



Holding Water in the Landscape with Communities in India

16th MAY 2019 Edinburgh

MINNI JAIN

minni@earthlinksall.com

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Empowering communities to take action for themselves, is a more long lasting solution to alleviating water stress.

“When a drought or flood comes, it doesn't look at whether you are rich or poor. Eventually, it will take everyone in its grip.”

FLOODS AND DROUGHTS
ARE TWO SIDES OF THE
SAME COIN..

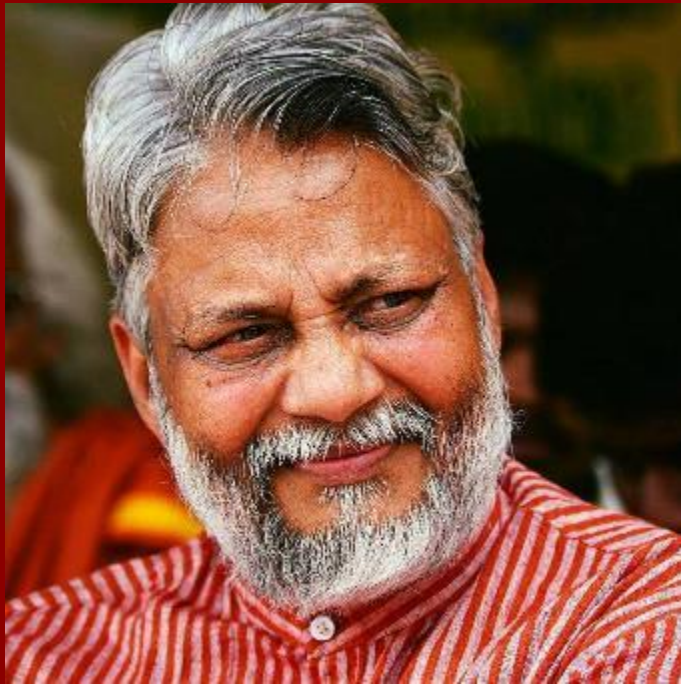
THE SOLUTION IS
HOLDING WATER WHERE
IT FALLS...

The Power of People's Engineering : Community Driven De-centralised Water Management



**A quick
history of
our work in
India**

Rajendra Singh World Water Prize 2015 for this work in Rajasthan- India



Also known as the "Waterman of India", for his pioneering work in community-based water harvesting and water management.

In 2008, The Guardian named him amongst its list of "50 people who could save the planet."

Rajendra Singh too was about to go back to Delhi where he had come from, thoroughly dejected that there was nothing he could do. Until he met this man's father...



*That meeting was to change
the life of that region
forever...*

Drawing the map



Is that ash you're using...?



Ah...I can see it now..



Staking the location



Diggin away the moments that make up a dull day..



Coming along



Looks an impressive
intervention.. *WE BUILT IT!!*



The 'river' in 1985



The river in 2000 (and today)

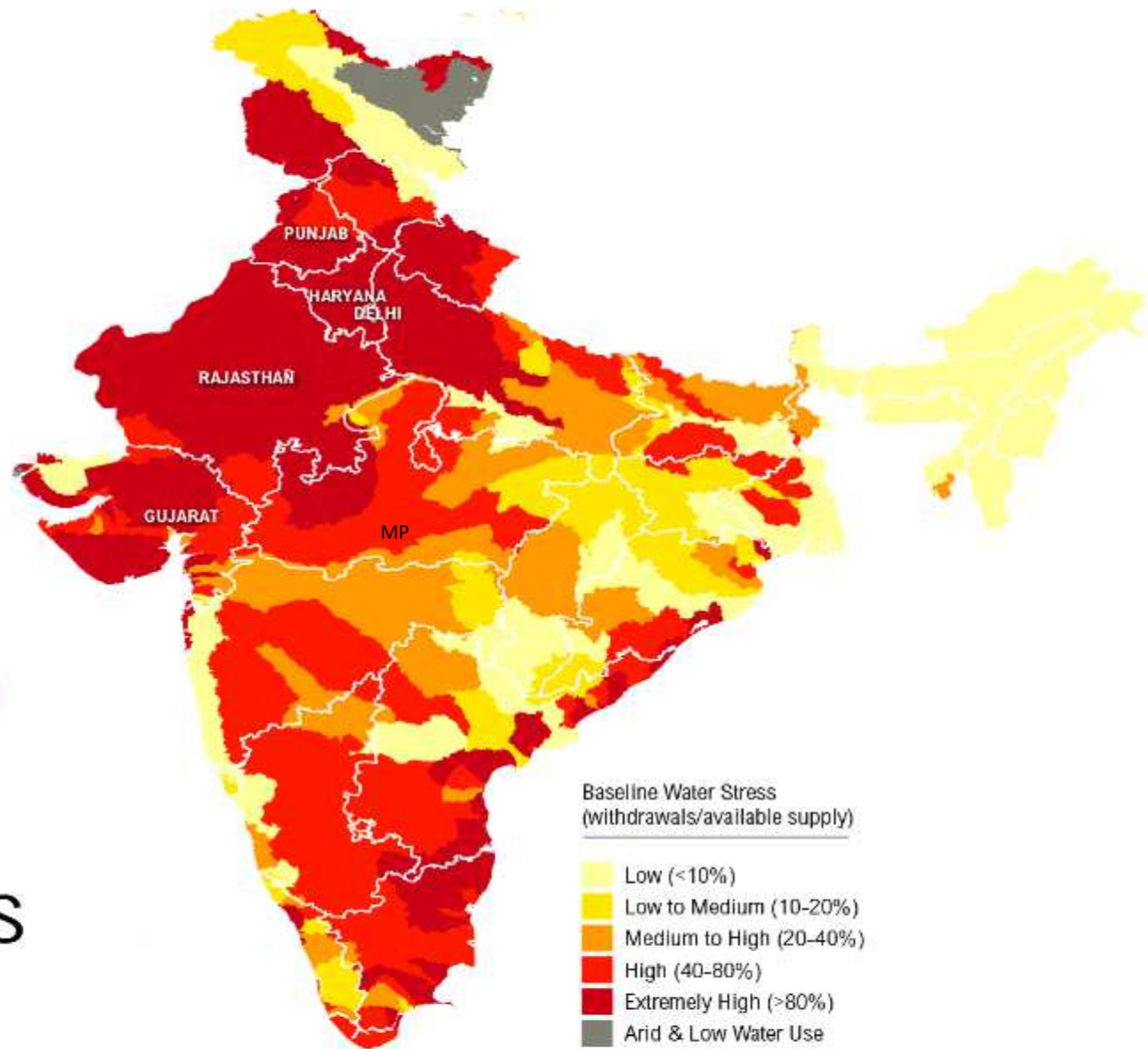


**15,000 Structures have been built
since then**

7 rivers have been revived..

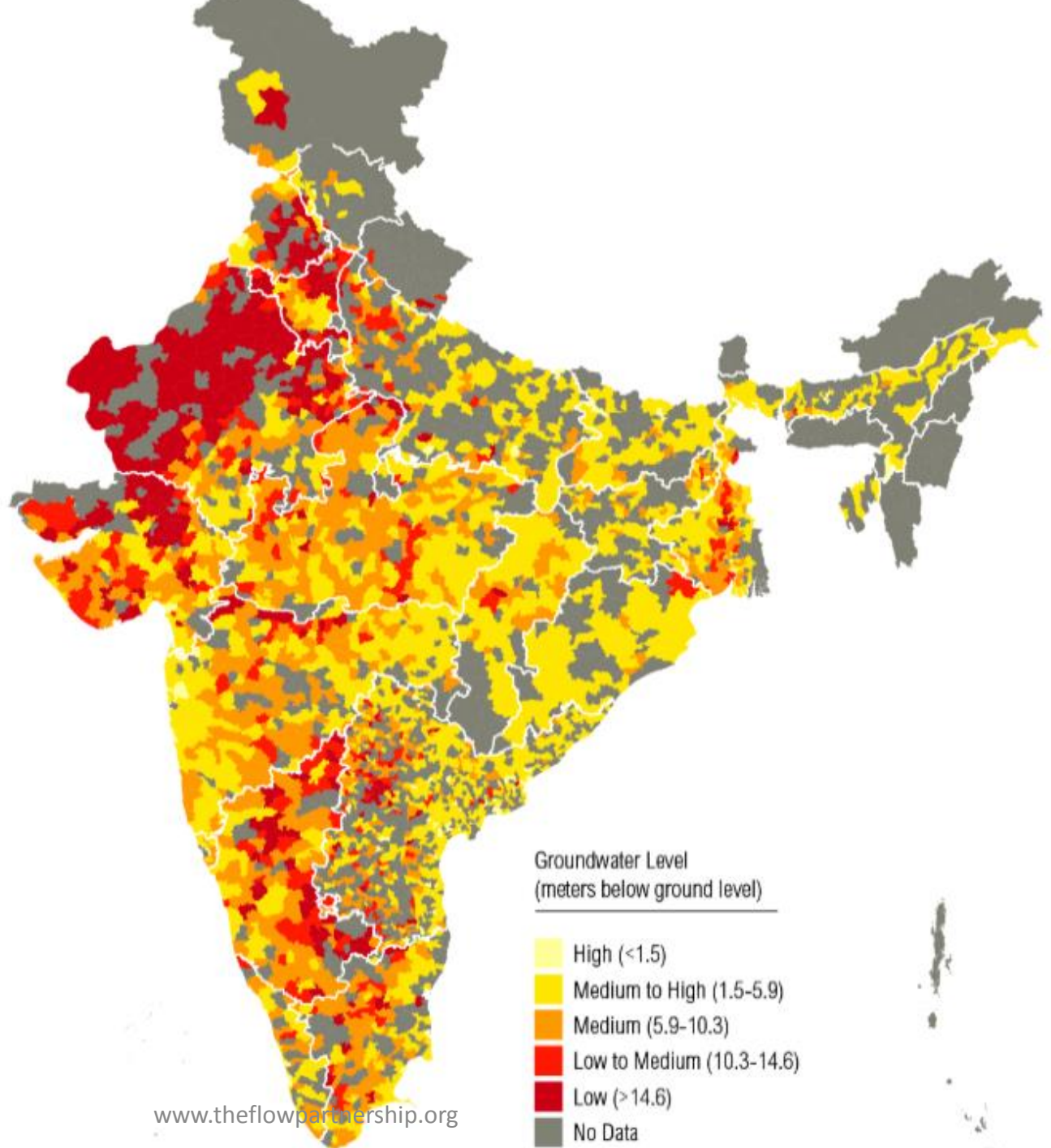
What's happening in Rajasthan in
2019...?

54%
of India
Faces
**High to
Extremely
High**
Water Stress



54%

of India's
Ground-
water
Wells Are
Decreasing



Karauli district in Rajasthan India



100% of the ground water wells here dry – landing them squarely into the map of the future of water

**100% of the people there are
considered to be living below the
poverty line**







**HOW DO YOU GO FROM THAT
ARIDITY...**



TO THIS ..?

Community Driven Decentralised Water Management













Countless conversations with the local community.... Discussing their woes, what will bring them back, coaxing them to contribute to the process ...

Getting them to unlock the gates to walk the path to a healthy local water cycle again..









Maharajpura
says
YES!

श्रीशमजी

DATE: _____
PAGE NO.: _____

आप दिनांक 14-4-2019 को महाराजपुरा साग
वासी को ने मिलकर तय किया कि हम सब 5 लाख
रुपये का श्रावणदान एकत्रित करेंगे। संख्या हमें
10 लाख रुपये की मदद करवाने
को कार्य होने हैं।

- ① डोंग से पानी लाने की व्यवस्था दोनों बगल से
- ② 5 कुर खजार और 5 कुर पाड की खेती
- ③ पाड की चौड़ाई नीचे से 25 कुर होनी हैं।

सभी ने मिलकर JCB और LUG की रेर
तय कि गांधी कोडापुरा के साथ में।
जिनमे निम्न दर तय की गई

59 रु. शोली भराई
2300 रु. छपरे - चलाई
700 रु. छपरे JCB से फैलाई

तां 20-4-2019 से काम करना तय किया गया।
तां 20-8-15 घर

हर 5 दिन में 40 हजार रु. की सीमा की
दिये जायेंगे।

श्रीशमजी देवेन्द्रसिंह

कोषाध्यक्ष श्रीशमजी देवेन्द्रसिंह
पुनर्विध श्रीशमजी देवेन्द्रसिंह
नन्दू देवेन्द्रसिंह
सावईसिंह

THE KEY THAT
UNLOCKS THE
ACTION

AND THE WORK BEGINS IMMEDIATELY...



**THE FIRST DIG IS DONE BY THE
COMMUNITY USING A SIMPLE SPADE**

And then the digger moves in.. If they want to complete the work before the onset of the monsoon rains and HOLD THE WATER AS IT FALLS *THAT SAME YEAR....*



















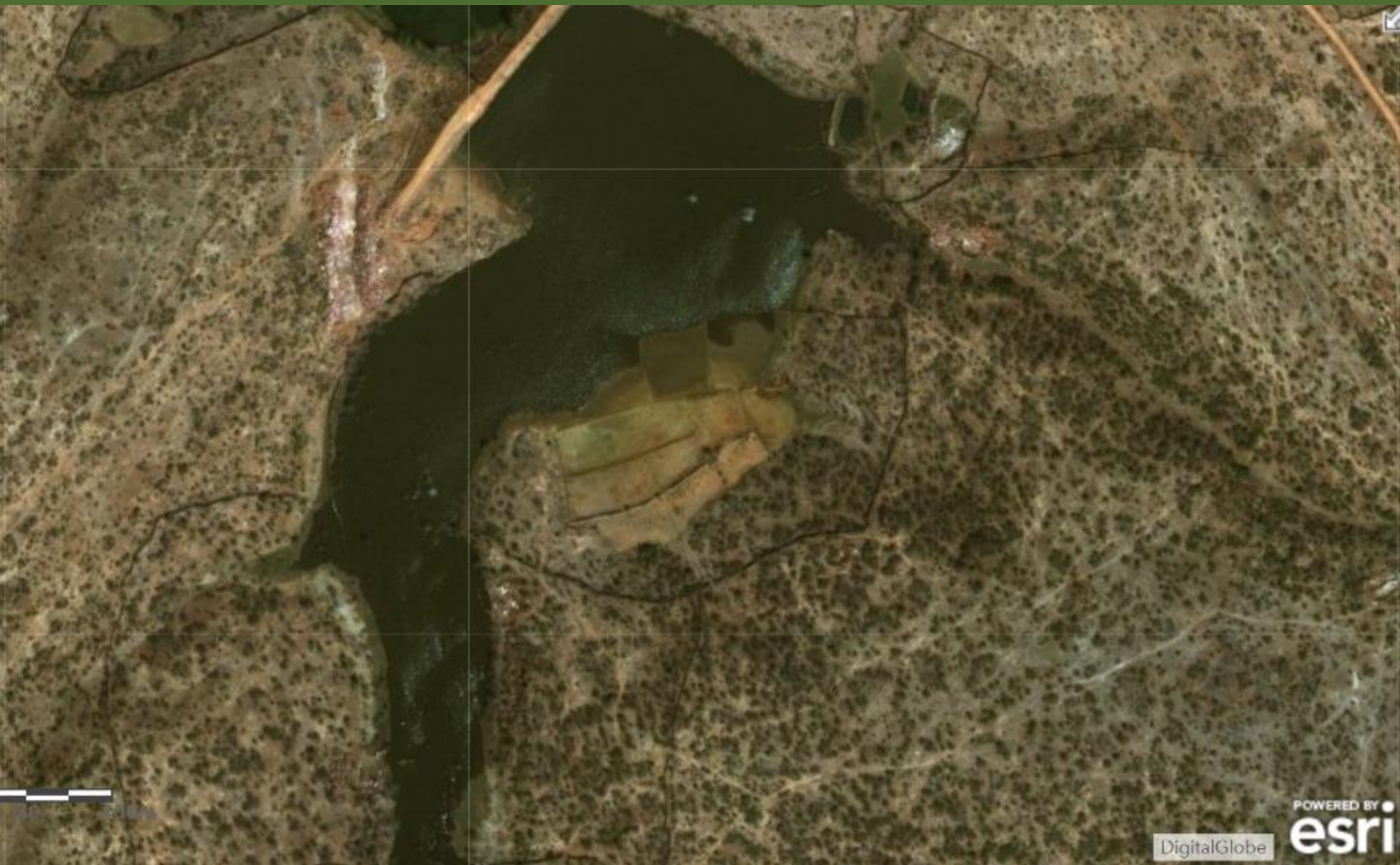




Proud to
take you
on a tour
of the
JOHAD
we built...

Works on scale...

75 structures have been built in Karauli..
If we were to help the villagers of the region revive the entire region and bring all the rivers and rivulets to life it would take less than five years at the rate of 70 structures a year – and of course some funds to help the process happen...



Satellite images of BOODKHEDA

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0.2 0.4km

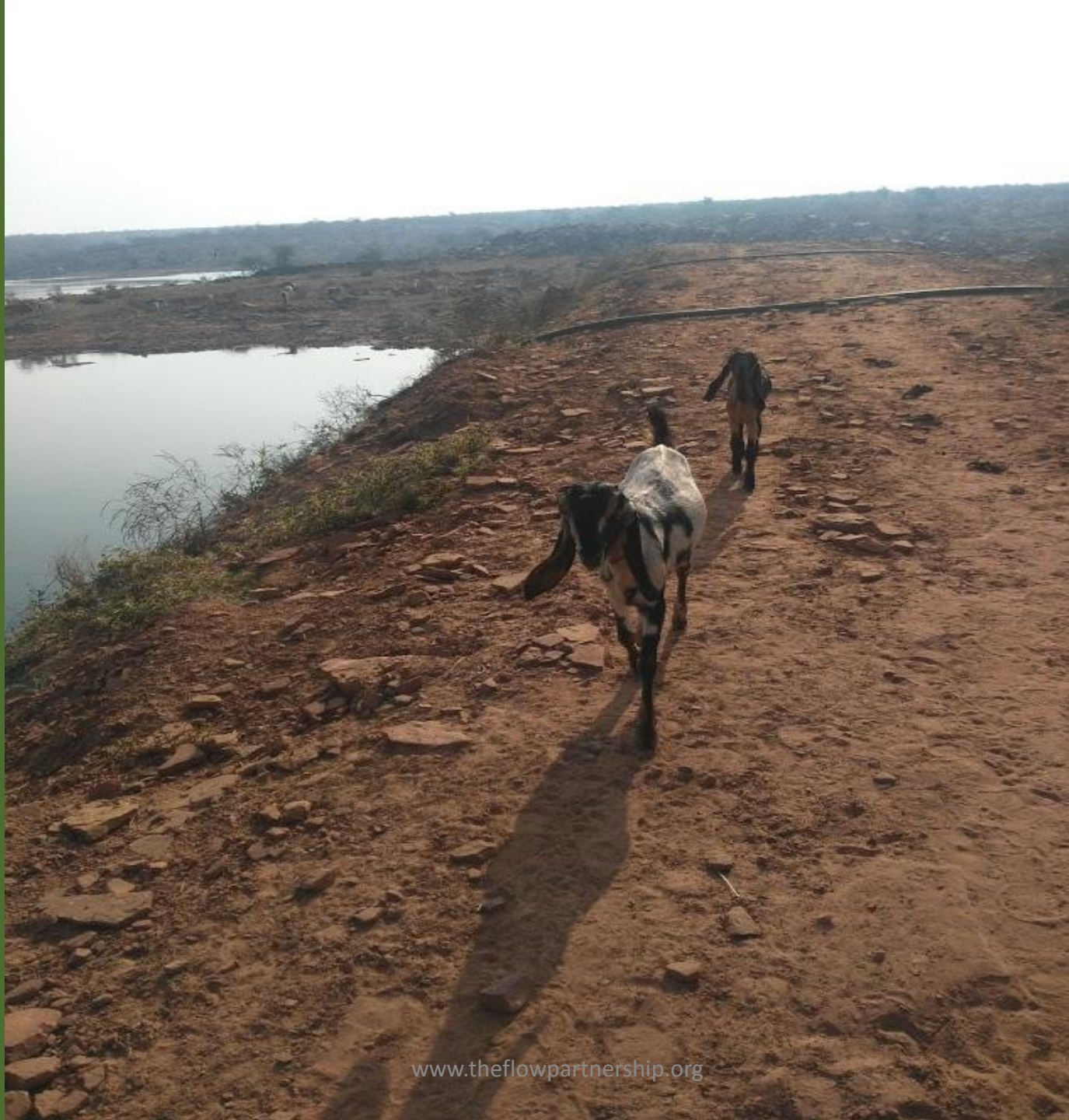
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Boodkheda : built by these villagers 3 years ago...







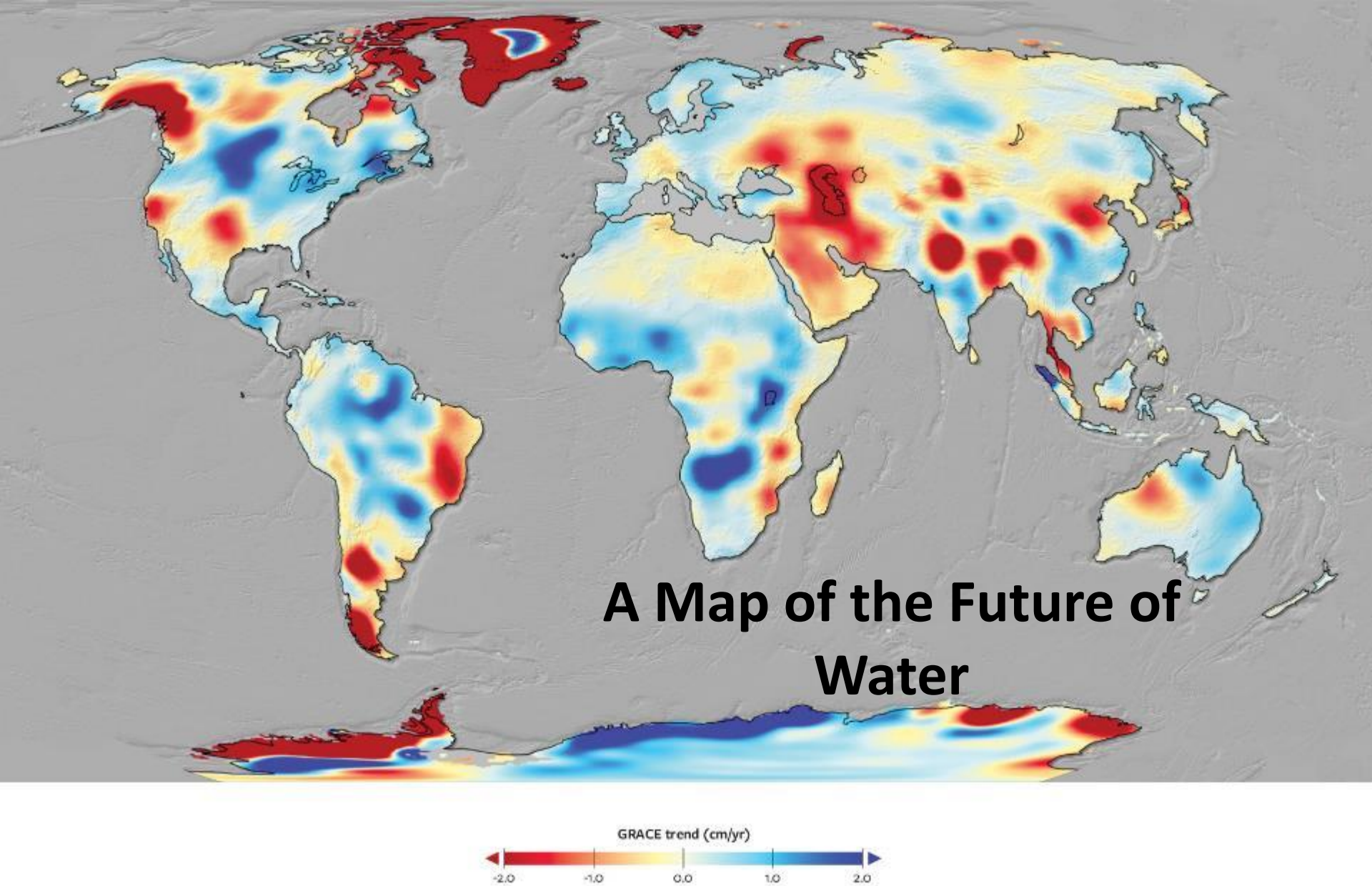




Amplifying this work

Going from Local to Global

- Local wisdom is the key
- Work with what communities already know and trusting their wisdom
- Communities own their project
- Science in service of the community/not community in service of science
- Collaborating with local NGO's and the local government



Jay Famiglietti ED of the Global Institute of Water Recovery Uni of Saskatchewan from Gravity Recovery and Climate Experiment – NASA 2017 data

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A GLOBAL WATER SCHOOL

**WORKING GLOBALLY
with
COMMUNITIES LOCALLY**



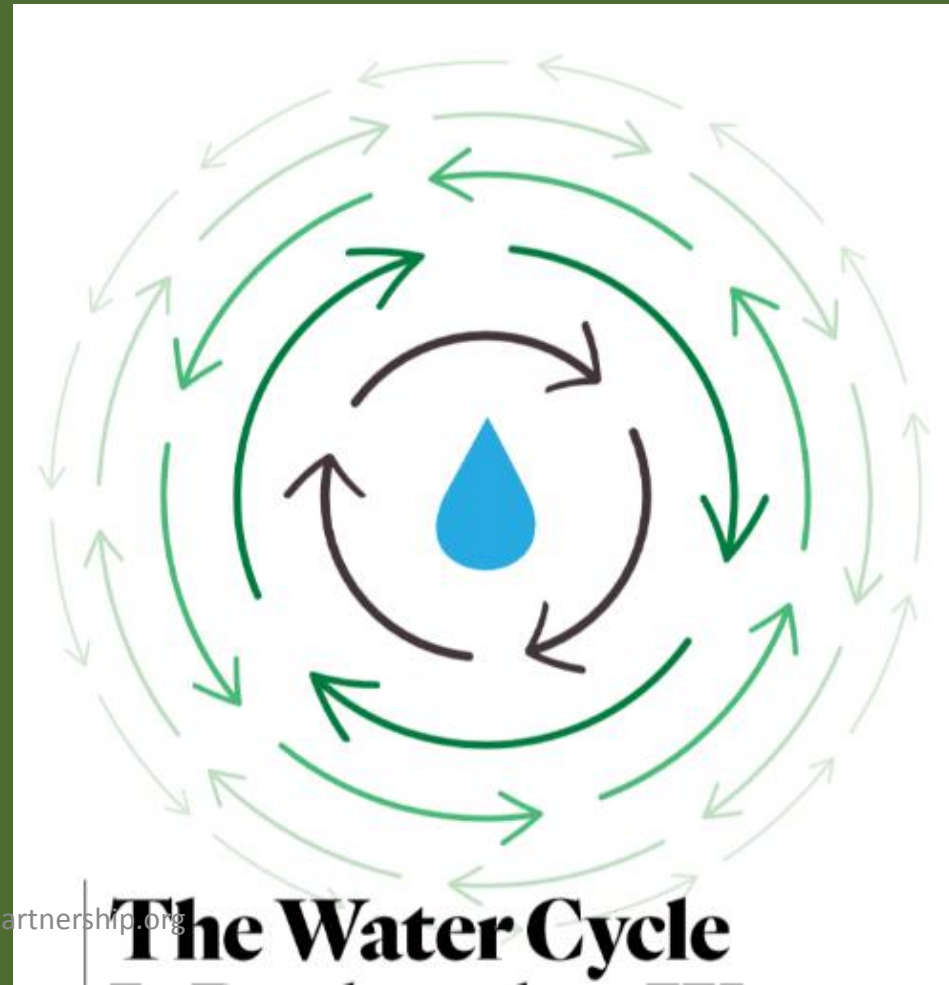
- * CATCHMENT HEALTH
- * REVIVAL METHODS
- * FLOODS /DROUGHTS
- * CASE STUDIES
- * MODELLING
- * SATELLITE DATA

***Access to the tools and methods in the
Water School will ALWAYS be free***

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The Water School will bring back the wisdom in the unspoken partnership between people and their water cycle

The GLOBAL KEY



Inbox (1,478) - pfranses@gmail.com x P7310347.jpg - Google Maps x +



https://www.google.co.uk/maps/@27.2503659,76.2516484,44545m/data=!3m1!1e3!4m2!6m1!1s1UB... Q ☆

Apps ar a FreeAgent : Contacts

Water School x

Sarsa Catchment

Path
Name P7310347.jpg
DateTime 2018:07:31 10:18:49
Direction 260



Viratnagar
विराटनगर

Sirska
सिर्सका

Mala Khara
माला खेरा

Dubbi
दुब्बी

Rajgarh
राजगढ़

Sakat
सकत

Baswa
बासवा

Karnawar
कर्नावर

Birkari
बिरकारी












Kanikhor
कनिकोर



Google

Imagery ©2019 Landsat / Copernicus, Map data ©2019 Google United Kingdom Terms Send feedback 5 km

11:31
15/04/2019





INTERACTIVE CASE STUDIES AND CATCHMENT STRUCTURES AND METHODS


 Details
  Add ▾
  Edit
  Basemap
  Analysis
  ▾
  Share
  ▾
  Directions
 


Mahārājpurā, Rajasthan, IND
 



← Living Atlas ▾

🔍 towns


71 layers
 











New England City and Town Area Divisions

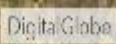

 by Federal_User_Community


Updated: 03/05/2019







Imagery of villages and Lake Sagar Maasalpur - ESRI



ALL YOU WANT TO KNOW IN ONE GLANCE

www.theflowpartnership.org



long range weather forecasts, crop
choice etc via satellites and mobile
network links

THE WATER SCHOOL IS A WORK IN PROGRESS ..



BUILD IT WITH US..

ARUP

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5 Metric
Tonnes of
Wheat!!!



Grown in
1.25
hectares
of land



With no
fertilisers

One grain of wheat usually produces 8 or more heads with over 40 seeds per head.

This was 34 heads per grain with about 55 seeds per head!!!

Thank you
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