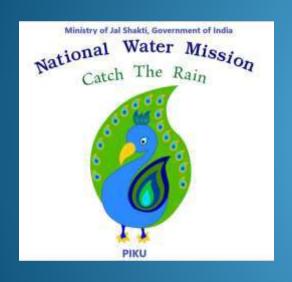
Training for NYKS District Co-ordinators

22-Jan-2021



Catch The Rain

where it falls, when it falls for

TANKER MUKTH INDIAN SUMMERS

National Water Mission Ministry of Jal Shakti

> **G. Asok Kumar** Addl Secy and MD, NWM Ministry of Jal Shakti



Jal Shapath

On 1st January 2021

In All States/ UTs of India

No. of Districts: 623

No of villages : **56**, **158**

Total Participants: 12.32 lakh
Officials, National Youth
Volunteers, Members of
Youth Clubs and Villagers



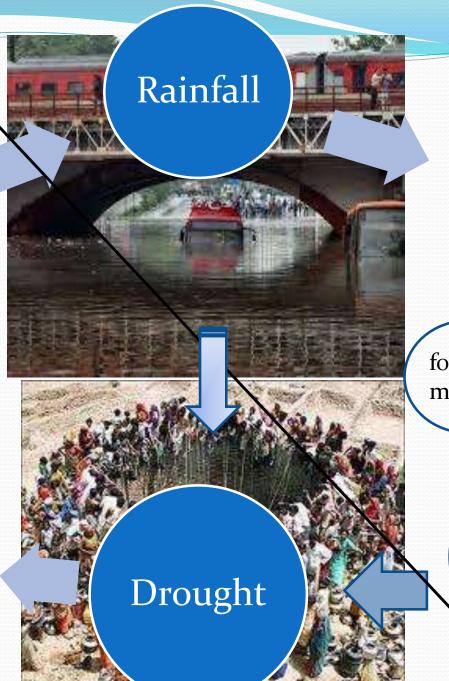




Farmers Suicides

Eight months

Tankers

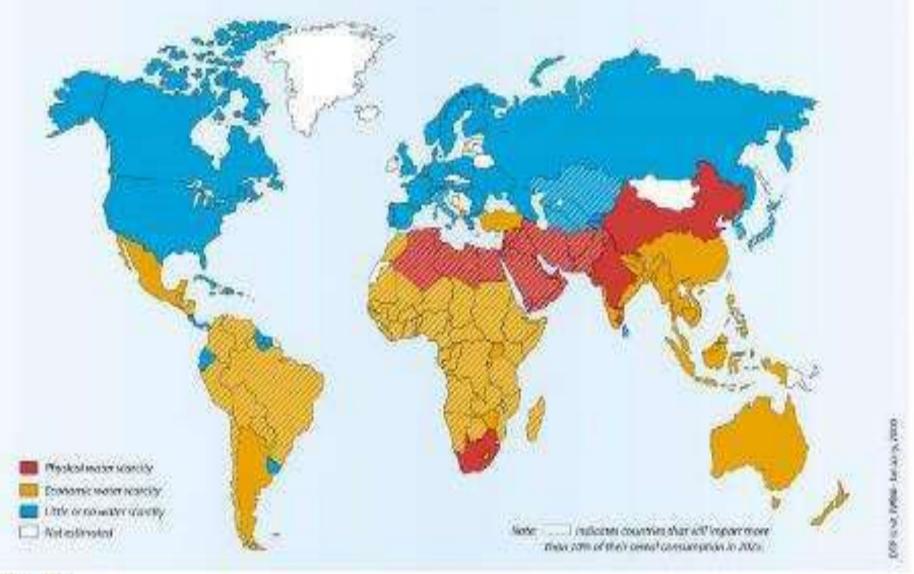


Floods

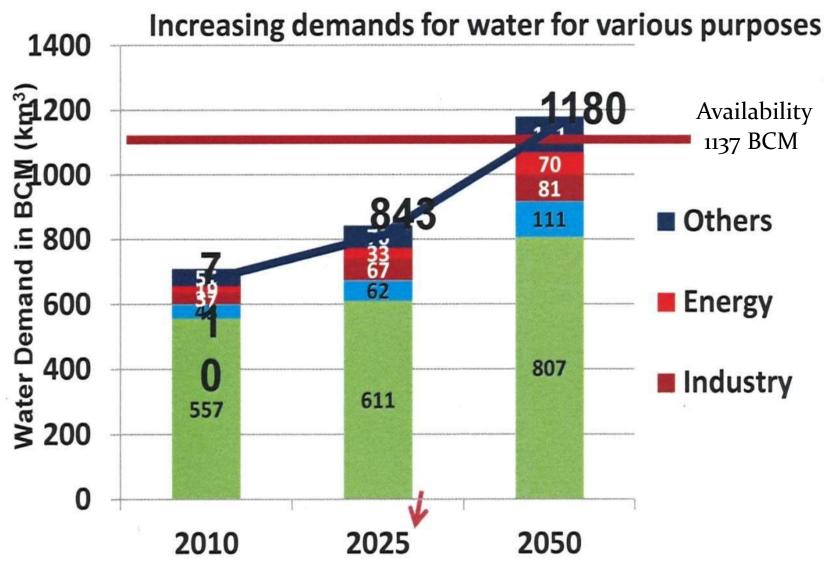
four months

Damages

Projected Water Scarcity in 2025







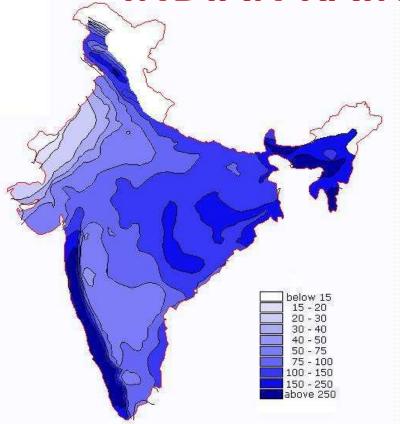
* As estimated by National Commission for Integrated Water Resources Development (NCIWRD), 1999

Year

Water resource challenges in India

- India is dependent upon monsoons for water availability
- More than 70% of the river annual flows are during monsoons.
- However around 50% of the rain falls in just 15 days.
- These intense rainfall causes flash flooding in many areas and with poor storage results in droughts later-on (e.g. Kerala floods in 2018)
- The per capita water availability have decreased from 1816 m³ in 2001 to 1545 m³ in 2011.
- The live water storage is only around 209 m3/capita which is very low.
- (US-2192 m3; Aus-3223 m3; Canada-25337 m3/capita)

INDIAN RAINFALL BEHAVIOUR





- ➤ High Spatial variability
- Unpredictable and erratic monsoon

- High Temporal variability
- ➤ Limited days of rainfall
- High Seasonal variability

Problem Statement

India

- has 18% of world's population,
- has 4% of world's fresh water, (85-89% is used in agriculture)
- (Even a 10% reduction in agriculture water usage will result in a significant saving)
- uses 2-3 times water to produce one unit of major food crops compared to major countries like China, Brazil and USA.
- extracts more ground water than USA and China put together
- largely uses flood irrigation technique which results in huge wastage of water
- has water intensive crops like paddy and sugarcane together grown over one-fourth of the gross cropped area, consuming over 60% of the total irrigation water supplied to agriculture.

WE ARE NOT REPLENISHING THE WATER DRAWN OUT We need to Catch the Rain

Why CATCH THE RAIN?

IT IS INDIA'S MAJOR WATER SOURCE

NATURE GIVES US ENOUGH WATER

State/UT	Area (Sq. Km)	Population	Rainfall (mm)	Rainfall Per Person per day (Litres)	
Delhi	1,483	1,67,87,941	612	148	
Puducherry	490	12,47,953	1,383	1,488	
Tripura	10,486	36,73,917	2,228	17,422	
Madhya Pradesh	3,08,252	7,26,26,809	917	10,663	
Uttarakhand	53,483	1,00,86,292	1,523	22,125	

So we need to keep our VESSELS READY

Catch The Rain- campaign concept

Catch The Rain, with the tagline Catch the rain, where it falls when it falls is to Nudge states and stakeholders:

- to create appropriate
 <u>Rain Water Harvesting Structures</u>
 (RWHS)
- suited to the climatic conditions and sub-soil strata,
- with People's Active Participation, (before the onset of monsoon).

Ancient practices of Rainwater Harvesting in India





Jhalara (Step wells)

- They are typically rectangular shaped stepwells wit tiered steps
- The stepwells collect subterranean seepage from an upstream reservoir or a lake
- The main aim of the **Jhalaras** were to ensure easy and regular supply of water for religious rites, royal ceremonies and community

Tankaas (storage tanks)

- The traditional rainwater harvesting technique is indigenous to the Thar desert region, Rajasthan
- It is a cylindrical paved underground pit collecting water from rooftops, courtyards or artificially prepared catchments flows
- Once filled, it can serve a family of 5-6 members throughout the dry season.



Johads in Rajasthan

- One of the oldest system to conserve and recharge ground water
- It is a earthen check dam that capture and store rainwater
- Constructed in an area with naturally high elevation
- Sometimes, several
 Johads are interconnected

Benefits if we CATCH THE RAIN?

- Water stored in these "natural vessels" will
 - Improve Soil moisture
 - Increase water table
 - Reduce cost of pumping, saves money, energy
 - Increase greenery and vegetation
 - Better environment- good water bodies- better aesthetics, better health, better life
 - Reduce drinking water problems in Summer
 - Enabling "Tanker Mukth Indian Summers"

Benefits if we CATCH THE RAIN?

- Water collected in these "natural vessels" will
 - Reduce urban flooding and water logging
 - Reduce flood-damages to roads, property
 (Urbanisation, Compaction and Concretisation has reduced Permeability and increased run-off)
 - do Crowd Saving, (Opposite to "Crowd Sourcing",) and can lead to decentralized storage of water, is environmentally sound, is cost effective and can be done with people's participation

Catch The Rain -activities proposed

- Roof-top RWHS in all buildings
- Water harvesting pits in all compounds
- New and repairing of old Check dams/ponds
- Removal of encroachments of tanks.
- De-silting of tanks to increase their storage capacity
- Removal of obstructions in the channels which bring water to them from the catchment areas
- Repairs to traditional step-wells and other RWHS
- Using defunct bore-wells/unused wells to recharge aquifers

with active participation of the people

Catch The Rain Campaign -Plan of Action

- **1. Set up "Rain-Centers"**(RCs) or Jal Shakti Kendras (JSK)in all the districts- Collectorates/ Municipalities/GP offices.
- All RCs/JSK to:
- have a dedicated mobile phone number
- have an engineer/NGO/a person trained in RWHS
- act as a technical guidance centre of district –
 how to catch the rain, as it falls, where it falls
- 2. All buildings in district should have rooftop RWHS-
- No or limited will water only to flow out of the compound
- Prevent urban flooding and its consequences!
- 3. Enumerate all water bodies in districts, (check with revenue records) and encroachments removed

Catch the Rain- Actions taken so far (6)

AS & MD sent DO letters to 720 District Magistrates on 11 May 2020, 9th October and 8th December requesting them to join in the Catch the rain campaign and

To Open Rain Centers in their districts & conserve Rain water by

- Taking up: Roof top RWHS in all government buildings,
- RWHS in <u>compounds</u> of all Government and private <u>institutions</u> <u>having large landed area</u>- like Universities, schools, Colleges, PSUs
- <u>Creating new</u> water harvesting structures,
- Enumerating and rejuvenating <u>existing</u> water bodies;
- <u>De-silting</u> of tanks, <u>removing encroachments</u> from tanks and channels which bring water to these tanks
- Reviving old wells & defunct bore wells to collect water with active participation of the people

STATE BANK OF INDIA

LOCAL HEAD OFFICE BHOPAL



यूनियन बैंक ण

क्षेत्र महाप्रबंधक कार्यालय दिल्ली क्षेत्रीय कार्यालय दिल्ली (दक्षिण)



Union Bank

Field General Manager's Office Regional Office Delhi (South)





Started "Catch The Rain-Dialogues with District Magistrates"

program every Saturdays from 8 August 2020











dialogue























AB TAK SAATH(17)

























Report of MNREGS works 2020-21

(as on 17 December 2020)

i No.	DISTRICT	Complete Work in 2020-2021				Ongoing Work Since Inception					
		Dug Wells	Traditional water Bodies	Ponds	Water Harvesting and Water Conservation Works	Total Works	Dug Wells	Traditional water Bodies	Ponds	Water Harvesting and Water Conservation Works	Total Wor
RAN	D TOTAL	65728	168541	212421	231241	736371	220434	60603	701769	918415	2034117

JSA-II: Catch The Rain (i)

- Department of Youth Affairs to do a 6 month campaign in
- 623 districts in 31150 villages with
- its 1.74 lakh village based Youth clubs

- This is to be done in 2 parts
- Part 1- December 2020 -March 2021-
- Part 2- April-June 2021 –

JSA-II: Catch The Rain (ii)

- 21st December 2020 to 31st March 2021 the Awareness generation, Field planning phase
- IEC activities, generate buzz in the districts
- Setting up of Jal Shakti Kendras
- Enumeration of water bodies and GIS mapping
- Removal of encroachments, de-silting of tanks
- Planning of new works and repairs to existing structures- preparation of estimates etc of works to be taken up during April- June 2021 phase
- All government buildings to have RTRWHS
- PREPARE GROUND (vessel) to CATCH THE RAIN when it falls in the next Monsoon

Jal Shakti Abhiyan II (iii)

- •1st **April 2021 to 30**th **June 2021** –the implementation and monitoring phase
- Taking up and execution of works planned
- All government buildings to have Roof Top RWHS
- 3 Visits of Central Team members
- Reporting- NYKS and Central team

JSA II: Catch The Rain (iv)

NYKS teams to

- meet **DMs/DCs**, get them on board to **form** district teams
- engage with the district administration, various line government departments & water agencies and sensitize about the need for water conservation & rainwater harvesting
- hold meetings with Sarpanchs, Pradhans, ZP members, MLAs, local influencers & volunteers to further the cause
- Liaise with local NGOs, clubs like Rotary, Lions, RWAs, local celebrities, sports persons, journalists, activists, farmers, industrialists, SHGs, Principals Colleges, HMs of schools etc
- Meet with leaders of religious institutions, sects etc to take up works in the ponds of temples, ashrams, mosques etc
- Launch the program in the district involving everybody

JSA-II: Catch The Rain (v)

NYKS teams to

- get details of ongoing MGNREGS water conservation works
- Organize to GIS map the water bodies
- Take steps to remove temporary encroachments on water bodies and its channels
- identify works to done- repairs to existing and plan new structures
- Take up Community work program such as de-silting, digging, maintenance and repairing of wells, ponds, small water channels, deepening of village ponds, disinfecting drinking water wells, water budgeting
- Funds from MREGS, FC grants, DMF etc with DMs

JSA-II: Catch The Rain (vi)

NYKS teams to organize,

(in water conservation themes):

- Jal Samvad, Jal Chowpals
- Essay competitions, debates, quizes, competitions for painting and slogan writing in colleges, schools and youth clubs
- Rallies, nukkad nataks, shows by folk artists, puppetry
- Runs, mini marathons,, hackathones

JSA-II: Catch The Rain (vii)

- NYKS teams to organize, (in water conservation themes):
 - distribution of IEC materials in electronic, print, social and folk media, posters
 - Slogans writings on wall
 - Jingles in local FMs, city TV channels, theatres
 - Encourage to post regularly in FB, WA, Twitter
 - e-posters in WA, Twitter & other Social media
 - At least a few major activities in every week

"जब हम सब मिलकर मजबूती से प्रयास करते हैं तो असंभव को भी संभव कर सकते हैं। जब जन-जन जुड़ेगा, जल बचेगा।" - प्रधानमंत्री नरेन्द्र मोदी



आहुए बारिश की हर बूँद को बचाएं।

"कैच द रेन'



बारिश के पानी को जमा करना आसान है। उसके लिए छत पर एक साधारण सा सिस्टम लगेगा जिसमें जो पाठा। से बारिश का पानी नीचे रखी देकी में जमा हीता जाएगा ताकि भविष्य में उसका अपयोग किया जा सके।

चारिश के पानी को जमा करने से:

- पानी की साल भर की जरूरतें पूरी हो सकती हैं।
- भूजल के स्तर में सुधार होगा।
- शहरी बाढ़ और जल जमाव घटेगा।

अधिक जानकारी के लिए संपर्क करें - catchtherain.nwm@gmail.com http://nwm.gov.in/catchtherain

वर्षा के जल का संचयन करें, एक बूँद भी बर्बाद न होंनें दें।



Some posters







जल जीवन का अनमोल रतन।







CATCH

National Water Mission

Ministry of Jal Shakti, Department of Water Resources, RD & GR



Some posters



JSA-II: Catch The Rain (viii)

- Local administration is asked to:
 - enumerate water bodies present in the district and co-relate / cross check with revenue records
 - ☐Geo-tag all existing water bodies
 - Mark boundaries of these water bodies on ground, as per records
 - □ Identify and Classify encroachments as permanent or temporary
 - Remove temporary encroachments, forthwith
 - □ Identify channels that bring water to these water bodies and remove encroachments, if any

JSA-II: Catch The Rain (xi)

- Local administration is asked to
 - ■Ensure Roof top RWHS in all government buildings
 - □ Identify structures (RTRWHS, check dams, ponds, dug wells, step wells) those require maintenance
 - Prepare estimates for major repair; works taken up
 - □Plan minor maintenance works to be taken up in April- May period
 - □ Identify new locations for construction of appropriate water harvesting structures (RTRWHS,check dams, ponds, dug wells, step wells) and estimates prepared

JSA-II: Catch The Rain (x)

- Rejuvenation of rivers and streams
 - Rejuvenation of small rivulets to be taken up
 - ■Steps to be taken for revival of wet lands
 - Removal of encroachments in flood plain areas
- Tree plantation and afforestation works to be take up
- Rain Centers/Jal Shakti Kendras to be made functional in all district HQs or at appropriate levels like municipalities, Blocks, Gram Panchayats etc



Thanks, Wishing you all the best to Catch The Rain