



Annual Report 2023-2024

Aarangaar Environment Action Foundation



Message From the Directors

Dear Friends and Supporters,

We are thrilled to connect with you and share updates on our journey towards water conservation and sustainability through traditional means. Our motivation has been creating self-sustaining villages and communities through small, local nature based solutions for ecological and economical sustainability. The idea since inception has been of combining indigenous knowledge systems and modern scientific knowledge to derive simple yet impactful initiatives that increase local ownership in creating climate resilient communities for the future.

Over the past year, we have made strides in our mission. By using age-old water conservation techniques, we have not only managed to create water bodies but also improved the livelihoods of rural communities in Eastern Rajasthan. This was carried out within the bigger mission of reviving the catchment of Syaluta wali river in eastern Rajasthan, The traditional methods, honed over centuries, have proven to be remarkably effective in maintaining ecological balance and ensuring water availability even in the driest seasons.

We are happy to share that our continued interventions in Kakrali Rampura village of Rajgarh, District Alwar has started showed encouraging results. The awareness about rain water conservation in the community led to the creation of traditional water body called 'Johad' back in 2021. We have received overwhelming support from local communities and their participation and enthusiasm have been instrumental in the success of our initiatives. Now the impact of this water body on flora and fauna of the surroundings and on the community is visible. We have also been working tirelessly to educate communities of the area on sustainable water usage and the importance of protecting our natural resources.

As we look to the future, we are excited to expand our work and reach many more villages in the catchment area of Syaluta wali river. Since our foundation has been running through voluntarily contributions, in order to expand our work we have also explored channels to receive individual donations. Apart, we have been approaching donor organizations.

We extend our heartfelt gratitude to all individuals who have voluntarily supported us in this journey. Together, we can make a significant difference and leave a lasting legacy for future generations. Thank you for being a part of this vital mission.

With gratitude and hope.

Directors,

Aarangar Environment Action Foundation

Overview of the Programmes

Aaranagar was started with a vision of creating self-sustaining villages and communities through small, local nature based solutions for ecological and economical sustainability. The idea since inception has been of combining indigenous knowledge systems and modern scientific knowledge to derive simple yet impactful initiatives that increases local ownership in creating climate resilient communities for the future.

At the core of our environmental projects is to strengthen local rural livelihood opportunities and poverty alleviation with special focus on women and children.

‘Aaranger foundation’ believes in result oriented efforts with clear and measurable scientific impact assessments of the interventions and knowledge documentation for replication and awareness.

- 1. Field Work& Awareness**
- 2. Research, Documentation and Publication**
- 3. Fund Raising**

Field Work & Awareness

About the Area:

The work is focused in Dausa and Alwar districts of Eastern Rajasthan. The area is surrounded by Aravali hills from all sides. Annual normal rainfall of the region is only about 560 mm, except the short duration of rainy season, the climate mostly remains dry.

There are no big rivers in this area; rather indigenous knowledge has been used to conserve rainwater through different traditionally made rainwater holding structures in the catchments which in turn would feed the wells, small local rivers and nals ensuring a perennial flow of water and good health of the ecosystem.

This system, dependent on community action, over a period of time has vanished, leaving immensely useful water bodies of the area dry and ecosystem degraded. The adverse impact is visible in all aspects of life and its habitations.

The colossal impact on human lives, leading to increased migration, forcing people to bank on single kharif crop while also struggling with uncertainties of climate change has been insurmountable misery.

About the work:

In a span of 5 years through community participation we intend to create sufficient rain water holding capacity in all the 21 villages present in the catchment area of seasonal 'Syaluta Wali River'. This will be followed by extensive plantation of local, native trees.

Bringing water back into a degraded catchment gradually heals the entire ecosystem. As soil becomes moist with water it creates an opportunity for the life to grow. As Flora and Fauna increases, hidden water streams flowing under that rich ecosystem start to become seasonal streams and eventually contributes in reviving a perennial river. The approach of the work is based on the principles of "Panch- J".

जन (Jun/People) – A society, where everyone has a vision for excellence, self-reliance and self-respect.

जल (Jal/Water) – Water discipline, in preserving and judiciously using it.

1. जंगल (Jungle/Forest) – Taking care of forests and rejuvenating pastures.
 2. जानवर (Janwar/Animals) – To maintain balance between social and ecological conditions by using cattle.
 3. जमीन (Jameen/Land) – Increasing the fertility of soil by using traditional methods.
- mostly remains dry.

1. Water Literacy

Promoting water literacy is essential for fostering responsible water use. Our community awareness campaign in the catchment area of Syaluta wali river is focused on spreading awareness about traditional water conservation methods. Taking community on board to initiate actions on the ground to mitigate water stress has also been one of the objectives of community engagement efforts.

Kakrali Rampura, Rajgarh, Alwar



Fig 1. Awareness programme at Kakrali Rampura (18 June 2023)



GPS Map Camera
Kakrali Rampura, Rajasthan, India
7F7H+G85, Kakrali Rampura, Gordhanpura, Rajasthan 301410, India
Lat 27.263113°
Long 76.477401°
28/01/24 04:17 PM GMT +05:30



Latitude
27.18212558°

Longitude
76.42990453°

Local 12:44:07 PM
GMT 07:14:07 AM

Altitude 335 meters
Wednesday, 31.01.2024

Note : Captured by GPS Map Camera Lite



GPS Map Camera
Kakrali Rampura, Rajasthan, India
7F7H+G85, Kakrali Rampura, Gordhanpura, Rajasthan 301410, India
Lat 27.263113°
Long 76.477401°
28/01/24 04:16 PM GMT +05:30

2. Community Action

Success Story

'Community revives a dry village Kakrali Rampura' (Dist. Alwar, Rajasthan)



Kakrali Rampura is a village in the catchment area of Syaluta wali river (Dist Alwar, Rajasthan) wherein Aarangar Environment Action Foundation intervened in 2021.

The work started with meetings with the village community. These meetings helped in spreading awareness about water conservation and livelihood. This led to full support from the community and also enthusiastic participation for the creation of the Johad in the village.



About Kakrali Rampura	
Village Name	Kakrali Rampura
Work Duration	September – December 2021
Water Table	300 feet
Area under farming	11% agriculture area
Land under tree cover	10%
Annual Income (from agriculture)	Rs. 20,000
Intervention	
Structure created	Johad
Water storage capacity	7926 m ³ (79,26,000 Litre)
Number of Beneficiaries	200 families
Method	Community Participation
Type of land where Johad was created	Common land of the village
Impact	
Impact	16 wells and 3 hand pumps will get revived, 500 animals will get drinking water and 200 families will have improved livelihood options and opportunities
Jobs Created	11 People got daily wage jobs worth 60 days
Women participation	63%

Result:

The work was carried out entirely by crowd funding and community contribution. The water conserved by the Johad (more than 7926 m³) and the changes in the surrounding area is the testimony of the work done in the village.

Brown to Green

Kakrali Rampura Success Story



5CR7+3FQ, Kakrali Rampura, Rajasthan 301410, India

Latitude 27.190093° Longitude 76.41296194°

Local 05:43:54 PM Altitude 13.73 meters
GMT 12:13:54 PM Sunday, 20.11.2022

Unnamed Road, Gordhanpura, Rajasthan 301410, India

Latitude 27.1860289° Longitude 76.4261188°

Local 01:08:57 PM Altitude 329 meters
GMT 07:38:57 AM Tuesday, 25.07.2023

Research, Documentation and Publication

Rejuvenating villages in the catchment of Syaluta Wali River

Chetna Joshi is Head (Programmes & Operations) at Aaranga Environment Action Foundation.

The case study presents the success of the traditional water body called 'Johad' as a simple and cost-effective Nature-based Solution (NBS) for the semi-arid region of Rajasthan for drought proofing, safeguarding livelihood, and reducing rural women's drudgery. This is one of the interventions to create hydrologically healthy regions one village at a time in the catchment of Syaluta Wali River.



Chetna Joshi

With every passing day, our water bodies continue to dry, putting all living beings, plants, animals, and humans under a severe threat, leading to the collapse of evolutionary, ecological, and cultural processes that sustains life. Conserving water at any level, anywhere in any capacity to have 'Hydrologically Healthy Regions' has become the need of the hour.

It is clear now that at a local level the 'hydrologically healthy regions' help stabilize precipitation over the land, provide healthy topsoil, brings down the temperature of the area, strengthens against extreme climate events, sequester carbon, support biodiversity and help uplifting socio-economic conditions of the communities. The primary principle is to allow infiltration of water into the soil, its saturation and the creation of groundwater reserves as well as surface water reserves, and thereby foster the growth of vegetation. The return of vegetation and water to land can only have a positive effect.

The question is how we can go about developing as many 'Hydrologically Healthy regions' as possible? There is no easy answer. But a possible answer could be through utilizing the vast traditional knowledge of terrain specific nature based methods for water management available across India.

In this connection, the state of Rajasthan holds a unique place because of its rich heritage of traditional water conservation methods successful especially for the semi-arid landscapes. Tanka, Talab, Johad, Kund and Bawadi etc are a few examples of that. These traditional solutions remained forgotten for a long period of time due to the new development paradigm resulting in the loss of interests of the communities to practice the traditional ways of

water management. However, in the last few decades the region is witnessing the revival of the culture of the lost art and science of these knowledge systems. In this regard, the work carried out under the leadership of Mr. Rajendra Singh in Alwar and Karauli and many

Village Name	Keetla
Work Days	1st January- 28th February 2021
Water Table	200 feet
Area under farming	10% agriculture area
Land under tree cover	10%
Annual Income (from agriculture)	Rs. 13,000 - 15,000
Structure created	Johad
Water storage capacity	4276 M3 (42,76,000 Litre)
Number of Beneficiaries	130 families
Type of land where Johad was created	Common land of the village
Impact	13 Wells and 2 hand pumps will get revived, 600 animals will get drinking water and 130 families will have improved livelihood options and opportunities
Method	Community Participation
Jobs Created	22 People got daily wage jobs worth 146 days
Women participation	68%

others in the region is exemplary. The conservation of rainwater in the entire catchments of the rivers have resulted in the revival of many small rivers in the area and has kindled the interests of the communities, community based organizations as well as the government. Several case studies are present

Interventions

13 km long 'Syaluta Wali' river used to flow through parts of Alwar and Dausa districts of Rajasthan, India. According to the local community, there was flow in the river, though severely reduced till late 1990's but from the last 23 year they haven't seen it flowing except a few days during monsoon season. Villages situated on the bank of the river hold app 91 km² of catchment area, yet most of the water gets wasted as runoff because of the lack of systems that reduce runoff and enhance water infiltration in the soil.

Based on the learnings from many other individuals, communities and organizational efforts, Aaranga Environment Action Foundation has initiated water conservation efforts in the catchment area of Syaluta Wali river. The idea is to cover all the 25 villages in the catchment in the next 5 years and systematically study the impact of the interventions over a period of time. Two villages have been covered so far wherein traditional structures called 'Johad', especially successful in the undulating terrain of eastern Rajasthan, have been created. The idea since inception has been of combining indigenous knowledge systems and modern scientific knowledge to derive simple yet impactful initiatives that increases local ownership in creating climate resilient communities for the future.

The Area

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Work Duration	September – December 2021
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Impact	16 wells and 3 hand pumps will get revived, 500 animals will get drinking water and 200 families will have improved livelihood options and opportunities
Method	Community Participation
Jobs Created	11 People got daily wage jobs worth 60 days
Women participation	63%

rainfall of the region is about 560 mm, except the short duration of rainy season, the climate mostly remains dry.

There were no big rivers in this area; rather indigenous knowledge was used to conserve rainwater through different traditionally made rainwater holding structures in the catchments which in turn would feed the wells, small local rivers and nalas ensuring a perennial flow of water and good health of the ecosystem. The work is being led by Mr. Kunj Bihari Ji on the ground.

Creation of a Johad at Keetla Village

In 'Keetla' village each family has members working as daily wage worker. During COVID-19 lockdown most of them returned back not knowing when to start earning again. During this time Kunj Bihari Ji met the villagers and explained about the work and its benefits for the whole village. The work started 16th of January and was completed on 22nd February, 2021. Women and men of different ages came

together with a community spirit and were rewarded financially for the efforts contributing to their sustenance. Villagers are now looking forward to the plantation drive before upcoming monsoons.

Creation of a Johad at Kakrali Rampura Village

Kakrali Rampura is the second village of the catchment where water conservation work has been taken up. The methodology has been same as was followed for Keetla. Number of meetings with the community and one to one interaction created awareness for the issue and led to full community participation for creation of the Johad in the village. The details are presented in the table below:

Positive Results

The work was carried out entirely by crowd funding and community contribution. Despite the less rainfall in the regions, the Johad at Kakrali Rampura has shown positive results. ■

Fund Raising

Creation of a system for Aarangar Foundation to receive crowd funding

Fund raising has been a challenge for the foundation. The issue was discussed in the the Meeting of Board of Directors of Aarangar Environment Action Foundation held on 20 September 2023 at the registered office of the company. It was decided that in addition to approaching the funding agencies, crowd sourcing avenues will also be explored.

To facilitate crowd sourcing a resolution was passed at the meeting and consent of the board of directors of the company was accorded to avail the facility of E-NACH & B-NACH of National Automated Clearing House (“NACH”) system provided by National Payment Corporation of India (“NPCI”), through IDBI Bank, Corporate Centre, Mumbai (“Sponsor Bank”).

E-Nach facility of NPCI was given to the Aarangar Environment Action Foundation in December 2023. As a result in the financial year (2023-2024) 5 donors registered mandates through ENACH facility started donating to the foundation.
