1965 with the dam at Paithan. The project was to initially provide irrigation facilities to an area of about 2.77 lakh hectares in Aurangabad, Jalna, Beed, Parbhani in the Marathwada region by way of the Paithan left bank and right bank canals. The upper Godavari sub basin includes the entire catchment of the Godavari River from its source (Trimbakeshwar) to Paithan dam including catchment area of Pravara and Mula Rivers and other tributaries viz, Darna, Kadwa, Shivana etc., which meet the Godavari River. The prominent reservoir complexes upto Paithan dam are the Mula Complex, Pravara Complex, Godavari - Darna Complex, Gangapur Complex, Palkhed Complex.

The schematic diagram of the Upper Godavari basin is as below:

Fig.1. Satellite Imagery of Upper Godavari Sub Basin

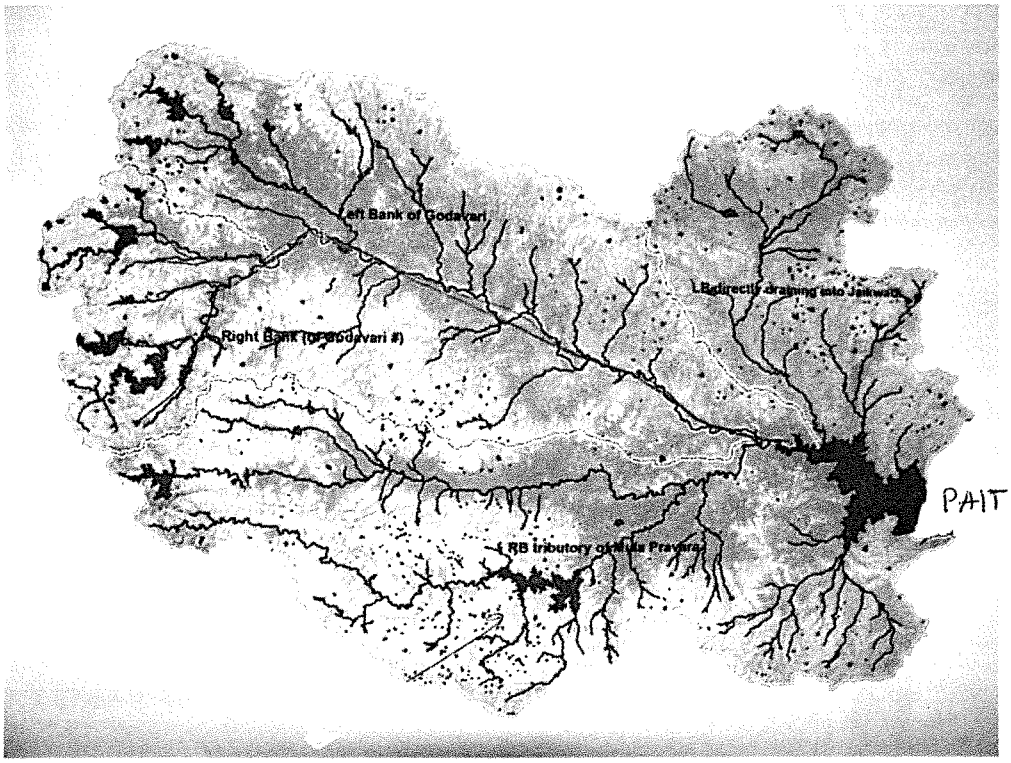
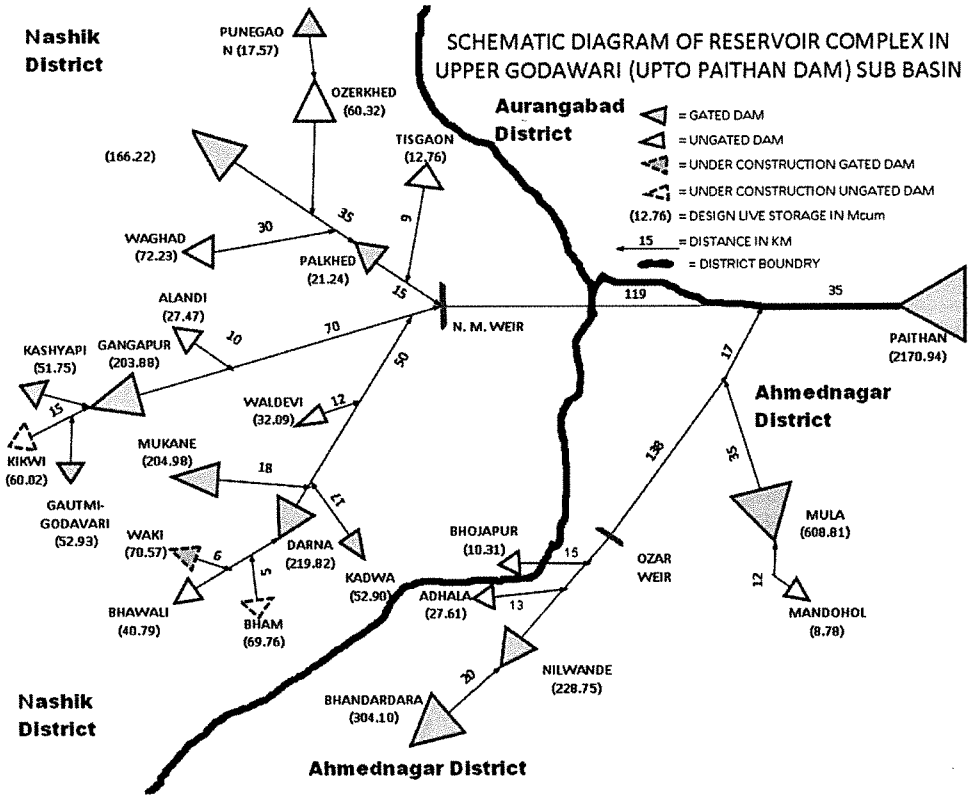


Fig.2. Schematic diagram of reservoir complex in upper Godavari (upto Paithan dam) sub basin.



According to the State Government's Affidavit filed at Aurangabad Bench of Bombay High Court in PIL No. 100 of 2012, as per the 1965 Jayakwadi project report, the availability of yield (water)was estimated as under:

75% dependable annual virgin yield at Paithan dam	5366.00 Mm^3 (196.56 TMC)
Corresponding upstream utilization	3270.65 Mm^3 (115.50 TMC)
Net yield available at Paithan Dam	2295.35 Mm^3 (81.06 TMC)

As per the approved Jayakwadi project report the utilization of water from Paithan dam for irrigation was planned as under:

1. Paithan left bank canal ... 38 TMC
2. Paithan right bank canal ... 11.22 TMC
3. Feeding into Majalgaon reservoir ... 12.36 TMC
4. Lake losses from Paithan reservoir ... 23.47 TMC

TOTAL **... 85.05 TMC**

Above water utilization was planned considering the net yield available at 75% dependability at Paithan dam as 81.06 TMC. In the subsequent years the Paithan dam did not seem to receive the estimated yield, the Government had asked the Central Designs Organization, Nashik, to update the yield study based of the latest hydro meteorological data. These yield studies were carried out in the year 2004.

The availability of yield estimated by Central Design Organization, Nashik is as under:

1. 75% dependable annual virgin Yield at Paithan dam. ... 157.20 TMC
2. Corresponding upstream Utilization. ... 143.87 TMC
3. Net yield available at Paithan Dam with regeneration of 10.37 TMC ... 23.72 TMC

(Regeneration being the surface and subsurface water that leaves the field following the application of irrigation water)

This study concludes that the net yield at Paithan dam stands reduced on account of the following reasons:

a) 75% dependable annual virgin yield at Paithan dam itself is reduced from 196.56 TMC to 157.20 TMC, that is by 39.36 TMC. This is because the earlier 1965 Study was made using Strange's table for run off estimation and no river gauge data was available there. During the British rule, Strange has carried out investigation in Bombay Presidency and worked out percentages for converting monsoon rainfall into monsoon yield. The 2004 study was based on rainfall data of 75 years along with tank gauge data and river gauge data. The yield worked out in 2004 study is more reliable.

b) Increase in upstream utilization to the extent of about 28.97 TMC is on account of construction of Major, Medium and Minor Irrigation projects.

Because of these two reasons, there is a deficit of 67.73 TMC yield in Paithan dam. Based on the 2004 Central Designs Organisation, Study, the Government of Maharashtra has banned the construction of new projects upstream of Paithan dam vide Government letter No. Misc.2004/4-JB/(18/4) WRI, dated 6th Sept., 2004.

Non-irrigation use on upstream projects has also increased from 8.72 TMC at the time of planning to 34.47 TMC today (as per the GSG Report)

Frame Work of Water Resources Planning:

The principle laid down vide Para 2.1.1 of the State water policy for operation of the irrigation system in the State is that "Water resources should be planned/developed /managed with river basin and sub-basin as a unit adopting multi sectoral approach, treating surface, sub-surface water with unitary approach.

Provision in the National water policy 2012 has been made for the principles to be adopted for the water sector as a whole. Some of the important principles relevant to the present case are:-

Public Policies on water resources need to be governed by certain basic principles, so that there is some commonality in approaches in dealing with

planning, development and management of water resources. These basic principles are:-

i. Planning, development and management of water resources need to be governed by a common **integrated perspective** considering the local, regional, State and National contexts, having an environmentally sound basis, keeping in view the human, social and economic needs.

ii. Principle of equity and social justice must inform use and allocation of water.

The application of the principle of "**from whole to the part**" has to be observed in irrigation management.

The above principles have the backing of the provisions laid down in the Constitution, vide Article 39(c), which reads:

> "39. Certain principles of policy to be followed by the State.—The State shall, in particular, direct its policy towards securing—
>
> ..
>
> (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment; .."

Against the above backdrop, we proceed to answer the aforesaid questions, as follows:

(1) Whether the equitable distribution of water should be made under section 11 (c) or under section 12(6) (c) of the MWRRA Act, 2005.

In order to answer the aforesaid question, it is necessary to analyze the provisions of sections 11(c) and 12(6)(c) of the 2005 Act. Both these sections are extracted as follows:

Section 11(c)	Section 12(6)
The Authority shall exercise the following powers and perform the following functions, namely:- ……	The Authority shall fix the Quota at basin-level, sub-basin level or project level on the basis of the following principles:-

(c) to determine the priority of equitable distribution of water available at the water resource project, sub-basin and river-basin levels during periods of scarcity;	(a) for equitable distribution of water in the command area of the project, every land holder in the command area shall be given Quota; (b) the Quota shall be fixed on the basis of the land in the command area: Provided that, during the water scarcity period each landholder shall, as far as possible, be given Quota adequate to irrigate at least one acre of land; (c) in order to share the distress in the river-basin or sub-basin equitably, the water stored in the Reservoir, in the basin or sub-basin, as the case may be, shall be controlled by the end of October every year in such a way that, the percentage of utilizable water, including Kharif use, shall, for all Reservoirs approx. be the same

A comparison of the above sections of the 2005 Act shows that the provisions of section 12(6) (c) require the Quota to be fixed at the basin-level, sub-basin level or project level. On the other hand, section 11(c) is an independent provision, for determining the priority of equitable distribution of water during periods of scarcity, and is separate from the function of fixation of the Quota under Section 12 (6)(c).

ANALYSIS OF SECTION 12(6)(c)

The various elements of Section 12 (6) are as follows.

The term "Quota" has been defined in section 2(1)(s) of the 2005 Act as follows:

"(s) "Quota" means a volumetric quantity of water made available to an entitlement holder, which is derived by multiplying an Entitlement by the annual or seasonal allocation percentage;"

The term "Entitlement" has been defined in section 2(i) of the 2005 Act as follows:

"(i) "Entitlement" means any authorization by any River-Basin Agency to use the water for the purposes of this Act;"

The various types of entitlements as provided in the 2005 Act have been defined as follows:

"(a) "Aggregate Bulk Water Entitlement" means an aggregate of Entitlements issued to a group or association of Water User Entities for the purpose of joint management of the Bulk Water Entitlements;"

(e) "Bulk Water Entitlement" shall mean the volumetric entitlement to a share of the surface water resources produced by a project, river system or storage facility, for a specific category or Categories of Use, and deliverable within a specific period of time as specifically provided in the order granting the Entitlement;"

(l) "Individual Water Entitlement" means any authorization by the Authority to use the water other than Bulk Water Entitlement or an Aggregate Bulk Water Entitlement;"

(z) "sub-surface entitlement" means an Individual or Bulk Water Entitlement to a volumetric quantity of water to be extracted in the command area of the irrigation project from a tube well, bore well or other well or by any other means of extraction of sub-surface water, or a group or field or wells duly and legally permitted, registered and constructed in accordance with standards prescribed by the Authority;

The term "Volumetric" has been defined in section 2(zb) of the 2005 Act as follows:

"(zb) "Volumetric" means a measurement of water on the basis of volume as per the norms of the Bureau of Indian Standard;"

It is also necessary to extract the definition of "Water User Entity" as defined in section 2(zc) as follows:

"(zc) "Water User Entity" means any Water User's Association, Utility, Industrial User's Association, other User's Association or any other Group (or Individuals) which is authorized by the Authority to receive and utilize a water Entitlement;"

It can be seen from the aforegoing provisions of the 2005 Act pertaining to the fixation of "Quota" that the same is dependant upon the measurement of water and that Quota is to be made available to an Entitlement holder. Section 2(zc) entitles a Water User's Association, Utility, Industrial User's Association, other User's Association or any other Group (or Individuals) to receive and utilize a water Entitlement. Section 31A of the Maharashtra Water Resources Regulatory Authority (Amendment & Continuance) Act, 2011 restricts the grant of entitlement only to these areas where inter alia, delineation under the Maharashtra Management of Irrigation Systems by Farmers (MMISF) Act, 2005 is made. Section 31A reads as follows:

"31A. Notwithstanding anything contained in this Act or any other law for the time being in force, the term "Entitlement" shall apply only to such areas where compliance of all relevant provisions including delineation under the Maharashtra Management of Irrigation Systems by Farmers Act, 2005 is made.

Explanation.- In respect of the areas where the Maharashtra Management of Irrigation Systems by Farmers Act, 2005, has not become applicable, section 78 of that Act shall apply and be effective."

The MMISF Act, 2005 provides for the delineation of command areas of an irrigation project; command areas of a Water User's Association; command areas of Distributory Level Association' command areas of Canal Level Association; and lands under Project Level Association. Section 23 of the MMISF Act, 2005 provides as follows:

"23. (1) For every area of operation delineated under this Act or where a Water Users' Association for flow irrigation has been duly constituted under this Act, it shall be the duty of the Canal Officer to provide a proper measuring device or devices on the canal at the point of supply to Water Users' Association and ensure its proper working.

23.(2) The accurate flow measurement, the form of record in which it shall be entered into and periodic evaluation thereof; as well as the mode of ascertaining the volume of water for a period in which measuring device is out of order, shall be such as may be prescribed."

236 projects have been delineated by the Government of Maharashtra under the aforesaid MMSIF Act, 2005. However, the command under the Jayakwadi Project at Paithan has not been delineated, nor has any Water Users' Association been constituted under MMISF Act for the same. As a result, there are no Entitlement holders for whom Quota can be fixed. It has already been seen from the provisions of section 12(6) that while fixing the Quota one of the principles that is required to be applied is provided in clause (c) of sub-section (6) of section 12. However, when Quota cannot be fixed, the question of applying the principle enunciated in clause (c) of sub-section (6) of section 12 does not arise.

In this regard it would be apt to refer to the contents of our affidavit dated 27.11.2012 filed before the Hon'ble High Court (Aurangabad Bench) in PIL No. 100 of 2012, which inter alia reads as follows:-

"In fact, from a letter dated 7-12-2009 from Shri Madhukarrao Chavan, Chairman, Marathwada Statutory Development Board, Aurangabad, this Respondent No. 3 came to deal with the subject of releasing water from the dams in the upper reach into Paithan reservoir of Jayakwadi Project. In response to the aforesaid letter dated 7-12-2009 Respondent No. 3 by its letter dated 14-01-2010 to Shri. Madhukarrao Chavan, indicated the need for obtaining clarity from the State Government on the provisions of the MWRRA Act pertaining to fixation of Quota on the basis of equitable distribution of water at the basin, sub-basin and project levels. The Respondent No. 3 also indicated that it had represented to the State Government by notifying it of the need to deal with drinking water during

scarcity due to low rainfall in certain areas of the State. By letter dated 19th January, 2010, Respondent No. 3 indicated to Respondent No. 2, i.e., Water Resources Department of the State Government that Section 12(6)(c) of the MWRRA Act, 2005, cannot be operationalized in a sub-basin / basin in the event of scarcity because of various reasons including the need, as prescribed in the said section, to take into consideration the water used during the kharif season by the farmers from all the reservoirs. The most important difficulty in operationalizing the provisions of Section 12(6)(c) is that the said provision envisages addressing the scarcity in a river basin or sub-basin by ensuring that the total available water in all the reservoirs of the scarcity affected basin or sub-basin is redistributed between them in such a manner as to achieve equal utilizable water in each of them. In fact, however, water travels by gravity from upper reservoirs to lower reservoirs and if water in the upper reservoirs is lesser than the water in lower reservoirs the latter cannot be transferred to the former due to the principle of gravity. Thus the section can only be operationalized if the lower reservoirs have lesser water than the upper reservoirs which is not fair to the farmers in the command areas of the upper reservoirs and will be objected to by them. Another difficulty envisaged is that in many cases the upper reservoirs in the sub-basin are much smaller command areas, which is especially so in the case of Jayakwadi. As a result of this the total water available for distribution between all of them, after taking into consideration drinking water needs, evaporation and transition losses and kharif use, may be so low as to be insignificant. For such reasons, it was proposed by the Authority vide letter dated 19.01.2010 to the Water Resources Department of the State Government that the redistribution exercise should apply to drinking water needs only. Hence, this Authority suggested to the Principal Secretary, Water Resources Department (hereinafter referred to as Respondent No.2) that Section 12(6)(c) be amended in such a way that its provisions apply to drinking water needs only. This would make the section easier to implement and would also have wider acceptance among stake-holders.

It is submitted that delineation of the Command Areas of an Irrigation Project and delineation of the Command Area of the Water Users' Association at Minor Level has significance for the system of supply of water from a water resources project. When the Command Area thereunder is delineated, the same involves (1) substantial repairs, construction and rehabilitation of canals

and field channels in the entire Command Area; (2) fixation of water measuring devices at various water distribution heads so that the quantum of water at the point of supply could be scientifically ascertained; and (3) the supply of water through and by way of mandatory constitution of Water Users' Association to be binding on all holders and occupants of such lands. There are 236 projects which have been delineated under the MMISF Act, 2005. Out of these 236 projects, Respondent No.3 has fixed the Applicable Water Entitlement (Water Quota) for 222 projects till the year 2011-12 for 792 Water Users Association. The work of fixing the Applicable Water Entitlement (Water Quota) for the balance 14 projects is under way as the measuring devices are in the process of being installed by the State Government. It is significant to note that Quotas cannot be given until all the water measuring devices are installed in the delineated command area of a project because Quotas are volumetric expressions of the quantity of water to be given for which water measuring devices are a must.

As and when the State Government issues a Notification delineating the command area covered by the Jayakwadi Project's Reservoir and after the formation of the Water Users' Associations, the Respondent No.3 will, according to its practice take steps to fix Water Quota, i.e. Applicable Water Entitlement for the Water Users' Associations in the Command Area as per the procedure laid down in the Technical Manual prepared by Respondent No.3 in terms of Rules 29(a) and (b) of the MMISF Rules, 2006."

The position, as regards the delineation having not been made by the State Government, remains the same. It is also important to point out that the parties seeking equitable distribution of water under clause (c) of sub-section (6) of Section 12 of the MWRRA Act, 2005 do not realize that the principle in clause (c) of sub-section (6) of Section 12 is to be applied when the Quota is fixed at basin-level, sub-basin level or project level. The principle in clause (c) of sub-section (6) of Section 12 does not by itself become a stand alone provision to be applied independent of the function of Quota fixation at basin-level, sub-basin level or project level.

As such, the Petitioners in the present matter not being Entitlement holders, can not ask for the fixing of Quota. Moreover, Quota can only be fixed once

the aforestated conditions of delineation and formation of water users associations are fulfilled. Therefore, the provisions of section 12(6)(c) are not attracted in the present case.

ANALYSIS OF SECTION 11(c)

We have shown earlier in this order, in the overview, that the availability of water in the Paithan Dam is normally less than that was initially envisaged.

Section 11(c) would require us to devise a mechanism by which the equitable distribution of water, available in the upper Godavari (upto Paithan Dam) sub-basin, among the complex of reservoirs upto the Paithan Dam, could be achieved. Once such a mechanism of equitable distribution is arrived at, the next requirement of section 11(c) would be to determine the priority of distribution of water amongst the various categories of use. Section 11(c) has the following components:

(a) Scarcity:

(b) Equitable Distribution of Water available at the Water Resources Project, Sub-basin and River Basin levels;

(c) Priority of Equitable Distribution of Water amongst various categories of use.

We have also determined under Issue No. (4) below, as to whether the equitable distribution of water available in the Godavari Basin can be decided. We are therefore not repeating here the reasons already provided under Issue No. (4) below.

For the said reasons, we are of the view that the equitable distribution of water that has been sought by the present Petitioners is covered under the functions of this Authority under section 11(c) of MWRRA Act 2005 which is made applicable to whole State of Maharashtra as per Government Notification dated 8.6.2005.

We would like to add however that even though directions are being given for equitable distribution under Section 11 (c), what would be necessary in the long run is that the Jayakwadi project should be delineated in a time

bound manner with the formation of the water users associations under MMISF Act 2005 for overall increase in water use efficiency.

(2) Are the permissions, sanctions, authorizationsfor water, etc., granted under the "block system" immune from the exercise of equitable distribution of water under section 11(c)?

The term "Block System" is defined under Rule 2(f) of the Bombay Canal Rules, 1934 notified under the Bombay Irrigation Act, 1879 as follows:

> "2(f) "Block System" means a system under which a supply of water is provided for carrying on irrigated cultivation under certain conditions throughout the block for a period of years;"

The Bombay Irrigation Act, 1879 as well as the Bombay Canal Rules, 1934 have been repealed by the Maharashtra Irrigation Act, 1976. Section 131 of the Maharashtra Irrigation Act, 1976 reads as follows:

> "131. On the commencement of this Act, the following Acts, i.e. to say –
>
> (i) the Bombay Irrigation Act, 1879,
>
> .....
>
> are hereby repealed:
>
> provided that the repeal shall not affect –
>
> (a) the previous operation of any law so repealed or anything duly done or suffered thereunder, or
>
> (b) any right, privilege, obligation, or liability acquired, accrued or incurred under any law so repealed, or
>
> .....
>
> Provided further that, subject to the preceding proviso, anything done or any action taken (including any charges created, appointments, rules, notifications, orders, summons, notices, warrants and proclamations made or issued, authorities and powers conferred or vested, record-of-rights prepared or revised, canals or any water works or water-courses or field-channels constructed, any supply of water made, water rates charged, agreements or contracts made, any taxes or fees levied, any compensation awarded, any labour obtained

or applied for emergency works of canals, any rights acquired or liabilities incurred, any suits instituted or proceeding taken or appeal made, and any Second Class Irrigation Works declared as such, under any law so repealed) shall, in so far as such thing done or action taken is not inconsistent with the provisions of this Act, be deemed to have been done or taken under the corresponding provision of this Act; and shall continue to be in force accordingly unless and until superseded by anything done or any action taken under this Act."

It has been contended before us that the authorizations granted to upstream dams/ upper-stream areas under the "Block System" which were saved by the Maharashtra Irrigation Act, 1976 must continue and cannot be disturbed by virtue of any exercise of power under the Maharashtra Water Resources Regulatory Authority Act, 2005 for the equitable distribution of water. In support of the above argument, section 31B of the aforesaid MWRRA (Amendment and Continuance) Act, 2011 has been pressed into service. Section 31B reads as follows:

"31B. Notwithstanding anything contained in this Act or in any other law for the time being in force, or in any order, judgment or decree of any court, tribunal or authority, any person or WaterUser Entity to whom a permission, allocation, sanction, authorization or Entitlement of Water has been granted by the High Power Committee or the River Basin Agency or the State Government, prior to the 17th September 2010 being the date of commencement of section 1 of the Maharashtra Water Resources Regulatory Authority (Amendment and Continuance Act, 2011, shall be deemed to have been granted, in accordance with the provisions of this Act and accordingly the same shall continue and no such person or Water User Entity shall be required to obtain fresh permission, allocation, sanction, authorization or Entitlement to draw water."

As can be seen from section 31B, the old permissions, allocations, authorizations, entitlement of water, etc., shall be deemed to have been granted under the MWRRA Act, 2005 and the protection that is accorded to the old permissions, allocations, authorizations, entitlement of water, etc., is limited to the exemption to obtain fresh permission, allocation, sanction, authorization or entitlement to draw water. In fact, section 31C of the 2011 Act

protects these old permissions, allocations, authorizations, entitlement of water, etc., from any challenge on the ground that these old permissions had not been obtained under the MWRRA Act, 2005. However, if and when the priority of equitable distribution of water during periods of scarcity is to be determined in accordance with section 11(c), these old permissions, allocations, authorizations, entitlement of water, etc., are not immune from the effect of the equitable distribution of water. In other words, section 131 of the Maharashtra Irrigation Act, 1976 or section 31B and section 31C of the 2011 MWRRA Amendment Act, cannot curtail the scope of section 11(c) of the MWRRA Act, 2005 nor would the old permissions that have been saved be immune from the provisions of section 11(c) of the 2005 Act.

Next contention raised before us in regard to the block system was that though the Maharashtra Irrigation Act, 1976 which had saved the block systems granted under the Bombay Irrigation Act, 1879 and the Rules thereunder, have now been repealed by the MMISF Act, 2005, the repealing section 77 saves any right, privilege, obligation or liability acquired, accrued or incurred under any section so repealed. Section 77 of the MMISF Act, 2005 reads as follows:

> "77. On the commencement of this Act, in relation to the areas under the Management of Irrigation Systems by Farmers, [Sub- section (1) and (2) of section 46,] sections 46 to 48, section 55, sections 57, 58, 60 and 61 to 74 of the Maharashtra Irrigation Act, 1976, shall be deemed to have been repealed:
>
> Provided that, the repeal shall not affect -
>
> (i) the previous operation of any sections so repealed or anything duly done or suffered thereunder; or
>
> (ii) any right, privilege, obligation or liability acquired, accrued or incurred under any section so repealed; or
>
> (iii) any penalty, forfeiture or punishment incurred in respect of any offence committed against any section so repealed; or
>
> (iv) any investigation, proceeding, legal proceeding or remedy in respect of any right, privilege, obligation, liability, penalty, forfeiture or

punishment as, aforesaid, and any such investigation, proceeding, legal proceeding or remedy may be instituted, continued or enforced and any such penalty, forfeiture or punishment may be imposed as if this Act had not been passed :

Provided further that, subject to the preceding proviso, anything done or any action taken (including any charges created, appointments, rules, notifications, orders, summons, notices, warrants and proclamations made or issued, authorities and powers conferred or vested, record-of-rights prepared or revised, canals or any water works or water courses or field-channels constructed, any supply of water made, water rates charged, agreements or contracts made, any taxes or fees levied, any compensation awarded, any labour obtained or supplied for emergency works of canals, any rights acquired or liabilities incurred, any suits instituted or proceeding taken or appeal made), under any section so repealed shall, in so far as such thing done or action taken is not inconsistent with the provisions of this Act, be deemed to have been done or taken under the corresponding provision of this Act; and shall continue to be in force accordingly unless and until superseded by anything done or any action taken under this Act."

Accordingly, it would appear that blocks saved under the Maharashtra Irrigation Act, 1976 have been again saved by virtue of the aforesaid section 77 of the MMISF Act, 2005 upon repeal of the Maharashtra Irrigation Act, 1976.

However, Section 65 of the MMISF Act, 2005 provides as follows:

> **"65.** The provisions of the sections 11 to 14 and section 22 of theMaharashtra Water Resources Regulatory Authority Act 2005 shall apply for implementing this Act and the rules made thereunder."

Hence, Section 11 to Section 14 and Section 22 of the MWRRA Act, 2005, which includes Section 11 (c), are to be applied for implementing the MMISF Act, 2005. Therefore, the exercise of equitable distribution under section 11(c) of the MWRRA Act, 2005 will apply for implementing the MMISF Act. Accordingly, we are of the view that equitable distribution as provided under Section 11 (c) has to be resorted to first with the sub-basin as a unit as per the

provisions of the State Water Policy and thereafter the allocation to the block holders at project level would be fixed by duly adjusting as per the guiding principles of equitable distribution.

Also, our reasoning provided in the aforegoing paragraphs with reference to the width and depth of section 11(c) as well as para 2.1.1 of the State Water Policy would not be curtailed by the limited nature of protection granted under section 31B of the 2011 Act to old entitlements, etc, and Section 77 of the MMISF Act.

It has also been contended before us that "block system" has the protection under clause 2.2.2 of the State Water Policy as well as section 77 of the MMISF Act, 2005. The State Water Policy inter alia provides as follows:

> "2.2.2. .... the block system on pre- independence projects (Neera, Pravara and Godavari) beneficiary farmers will be entitled for the water quota in their WUAs as per present practice of block/agreement system and it will be made obligatory to WUAs to observe accordingly. ...."

We do not deny that the Quota of the Water Users Associations will include the Quota for the Block as approved. However, Quota of WUAs will stand adjusted as per the guiding principles of equitable distribution.

It has been contended by a caveator that the Talukawise water use under the Bhandardara project was finalised by the Government as 52% for Rahata and Shrirampur, 30% for Sangamner and Akole, 3% for Newasa and 15% for Rahuri. It has been contended that this aspect has not been considered by the study group. The above Taluka wise allocations were made by the Government. However, the equitable distribution of water under the statute would prevail over the Taluka wise allocations made by the Government

As regards the contention that equitable distribution should not be resorted to in view of the reduction of land holdings of the agriculturists under the Ceiling Act, 1961 getting the benefit of the block irrigation system, we note from the Affidavit filed by the State Government that compensation has been paid for acquisition of the excess land under the Ceiling Act. It is to be noted

that the lands were acquired and till the date these farmers are getting the full benefit of irrigation.

We are of the view that Section 11(c) requires this Authority to adjust the quantities of water of all category of users as may be required in the event of water scarcity. Hence, the determination under section 11(c) of the priority of equitable distribution of water during periods of scarcity would require even the quantities of water available to the old block systems to be adjusted during the periods of water scarcity.

(3) Whether the Godavari Study Group Report can be considered for the equitable distribution of water available in the Godavari Basin?

The Hon'ble High Court has vide its Order dated 5.5.2014 asked us to appropriately deal with the issue of equitable distribution. Hence, it is not correct to contend that the GSG Report could not have been used by us in the absence of a specific direction of the Hon'ble High Court. As far as the contention that GSG has not been commissioned by us, and hence we cannot make use of the said GSG Report, the contention raised is misplaced as any study report as far as it is useful and relevant to the issue of equitable distribution of water can be made use of and it is not necessary that the study report must have been pursuant to a study commissioned by us.

It has been contended that the tables given in the GSG Report viz table 5, 6 and 7 are not prepared on the basis of the principles laid down under section 12(6)(c) of MWRRA Act, 2005 because equalization of the reservoir should not take into account reservations for drinking and industrial use. We are of the view that these contentions are inconsistent with the State Water Policy of Maharashtra requires " To adopt an integrated and multi sectoral approach to the water resource planning, development and management on a sustainable basis taking river basin / sub-basin as a unit." If the contentions are accepted then a stage will come in upstream project when there will not be sufficient water for meeting their drinking needs. Apart from the above contention on the GSG Report, we note that none of the party has raised any objections on the facts relied upon in the GSG Report.

There is an objection to regulation of water proposed from September. It has also been contended that GSG Report does not take into account the effect of the return rainfall on the Jayakwadi command area. There is good rainfall in the command of the Jayakwadi project while the upstream area lies in the rain shadow region. As far as the above contentions are concerned it is clarified that the approach in the present Order is to take into account the effect of the return rainfall so as to avoid the spilling over of Jayakwadi reservoir in extreme cases. It is proposed to have regulation over the reservoir operations after taking into account the likely effect of return rainfall normally occurring in the first fortnight of October.

As regards the Majalgaon project and Tail End of the Paithan Left Bank Canal, we have given appropriate directions in this Order as per the water planning of the Jayakwadi Project.

Regarding the grievance pertaining to the irrigation needs of about 10000 hectares in Nashik and Ahmednagar districts, we have given appropriate directions in this Order.

As far as the issue of the GSG Report not taking into account the diversion of west flowing water to the Godavari basin to increase water availability, as per the Affidavit filed by the State Government before us, there are 27 gravity flow diversion schemes for which water availability certificates to the tune of about 7.91 TMC are received and 17 diversion schemes of about 1.4 TMC are in progress and balance are under survey and investigation. Hence, from the above it is clear that this aspect is under the consideration of the Government.

As far as the measures proposed to deal with the problem of unauthorized utilization of water from Jayakwadi project, we have given appropriate directions in this Order.

As regards the aspect of the type of soil in the irrigation commands of upstream projects and Jayakwadi command, our Order has considered this issue.

As far as the State Government is concerned, it has been submitted that the Guiding Principles suggested for the synchronization of storages in the sub basin need to be formulated after carrying out detailed realistic review of

water availability and water planning of the whole sub basin which can be concurrently done with the development of the computerized decision support system. It will be appropriate to follow the guiding principles thereafter. Until such time the decision support system is put in place, the review of filling of the reservoirs in the sub basin shall be taken by the end of the October every year. It is not therefore possible at this stage to take acategorical decision on the report. We agree that it will take some time for the Government to develop a computerized decision support system. However, to overcome the scarcity situation at Jayakwadi, some mechanism is required to be put into place immediately. The GSG Report has dealt with the aspect of scarcity as a short term measure. The aspect of computerized decision support system is examined by the GSG Report as a long term measure. We note that the Hon'ble High Court has considered "the issue of equitable distribution of water is of some urgency.." Therefore, the issue of equitable distribution of water cannot be ignored until such time the computerized decision support system is put in place.

The Water Resources Department of Government of Maharashtra vide Marathi resolution No. MISC-2012(891/12)/2012 IM(P) Dated 29.1.2013 has constituted the Godavari Study Group (GSG) for formulation of regulations/guiding principles on integrated operation of reservoirs in Upper Godavari (upto Paithan Dam) sub basin with the following Terms of References:

(1) To formulate guidelines for integrated operation of reservoirs during filling period in Upper Godavari (upto Paithan dam) sub-basin so that likely water scarcity situation in Paithan dam may not be attained.

(2) To develop mechanism for effective implementation of such guiding principles.

(3) To suggest reforms about the technical, financial and management aspects thereof.

This was done by the Government in compliance with commitment made by the Government in their Affidavit dated 18.12.2012 in PIL 100/2012 at Hon'ble High Court at Aurangabad Bench.

The GSG consists of the Director General, Water And Land Management Institute, (WALMI) Aurangabad as a Chairman and five other members who are the Sr. Chief Engineers from Nashik, Aurangabad, Pune, the Executive Director, Aurangabad and Chief Engineer (Planning & Hydrology).

GSG conducted 8 meetings starting from 13th February, 2013 to 8th May, 2013. At the outset, the GSG has gathered voluminous relevant data pertaining to the various aspects of the TOR from the regional Chief Engineers and got duly validated from the Executive Director, Godavari Marathwada Irrigation Development Corporation (GMIDC), Aurangabad.

The objective of this study was to plan a water balance scenario considering the different probabilities of inflows and various demands to the maximum possible extent, adopting the sub basin as a unit. The concept of the operation of a reservoir considering it as a single entity has given way to the concept of an integrated operation of reservoirs to achieve approximate equal distribution of water at sub basin level and to benefit the entire system or systems of reservoirs.

GSG has also conducted a literature review and studied various norms and regulations on the topic. The GSG has studied the hydrological aspect of water planning of the Jayakwadi Project (1965) and its present status (2012). Also rainfall characteristics, inflows in various reservoirs in the sub basin are reviewed.

The study scenario as stated in the report is as under:

"The operating strategy for reservoir operation, will decide the specification of how much water to be stored and released each period depending on the state of the water availability and water demands in the complex in that period to best attain a specified goal i.e. approximate equitable distribution of water. So it is decided to consider following 6 scenarios covering different conditions of probabilities of inflows in Paithan dam including the bad year and good year.

(1) 100% dependable year of Paithan dam.

(2) 90% dependable year of Paithan dam.

(3) 75% dependable year of Paithan dam.

(4) 50% dependable year of Paithan dam.

(5) Average yield.

(6) Good year.

Above mentioned probability criterion is based on the performance requirements of the multipurpose projects as prescribed in Indian Standard (IS)-5477-(Part-I)"

The output of the study scenario gives the distribution of utilisation water available in sub basin among the complex of reservoirs under different conditions of probabilities of inflows in Paithan dam. GSG has come out with step by step synchronization of storages in upstream reservoirs of Paithan dam during the filling period for different operating strategies. These guiding principles for operating rules will help achieving the approximate equitable and judicious distribution of water available among different categories and uses among upstream and downstream users.

We are of the view that the findings of the Godavari Study Group can be called to our aid in addressing the issues of equitable distribution of water during scarcity under Section 11 (c).

We have noted that, except one party, none of the party has raised any objection to the facts relied upon in the GSG Report, which we have dealt with in this para above.

The findings of the Godavari Study Group are consistent with the relevant principles laid down in the State Water Policy of Maharashtra, which are as follows:-

> *"Objectives of the Maharashtra State Water Policy (MSWP)*
>
> *2.1.1 Integrated, Multi-Sectoral and River Basin Approach*
>
> *To adopt an integrated and multi sectoral approach to the water resource planning, development and management on a sustainable basis taking river basin / sub-basin as a unit.*
>
> *The Water Resources of the State shall be planned, developed, managed with a river basin and sub-basin as the unit, adopting multi-sectoral approach and treating surface and sub-surface water with unitary approach.*

The management of the water resources of the State shall be decentralized to the lowest practicable level on the basis of hydrologic or watershed units. The State shall be divided into 5 river basin drainages and appropriate river basin agencies shall be established within each river basin. Water resources development corporations shall be established within each river basin.

..."

*"2.8 **Drought Management***

...

***The distress in water availability during deficit period shall be shared equitably amongst different sectors of water use and also amongst upstream and downstream users.** The norms of supply of water for domestic use shall be different for different river-basins of the State depending upon the water availability status of the areas concerned."*

Moreover the MWRRA Act does not prevent us from relying on the facts and the findings of any study carried out by any other technical body or bodies.

(4) Whether the equitable distribution of water available in the Godavari Basin can be decided?

The representations made by the Petitioners before us seek the equitable distribution of water in the upper Godavari Sub-Basin, being adversely affected on account of scarcity at Paithan Dam (Jayakwadi Project).

As envisaged initially at the time of planning, the Jayakwadi project at Paithan dam was to irrigate about 2.77 lacs hectares of area from Aurangabad, Jalna, Beed, Parbhani districts by way of the Paithan left bank and right bank canal. The Jayakwadi dam at Paithan was completed in the year 1975. This dam has been filled to its full design live storage capacity only 5 times since the first impounding of water from 1975 to 2013. The dam is not getting sufficient water for irrigating 2.77 lacs hectares of the command envisaged in its initial planning. Paithan dam has experienced water deficit for 34 out of 39 years. The Petitioners are requesting for equitable distribution to overcome this shortage by way of equitable distribution as provided in the MWRRA Act, 2005.

The Maharashtra Water Resources Regulatory Authority (Allocation and Monitoring of Entitlements, Disputes and Appeals and Other matters) Rules, 2013, have recently been repealed by the State Government vide Official Gazette Notification dated 18.2.2014. As a result, the provisions in the said Rules of "Equitable Distribution of Water during water scarcity" as well as the definition of "water scarcity" or "distress" cannot be applied. In the circumstances, we would like to rely on the definition of "hydrological drought" i.e. shortages in water availability for meeting the needs of minimum normal and specified needs, as specified in the Manual for Drought Management by the Government of India. Hydrological drought is defined as a deficiency in surface and sub surface water supply leading to a lack of water for normal and specific needs (minimum drinking, food crop requirement, and minimum industrial use which creates employment). Such conditions arise even in times of average precipitation when increased usage of water diminishes the reserves. The Jayakwadi dam at Paithan has suffered from a shortage of water for irrigation for 34 out of 39 years. In light of this fact, equitable distribution is required to overcome this situation of hydrological drought which is in consonance with the concept of scarcity.

However, we also feel that there must be sufficient water available in upstream projects before water can be released downstream. The basic needs of the upstream people must first be met.

While planning a water resources project, the utilization of water from dead storage for irrigation purpose is not proposed, but in exceptional cases such water can be used for drinking. The possibility of using water out of dead storage in Jayakwadi for irrigation purposes by way of lifting is altogether ruled out.

There may be issues regarding transmission losses in the river carrier system during equitable distribution process. The equitable distribution has to be resorted to at the end of monsoon season so that the river carrier system is also in a saturated condition and less prone to losses. Some transmission losses in the system can not be ruled out. The evaporation losses are not avoidable in the system by virtue of topographical & physiographic nature.

The Petitioners' demand is to resort to an equitable distribution of the water available in the Upper Godavari Sub-basin (upto Paithan dam).This will help overcome the shortage of water at Paithan dam.

The GSG was appointed by the Government with the following TOR:

1. To formulate guidelines for integrated operation of reservoirs during filling period in Upper Godavari (upto Paithan dam) sub-basin so that likely water scarcity situation in Paithan dam may not be attained.
2. To develop mechanism for effective implementation of such guiding principles.
3. To suggest on reforms about the technical, financial and management aspects thereof.

The GSG has come out with guiding principles which give 6 scenarios for distribution of utilizable water among various reservoirs under different conditions. These guiding principles will help achieve the approximate equitable and judicious distribution of water available among different categories of uses and between the upstream and the downstream users. The findings of the GSG as contained in its report are in the following two tabular forms (Copies of which are enclosed to this Order)–

1) Table 5: It shows the distribution of water available in the upper Godavari sub-basin upto Paithan dam in various complexes/systems of reservoirs under different conditions of probabilities of inflows at Paithan dam as prescribed in the IS 5477 (Part-I), 1969.

2) Table 6: It presents operating strategies (guiding principles) to be adopted for effecting equitable distribution of available water in the sub basin. It is in the form of a step-by-step synchronization of storages in upper reservoirs with the Paithan dam for different operating strategies.

Looking to the Terms of Reference of Godavari Study Group and their findings, we are of view that the above guiding principles of the Godavari Study Group can be used for addressing the issue of equitable distribution of water during scarcity under Section 11 (c) of MWRRA Act

It will be logical to regulate upper reservoirs as per the above guiding principles after taking review of storage position in upstream complexes, storage in the Paithan dam and after taking into account likely effect of return rainfall normally in the first fortnight of October so the equitable distribution of available water among upstream and downstream users is achieved by end of October.

We feel that the operating strategy should be chosen for regulating reservoirs by observing the storage position at Paithan dam in the first fortnight of October. The storage position in the upstream complexes would have to be considered duly accounting for the actual Kharif use. Equitable distribution should be effected if hydrological draught has occurred. Such distribution is to be achieved through a step-by-step synchronization of the storages in the upper reservoirs upto Strategy-III as given in Table 6. The requirement of Strategy-I should first be met fully for all the above complexes of reservoirs. If sufficient storage is available in upstream reservoirs, then Strategy-II would come into play and so on upto Strategy III. While doing so an uniform cut (say, 5%/10%/15% as the case may be) in the utilizable water of upstream storages will be applied in order to meet the requirement of storage of the lower reservoir for chosen strategy in consonance with the principle of "Sharing Distress by All". Water is to be made available in all reservoirs for meeting the requirement of drinking water and for giving a maximum of 2 rotations for growing food crops in the command of the projects and for 80 % of the industrial requirement so as to prevent migration of people. The Rabi cropping pattern of the Jayakwadi project provides for sorghum and gram cultivation. Therefore two rotations will meet the minimum food requirement of these farmers. This is in line with the requirement of meeting the minimum normal and specific needs of the population dependant on the project.

If any complex of reservoir on the upstream side is short of water to meet its own minimum needs governed by the respective strategy to be adopted for reservoir operation, no release of water from that system will be allowed.

However, it should be ensured that there is no drawl from the dead storage for irrigation purposes from the Jayakwadi reservoir. Moreover the Kharif use in any project should be limited to planned use.

In case the natural storage position at the Paithan dam in the first fortnight of October is above or equal to 65% of the live storage (Strategy-III) then the question of releasing water from the upstream storages does not arise.

10 DETERMINATIONS:

In view of the above background, we are of the view that the following directions are required to be given to achieve an equitable distribution of water as contemplated under section 11(c) of the 2005 Act:

(a) The upper reservoirs need to be regulated as per the above guiding principles after taking a review of the storage position in upstream complexes and in the Paithan dam and also after taking into account the likely effect of the return rainfall. This needs to be done in the first fortnight of October so that an approximate equitable distribution of available water among upstream and downstream users is achieved by the end of October. We feel that the operating strategy should be chosen for regulating reservoirs by observing the storage position at Paithan dam in the first fortnight of October and also considering the storage position in the upstream complexes, duly accounting for planned Kharif use.

(b) An approximate equitable distribution is to be resorted to when hydrological draught occurs. This is to be achieved through a step-by-step synchronization of the storages in the upper reservoirs upto Strategy-III as given in Table 6 (enclosed) provided that requirement of Strategy-I is first met fully for all the upper complexes of reservoirs. If sufficient storage is available in the upstream reservoirs, then Strategy-II will come into play and likewise Strategy-III. While doing so uniform cut (say, 5%/ 10%/ 15% as the case may be) in the utilizable water of all upstream storages shall be applied to meet the requirement of storage of the lower reservoir for the chosen strategy which is in consonance with the principle of "Sharing Distress by All". Water is to be made available in all the reservoirs for meeting the drinking water requirement, for the growing of bare minimum food crop for

people in the command areas of all the projects and for minimum of industrial use (but limited to 80% of the industrial requirement) so as to prevent the migration of population. K.T. weir needles which obstruct the flow of water should not be placed in position until an equitable distribution is achieved by October end.

(c) If any reservoir on the upstream is short of water to meet its own minimum needs, no release of water from that reservoir is to be made.

(d) However, it must be ensured that there is no drawl of water from the dead storage for irrigation purposes from the Jayakwadi reservoir.

(e) If the natural storage at Paithan dam in the first fortnight of October is above or equal to 65% of the live storage (Strategy-III) then the question of releasing water from the upstream storages does not arise.

(f) The water requirement for the crop is to be worked out scientifically with giving due consideration to overall ground water conjunctive use taking into account the actual soil moisture condition.

(g) On the upstream projects in Nashik & Ahmednagar Districts, the diversion of monsoon flows through canals, flood canals, rivers and streams for Kharif use outside the project command, or for filling tanks and farm ponds is to be allowed only after the Paithan reservoir reaches its full design capacity.

(h) During the period of floods, thenormal reservoir operation will switch over to flood regulation.

(i) These guiding principles will be reviewed each year and a report thereon made to MWRRA.

(j) The Executive Director of the GMIDC will be responsible for the operation of all upstream reservoirs as per the operating strategy stated above.

(k) The role of the canal advisory committee will begin at the project level after the reservoir operation has been completed.

(l) The question of the authorized "block" holders has to be addressed at the project level only after the completion of the reservoir operation.

(m) Farmers at the tail end of canal system should be assured of enough water.

(n) The share of water of the tail end users should be decided at the start of the Rabi season by conducting meetings of the Canal Advisory Committees including representatives of the WUAs. Minutes of the meetings at the start of the season with the WUAs be drawn up and kept on the Government Website with copies to the MWRRA and WUAs.

(o) The proportionate share of the Majalgaon Project as planned be decided at the start of the season and releases be made on time.

(p) The WRD should ensure that the canal system is well maintained so as to ensure that the tail end receives sufficient water.

(q) The orders of Government banning new projects upstream of the Paithan Dam, issued vide letter dated 6/9/2004, be strictly observed.

(r) Drip irrigation has to be strictly enforced on upstream perennial crops and horticulture. Ground water conjunctive use with drip irrigation will help in increasing water use efficiency.

(s) There must be an upper limit to the diversion of irrigation water to non irrigation purposes. The restoration of the resulting curtailed irrigated area be carried out by Government in a time bound manner. Government should give a schedule for this to the MWRRA in 8 weeks from the date of this order.

(t) Most of the major and medium projects in the Godavari Sub-basin have been completed 10-15 years ago. They need to be reviewed

and the new parameters like the command area and water availability need to be decided.

(u) The suggestion regarding the use of a closed pipe line for drinking and industrial water supply is as per the provision in the State Water Policy. This should be considered by the Government on a priority basis.

(v) The lifting of water from the backwaters of any project has to be limited to the approved water use planning. Government has to exercise rigorous controls on the unauthorized pumping on Jayakwadi back water. Action taken to be reported to MWRRA.

(w) Government should give a schedule and a road map for the delineation of the Jayakwadi command and the formation of WUAs under the MMISF Act, 2005 to the MWRRA within 8 weeks of the date of this order.

With the above findings and directions, the petitions and the applications stand disposed of.

Sd/-	Sd/-
(Chitkala Zutshi)	**(S.V. Sodal)**
Member (Economy)	**Member (Engineering)**

(Dr. Suresh Kulkarni)
Secretary

M. W. R. R. A. MUMBAI

Table : 5

Distribution of Utilizable Water Available in the Upper Godavari (upto Paithan dam) Sub-basin among the various complex/systems of Reservoirs under different conditions of Probabilities of Inflows in Paithan dam

Strategy No.	Scenario						Utilizable Water including Kharif/Monsoon Use (Mcum)					
	Complex →						Mula	Pravara	Gangapur	Godavari - Darna	Palkhed	Paithan
	Dams/Systems in complex →						Mandhol, Mula	Bhandardara, Nilwande, Adhala, Bhojapur	Gangapur, Kashyapi, Gautami	Alandi, Kadwa, Bham, Bhawali, Waki, Darna, Mukane, Waldevi	Karanjwan, Waghad, Punegaon, Ojharkhed, Palkhed, Tisgaon	Paithan
	Design Live storage (Mcum) →						617.59	570.77	308.56	718.38	350.34	2170.94
	Carry over (Mcum) →						28.32	0.00	11.64	0.00	0.00	381.70
	Design Water Use (Mcum) →						717.78	835.84	324.81	1220.04	456.52	2618.59
1	2						3	4	5	6	7	8
	Paithan observed Net Inflow at	**% Demands**										
		D-NI	I-NI	K-I	R-I	HW-I						
1	100% dep. Year	80	80	80	0	0	331.45	320 .33	198 .50	460.69	253.98	1178.67
2	90% dep. Year	80	80	80	32	0	430 .04	425 .38	238.76	604 .00	253.98	1554.62
3	75% dep. Year	80	80	80	52	0	517 .28	500.44	263.61	736.26	287 .41	1790 .43
4	50% dep. Year	80	80	80	72	0	604.56	574.96	288 .43	870 .26	345.36	2027.12
5	Average yield	80	80	80	80	0	639.39	605.16	298.15	917.52	368.54	2119.94
6	Good year	100	100	100	100	100	717.78	835.84	324.81	1220.04	456.52	2618.59

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Table : 6

Upper Reservoirs' Storages to be synchronized with the state of Paithan dam storage for different Operating Strategies during filling (Monsoon) period

Operating Strategy	Utilizable Water including Kharif/Monsoon Use excluding carry over (Mcum) (% of Design Live Storage)					
Complex →	Paithan	Mula	Pravara	Gangapur	Godavari - Darna	Palkhed
Dams/Systems in complex →	Paithan	Mandhol, Mula	Bhandardara, Nilwande, Adhala, Bhojapur	Gangapur, Kashyapi, Gautami	Alandi, Kadwa, Bham, Bhawali, Waki, Darna, Mukane, Waldevi	Karanjwan, Waghad, Punegaon, Ojharkhed, Palkhed, Tisgaon
1	2	3	4	5	6	7
Strategy -I	797 (37%)	303 (49%)	320 (56%)	187 (61%)	461 (64%)	254 (73%)
Strategy - II	1173 (54%)	402 (65%)	425 (74%)	227 (74%)	604 (84%)	254 (73%)
Strategy - III	1409 (65%)	489 (79%)	500 (88%)	252 (82%)	736 (102%)	287 (82%)
Strategy -IV	1645 (76%)	576 (93%)	575 (101%)	277 (90%)	870 (121%)	345 (99%)
Strategy - V	1738 (80%)	611 (99%)	605 (106%)	287 (93%)	918 (128%)	369 (105%)
Strategy -VI	2237 (103%)	689 (112%)	836 (146%)	313 (101%)	1220 (170%)	457 (130%)

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