



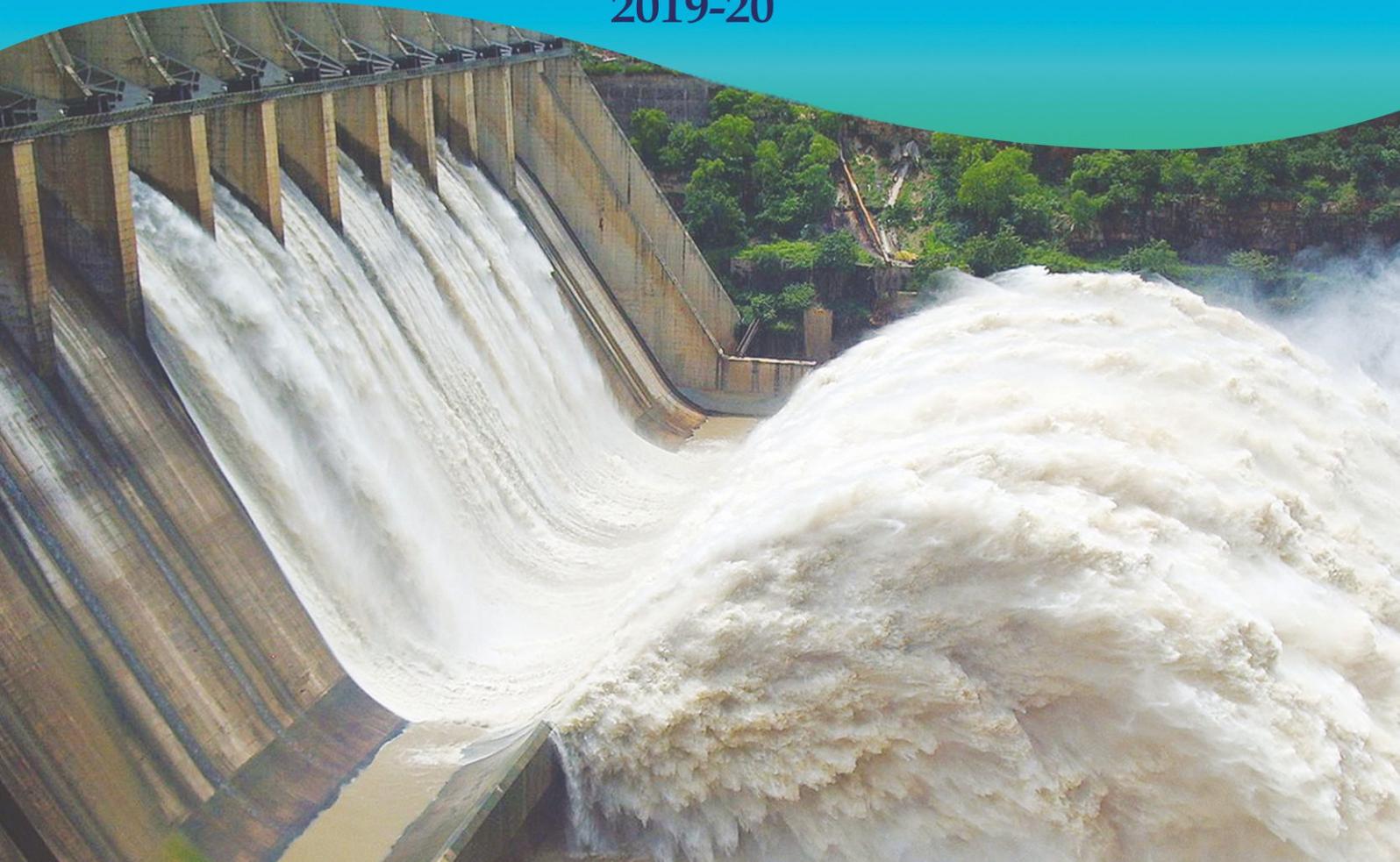
सत्यमेव जयते

भारत सरकार / Government of India
जल शक्ति मंत्रालय / Ministry of Jal Shakti
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग /
Department of Water Resources, River Development
& Ganga Rejuvenation



कृष्णा नदी प्रबंधन बोर्ड
Krishna River Management Board
కృష్ణానది యాజమాన్య బోర్డు

Annual Report
2019-20



KRISHNA RIVER BASIN MAP





सत्यमेव जयते

भारत सरकार
Government of India
భారత ప్రభుత్వం



कृष्णा नदी प्रबंधन बोर्ड
Krishna River Management Board
కృష్ణానది యాజమాన్య బోర్డు

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
Department of Water Resources, River Development & Ganga
Rejuvenation
జలవనరులు, నది అభివృద్ధి మరియు గంగా పునరుద్ధీకరణ శాఖ

जल शक्ति मंत्रालय
Ministry of Jal Shakti
జలశక్తి మంత్రిత్వశాఖ

Annual Report
2019 - 20



FROM CHAIRMAN'S DESK

It gives me immense pleasure to present the Annual Report of Krishna River Management Board for the year 2019-20. Annual Report 2019-20 provides a brief description of Krishna River Basin and an overview of Krishna River Management Board, its functions and activities taken up by the Board during 2019-20.

Regulation of available water in Krishna Basin and its sharing among Andhra Pradesh and Telangana, as per provisions of APRA – 2014, is the mandated function of Krishna River Management Board (KRMB). During the year 2019-2020, two meetings of the Board were held to discuss the matters of KRMB. Regulation of supply of water is being carried out by the Board through a mechanism of “Three member committee”. To regulate the supply of water during 2019-20, KRMB issued five (5) water release orders in respect of Srisailem and Nagarjuna Sagar projects on recommendations of the three member committee.

KRMB could perform its function with the support and guidance of DoWR, RD&GR and support of State Governments of Andhra Pradesh and Telangana.

I express my gratitude to the Department of Water Resources, RD&GR, Ministry of Jal Shakti, Gol, for providing all support and guidance to KRMB. I am also grateful to Government of Andhra Pradesh and Government of Telangana for the support and cooperation extended to KRMB in performing its functions.

Efforts and support of all the members of the Board including members from Andhra Pradesh and Telangana in performing the functions of Board is duly acknowledged.

I express my appreciation to all the officials of KRMB for putting in sincere efforts and showing devotion to work which enabled to perform its function impartially and successfully.

The publication of this Annual Report has been possible with the dedicated efforts of officers and staff of KRMB. I acknowledge the efforts of all who contributed in bringing out this report.

A handwritten signature in black ink, appearing to read 'Mahendra Pratap Singh', written over a horizontal line.

**(Mahendra Pratap Singh)
Chairman, KRMB**

PREAMBLE

Krishna River Management Board (KRMB) was constituted on 02.06.2014 as an autonomous body under the administrative control of Central Government. The work of KRMB is administration, regulation, maintenance and operation of such projects, as may be notified by the Central Government from time to time.

KRMB has been regulating the water supply to both the States of Andhra Pradesh and Telangana based on the mutually agreed ad-hoc arrangement for water sharing. This is basically based on the decision taken during the meeting held at New Delhi on 18th - 19th June, 2015 wherein it was agreed to share 811 TMC of allocated water to erstwhile Andhra Pradesh among various projects in the States of Andhra Pradesh and Telangana.

As per the decision in the said meeting, a Three Member Committee of Member Secretary, KRMB and Engineers-in-Chief of Andhra Pradesh and Telangana was formed to consider the indents raised by the project authorities keeping in view of the overall availability of water and requirements raised by the concerned project authorities and to make recommendation to KRMB. The decision taken by KRMB is to be implemented by the concerned State project authorities. 5 meetings of the said committee were held and 5 Water Release Orders were issued during the year 2019-20.

Further, KRMB is in process of installation of Telemetry Stations for water accounting from the reservoirs in both the States. At present 18 Nos of Telemetry stations have been installed under Phase-I at various locations of Jurala, Srisailem, Nagarjuna Sagar projects. The installation of the balance 9 telemetry stations would be beneficial for water accounting and equitable sharing of water among the States of Andhra Pradesh and Telangana.

Apart from the technical activities, KRMB has organized various events viz. International Yoga Day, Swachhta hi Seva Campaign, Hindi Pakhwada and Swachhta Pakhwada as per the instructions of MoJS, DoWR, RD and GR.

I express my sincere thanks to Shri Mahendra Pratap Singh, Chairman, KRMB, for his valuable suggestions and guidance in preparation of this report. I compliment the officers and staff of the KRMB especially Shri L. B. Muanthang, Member (Power), Shri S. Siva Sankaraiah, Executive Engineer, Shri S. Sridhar Kumar, Deputy Executive Engineer and Smt. D. Daiva Prasanthi, Assistant Executive Engineer for their efforts in bringing out this report.



(D. M. Raipure)
Member Secretary, KRMB

HIGHLIGHTS OF THE YEAR 2019-20

- 10th Board Meeting of KRMB was held on 9th August, 2019.
- 11th Board Meeting of KRMB was held on 9th January, 2020.
- As per the recommendations of Three Member Committee, five (05) water release orders were issued by KRMB.
- A Committee was constituted by Department of Water Resources, RD&GR, Ministry of Jal Shakti, Gol to ensure supply of Krishna water to augment the drinking water supply to Chennai city with Chairman, KRMB as chairperson of the committee.
- A Committee was constituted with Member, KRMB as Member and Convener by Department of Water Resources, RD&GR, Gol for regulation of surplus water during monsoon period spilling from the main stem projects on Krishna river for supply to the States of AP and TS.
- Field visits were undertaken by senior officers of KRMB to calibrate the telemetry data with Acoustic Doppler Current Profiler (ADCP) observations.
- E-Governance activities were performed in office working viz. website, LIMBS, RTI Online, e-Samiksha, GeM, etc.
- Information on water resource projects in Krishna Basin in the States of Andhra Pradesh and Telangana were collected and compiled.
- Various mass awareness programs of Govt. of India viz. Swachhta Hi Sewa, Swachhta Pakhwada, Vigilance Awareness Week, International Yoga Day etc. were organized.
- Budget estimate of Rs. 10.80 Crore for the FY: 2019-20 was approved by the Board.
- Capacity building of the officers of the Board was done through participation in Training programs/ Conferences/ Seminars/Workshops/ Meetings.

Contents

Chapter No.	Name	Page
	From the Chairman's Desk	i
	Preamble	ii
	Highlights of the Year 2019-20	iii
1	An Overview of Krishna River Management Board	1
2	Krishna River	3
3	Functions of the Board	7
4	Board Organization	9
5	Board Meetings	12
6	Administrative Matters	16
7	Financial Matters	18
8	Technical Matters	21
9	Parliament Questions, RTI, VIP References , Capacity Building and Court Cases	31
10	Other Activities	33
	Annexure 1 (The Eleventh Schedule)	39
	Annexure 2 (The Twelfth Schedule)	41
	Annexure 3 (18 th and 19 th June 2015 Minutes of Meeting)	43
	Appendix to Annexure 3	47
	Annexure 4 (Canal/Scheme-wise Drawlas of Water by AP and TS)	50
	Annexure 5 (Details of Hydro Power Projects on Krishna River)	51

Abbreviations Used in the Report

ADCP	Acoustic Doppler Current Profiler
AMRP	Alimineti Madhava Reddy Project
AP	Andhra Pradesh
AP GENCO	Andhra Pradesh Power Generation Corporation Limited
APR Act, 2014	Andhra Pradesh Reorganisation Act, 2014
CEA	Central Electricity Authority
CVC	Central Vigilance Commission
CWC	Central Water Commission
CWES	Central Water Engineering Service (Group-A service)
CWPRS	Central Water and Power Research Station
DPR	Detailed Project Report
FRL	Full Reservoir Level
GWDT	Godavari Water Dispute Tribunal
HNSS	Handri Niva Sujala Sravanthi
I & CAD	Irrigation and Command Area Development
ISRWDA	Inter-State River Water Disputes Act
KRMB	Krishna River Management Board
KWDT	Krishna Water Disputes Tribunal
MoJS,	Ministry of Jal Shakti
NIH	National Institute of Hydrology
NRSC	National Remote Sensing Centre
LIS	Lift Irrigation Scheme
LMC	Left Main Canal
RMC	Right Main Canal
MDDL	Minimum Draw Down Level
MW	Mega Watt
NSP	Nagarjuna Sagar Project
NSRSSP	Neelam Sanjeeva Reddy Sagar Srisailam Project
RDS	Rajolibanda Diversion Scheme
RTI	Right to Information
SCADA	Supervisory Control and Data Acquisition
SLDCP	Side-Looking Doppler Current Profiler
TMC	Thousand Million Cubic Feet (2831 ha m)
TS	Telangana State
TS GENCO	Telangana State Power Generation Corporation Limited
WRD	Water Resources Department

CHAPTER-1

AN OVERVIEW OF KRISHNA RIVER MANAGEMENT BOARD

1.1 Constitution of Krishna River Management Board (KRMB)

The Andhra Pradesh Reorganisation Act, 2014 was promulgated in Parliament by the Central Government for bifurcation of the erstwhile State of Andhra Pradesh into the States of Andhra Pradesh and Telangana, and under the Presidential Orders, Ministry of Law and Justice published the Act vide Gazette No.6 (part-2) of 2014 on 1st March 2014. Part IX of the Act deals with Management and Development of Water Resources of the successor States.

In exercise of the powers conferred under Section 85 (part IX) of the APR Act, 2014, the Central Government constituted Krishna River Management Board (KRMB), 02.06.2014 as the appointed day, with autonomous status under the administrative control of Central Government vide Ministry of Water Resources Notification dated 28th May, 2014 for the administration, regulation, maintenance and operation of such projects, as may be notified by the Central Government from time to time. Part IX of the Act and relevant Section 92 of part X of the Act are reproduced and placed in link <https://krmb.gov.in/uploadedFiles/Go's/KRMB-APReorganisationAct,201492.pdf>

A copy of notification of KRMB by MoWR, RD & GR is placed in link <https://krmb.gov.in/uploadedFiles/Go's/GazetteNotification93.pdf>

The composition of KRMB in brief is as given below:

(1)	An officer of the level of Additional Secretary to the Government of India from the Central Water Engineering (Group 'A') Service	Chairperson
(2)	Two members, to be nominated by each of the successor States of Telangana and Andhra Pradesh, of which one shall be the technical member not below the rank of Chief Engineer and the other administrative member to represent the concerned States	Members
(3)	One expert from the Central Power Engineering (Group 'A') Service	Member
(4)	An Officer not below the rank of Chief Engineer from the Central Water Engineering (Group 'A') Service	Member Secretary

The Board started functioning from 2nd day of June, 2014 i.e. the appointed day notified vide notification dated 04.03.2014 by Ministry of Home Affairs for the purposes of the APR Act, 2014.

1.2 Headquarters

As per APR Act, 2014, the headquarters of Krishna River Management Board is to be in the successor State of Andhra Pradesh. However, as per the MoWR notification dated 28.05.2014 regarding constitution of the KRMB, the headquarters of the Board is presently at Hyderabad.

1.3 Staff of the Board

In pursuance of Section 86(1) of the APR Act, 2014, the Board has employed staff as per its requirement for the efficient discharge of its functions under this Act on deputation from the successor States.

1.4 Apex Council

The Central Government constituted an Apex Council for the supervision of the functioning of the Krishna River Management Board.

The Apex Council consists of -

- (a) Minister of Jal Shakti, Government of India - Chairperson,
- (b) Chief Minister of State of Andhra Pradesh - Member,
- (c) Chief Minister of State of Telangana - Member.

The functions of the Apex Council include-

- (i) supervision of the functioning of the Krishna River Management Board and Godavari River Management Board;
- (ii) planning and approval of proposals for construction of new projects, if any, based on Krishna or Godavari river water, after getting the proposal appraised and recommended by the River Management Boards and by the Central Water Commission, wherever required;
- (iii) resolution of any dispute amicably arising out of the sharing of river waters through negotiations and mutual agreement between the successor States;
- (iv) reference of any disputes not covered under Krishna Water Disputes Tribunal, to a Tribunal to be constituted under the Inter-State River Water Disputes Act, 1956.

CHAPTER-2

KRISHNA RIVER

2.1 Introduction

The Krishna Basin extends over Maharashtra, Karnataka, Telangana and Andhra Pradesh having a total area of 2,58,948 Sq.km which is nearly 8% of the total geographical area of the country. The basin has a maximum length and width of about 701 km and 672 km, it lies between 73°17' to 81°9' East longitudes and 13°10' to 19°22' North latitudes.

It is bounded by Balaghat range on the North, by the Eastern Ghats on the South and the East and by the Western Ghats on the West. The Krishna River rises from the Western Ghats near Jor village of Satara district of Maharashtra at an altitude of 1,337 m just North of Mahabaleshwar. The total length of river from origin to its outfall into the Bay of Bengal is 1,400 km.

Its principal tributaries joining from right are the Ghatprabha, the Malprabha and the Tungabhadra whereas those joining from left are the Bhima, the Musi and the Munneru are joining the river from left.

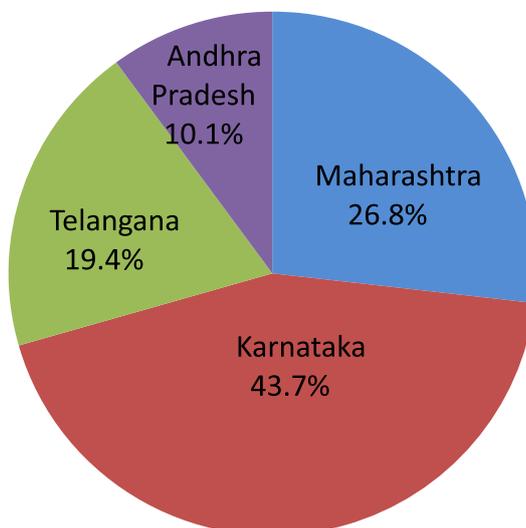
The major part of basin is covered with agricultural land accounting to 75.86% of the total area and 4.07% of the basin is covered by water bodies.

The State-wise distribution of catchment area and length of river Krishna are as given in Table - 2.1.

TABLE - 2.1

Basin State	Length in km	Catchment Area in sq km
Maharashtra	306	69425
Karnataka	483	113271
Telangana	612	50155
Andhra Pradesh		26097
Total	1401	258948

State wise percentage of basin area in Krishna river



2.2 Major Tributaries

Principal tributaries of Krishna River are as given below in Table - 2.2.

TABLE - 2.2

Sl. No.	Tributary	Length in km (Approx.)
1	Koyna (R)	119
2	Ghataprabha (R)	283
3	Malaprabha (R)	306
4	Tungabhadra (R)*	531
5	Vedavati (R)	391
6	Bhima (L)*	861
7	Musi (L)	267
8	Paleru (L)	153
9	Munneru (L)	196

* The rivers Tungabhadra and Bhima, tributaries of the Krishna, are themselves Major Inter-State rivers.

2.3 Sub - Basins

For the purpose of planning and development of water resources in the basin, the Krishna River Basin has been divided into the following 12 sub-basins as given in Table - 2.3.

TABLE - 2.3

Sl. No.	Sub-Basin	Number	Area in sq km	Area in Percentage
1	Upper Krishna	K1	17972	7
2	Middle Krishna	K2	17558	7
3	Ghataprabha	K3	8829	3
4	Malaprabha	K4	11549	4
5	Upper Bhima	K5	46066	18
6	Lower Bhima	K6	24548	10
7	Lower Krishna	K7	36125	14
8	Tungabhadra	K8	47827	19
9	Vedavathi	K9	23590	9
10	Musi	K10	11212	4
11	Paleru	K11	3263	1
12	Munneru	K12	10409	4
Total			258948	100

2.4 Krishna River in Andhra Pradesh and Telangana

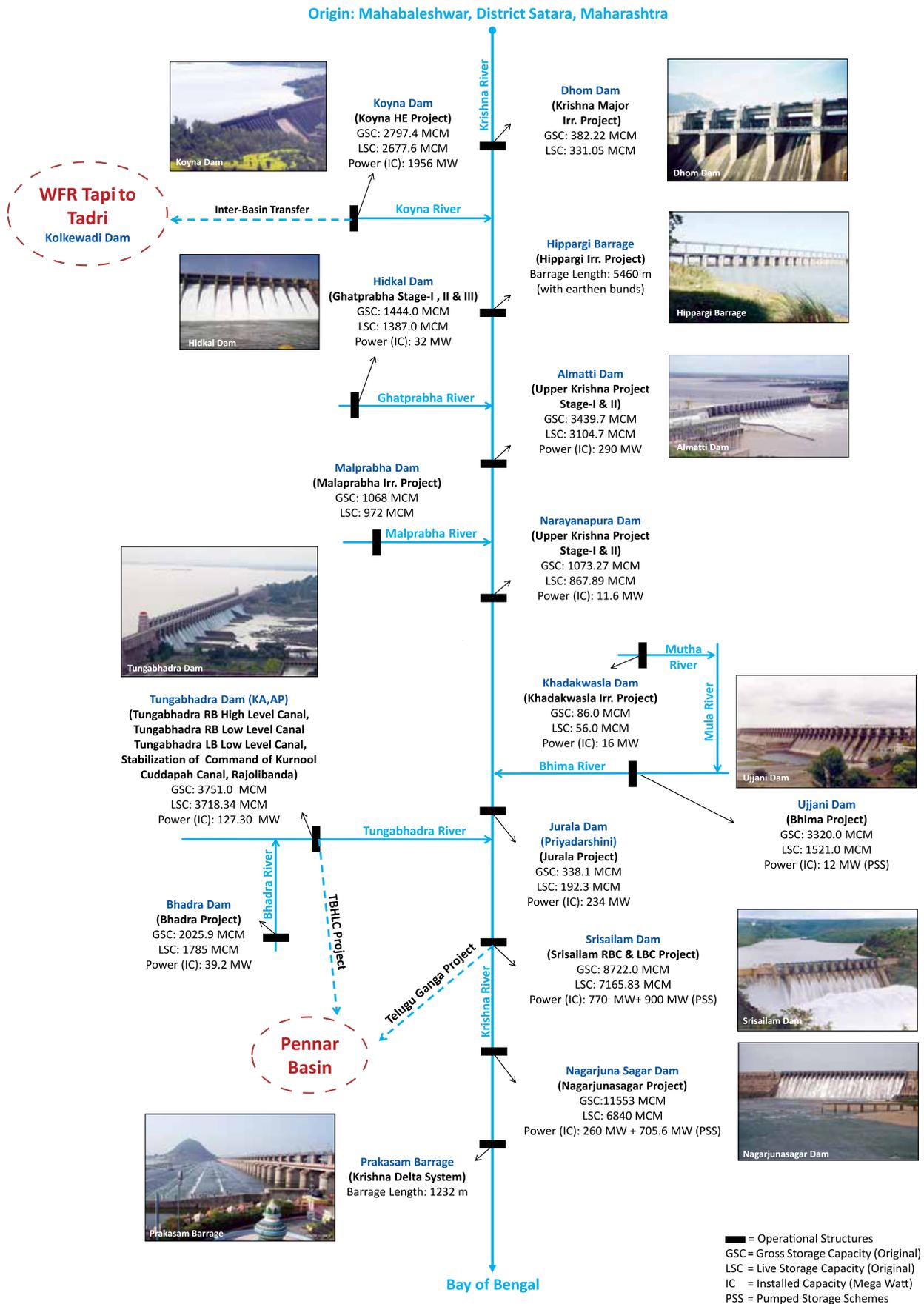
Priyadarshini Jurala is the upstream most project built on river Krishna in erstwhile Andhra Pradesh State and is presently in Telangana State. The project is located in lower Krishna sub basin. The other sub basins in Telangana and Andhra Pradesh are Tungabhadra, Vedavathi, Musi, Paleru and Munneru.

The river Krishna including the tributaries joining the river Krishna viz., Tungabhadra, Musi, Paleru and Munneru are flowing both in Telangana and Andhra Pradesh and are Inter State Rivers.

The Neelam Sanjeeva Reddy Sagar Project (Srisailam), Nagarjuna Sagar Project, Dr K.L. Rao Pulichintala Project and Prakasam Barrage are major existing projects on Krishna River. The two major projects Srisailam and Nagarjuna Sagar serve both the States.

Tungabhadra Dam, Rajolibanda Diversion Scheme (RDS) and Sunkesula Barrage are existing on Tungabhadra river, which is a major tributary of river Krishna. Tungabhadra Dam constructed across river Tungabhadra, serves Karnataka, Andhra Pradesh and Telangana.

River Flow Line Diagram



CHAPTER-3 FUNCTIONS OF THE BOARD

3.1 Functions of Krishna River Management Board (KRMB)

The functions of the Board as laid down in the APR Act, 2014 under clause 85(8) are-

- (a) the regulation of supply of water from the projects to the successor States having regard to-
 - (i) awards granted by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956;
 - (ii) any agreement entered into or arrangement made covering the Government of existing State of Andhra Pradesh and any other State or Union territory;
- (b) the regulation of supply of power generated to the authority in-charge of the distribution of power having regard to any agreement entered into or arrangement made covering the Government of the existing State of Andhra Pradesh and any other State or Union territory;
- (c) the construction of such of the remaining on-going or new works connected with the development of the water resources projects relating to the rivers or their tributaries through the successor States as the Central Government may specify by notification in the Official Gazette;
- (d) making an appraisal of any proposal for construction of new projects on Krishna river and giving technical clearance, after satisfying that such projects do not negatively impact the availability of water as per the awards of the Tribunals constituted under the Inter-State River Water Disputes Act, 1956 for the projects already completed or taken up before the appointed days; and
- (e) such other functions as the Central Government may entrust to it on the basis of the principles specified in the Eleventh Schedule.

3.1.1 The Eleventh Schedule

The Eleventh Schedule of APR Act, 2014 covers the principles governing the functioning of the River Management Boards and is enclosed as **Annexure - 1**.

3.1.2 The Twelfth Schedule

Section 92 under Part X of APR Act, 2014 covers "Infrastructure and special economic measures" under which power generation, transmission and distribution as enumerated in the Twelfth Schedule shall be implemented by the successor States. Twelfth Schedule is enclosed as **Annexure - 2**.

3.2 Jurisdiction

As per Section 87(1) of the APR Act, 2014 the Board shall ordinarily exercise Jurisdiction on Krishna river in regard to any of the projects over headworks (barrages, dams, reservoirs, regulating structures) part of canal network and transmission lines necessary to deliver water or power to the States concerned, as may be notified by the Central Government, having regard to the awards, if any, made by the Tribunals constituted under the Inter-State River Water Disputes Act, 1956.

As per Section 87(2) of the APR Act, 2014, if any question arises as to whether the Board has Jurisdiction under sub-section (1) over any project referred thereto, the same shall be referred to the Central Government for decision thereon.

In the first meeting of the Apex Council held on 21.09.2016 under the Chairpersonship of Hon'ble Minister (Jal Shakti), the Government of Telangana stated that only after the final KWDT - II Award, Jurisdiction of KRMB may be notified. The Government of Andhra Pradesh stated that pending allocations to be made by KWDT - II, Jurisdiction of KRMB may be notified by GoI as there is no linkage between Jurisdiction and project wise allocations by KWDT - II.

In the meeting taken by the Secretary, DoWR, RD & GR on 15.02.2018, it was decided that final decision in this matter will be taken by the Apex Council.

Also in the meeting taken by the Secretary, DoWR, RD&GR on 21.01.2020, it was decided that the matter would be placed before the Apex Council for decision.

CHAPTER-4 BOARD ORGANISATION

4.1 Organisation

Krishna River Management Board (KRMB) was established on 2nd June, 2014 in pursuance of Section 85 (1) of APR Act, 2014.

4.2 Board Secretariat

The following officers of the Board are appointed by the Central Government.

- (i) Chairperson,
- (ii) Member Secretary,
- (iii) Member (Power) and
- (iv) Member.

KRMB is headed by the Chairperson who is vested with the administrative and financial powers for smooth functioning of the Board. Chairperson is assisted by Member Secretary, Member (Power) and Member (in the Board Secretariat). Member Secretary, appointed from Central Water Engineering (Group 'A') Services is in-charge of the supervision of Board's administration and financial matters. The Member (Power), appointed from Ministry of Power is responsible to look after the power related matters. The Member in the Board Secretariat, of the rank of Chief Engineer from Central Water Engineering (Group 'A') Service is responsible for technical matters.

Member Secretary, Member (Power) and Member in KRMB are assisted by Superintending Engineer/ Executive Engineer level officers. Allied duties and functions are grouped under respective units and each unit is divided into divisions, headed by Executive Engineers, Deputy Director/ Director (F). The Executive Engineers, Deputy Director/ Director (F) are supported by the officers of the level of Dy. Executive Engineer, Assistant Director, Assistant Executive Engineer, Superintendent, Accounts Officer, Sr. Assistant and Jr. Assistant.

The structure of KRMB under Member Secretary, Member and Member (Power) is as follows:

- (i) Administration and Finance Unit under Member Secretary
 - 1. Administration and Coordination Division
 - 2. Finance Division
 - 3. Water Management Division
- (ii) Technical Unit under Member
 - Appraisal and Monitoring Division
- (iii) Power Unit under Member (Power)

4.3 Incumbents

The incumbents to the posts of Chairperson and Members of KRMB during the year 2019-20 are given in Table - 5.3.

TABLE - 5.3

Sl. No.	Designation	Name	Period
1	Chairperson	Dr. R.K.Gupta	01-04-2019 to 13-01-2020
		Shri J. Chandra Shekhar Iyer (Link Officer)	14-01-2020 to 31-03-2020
2	Member Secretary	Shri A. Paramesham	01-04-2019 to 31-03-2020
3	Member (Power)	Shri L.B.Muanthang	01-04-2019 to 31-03-2020
4	Member	Shri Harikesh Meena	01-04-2019 to 31-03-2020

4.4 Nominated Board Members from the State Governments

Particulars of the Board Members from the States are given in the following Table:

Government of Andhra Pradesh		
1	Member (Admin)	Shri Aditya Nath Das, IAS Special Chief Secretary to Govt. of Andhra Pradesh, Water Resources Department

2	Member (Technical)	Shri M.Venkatesawar Rao Engineer-in- Chief (I), Water Resources Department (Period: 01-04-2019 to 31-12-2019)
		Shri C. Narayana Reddy Engineer-in- Chief (I), Water Resources Department (Period: 01-01-2020 to 31-03-2020)
Government of Telangana		
1	Member (Admin)	Shri Somesh Kumar, IAS Special Chief Secretary to Govt. of Telangana, Irrigation & CAD Department
2	Member (Technical)	Shri C. Muralidhar Engineer-in-Chief (I), Irrigation & CAD Department

4.5 Other Officers/ Staff of the Board

In addition to the personnel from the Central Government, other engineering officers from the level of Superintending Engineer to Assistant Executive Engineers and Financial/ Administrative/ Ministerial officials from the level of Director (Finance) to Assistants are deployed on deputation/ diversion/ loan basis from the Governments of Telangana, Andhra Pradesh and CWC.

In KRMB, 24 officers are in position as on 31.03.2020 and the break-up is as follows:

Government of India	-- 3
Government of Andhra Pradesh	-- 13
Government of Telangana	-- 8

Organisation Chart of Board Secretariat is at <https://krmb.gov.in/krmb/orgChart>

CHAPTER-5

BOARD MEETINGS

5.1 Board Meetings

Board Meetings

During the water year 2019-20, two Board meetings were held:

Sl. No.	Meeting	Date	Chair
1	10 th Board Meeting at Hyderabad	09.08.2019	Dr. R.K. Gupta Chairman, KRMB
2	11 th Board Meeting at Hyderabad	09.01.2020	Dr. R.K. Gupta Chairman, KRMB

Tenth Meeting of the Board

The 10th meeting of the Board was held on 09.08.2019 at Hyderabad and following decisions were taken:

- Providing Budgetary funds to KRMB by the States for the financial year 2019-20 was discussed and both the States agreed to release the funds as requested by Chairman, KRMB.
- Shifting of KRMB Headquarters to Vijayawada was discussed and decided that necessary action will be taken as per the Union Ministry's direction.
- Water sharing during the water year 2019-20 was discussed. In the absence of Administrative Member of Govt. of Andhra Pradesh, it was decided that the issue may be discussed when all the Members are present in the Board Meeting. Till such time both the State Governments agreed for prevailing adhoc working arrangements (i.e., ratio of 66:34 for A.P. and T.S. excluding Minor Irrigation and Diversion of Godavari Water).
- Implementation of Telemetry in phase-II and funds requirement was discussed.
- Working Manual of KRMB was discussed and it was decided to hold a joint meeting of KRMB and GRMB to specifically discuss the issue of finalization of Working Manual.

Eleventh Meeting of the Board

The 11th meeting of the Board was held on 09.01.2020 at Hyderabad and following decisions were taken:

- Both the State Governments agreed for water sharing in the ratio of 66:34 for A.P. and T.S. during the water year 2019-20.
- Providing Budgetary funds to KRMB by the States and budget estimate for the financial year 2020-21 was discussed and after deliberations budget estimate of Rs. 1675.00 lakh for financial year 2020-21 was approved.
- Shifting of KRMB Headquarters to Vijayawada was discussed.
- It was decided to hold a joint meeting of KRMB and GRMB to specifically discuss the issue of finalization of the Working Manual.
- It was decided to take the help of CWPRS, Pune for establishing new gauges for NSLC (Nagarjuna Sagar Left Canal) and NSRC (Nagarjuna Sagar Right Canal) in order to get correct discharges.

5.2 Three Member Committee Meetings and Outcomes

Five (5) meetings of the Three Member Committee consisting of Engineers-in-Chief of both the States and Member Secretary, KRMB was held during the water year 2019-20. Water Release Orders were issued keeping in view primarily the following factors.

- i) Drinking and Irrigation water requirements.
- ii) Storage positions in the reservoirs.
- iii) Generation of power as an incidental benefit.

Further, it was also seen that the overall ratio of sharing of the water between the States was adhered to.

As per the recommendations of Three Member Committee, Five (05) water release orders were issued by KRMB during the water year 2019-20 from common projects of Srisailem and Nagarjuna Sagar for irrigation needs from different outlets and also drinking water supply to Hyderabad City and Chennai City.

5.3 Committee to ensure supply of Krishna water to augment drinking water supply to Chennai City.

As per the 10th meeting of the Standing Committee of the Southern Zonal Council held at Bengaluru on 28th November 2017, a Committee was constituted by MoWR, GoI to ensure supply of Krishna water to augment the drinking water supply to Chennai city.

- I. Relevant extracts of the agreements of 1976 and 1977 among Maharashtra, Karnataka, erstwhile Andhra Pradesh, Tamil Nadu and Union Ministry of Agriculture and Irrigation-
 - (i) “Maharashtra, Karnataka and erstwhile Andhra Pradesh have to spare 5 TMC each during the period from 1st July to 31st October of every year” towards drinking water supply to Chennai city.
 - (ii) Government of Tamil Nadu shall draw not more than 15 TMC in a water year from Srisaïlam reservoir during the period 1st July to 31st October.
- II. Relevant extracts of the agreement of 1983 between erstwhile Andhra Pradesh and Tamil Nadu -

Andhra Pradesh shall ensure to provide 8 TMC during the period from July to October and 4 TMC during the period from January to April.

During the water year 2019-20, two meetings of the Committee were held on 18-06-2019 and 05.02.2020 respectively under the Chairmanship of Chairman KRMB and Chairman of the Committee.

The following main decisions were taken in the 2nd meeting of the Committee:

1. Andhra Pradesh and Telangana States shall release 15 TMC of water from Srisaïlam during July – October, 2019 to Tamil Nadu.
2. Andhra Pradesh shall release 8 TMC of water from July to October, 2019. If water is available, Andhra Pradesh should look for the possibility of supplying 12 TMC of water to Tamil Nadu during this period as supplying water during January – April becomes generally difficult due to low reservoir levels. Tamil Nadu informed that they have sufficient storage capacity to store the entire quantity of water, if received.
3. As soon as the water levels in the Srisaïlam, Somasila and Kandaluru reservoirs come to required levels, water shall be released to Tamil Nadu, so that it can meet their immediate requirements.
4. Indents for water release from Srisaïlam shall show clearly the water being drawn for Tamil Nadu, and the same shall be ensured to reach Tamil Nadu.

The following main decisions were taken in the 3rd meeting of the Committee:

1. Establish a mechanism in consultation with the upper States to measure releases from the upper States to find enroute losses and realization at Srisailam for water accounting.
2. To consider the release of 3 TMC of water to Tamil Nadu from the available storage for the balance period upto April 2020.
3. Sharing the utilisation data from the water year 2008-09 to 2017-18 in the formats as submitted to KWDT- 2 within 3 months' time and the data for water year 2018-19 onwards will be exchanged within one month.
4. The data related to water utilisation and river releases at interstate border points shall be shared with Upper/ Lower riparian States and the same may be furnished to the Committee.
5. Chairman stated that as KGBO may be having data of Krishna basin only, Cauvery and Southern Rivers Organization (CSRO) may also be addressed for obtaining data pertaining to Pennar basin.
6. Water withdrawal plans every year for the periods of July - October and January – April as per the bilateral agreement between erstwhile Andhra Pradesh and Tamil Nadu. Further, a plan of withdrawal for the current period of January – April 2020 may be furnished to the committee.

During the water year 2019-20, a quantity of 9.562 TMC water was released at Srisailam with a realization of 7.650 TMC at A.P.-T.N. border.

CHAPTER-6

ADMINISTRATIVE MATTERS

6.1 Working Manual

As per Section 88 of the APR Act, 2014, the Board may make regulations consistent with the Act and the rules made thereunder, to provide for -

- a) regulating the time and place of meetings of the Board and the procedure to be followed for the transaction of business at such meetings;
- b) delegation of powers and duties of the Chairman or any officer of the Board;
- c) the appointment and regulation of the conditions of service of the officers and other staff of the Board;
- d) any other matter for which regulations are considered necessary by the Board.

Accordingly, Krishna River Management Board (KRMB) prepared the draft Working Manual including the rules required for day to day functions of the Board, procedure for transaction of business, conduct meetings, staff requirement, etc.

A draft Working Manual of KRMB after receiving comments on earlier draft from both the State Governments was placed in the 10th Board meeting of KRMB held on 09.08.2019. A decision was taken to hold joint meeting of both the Boards i.e., KRMB and GRMB specifically to discuss the issue of finalisation of the Working Manual.

The Working Manual of KRMB 2019 was kept as Agenda 11.5 in 11th Board meeting held on 09.01.2020 and it was decided to hold a joint meeting of both the Boards (i.e., KRMB and GRMB) to specifically discuss the issue of finalization of the Working Manual.

6.2 KRMB Web Site

The KRMB maintaining its web site on National Informatics Centre (NIC) server with domain name as “**krmb.gov.in**”. All the project authorities have been instructed to upload the daily data of reservoirs inflows and outflows in this web site. Accordingly, the same is also considered in water use account of both the States.

6.3 e-Governance

The goal of e-governance is to offer a variety of information to citizens in an efficient and economical manner and to strengthen the relationship between Government and citizens using

technology. The Government of India has initiated many Digital India Components. The following Digital India Components have been adopted by KRMB:

e-Procurement: The Government initiated to commence e-Procurement of all procurements made with minimum tender value limit of Rs.2.00 lakhs w.e.f. 01.04.2016. Accordingly, the process of e-Tendering through <https://eprocure.gov.in/> is followed by KRMB.

e-Samiksha Software: e-Samiksha is a real time online system for monitoring of follow-up action on the decisions taken in meetings held in the cabinet secretariat. For implementation of the e-Samiksha Software in all organisations of the Ministry, the KRMB had nominated its Nodal Officer and communicated to MoJS for registration in e-Samiksha Software System.

Government e-Marketplace (GeM): GeM is a one stop portal to facilitate online procurement of common use Goods and Services required by various Government Departments/ Organizations/ PSUs. GeM aims to enhance transparency, efficiency and speed in procurement. The purchases through GeM by Government users have been authorized and made mandatory by Ministry of Finance by adding a new Rule No. 149 in the General Financial Rules, 2017. Since then the procurement for Goods and Services are carried out in KRMB through the GeM.

Legal Information Management & Briefing System (LIMBS): LIMBS is to create a national portal of all cases pending in various courts/ tribunals as a part of the e-Governance initiative. Once completed, information relating to all court/ tribunal cases being handled by the various ministries/ departments and other organisations of the Government of India will be available on a single web-based online application. The KRMB has been uploading data from the year 2018 onwards in the LIMBS web site.

6.4 Infrastructure/ Office Accommodation

Infrastructure/ Office accommodation for the Board was provided by Govt. of Telangana in the 5th floor of Jalasoudha Building, Errum Manzil, Hyderabad.

CHAPTER-7 FINANCIAL MATTERS

7.1 Budgetary Funds

In pursuance of Section 86(2) of the APR Act, 2014, Govt. of AP and Govt. of TS shall at all times provide the necessary funds to the Board to meet all the expenses required for the discharge of its functions and such amounts shall be apportioned between the States concerned in such proportion as the Central Government may, having regard to the benefits to each of the said States, specify.

Initially, the expenditure incurred in respect of KRMB were processed by GoAP through PAO, Vijayawada under HOD, Chief Engineer, Krishna Delta System, Vijayawada. However, certain difficulties were faced for timely settling of the bills (including salary bills) through this process.

Hence in the 3rd meeting of the Board held on 16th December, 2015, it was decided that, Both the States shall deposit the Budget funds and this Board should be made functionally independent.

GoAP shall deposit every year the amount as per the budget estimate approved by the board in full in the first quarter of the financial year. The share of the GoTS shall be adjusted by the GoAP independently.

The saving bank account shall be operated independently by the Board secretariat as Chairperson is fully authorized to use the amount for the identified tasks. He can delegate the operation of the finances within the Board Secretariat.

All transactions shall be done jointly under two signatures. The signatories are Member Secretary and Drawing & Disbursing Officer.

The unutilized funds at the end of the year are non-lapsable and shall be adjusted in the subsequent year.

The Board secretariat shall place the annual account of expenses before the Board. The accounts of the Board are subjected to audit as per provisions of the State/Central Government.

During the 6th meeting of the Board held on 22nd August 2017, Board has decided to have a reserve fund of at least Rs.10.00 crore. It was decided that the Board may gradually built up the reserve fund out of savings from the approved/ allocated fund subject to maximum of Rs.1 crore per year.

In the 8th meeting of the Board held on 6th June, 2018, to avoid the process of apportionment of share of expenditure between both the States and reimbursement to AP, which is time taking, it was agreed that, both the State Governments will share the Budget estimate approved by the Board in equal proportion (50:50) from the Financial Year 2018-19 onwards.

However in the 9th meeting of Board held on 16th October, 2018, on request of the Chief Secretary, GoTS, it was decided that AP State shall release full budget requirement of KRMB quarterly. GoTS would subsequently reimburse 50% of its share through KRMB for proper accounting. With this, the decision of previous meeting of the Board stands superseded.

The budget estimate of Rs.10.80 crore was approved by the Board for the FY: 2019-20. During the 11th meeting Board held on 09.01.2020 revised budget Estimate for Rs.7.60 crore was placed for F.Y: 2019-20 along with BE for F.Y. 2020-21. During F.Y. 2019-20 GoTS have released Rs.5.14 crore and no funds are released by the GoAP. The details of budget estimate, funds released and expenditure incurred by the Board during financial year 2019-20 are given as below:

The Details of Budget Estimate, funds received and expenditure incurred during the Financial Year 2019-20

(Rs. in Lakhs)

Sl.No	Particulars	Amount
I.	Budget Estimate approved by Board/ Revised Estimate	1080.00 760.00
II.	Amount of Budget released during 2019-20	514.00
III.	Expenditure during 2019-20	483.94
IV.	Balance as on 31.3.2020 including previous year saving amounts (excluding grant from GOI)	432.01

Note: One time grant-in-aid of Rs.1.00 Crore was received as initial amount to be reimbursed by the Board on receipt of funds from the State Government of Andhra Pradesh and Telenagana vide MoWR, RD&GR Letter no: R.160011/8/2014-Pen.Riv/009 dated 16.12.2014.

7.2 Procurement

KRMB procures all necessary items through Government e-Marketplace (GeM) and Local Market. The major items procured during the financial year 2019-20 were Computers and peripherals.

7.3 Audit

KRMB is not operating the Head of accounts of both the States directly. However, the accounts of KRMB for the financial years 2015-16, 2016-17, 2017-18, 2018-19 were audited by the Indian audit and accounts department, O/o Principal Director of Audit, Scientific department, Chennai Branch. The replies to the Separate Audit Report were submitted to Indian audit and accounts department, O/o Director General of Audit, Scientific department, Bangalore by KRMB. The Final report is awaited.

CHAPTER-8

TECHNICAL MATTERS

8.1 Water Management

Arrangements of water sharing between Andhra Pradesh and Telangana

A tentative distribution of water between Government of Andhra Pradesh and Government of Telangana in Krishna basin was agreed in a meeting held on 18th - 19th June, 2015 at New Delhi under the Chairmanship of Additional Secretary, MoWR, RD & GR (A copy of the minutes of the meeting is at **Annexure - 3**). The issues related to regulation of water, use by Krishna River Management Board (KRMB), between Andhra Pradesh and Telangana State were also discussed. The meeting was attended by Principal Secretary, Water Resources Department of Government of Andhra Pradesh and Principal Secretary, I & CAD Dept., Government of Telangana.

In the meeting, it was agreed to share the quantity of 811 TMC (allocated enbloc by KWDT for utilization in various projects to erstwhile State of Andhra Pradesh) as 298.96 TMC for Telangana and 512.04 TMC for Andhra Pradesh. It was agreed that for current year the quantity of water available after allocation of 811 TMC would be shared proportionately. Similarly, the deficit below 811 TMC would also be shared accordingly. The ratio works out as 63.13 : 36.87 between Andhra Pradesh and Telangana States.

It was also agreed in the meeting held on 18th - 19th June, 2015 that a three member committee comprising of Engineers-in-Chief of both the States and Member Secretary of KRMB would assess the availability of water from time to time and requirements raised by the concerned State and accordingly decide the release of water to both the States. The decision taken by KRMB shall be implemented by the concerned State project authorities.

8.2 Water use Account

Water utilisation by both the States during water year 2019-20.

Utilisations in Krishna Basin:

In Krishna basin, during water year 2019-20, the total utilisation by both the States is 931.394 TMC out of which utilisation of Andhra Pradesh is 653.064 TMC and utilisation of Telangana State is 278.330 TMC.

Utilisations in two common reservoirs:

During water year 2019-20, 743.124 TMC of water was drawn by both States from the two common reservoirs namely Neelam Sanjeeva Reddy Sagar Srisailam and Nagarjuna Sagar Project. Out of this, 271.922 TMC was drawn from Srisailam reservoir and 471.202 TMC was drawn from Nagarjuna Sagar. Canal/ Scheme-wise Drawals of Water by Andhra Pradesh and Telangana from two Common Reservoirs is enclosed at **Annexure - 4**.

8.3 Implementation of Telemetry System under Krishna River Management Board:

Phase-I:

Krishna River Management Board has taken up the implementation of Telemetry system as per the decision taken in the MoWR, RD & GR meeting held on 21st - 22nd June, 2016 and 1st meeting of the Apex Council held at New Delhi on 21st September 2016 to have real time data of inflows and outflows of various projects of Andhra Pradesh and Telangana in Krishna basin.

18 No.s of Telemetry stations were installed in Phase-I at various locations of Jurala, Srisailam, Nagarjuna Sagar projects as detailed below:

Sl. No.	Name of the Telemetry station	Type of sensor	Field Division AP / TS in charge of the station
1	AMRP Lift Scheme at Km 1.10 of Link canal connecting to Akkampalli Balancing Reservoir	Level sensor	AMR SLBC Division, Angadipeta.
2	Nagarajuna Sagar Project (NSP) Dam at Diversion Tunnel Intake Tower		Dam Maintenance Division, Hill colony, NSP Dam
3	NSP Right Bank Canal	Level cum Velocity Sensor	Monitoring division, Lingamguntla
4	NSP Left Bank Canal		NSC Monitoring Division, Tekulapally, Khammam
5	Palair Reservoir upstream of intake structure at Km 136.345 of NSP LBC		
6	Palair Reservoir Off take at Km 0.20 downstream of confluence of NSLC and Power House outlet	Level sensor	NSLBC O&M Division, Nuzvid
7	NSP LBC Km 101.362 at Andhra Pradesh Telangana Border	Level sensor	

8	Mahatma Gandhi Kalwakurthy LI Scheme (MGKLIS) at Cistern	Level sensor	MGKLIS Division-1, Nagarkurnool, Mahaboobnagar
9	Srisaillam Reservoir near Block 17/18		Dam Maintenance Division, NSRSSP
10	At SLB @ Km. 12.265 of SRMC of Pothireddypadu Head Regulator now proposed at 3 km d/s of PRP HR	Level cum Velocity Sensor	TGP Distributory Division-1, Nandyal
11	Handri Niva Sujala Sravanthi (HNSS) LI Scheme near Culvert at Km (-) 1.62 of old pump house	Level sensor	Division-02, HNSS, WRD, Kurnool
12	Jurala Reservoir		PJP Dam Division No.-2, Nandimala
13	Jurala Right Main Canal near head regulator		PJP Execution Division No.-2, Gadwal
14	Jurala Left Main Canal near head regulator	Level sensor	PJP Dam Division No.-2, Nandimala
15	Jurala Left Parallel Canal near head regulator		RBL-II, HW & Canal Division, Sangambanda Camp, Makthal, Mahaboobnagar.
16	Bhima LI Scheme - I at lift point		
17	Koilsagar LI Scheme at lift point		
18	Nettampadu LI Scheme at lift point	Level cum Velocity Sensor	PJP Execution Division No.-2, Gadwal

Out of 18 nos of Phase-I Telemetry stations, 17 Telemetry stations have been placed under 2 years warranty and 5 years AMC except the Telemetry station of Nettempadu due to prevailing hydraulic conditions of the site.

The remote data of all the 18 Telemetry stations are being received at Model Centre at KRMB, Hyderabad. As of now, the telemetry data is not being used for water accounting as the Board decided that all the Telemetry stations of Phase-I & Phase-II may be commissioned and the data may be used for accounting simultaneously.



Non-contact water level cum velocity sensor at Palair Reservoir U/s



Telemetry station at Srisaillam Reservoir



Telemetry station at 12.265 km d/s of Koilsagar LIS

Monthly telemetry report showing Real Time Data of NSP left bank canal in the month of July 2019 available in the telemetry website (Level cum velocity sensor)

Date	Water Depth (Mtr)			Velocity (M/s)			Discharge (Cumecs)			Discharge (Cusecs)		
	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.
01/07/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
02/07/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
03/07/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
04/07/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
05/07/2020	0.41	0.51	0.46	1.23	1.74	1.47	8.20	14.51	11.03	290	512	389
06/07/2020	0.00	0.91	0.82	0.00	2.65	2.52	0.00	37.05	34.00	0	1308	1200
07/07/2020	0.98	1.03	1.00	0.00	2.51	2.41	0.00	39.67	37.99	0	1401	1341
08/07/2020	0.98	1.01	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
09/07/2020	0.95	0.97	0.96	0.00	2.52	1.38	0.00	38.27	20.90	0	1351	738
10/07/2020	0.94	0.97	0.95	0.00	2.52	2.38	0.00	38.06	35.92	0	1344	1268
11/07/2020	0.90	1.02	0.94	0.00	2.55	2.38	0.00	39.01	35.49	0	1377	1253
12/07/2020	0.00	0.94	0.91	0.00	2.53	2.03	0.00	37.27	29.82	0	1316	1053
13/07/2020	0.89	0.90	0.90	0.00	2.55	2.45	0.00	36.28	34.77	0	1281	1228

14/07/2020	0.90	0.92	0.91	0.00	2.54	2.37	0.00	36.66	34.16	0	1294	1206
15/07/2020	0.91	1.02	1.00	0.00	2.53	2.24	0.00	38.34	35.28	0	1354	1246
16/07/2020	0.97	0.99	0.98	0.00	2.37	2.20	0.00	37.05	34.02	0	1308	1201
17/07/2020	0.96	0.98	0.97	0.00	2.34	2.19	0.00	35.91	33.63	0	1268	1188
18/07/2020	0.91	0.96	0.93	0.00	2.38	2.29	0.00	35.15	33.69	0	1241	1190
19/07/2020	0.84	0.89	0.87	0.00	2.44	2.31	0.00	33.66	31.74	0	1189	1121
20/07/2020	0.77	0.85	0.80	2.44	2.48	2.46	30.36	32.61	31.27	1072	1151	1104
21/07/2020	0.73	0.77	0.75	0.00	2.47	2.34	0.00	30.17	28.13	0	1065	993
22/07/2020	0.71	0.74	0.73	0.00	2.37	2.28	0.00	28.10	26.61	0	992	940
23/07/2020	0.70	0.73	0.71	0.00	2.34	2.07	0.00	27.32	23.85	0	965	842
24/07/2020	0.65	0.68	0.67	0.00	2.25	2.09	0.00	24.63	22.52	0	870	795
25/07/2020	0.00	0.76	0.73	0.00	2.08	1.98	0.00	25.35	24.02	0	895	848
26/07/2020	0.74	0.76	0.75	1.92	2.02	1.97	23.01	24.57	23.83	812	868	841
27/07/2020	0.75	0.77	0.76	1.79	1.93	1.86	21.55	23.74	22.54	761	838	796
28/07/2020	0.72	0.75	0.74	1.64	1.78	1.72	18.98	21.37	20.50	670	755	724
30/07/2020	0.71	0.76	0.74	1.39	1.50	1.43	15.85	18.20	16.81	560	643	594
31/07/2020	0.75	0.79	0.77	1.35	1.51	1.43	16.17	18.83	17.63	571	665	623

Monthly telemetry report showing Real Time Data of Jurala Reservoir in the month of June 2019 available in the telemetry website (Level sensor)

Date	Reservoir Level (Mtr.)	Reservoir Level (Feet)	Gross Contents (TMC)	Contents (%)	Live Contents (TMC)
01/06/2019	313.30	1027.89	2.30	0.00	0.00
02/06/2019	313.28	1027.82	2.28	0.00	0.00
03/06/2019	313.27	1027.79	2.27	0.00	0.00
04/06/2019	313.25	1027.72	2.26	0.00	0.00
05/06/2019	313.22	1027.62	2.24	0.00	0.00
06/06/2019	313.22	1027.62	2.24	0.00	0.00
07/06/2019	313.23	1027.66	2.24	0.00	0.00
08/06/2019	313.19	1027.53	2.21	0.00	0.00
09/06/2019	313.21	1027.59	2.23	0.00	0.00
10/06/2019	313.17	1027.46	2.20	0.00	0.00
11/06/2019	313.17	1027.46	2.20	0.00	0.00
12/06/2019	313.13	1027.33	2.17	0.00	0.00
13/06/2019	313.12	1027.30	2.16	0.00	0.00
14/06/2019	313.10	1027.23	2.14	0.00	0.00

15/06/2019	313.09	1027.20	2.14	0.00	0.00
16/06/2019	313.08	1027.17	2.13	0.00	0.00
17/06/2019	313.05	1027.07	2.11	0.00	0.00
18/06/2019	313.03	1027.00	2.09	0.00	0.00
19/06/2019	313.01	1026.94	2.08	0.00	0.00
20/06/2019	313.02	1026.97	2.08	0.00	0.00
21/06/2019	313.01	1026.94	2.08	0.00	0.00
22/06/2019	313.01	1026.94	2.08	0.00	0.00
23/06/2019	312.99	1026.87	2.06	0.00	0.00
24/06/2019	312.98	1026.84	2.06	0.00	0.00
25/06/2019	312.98	1026.84	2.06	0.00	0.00
26/06/2019	312.97	1026.80	2.05	0.00	0.00
27/06/2019	312.94	1026.71	2.03	0.00	0.00
28/06/2019	312.93	1026.67	2.02	0.00	0.00
29/06/2019	312.93	1026.67	2.02	0.00	0.00
30/06/2019	312.91	1026.61	2.01	0.00	0.00

8.4 Hydro Power

On Krishna river in both the States, hydro power plants are located at Priyadarshini Jurala, Lower Jurala, Srisailam Right Bank power house, Srisailam Left Bank power house, Nagarjuna Sagar Dam power house, Nagarjuna Sagar Right Canal power house, Nagarjuna Sagar Left Canal power house, Nagarjuna Sagar Tail Pond power house and Pulichintala power house. The Details of Hydro Power Projects on Krishna River in the States of Andhra Pradesh and Telangana are given at **Annexure - 5** in the order of location from upstream to downstream. At present, these are operated by the concerned States based on the geographical location of the plants.

In the meeting taken by Additional Secretary, MoWR, RD & GR, New Delhi on 18th – 19th June, 2015 both States agreed that while making releases for power generation the committed utilizations for Nagarjuna Sagar and Srisailam Reservoir as mentioned in the **Appendix to Annexure - 3** may be ensured. Further, both States have also agreed to release water from power house of Srisailam to derive power benefits in 50:50 ratio.

**Hydro Power Generation (million units) of various Power Plants on the Krishna River
during the water year 2019-20 is given in the following table:**

Month	Priyadarshini Jurala	Lower Jurala	Srisailam RB	Srisailam LB	NS Dam	NS RBC	NS LBC	NS Tail pond	Pulichintala
Jun-19	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.000	0.000
Jul-19	3.052	3.806	0.086	0.032	0.000	0.000	0.000	0.000	0.000
Aug-19	37.093	26.207	276.595	398.140	257.045	21.276	7.652	8.772	7.993
Sep-19	113.659	107.032	335.980	486.972	456.512	31.832	24.740	23.767	54.155
Oct-19	108.780	113.349	314.623	500.740	468.626	22.798	21.989	25.725	70.265
Nov-19	59.094	67.333	155.027	232.190	198.452	19.635	17.988	14.915	42.195
Dec-19	0.000	0.522	14.992	74.137	16.541	7.268	11.300	1.346	6.479
Jan-20	0.000	0.162	28.076	80.652	64.736	0.000	10.502	0.388	10.392
Feb-20	0.000	0.000	141.569	134.386	31.798	0.000	3.058	0.175	10.588
Mar-20	0.000	0.415	43.500	65.130	1.421	0.000	4.934	0.111	7.544
Apr-20	0.000	0.000	1.905	28.153	0.064	0.000	2.152	0.745	2.739
May-20	0.000	0.000	0.609	0.000	0.000	3.370	0.000	0.125	0.000
Total	321.678	318.826	1312.962	2000.547	1495.195	106.179	104.315	76.069	212.350

8.5 Regulation of Power Generated from Interstate Projects

As per Section 85(8)(b) of the APR Act, 2014, KRMB is required to undertake regulation of supply of power generated to the authority in-charge of the distribution of power having regard to any agreement entered into or arrangement made covering the Government of the existing State of Andhra Pradesh and any other State or Union territory.

There is a separate “Tungabhadra Board” constituted by the President of India in exercise of the powers vested under sub section (4), Section 66 of the Andhra Pradesh State Act, 1953 for completion of the Tungabhadra Project and its operation and maintenance.

In case of **Tungabhadra Interstate Power Project**, it is noted that there are two Inter-State power houses (namely Hampi power house – 4 x 9 MW and Tungabhadra dam power house – 4 x 9 MW) on Tungabhadra river. Earlier, the power produced was being shared by the States of Karnataka and undivided Andhra Pradesh.

8.6 Technical Committees

I) Technical Committee constituted for regulation of surplus water during monsoon period spilling from the main stem projects on Krishna river for supply to the States of Andhra Pradesh and Telangana.

As per the deliberations held during the meeting held under the Chairmanship of Secretary, Department of Water Resources, RD & GR at New Delhi on 21.01.2020, a Committee under the chairmanship of Chief Engineer, IMO, CWC was constituted by DoWR, RD&GR, Ministry of Jal Shakti for regulation of surplus water during monsoon period spilling from the main stem projects on Krishna river for supply to the States of Andhra Pradesh and Telangana.

The composition of the Committee is as follows:

- | | | | |
|------|--|---|-------------------|
| i. | Chief Engineer (IMO),
Central Water Commission | - | Chairperson |
| ii. | Chief Engineer (ISWR),
Government of Andhra Pradesh | - | Member |
| iii. | Chief Engineer (ISWR),
Government of Telangana | - | Member |
| iv. | Director (Hydrology),
Central Water Commission | - | Member |
| v. | Member, Krishna River Management Board | - | Member & Convener |

First meeting of the Committee was held on 13.05.2020 through video conference.

II) Committee for Accounting of losses in Nagarjuna Sagar Left Canal- common to both the States of Andhra Pradesh and Telangana for water year 2019-20.

As per the decision taken in the 10th meeting of the Krishna River Management Board held on 09.08.2019, a committee was constituted on 17.10.2019 for Accounting of losses in Nagarjuna Sagar Left Canal- common to both the States of Andhra Pradesh and Telangana for water year 2019-20. The committee conducted field observations during October & November 2019 and submitted its report to KRMB on 05.02.2020. KRMB sent the report to the ENC's of the both the States on for their views on the report vide letter no. 2/27/2018/KRMB/409-410 dated 07.02.2020.

III) Accounting of only 20% of water utilized for Domestic and Municipal Water Supply for Hyderabad Metro Water Supply & Sewerage Board(HMWS&SB) as per clause VII of KWDT-I final order.

The issue was discussed in the 11th meeting of KRMB held on 09.01.2020. After detailed deliberations with the both States, Chairman informed the both the States to give their opinion to refer the case to CWC.

IV) Committee to study the gap in discharges measured at CWC gauge stations at Huvenhedgi & Yadgir and realization at Jurala Project and reasons for such gap.

The issue was discussed in the 10th meeting of KRMB held on 09.08.2019. Wherein Member Secretary asked the committee to meet and deliberate on the issue to explore alternatives in the absence of data from Karnataka and submit their recommendations.

Accordingly, Committee requested to the KGBO, CWC regarding the discharge measurement at Deosugur site during the next monsoon. However, the response from the KGBO, CWC is still awaited.

The committee will take final decision after receiving response from KGBO for taking up discharge measurements at Deosugur site.

CHAPTER-9

PARLIAMENT QUESTIONS, RTI, VIP REFERENCES, CAPACITY BUILDING AND COURT CASES

9.1 Parliamentary Questions

During the year 2019-20, KRMB furnished relevant information/ inputs to the Ministry of Jal Shakti, Department of Water Resources, RD & GR for preparation of replies to seventeen (17) Parliament Questions (Lok Sabha and Rajya Sabha).

9.2 RTI

For implementing RTI Act, 2005 in KRMB, Superintending Engineer was designated as Central Public Information Officer (CPIO) for Krishna River Management Board and Member Secretary was designated as Appellate Authority.

During the year 2019-20, Krishna River Management Board has received nineteen (19) RTI applications from various persons/ organisations and replies have been sent to all the applicants.

9.3 VIP References

KRMB has furnished relevant material to the Ministry of Jal Shakti, Department of Water Resources, RD&GR for replying to four (04) VIP reference received during the year 2019-20.

9.4 Capacity Building (Training/ Conference/ Seminar/ Workshops/ Meetings)

1. Four officers attended the training programme on "Conventional and Advanced Hydrometric Techniques for Discharge Estimation" during 10th - 12th June, 2019 at IIT Roorkee, Uttarakhand.
2. One officer attended the training programme on "Role of Management in optimum utilisation of Water Resources" during 14th - 15th June, 2019 at Hyderabad.
3. Two officers attended the "newly promoted Assistant Directors under consideration by the Training Directorate for the upcoming orientation programme" during 17th – 28th June, 2019 at NWA, Pune.
4. Three officers attended the "Jal Sanrakshan Ahbiyan –Briefing Meeting" during 27th - 28th June, 2019 at Vigyan Bhawan, New Delhi.

5. Two officers attended the "Jal Shakti Abhiyan (JSA)" during 10th - 13th July, 2019 at Hyderabad
6. Seven officers attended the training course on "6th India Water Week -2019 (IWW-2019)" during 24th-28th September, 2019 at Vigyan Bhawan, New Delhi.
7. Two officers attended the "Stakeholder consultation meeting" for Detailed Project Report (DPR) on 10th October, 2019 at Vijayawada.
8. One officer attended the training programme on "Management Development Program" for non technical officers during 14th - 18th October, 2019 at National Water Academy (NWA), Pune.
9. One officer attended the training-cum-workshop on "Transparency Audit Software Developed by CIC" during 15th February, 2020 at National Water Academy (NWA), Pune.

9.5 Court Cases

An original application No.71/2020 dated 15.05.2020 is filed in National Green Tribunal, Southern Bench , Chennai by the applicant Sri Gavinolla Srinivas resident of Bapanapalli village, Narayanapet District, Telangana regarding the violations committed by the State of Andhra Pradesh in implementing the new lift irrigation project by name Rayalaseema lift scheme by providing a major water pumping scheme for extracting water from Srisailam reservoir which is being shared by newly formed State of Telangana and also State of Andhra Pradesh flouting the environmental laws.

CHAPTER-10 OTHER ACTIVITIES

10.1 International Yoga Day

International Yoga Day was organized in KRMB on 21st June, 2019 in pursuance of directions of Department of Water Resources, RD & GR, MoJS. During the event, Yoga demonstration/ practice of Yoga asana by KRMB officers/ staff was observed under the guidance and supervision of a Yoga master.



International Yoga Day in KRMB

10.2 Swachhta Hi Seva Campaign

Swachhta Hi Seva is a massive nationwide awareness and mobilization campaign on Swachhta. The Swachhta Hi Seva 2019 has been organized in KRMB, Hyderabad from 11th September 2019 to 27th October 2019 with a theme “*plastic waste awareness and management*”.



Swachhta Hi Seva Pledge by KRMB officers/ staff



Plastic Free Awareness campaign at public places



Cleanliness and Plastic collection drive at public place in Hyderabad

10.3 Hindi Pakhwada

The KRMB celebrated “Hindi Pakhwada” during 3rd to 16th September, 2019 in accordance with Ministry of Home Affairs, Department of Raj Bhasha, order No.1/14034/87-R.B.(K-1) dated: 21.04.1987. During this event various competitions were organized and prizes were distributed to all the winners.



KRMB Chairman, Member Secretary, Members



KRMB Chairman, Member Secretary, Members and officers participating in Hindi Pakhwada

10.4 Swachhta Pakhwada

Swachhta Pakhwada Programme was inaugurated on 16.03.2020 in KRMB, Hyderabad. Swachhta Pledge in English and Hindi was administered to officers and staff of KRMB by Shri J. Chandrashekar Iyer, Chairman.



Swachhta Pledge by all the KRMB officers and staff

10.5 Field Visits

A team of officers from KRMB went to different field visits as part of Committees, to check the telemetry station and to supervise the flow in different projects.

- 1) A team of EE's, AEE's from KRMB, a team of CWPRS officials visit to Jurala, HNSS, Srisailam, NSP tail pond from 17.12.2019 to 19.12.2019 along with State Officials.



CWPRS, KRMB officials visit to Jurala, HNSS, Srisailam, NSP tail pond from 17.12.2019 to 19.12.2019

- 2) A team of EE's, AEE's from KRMB visited Priyadarshi Jurala and its telemetry stations along with State Officials.



Priyadarshi Jurala Project Main Canal



Priyadarshi Jurala Project Telemetry Station

THE ELEVENTH SCHEDULE
[See section 85(8) (e)]

Principles governing the functioning of the River Management Boards

1. The operation protocol notified by the Ministry of Water Resources with respect to water resources arrived at based on appropriate dependability criteria after the adjudication by the Krishna Water Disputes Tribunal shall be binding on both the successor States.
2. In the event of conflicting demand of water for irrigation and power, the requirement of water for irrigation shall take precedence.
3. In the event of conflicting demand of water for irrigation and drinking water, the requirement of water for drinking water purpose shall take precedence.
4. The allocations made by the River Water Tribunals with regard to various projects on Godavari and Krishna Rivers or for the regions of the existing State of Andhra Pradesh, in respect of assured water shall remain the same.
5. Allocations, if any, to be made on excess flows by any Tribunal in future shall be binding on both the State of Telangana and the successor State of Andhra Pradesh.
6. While the successor State Governments shall be responsible for managing natural calamities, the Boards shall advise the two State Governments on the management of disaster or drought or flood in the rivers of Krishna and Godavari, particularly in reference to the release of water for the management and mitigation of the natural calamities. The Boards shall have the full authority to get their orders implemented by the two successor State Governments promptly and effectively in respect of operation of the head works of the dams, reservoirs or head works of canals and works appurtenant thereto including the hydel power projects, as notified by the Central Government, on Krishna and Godavari Rivers.
7. No new projects based on water resources arrived at based on appropriate dependability criteria on Godavari or Krishna rivers can be taken up by the State of Telangana or the State of Andhra Pradesh without obtaining sanction from the Apex Council on River water resources. All such proposals shall be first appraised and technically cleared by the respective Board, before sanction by the said Apex Council.

8. Execution of ongoing projects and future new projects on Godavari and Krishna rivers shall be the responsibility of the State Government concerned where the project is located.
9. In case of non-implementation of the decision by either of the States, the defaulting State shall bear the responsibility and shall face financial and other penalties imposed by the Central Government.
10. The following irrigation projects which are under construction shall be completed as per the plan notified by the existing State of Andhra Pradesh and the water sharing arrangement shall continue as such :-
 - (i) Handri Niva
 - (ii) Telugu Ganga
 - (iii) Galeru Nagiri
 - (iv) Venegondu
 - (v) Kalvakurthi
 - (vi) Nettempadu

THE TWELFTH SCHEDULE
(See section 92)

A. Coal

1. Of the total equity of Singareni Collieries Company Ltd. (SCCL), 51% shall be with the Government of Telangana and 49% with the Government of India.
2. Existing coal linkages of SCCL shall continue without any change.
3. New linkages shall be allotted to the successor States as per the New Coal Distribution Policy by Government of India.
4. End use plants of the allocated coal blocks shall continue with coal from the block to be supplied in proportion to their respective capacities.

B. Oil and Gas

1. Allocation of natural gas will continue to be done as per the policies and guidelines issued by the Government of India from time to time.
2. The royalties payable on domestic onshore production of oil and gas shall accrue to the State in which such production takes place.

C. Power

1. Units of APGENCO shall be divided based on geographical location of power plants.
2. Existing Power Purchase Agreements (PPAs) with respective DISCOMS shall continue for both on-going projects and projects under construction.
3. The existing Andhra Pradesh Electricity Regulatory Commission (APERC) shall function as a joint regulatory body for a period not exceeding six months within which time separate SERCs will be formed in the successor States.
4. The existing State Load Despatch Centre (SLDC) shall function for both successor States for a period not exceeding two years within which time separate SLDC shall be set up for each successor State. During this period, the existing SLDC shall function under the direct administration and control of the Southern RLDC at Bengaluru.
5. Transmission lines of APTRANSCO of 132 KV and higher voltage cutting across the successor States shall be deemed as Inter-State Transmission System (ISTS) lines. The transmission lines falling within the territory of each successor State shall be transferred to the respective State Transmission Utilities. The maintenance of ISTS lines shall also be done by successor States in their respective jurisdictions.

6. The power of the Central Generating Stations will be allotted in such ratio to the State of Telangana and the State of Andhra Pradesh based on the actual energy consumption of the last 5 years of the relevant DISCOMS in the respective successor State.
7. For a period of ten (10) years, the successor State that has a deficit of electricity shall have the first right of refusal for the purchase of surplus power from the other successor State.
8. The districts of Anantapur and Kurnool which fall within the jurisdiction of the AP Central Power Distribution Company Ltd. will now be reassigned to the AP South Power Distribution Company Ltd.

Annexure – 3

Copy of Minutes of the Meeting Held on 18th - 19th June, 2015 to discuss the issues related to regulation of water by KRMB.***Brief record of the discussion of the meeting held on 18th-19th June, 2015 to discuss issues related to regulation of water by Krishna River Management Board***

1. A meeting was held on 18th and 19th June, 2015 under the Chairmanship of Additional Secretary, MoWR, RD & GR to discuss the issues related to regulation of water use by Krishna River Management Board between Andhra Pradesh and Telangana State. In addition to the officials of Ministry of Water Resources, River Development and Ganga Rejuvenation, officials from Government of Telangana and Andhra Pradesh and Krishna River Management Board were present in the meeting.
2. While welcoming the participants, Additional Secretary, MoWR, RD & GR requested the representatives of both the States to present their views in this regard.
3. The representative of Govt. of Andhra Pradesh requested to notify the projects for taking over under the jurisdiction of Krishna River Management Board urgently for the purpose of regulation of water. He also cited that at present the directives of the Board are not followed. Representative of the State of Telangana stated that before taking any decision regarding notification of projects and regulation of water, it is necessary that Broad principles of water regulation and an appropriate implementation mechanism are worked out. In this regard, he highlighted that as per KWDT - I award the erstwhile State of Andhra Pradesh has been allocated 811 TMC for utilization in various projects as enbloc. However, as per the arrangement/various decisions taken by the erstwhile State of Andhra Pradesh revised allocations in both the parts of the State came to be 512 TMC in Andhra Pradesh and 299 TMC in Telangana.
4. The representative of Andhra Pradesh contested that the share of Telangana is only 279 TMC and additional 20 TMC will be available to them for Bhima Lift Project only after the completion of modernization of Krishna Delta System. The representative of Telangana contended that revised allocations statement

submitted by the erstwhile Andhra Pradesh before KWDT - II has to be adhered to by both the States.

5. It was agreed in the meeting that the figures of share of the two States as mentioned in the list of projects dated 18-10-2013 (appended herewith as Annexure) may be followed as the working arrangement for the current year only without prejudice to the rights of the two States about their entitlements which have been raised or to be raised before appropriate fora.
6. The representatives of both the States agreed that they may utilize their share of water wherever they decide subject to availability of water at that place and without affecting the rights of other State.
7. Thereafter, project related issues were discussed and following working arrangements for the water year 2015-2016 only were agreed as a temporary measure.

Nagarjuna Sagar Project

8. After detailed deliberations, it was agreed that the water share of both the States from this project would be as mentioned in the Annexure. KRMB would duly consider the requirements of both Andhra Pradesh as well as Telangana State as per existing practice while regulating the water of Left Bank Canal.
9. It was agreed that while considering the demands of two States the due priority would be given to the drinking water requirements of all the areas including the twin cities of Hyderabad and Secunderabad as per Schedule XI of the AP Reorganisation Act, 2014.

Krishna Delta System

10. As per the Tribunal award, 181.2 TMC of water has been allocated for Krishna Delta Project, i.e. Prakasham Barrage at Vijayawada. However, as per Annexure enclosed the share of Krishna Delta is 151.2 TMC.
11. The water requirements for Krishna Delta are met from intermediate contribution supplemented by NSP. In so far utilizable water yield downstream of Nagarjuna Sagar by Paleru, Munneru and Musi is concerned, Govt. of Andhra Pradesh stated that this is only 20 TMC. According to representative of Govt. of Telangana, this yield is 101.2 TMC. It was agreed that actual utilizable water

from intermediate catchment may be taken into consideration by KRMB while determining releases to Krishna Delta.

The utilizable quantity of water from the intermediate catchment downstream of Nagarjuna Sagar would be assessed by the CWC for consideration of KRMB by taking the flow data from Musi, Paleru and Munneru Streams, storage in Pulichintala and measurement of actual discharges through the canals in Krishna Delta. That quantity shall be deducted from the total allocation and the same shall be supplemented through Nagarjuna Sagar Project for the irrigation and command of Krishna Delta System.

12. The representative of Govt. of Andhra Pradesh mentioned that the cost of Krishna Delta Modernization should be shared by Govt. of Telangana if 20 TMC of water is to be utilized for Bhima Project. Representation of Govt. of Telangana vehemently opposed this idea of cost sharing.
13. It was suggested that the water would be regulated at Nagarjuna Sagar Project duly considering the requirements of its Canal System and requirements of Krishna Delta System.

Srisaillam Reservoir Project

14. It was noted that there is 5 TMC requirement for Chennai Water Supply (AP and TS share) through Telugu Ganga Canal and another 19 TMC requirement for SRBC. It was agreed that while making releases for power generation the committed utilizations for Nagarjuna Sagar and Srisaillam Reservoir as mentioned above/in the Annexure may be ensured.

Implementation Mechanism

15. A Committee comprising of E-in-Cs of the two States and Member Secretary of KRMB would consider the indents raised by the project authorities keeping in view of the overall availability of water and requirements raised by the concerned project authorities and make recommendation to KRMB. The decision taken by KRMB shall be implemented by the concerned State project authorities.

16. The above mentioned Committee will also regulate the release of water through KC Canal, Jurala and RDS as mentioned in the Annexure.
17. It was agreed that for current year the quantity of water available after allocation of 811 TMC would be shared proportionately. Similarly, the deficit below 811 TMC would also be shared accordingly.
18. The entire arrangements agreed for the current year would be without any prejudice to the stand of both the States before any forum.

The meeting ended with a Vote of Thanks to the Chair.

Sd/- dt. 19.06.2015
A. N. DAS
Principal Secretary, WRD
Govt. of Andhra Pradesh

Sd/- dt. 19.06.2015
S. K. Joshi
Principal Secretary, I & CAD Dept.
Govt. of Telangana

Sd/- dt. 19.06.2015
Dr. Amarjith Singh
Additional Secretary
Ministry of WR, RD & GR

Appendix to Annexure - 3

Andhra Pradesh and Telangana Projects in Krishna Basin

Sl. No.	Name of the Project	As per Bachawat Report	Re-allocation	Region-wise allocations			Total
				Rayalaseema	Coastal Andhra	Telangana	
1	2	3	4	5	6	7	8
I	Specific Projects in Region						
1	Krishna Delta	181.20	152.20	-	152.20	-	152.20
2	Muniyeru Project	3.30	3.30	-	3.30	-	3.30
3	Pakhal Lake	2.60	2.60	-	-	2.60	2.60
4	Wyra	3.70	3.70	-	-	3.70	3.70
5	Palair	4.0	4.0	-	-	4.0	4.0
6	Dindi	3.70	3.50	-	-	3.5	3.5
7	Kurnool-Cuddapah Canal	39.90	31.90	31.90	-	-	31.90
8	Koilsagar	3.90	3.90	-	-	3.90	3.90
9	Tungabhadra Right Bank Low Level Canal	29.50	29.50	29.50	-	-	29.50
10	Tungabhadra Right Bank High Level Canal Stage- I & II	32.50	32.50	32.50	-	-	32.50
11	Rajolibanda Diversion Scheme	15.90	15.90	-	-	15.90	15.90
12	Bhairavanitippa	4.90	4.90	4.90	-	-	4.90
13	Musi	9.40	9.40	-	-	9.40	9.40
14	Lankasagar	1.0	1.0	-	-	1.0	1.0
15	Vykuntapuram Pumping Scheme	2.60	2.00	-	2.0	-	2.0
16	Kotipallivagu	2.0	2.0	-	-	2.0	2.0
17	Guntur Channel	4.0	4.0	-	4.0	-	4.0
18	Okachettivagu	1.90	1.90	-	-	1.90	1.90
19	Gajuladinne	2.0	2.0	2.0	-	-	2.0

20	Jurala	17.84	17.84	-	-	17.84	17.84
21	Water Supply to twin cities of Secunderabad and Hyderabad	3.90	5.70	-	-	5.70	5.70
22	Minor Irrigation	116.26	111.26	12.24	9.87	89.15	111.26
Total (I)		486.00	445.00	113.04	171.37	160.59	445.00
II	Common Projects						
23	Nagarjuna Sagar Project	281.00	280.00		174.30	105.70	280.00
24	Srisaïlam (Evaporation losses)	33.00	33.00	11.00	11.00	11.00	33.00
25	Chennai city Water Supply		5.00	1.66	1.67	1.67	5.00
Total (II)		314.00	318.00	12.66	186.97	118.37	318.00
III	New Projects based on savings & return flows						
26	Srisaïlam Right Branch Canal		19.00	19.00			19.00
27	Pulichintala Project		9.00		9.00		9.00
28	Rajiv (Bhima) Lift Scheme (from Jurala foreshore)		20.00			20.00	20.00
29	Return flows	11.00					
Total (III)		11.00	48.00	19.00	9.00	20.00	48.00
Total (I+II+III)		811.00	811.00	144.70	367.34	298.96	811.00

Note:

1. The above statement is prepared based on the location of the projects for which allocations are made by KWDT - I.
2. Hyderabad water supply scheme was taken up with consumptive use of 3.3 TMC by making reallocations of 0.2 TMC from Dindi Project, 0.6 TMC from Vykuntapuram P.S, 1.0 TMC from Nagarjuna Sagar Project and saving of 1.50 TMC out of 3.9 TMC towards water supply to twin cities. (Govt. of Andhra Pradesh Irrigation Dept G.O.Ms.No.19 dt: 05.02.2003).

3. Bhima Lift Irrigation project in Mahabubnagar District (20 TMC) and Pulichintala project (9 TMC towards evaporation losses) are taken up against the savings proposed by modernizing the Krishna Delta. (CWC approval vide 64th meeting of the Advisory Committee letter No.10/27/96-PA (N)/502-550 dt: 16.04.1996).
4. Srisailam Right Branch Canal was taken up with the return flow of 11 TMC allocated by Bachawat Tribunal and 8 TMC by way of savings due to modernization of K.C Canal system. (CWC approval vide 58th meeting of the Advisory Committee letter no.16/27/94-PA (N) dt: 04.07.1994).
5. 5 TMC reallocated towards AP's contribution for Chennai water supply as per the Agreement dated 14.04.1976 among the Govt. of A.P., Karnataka and Maharashtra. This 5 TMC is shown equally among three regions out of minor irrigation allocations.
6. The evaporation loss of 33 TMC for Srisailam reservoir is shown equally among three regions.
7. The allocation of Nagarjuna Sagar Project is shown as per "Nagarjuna Sagar Project, Third Revised project Estimate 2000" and the evaporation loss is included in proportion to allocations.

Yours faithfully,

Sd/- dt.18.10.2013
Chief Engineer (OSD), IS & WR
For Chief Engineer (OSD) / IS & WR

The Canal/ Scheme-wise Drawals of Water by Andhra Pradesh and Telangana from Common Reservoirs of Srisaïlam and Nagarjuna Sagar during 2019-20 (in TMC)

Sl.No.	Name of the Project	Water drawn by AP	Water drawn by TS	Total
I	Srisaïlam			
	(i) From Pothireddypadu Head Regulator (Including Srisaïlam Right Branch Canal, Telugu Ganga Project, etc)	169.668	---	271.922
	(ii) Handri Niva Sujala Sravanthi & Mutchumarri LI Scheme	47.328	---	
	(iii) Chennai Water Supply	3.333	1.667	
	(iv) Mahatma Gandhi Kalwakurthy Lift Irrigation Scheme	---	49.926	
II	Nagarjuna Sagar Project			
	(i) Nagarjuna Sagar Right Canal (Jawahar Canal)	160.265	---	471.202
	(ii) Nagarjuna Sagar Left Canal (Lal Bahadur Canal – Common to both the States)	131.550		
	(iii) Alimineti Madhava Reddy Project (AMRP) Lift Irrigation Scheme	---	60.107	
	(iv) Hyderabad Metro Water Supply & Sewerage Board (HMWS & SB)			
	(v) Krishna Delta System (excluding diversion of Godavari waters)	119.280	---	
			Total	743.124

Annexure - 5

**Details of Hydro Power Projects on Krishna River in the States of
Andhra Pradesh and Telangana**

Sl. No.	Hydro Power Project	Capacity (MW)	FRL	MDDL	Discharge	Pump mode operation facility	State
1	Priyadarshini Jurala	6 x 39	+318.516 m	+314.86 m	--	--	Telangana
2	Lower Jurala	6 x 40	+299.000 m	+294 .00 m	--	--	Telangana
3	Srisaïlam Right Bank	7 x 110	+269.748 m	+254.200 m	--	--	Andhra Pradesh
4	Srisaïlam Left Bank	6 x 150	+269.748 m	+243.84 m	--	All turbines are of reversible type for pump mode operation	Telangana
5	Nagarjuna Sagar Dam	1 x 110 + 7 x 100.8	+179.832 m	+154.230 m for conventional and +150.880 m for reversible unit	4700 cusec for conventio nal/ 4300 cusec per unit for reversible	7 x 100.80 MW turbines are of reversible type for pump mode operation	Telangana
6	Nagarjuna Sagar Right Canal	3 x 30.6	+179.832 m	+161.544 m	5000 cusec per unit	--	Andhra Pradesh
7	Nagarjuna Sagar Left Canal	2 x 30.6	+179.832 m	+167.030 m	--	--	Telangana
8	Nagarjuna Sagar Tail pond	2 x 25	+75.50 m	+74.0 m	--	--	Andhra Pradesh
9	Pulichinthala	4 x 30	+53.34 m	+42.67 m	--	--	Telangana



PRAKASHAM BARRAGE



Krishna River Management Board

**5th Floor, Jalasoudha, Errum-Manzil,
Hyderabad – 500 082**

Tel: 040-23301858; ***Fax:*** 040-23301655

E-Mail: krmb.hyd@gmail.com