**INDUS RIVER SYSTEM AUTHORITY (IRSA)**

**Government of Pakistan**

***Islamabad, October 1st, 2020***

IRSA Advisory Committee meeting was held on October 1st, 2020 to approve the Rabi 2020-21 *Anticipated Water Availability Criteria* from October 1st, 2020 to March 31st, 2021 under the Chairmanship of Engr. Syed Zahid Abbas, Chairman / Member IRSA KPK at IRSA HQs Islamabad. The following were present: -

1. *Engr. Rao Irshad Ali Khan, Member IRSA Punjab.*
2. *Engr. Zahid Hussain Junejo, Member IRSA Sindh.*
3. *Engr. Asjad Imtiaz Ali, Member IRSA Federal.*
4. *Engr. Abdul Hameed Mengal, Member IRSA Balochistan.*
5. *Mr. Ahmed Kamal, CEA & CFFC, Ministry of Water Resources (MoWR).*
6. *Mr. Saif Anjum, Secretary Irrigation Deptt., Punjab.*
7. *Mr. Janat Gul, Spl Secretary, Agriculture Deptt, KPK.*
8. *Mr. Jamaluddin Mangan, Additional Secretary (T), Irrigation Deptt, Sindh.*
9. *Mr. Fareed Ahmed Mughal, GM, TDO, WAPDA.*
10. *Mr. Jamil Akhtar, GM (Power), Tarbela, WAPDA.*
11. *Mr. Muhammad Awais, GM (HRM), WAPDA.*
12. *Mr. Muhammad Khalid Idrees Rana, Director (Opr), IRSA.*
13. *Agha Ehsan Ullah, Director Regulation, Irrigation Deptt, Sindh.*
14. *Engr. Riaz Ahmed Baloch, S.E. Patfeeder Canal, Irrigation Deptt, Balochistan.*
15. *Engr. Zahoor Muhammad, S.E. (H/Q) / Director Hydrology, Irrigation Deptt., KP.*

2. IRSA Advisory Committee reviewed the Kharif 2020 system operation and observed that the actual Rim-Station inflows of 97.80 MAF remained 10% less than forecasted volume of 108.24 MAF. Despite reduction in inflows, the Committee expressed satisfaction that the actual provincial withdrawals remained at 65.106 MAF and provinces got indented supplies. By the Grace of Almighty Allah both Tarbela and Mangla Reservoirs were filled to their maximum capacity on 28th August, 2020 by efficient and integrated operation of IRSA despite below normal inflows. The actual system losses were 12.374 MAF as compared to anticipation of 17.633 MAF and downstream Kotri releases remained 14.698 MAF. The Committee appreciated the efforts of Chief Engineer Chashma Barrage regarding the flushing of sediments from the reservoir carried out in last Ten-daily of August, 2020. It was expected that this flushing operation would reclaim considerable lost storage volume. The Committee also valued the facilitation of IRSA and the role of Flood Mitigation Committee (FMC) of Mangla Reservoir in mitigating of flood peaks in late August 2020, successfully.

3. IRSA Advisory Committee discussed the recommendations of IRSA Technical Committee Meeting held on 25.09.2020 and approved the following likely Anticipated Water Availability for Rabi 2020-21: -

1. Rim Station Inflows:

**MAF**

1. Indus @ Tarbela = 8.574
2. Kabul @ Nowshera = 4.326
3. Jhelum @ Mangla = 4.902
4. Chenab @ Marala = 4.442
5. Eastern Rivers Component = 1.200
6. Total = **23.444**
7. Based on the above Rim Station Inflows plus storage release of 12.054 MAF minus the expected system losses of 2.487 MAF and minor involuntary escapage downstream Kotri of 0.044 MAF, the approved likely availability at respective provincial canal heads was approved as:

**MAF**

1. Punjab = 17.813
2. Sindh = 13.433
3. KPK (CRBC) = 0.701 Exempted from
4. Balochistan = 1.022 Shortages
5. Total = **32.968**

4. The above-mentioned likely availability at canal heads of 32.968 MAF was 13% higher than last year’s availability of 29.20 MAF and 9% higher than 10-year’s average of 30.22 MAF. The Basin-wide shortage was approved as 10% which was less than previous Rabi 2019-20’s forecasted shortage of 15% and actual shortage of 20%. It was agreed by the participants that the likely projected shortages were manageable and hopefully the cropping targets for Rabi 2020-21 would be achieved be applying efficient and best water management practices. It was also decided that remaining within the above indicated likely shares, the provinces would submit their withdrawal plans within 15 days.

5. The IRSA Advisory Committee also approved additional allocation of 0.149 MAF for Kachhi Canal of Balochistan. However, carry-over storage of 0.5 MAF for Early Kharif 2021 was linked with mid-season-review of the anticipated Rabi Criteria 2020-21 and in case of better inflows carry-over storage provision would be revisited.

6. The Committee was apprised that Commonwealth Scientific and Industrial Research Organization (CSIRO) - within the umbrella of Australian Aid and under supervision of IRSA, MoWR, WAPDA and focal persons of the provinces - had prepared a software named as Water Apportionment (WAA) Tool, which forecasted Rim-Station inflows and performed system operation by running the reservoirs on set rules, routing the flows in the river network with accompanying losses / gains, allocating shares to the provinces on different sharing options and releasing excess water downstream Kotri, if available. It followed the same statistical and analytical techniques as manually adopted by IRSA and thus saved a lot of time by calculating system operation in a matter of seconds. With this ease of fast computing, the Tool had the capacity to calculate and present with different system operation scenarios, which previously consumed a lot of time. The Committee was informed that calculations of the Tool for Anticipated Criteria Rabi 2020-21 matched exactly with the assessments of IRSA and that the shortage predicted by the Tool was also 10 %. The Committee appreciated the efforts of CSIRO, IRSA and all others involved in the development of the WAA Tool. It was also agreed that IRSA would impart briefing to PIDs regarding the development and working of the WAA Tool.

**END.**