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MOVING FORWARD TOGETHER

Pathways for quality-oriented growth through resilient and water-secure Asia and the Pacific

Resilient and Water-Secure Asia and the Pacific

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Quality of growth, Resilience and Water Security in Asia

#3 Key trends

Pathways lie in accelerating the implementation of 2030 Agenda– capitalizing of advances in STI and innovative financing

Quality of growth (SDG)

1

SDG: Progress has been insufficient and has slowed down in Asia Region has regressed on climate action (Goal 13): Mitigation and Adaptation, and Sustainable consumption and production (Goal 12)

Resilience (Sendai Framework for DRR)

2

None of the Sendai Framework's 'substantially reduce' targets are on achieved by 2030:

Direct economic loss and damage to critical infrastructure have increased substantially over the past decade

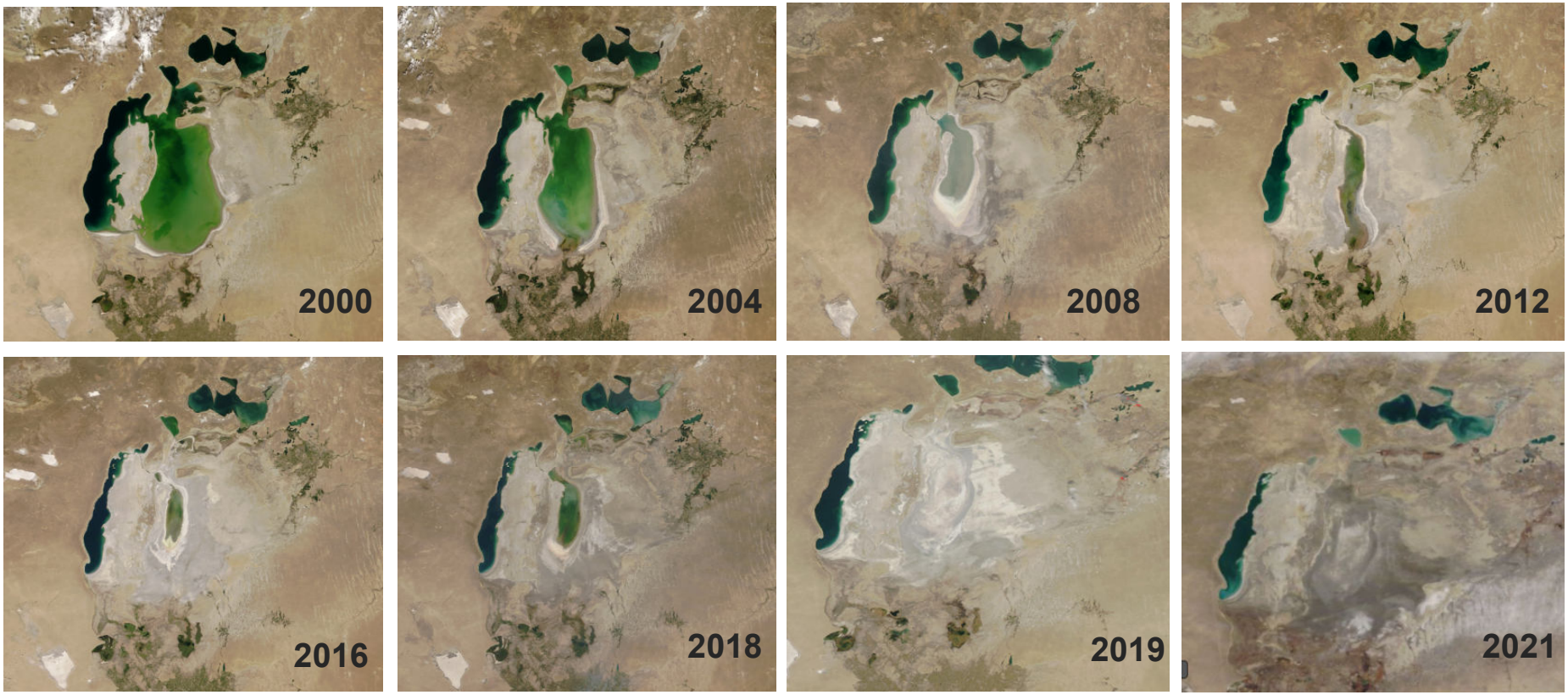
'Code red' for human driven global heating: IPCC

3

Climate change is widespread, rapid, and intensifying, and some trends are now irreversible,

Intensification of floods, drought, tropical and heatwaves

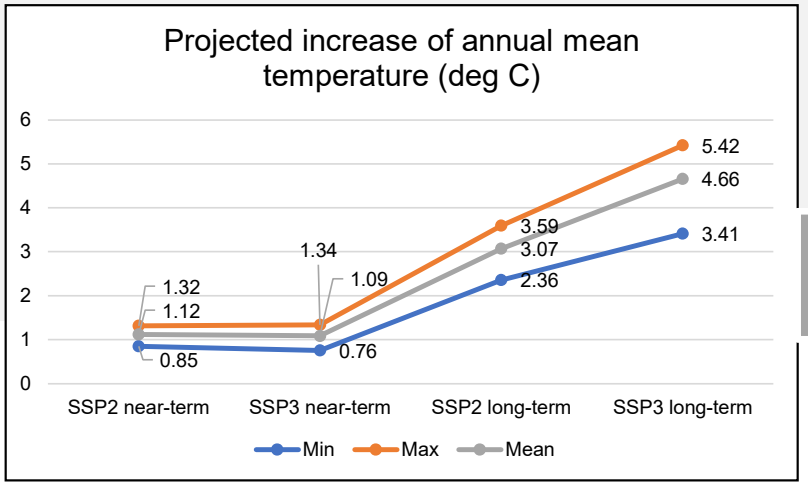
The shrinking Aral Sea in Central Asia indicates the trend..



Source : (MODIS) on NASA's Terra satellite

Disclaimer : The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Projected climate scenarios: Aral Sea

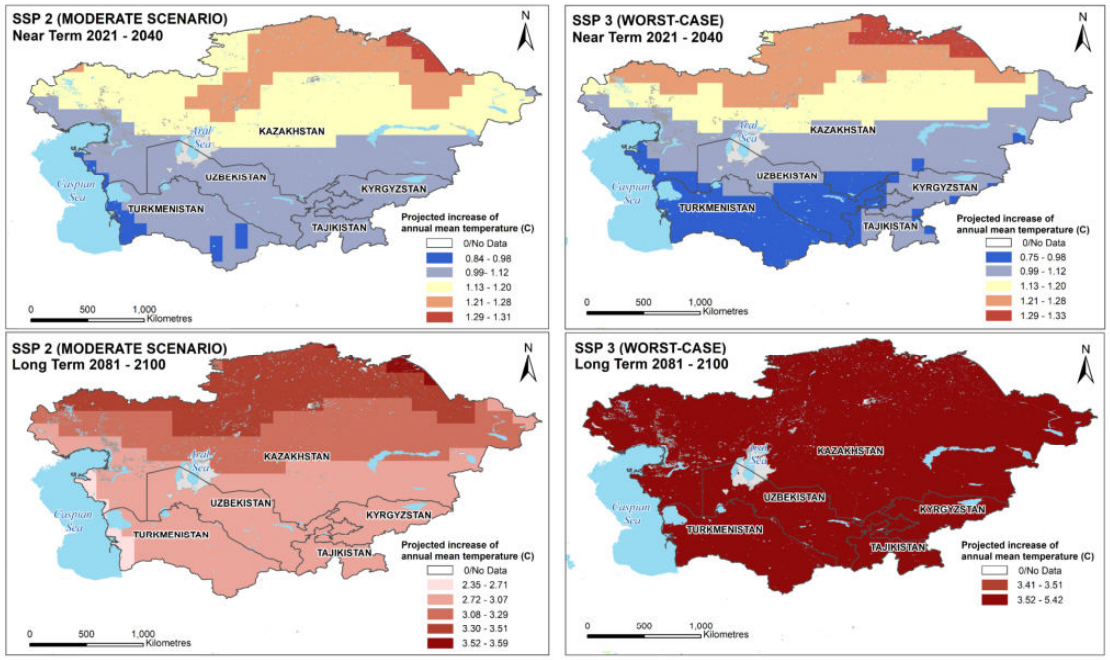


- SSP2 – RCP 4.5 (moderate), 2021-2040 (near-term), 2081-2100 (long-term)
- SSP3 – RCP 7.0 (worst-case), 2021-2040 (near-term), 2081-2100 (long-term)

Projected average increase of annual mean temperature under SSP2 near-term to SSP3 long-term is between 1.12 to 4.66°C in Central Asia. The maximum temperature rise between 1.32 to 5.42°C.

West Central Asia and East Central Asia: Observed **increase** in hot extremes and **high** confidence in human contribution to the observed changes *(IPCC, AR6 – Summary for policymakers, 2021)*

The evidence is mostly drawn from changes in metrics based on daily maximum temperatures; regional studies using other indices (heatwave duration, frequency and intensity) are used in addition.



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Pathway (1): #5 Adaptation priorities for managing and mitigating in-land water disasters in the Aral Sea that also support simultaneous progress on multiple SDGs

Improving dryland agriculture crop production	Making new infrastructure resilient	Making water resources management more resilient	Nature based solutions: green infrastructure	Multi-hazard risk assessment and early warning systems
				

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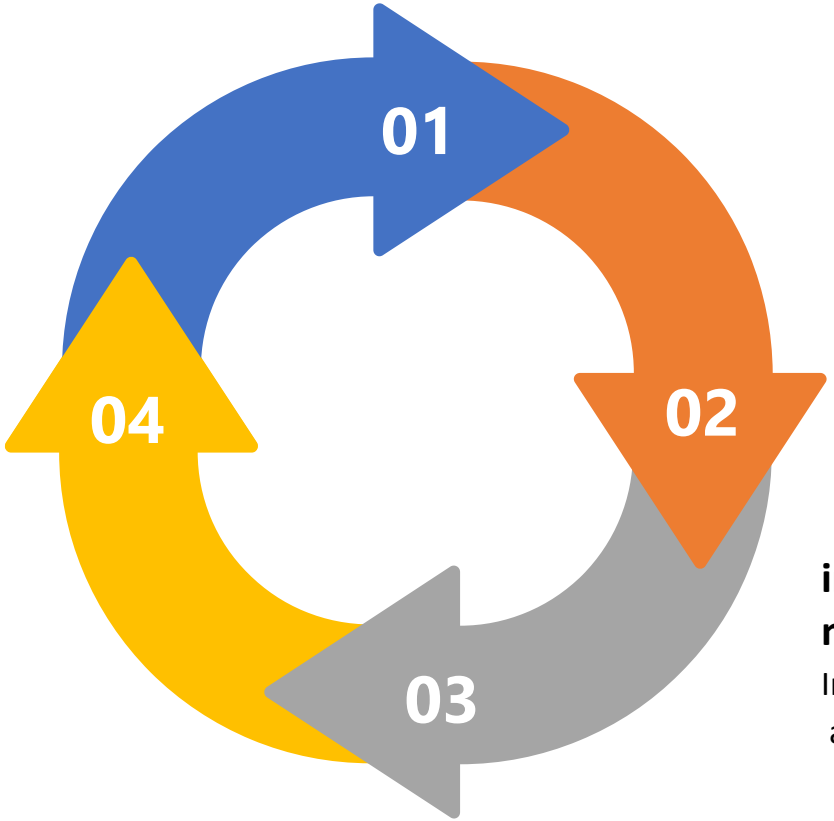
Pathway (2): Resilient water infrastructure

Water-energy and food nexus approach

Infrastructure is the key

responsible for 79 % emissions and 88% adaptation costs, across a range of sectors



Water sector is critical

adapt to the impacts of climate change, at 54 % of all adaptation costs

New generation water infra: grey and green infra

To reduce the cost for flood risk management and protect coastal cities

integrated water resources management (IWRM)

Interdependencies and impacts across subsectors (SDG 6)

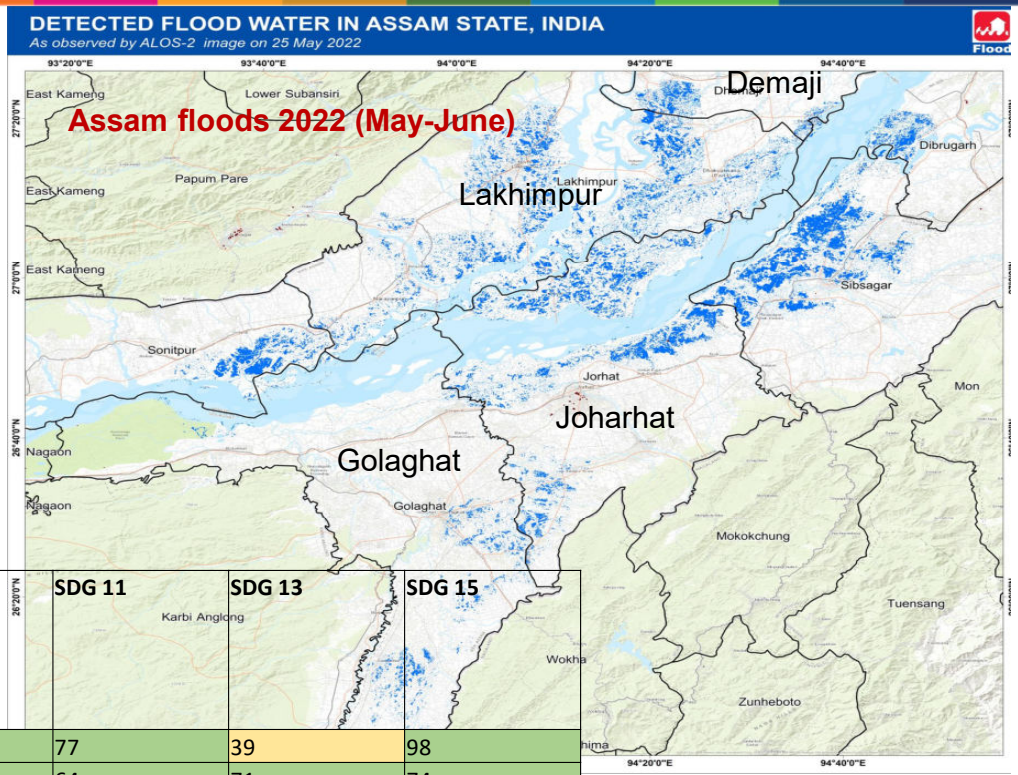
Source: Infrastructure for climate action, UNOPS, UNEP and Oxford University 2021

Pathway (3): Capitalize on STI for localizing SDGs

Assam (India) records one of the highest number of flood events across India (1969-2019): Many districts have low SDGs (2, 13)

2022 Assam floods impact severely SDGs
SDGs (2/13) already low in Golaghat, Demaji, Lakhimpur, Jorhat..
Floods impacts on agriculture will affect the progress

Small and marginal farmers bear the brunt



Districts	Composite SDG Score	SDG 1	SDG 2	SDG 3	SDG 9	SDG 11	SDG 13	SDG 15
Cachar	68	56	49	60	94	77	39	98
Dhemaji	66	64	42	61	94	64	71	74
Dibrugarh	68	64	55	59	95	71	38	87
Golaghat	67	65	48	58	94	70	70	71
Hailakandi	67	52	45	59	96	71	72	93
Jorhat	70	65	47	57	96	73	75	83
Karbi Anglong	64	50	48	61	78	67	35	81
Karimganj	69	56	50	61	93	73	76	98
Lakhimpur	69	68	42	63	90	76	74	77
Nagaon	67	61	48	61	96	70	73	80
Sibsagar	68	61	54	62	92	69	77	90
Sonitpur	69	65	51	59	94	75	74	78

Source: Sentinel Asia, AIT

Front runner

Performer

Aspirant

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An Initiative of the Asia Pacific Disaster Resilience Network

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