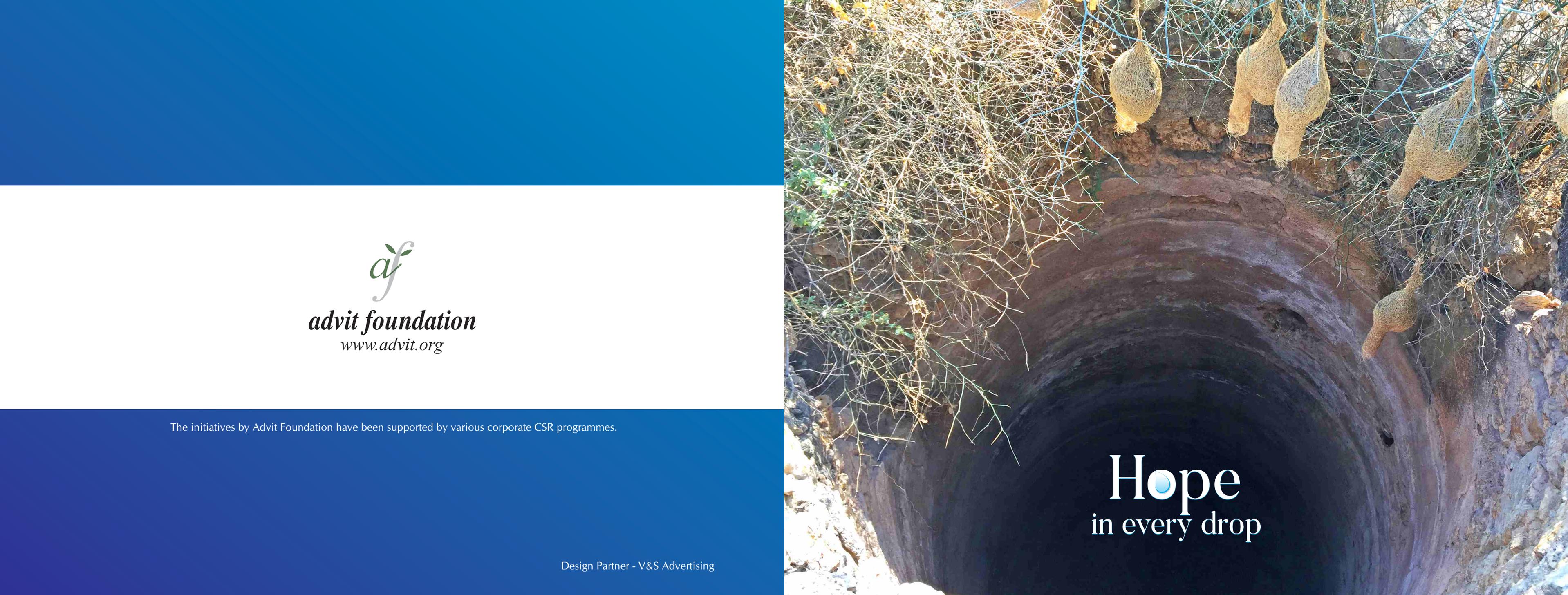




The initiatives by Advit Foundation have been supported by various corporate CSR programmes.

Design Partner - V&S Advertising

A large, deep, circular well with a thatched roof structure made of woven branches and dried gourds hanging from the rim. The well is dug into the earth, and the interior is dark. The surrounding area is dry and rocky, with some sparse vegetation.

Hope
in every drop

A long-term commitment.

Advit Foundation is a not for profit development organisation working for conservation of environment resources and livelihood enhancement. Advit has sought to conserve environment and empower communities through viable options of sustainable development.

With a vision of promoting approaches to sustainability, Advit's work focuses on watershed development, renewable energy promotion, skill upgradation, and entrepreneurial trainings. This is achieved using information and communication systems tools and undertaking environment education and conservation initiatives. Forward linkages are sought through outreach programmes and market connects.

This book is a snapshot of Advit Foundation's initiatives on holistic village development and skill trainings that have helped in livelihood enhancement of communities spread over 25 villages in Rajasthan.



Touching lives.

The foundation has been extensively working on water conservation and livelihood enhancement of communities in India.

Water has been the focus of all the development initiatives designed and undertaken.

Water conservation structures ensured water availability for drinking, sanitation, agriculture and livestock. Over a period of time the wells got recharged and the salinity and fluoride in the ground water reduced. The soil moisture improved and this led to increase in agriculture land. A change in cropping pattern was enabled. An increase in the green belt made more land available for cattle grazing.

All of the above led to enhancement of income from agriculture as well as livestock.

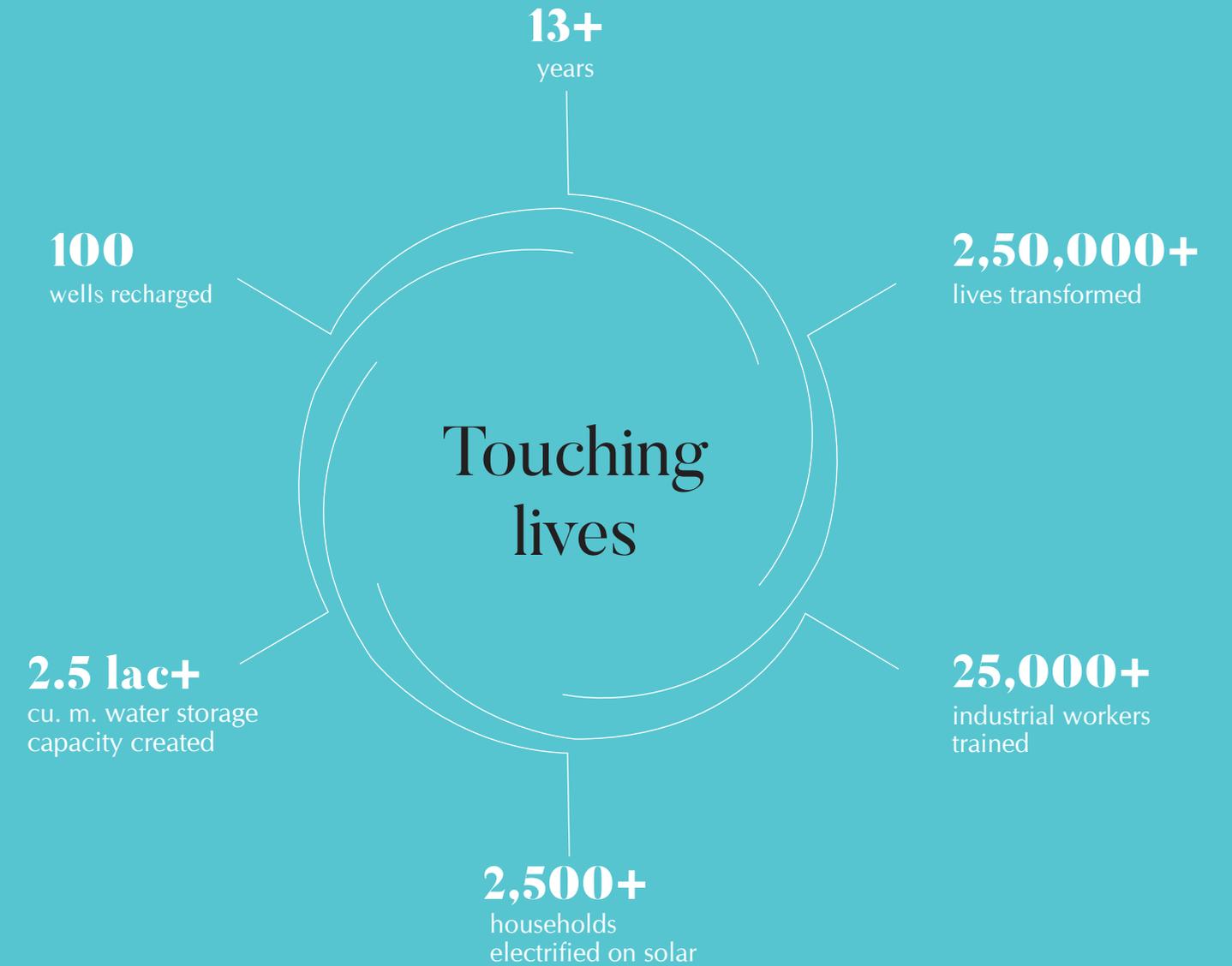
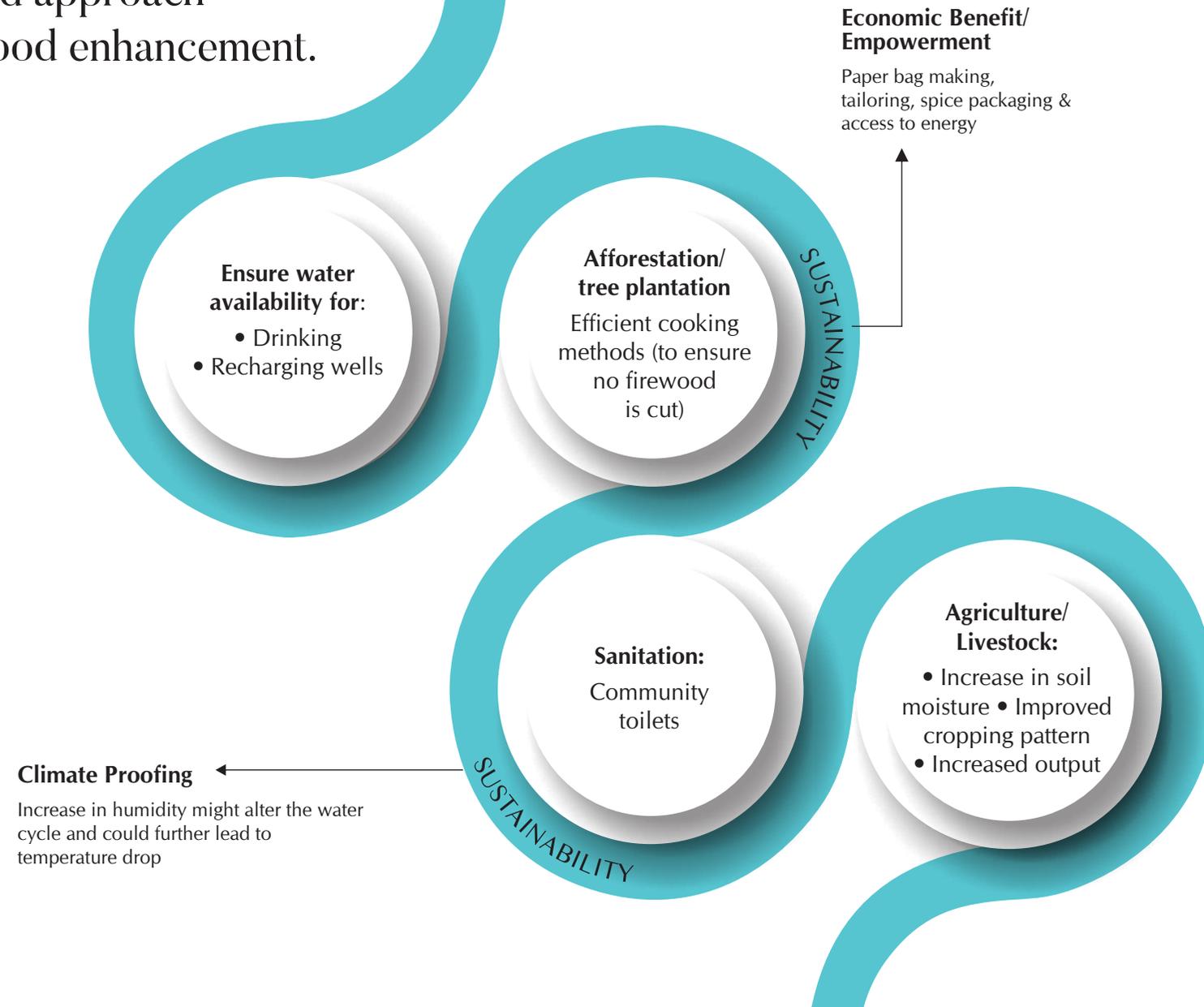
While the basic necessities were taken care of with the water structures, further improvement in income was enabled through skill training initiatives. New skills were introduced and the existing ones were upgraded. Market linkages were developed and financial inclusion was part of the programme.

Women empowerment has been an important impact created. Besides income from off-farm activities, energy access and improved form of cooking has immensely improved livelihood. Solar electrification of homes was carried out. The introduction of energy efficient and renewable energy technologies not only improved livelihood and income but also contributed to carbon – offsetting.

The sustainability of the various interventions are measured through economic empowerment and climate proofing. In due course, the large number of water-bodies could increase ambient humidity. The increased transpiration and evaporation could lead to a temperature drop in the local region. The water cycle could improve too!



Watershed approach to livelihood enhancement.



Water scenario in India.

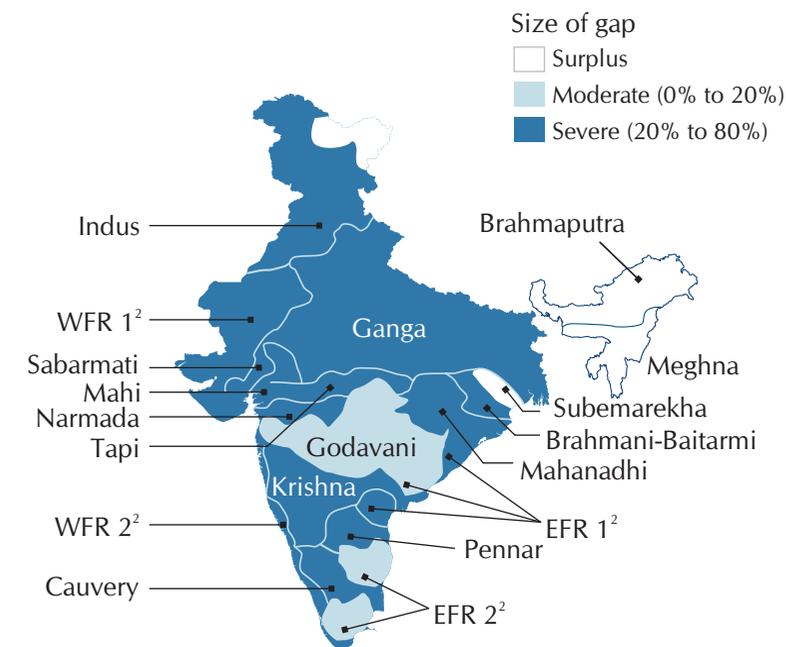
The major issues concerning 'Water Resources' in India can be broadly classified into issues of water quantity (availability) and quality, for use in the domestic, industrial and service sectors. A look at the present scenario, with respect to these two aspects, gives an overview of the existing problems and provides a platform for improvement in terms of action at the policy and consumer level.

The per capita availability of freshwater in India is a little over 2,000 cubic meters. However, there is a large spatial and temporal variation in the availability of freshwater. While some areas in Rajasthan get just around 100 millimetres of rainfall annually, some parts of Meghalaya get over 11,000 millimetres. This reflects on the per capita availability. For example, it is around 650 cubic metres in the Western region, supplied by the rivers of Kutch and Saurashtra and 18,500 cubic metres in the East, supplied by the Brahmaputra. Temporal variations are with respect to the number of rainy days in a year. In India, most of the rainfall is received during the two major monsoons, South-West and North-East.

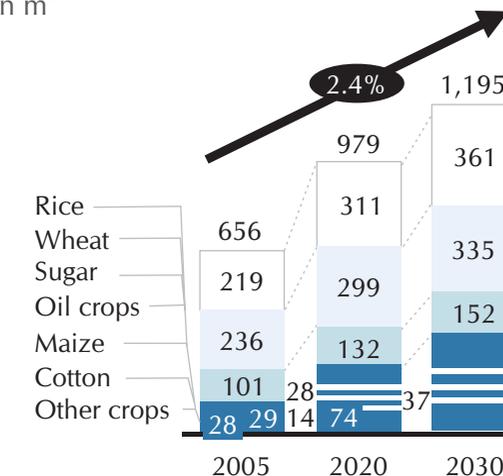
It is estimated that 85 percent of urban population has access to drinking water. However, only a small percentage of the people have access to safe drinking water.

The main source of drinking water are the reservoirs that are located far away from the urban centres. To cite an example, Bengaluru draws water from river Cauvery, which is around 100 Kms away from the city. Over the last couple of decades, there has been large exploitation of ground water for domestic purposes. Roads and pavements are made of concrete in most of the cities leading to high run-offs during rains; thereby preventing recharge of groundwater aquifers resulting in drastic decrease of the water table.

Gap between existing supply and project demand in 2030
Percent of 2030 demand



Water Demand in agriculture
Billion m³



	2005	2020	2030
Food Percent	98	96	95
Feed Percent	2	4	5
Net export Percent	5	3	1

1. The unconstrained projection of water requirements under a static policy regime and at existing levels of productivity and efficiency
2. WFR- Western Flowing coastal Rivers; EFR- Eastern Flowing coastal Rivers

Source: 2030 Water Resources Group

Water & project location - Phagi Block, Jaipur District, Rajasthan.

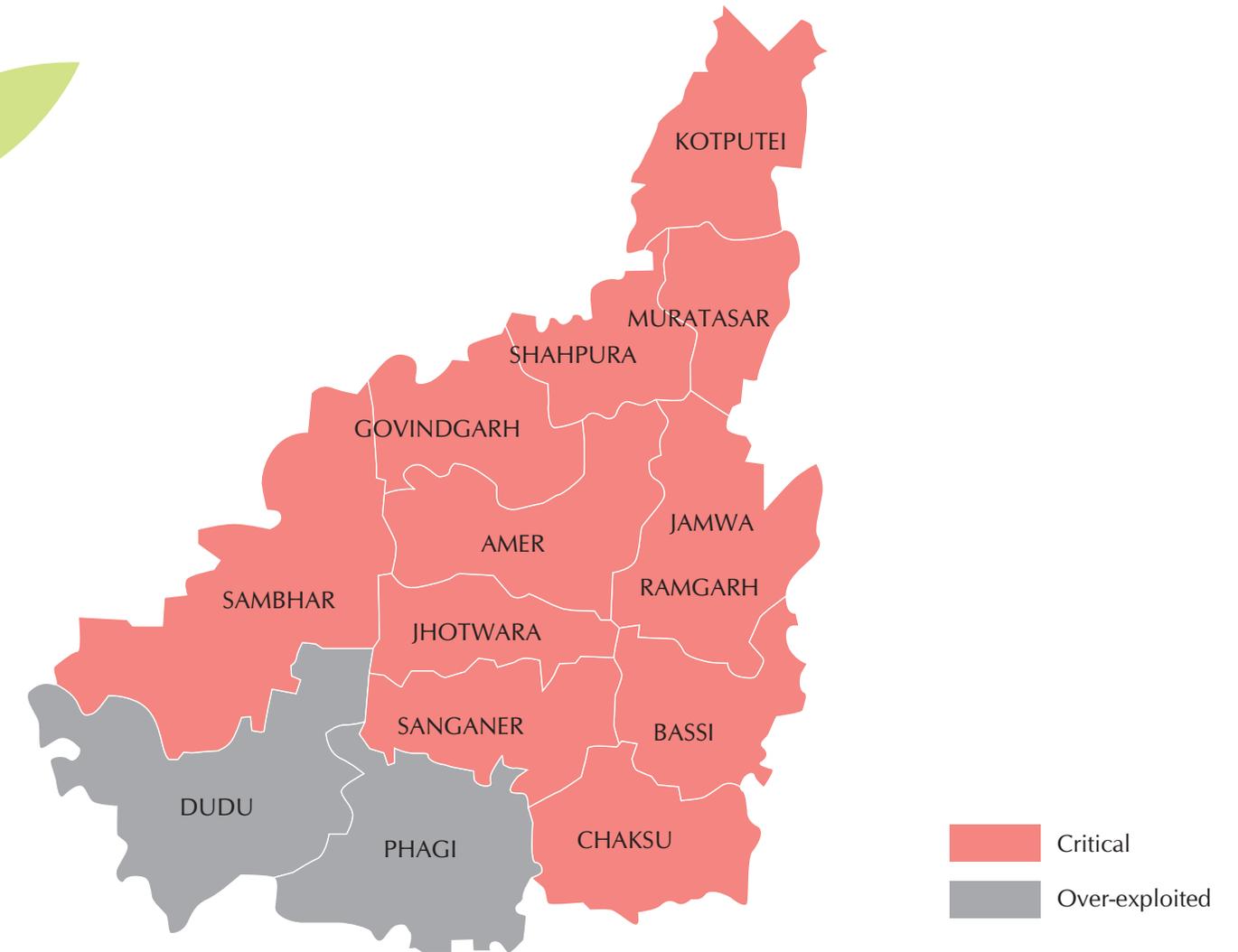
The entire Phagi block including the belt of selected villages is possibly the driest part of the Jaipur district. The area suffers from a disproportionately poor availability of water, loss of tree cover and very high fluoride content (80%). The situation has worsened over time due to a rapid increase in use-related parameters.

The primary source for groundwater recharge is the scanty and uncertain rainfall, confined to just two months of the year. The area can be categorized as semi arid, which implies that the area is suffering from recurrent water scarcity.

The rainfall in the area is not only inadequate, but also varies sharply from year to year. Consequently, droughts are now almost a normal occurrence. Fluctuations in rainfall influence both surface and ground water availability. The water balance analysis of the area indicates a moderate recharge of only 14%. Due to the dry climate, the evapo-transpiration losses are very high (57%).

The excessive pumping of groundwater recharge is one of the major reasons for low water levels in the area. The volume of seepage (6.67 %) is also very low due to the structure of the soil. The analysis of monthly rainfall and monthly evaporation data indicates that there is a small period when the evaporation is lesser than the rainfall (mid-July to end-September). This is the period when maximum harvesting of rainwater could be done to increase the groundwater charging.

According to the Central Ground water board of Rajasthan, the water scenario in the two blocks of Phagi and Dudu blocks is at critical levels.



Water is elixir of life!

More than **1,50,000 cu. m.** water storage capacity has been created. In the parched lands of rural Rajasthan, water conservation structures have ensured water availability for drinking, sanitation, agriculture and livestock.



Musalmano ki Dhani, Village Sultania



The wells got recharged.



Biannual water monitoring has been undertaken and data documented. Well water levels, fluoride, hardness, residual chlorine, alkalinity, turbidity, pH, iron, nitrate, ammonia and biological coliform were analysed. Analysis showed that salinity and fluoride content has reduced.

Water monitoring



Before

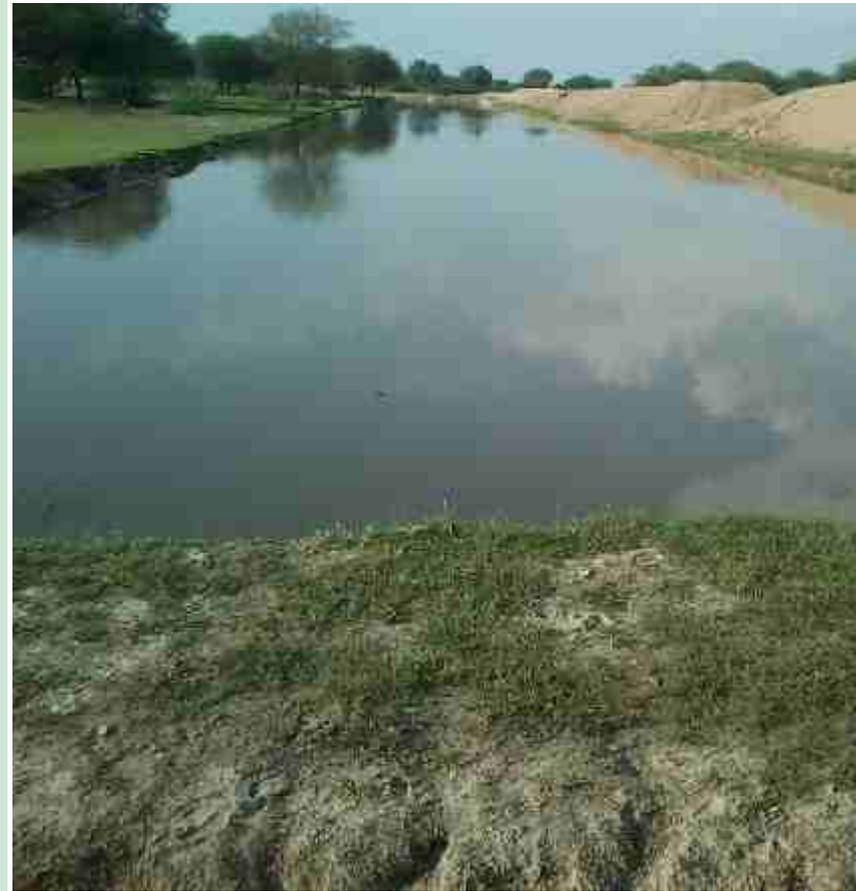


After





Before



After

Village Awandia

Soil moisture increased,
leading to increase in cropping pattern. More land has come under agricultural land.



More green belt was available to cattle for grazing,
and water bodies for rejuvenation, leading to an increase in output.



Village Sawa ka Baas



Village Pachala

While the basic necessities were taken care with the water structures, the interventions also enhanced income from agriculture and livestock. This led to thinking beyond the basic necessities – Skill trainings were initiated.

a a r o h a n – rural self employment training centre. New skills were introduced and existing were upgraded.

- Solar electrical trainings
- Biogas installation
- Solar cooker making
- Upgradation of potters kilns
- Tailoring
- Spice grinding and packaging
- Hand made paper bag making
- Block printing
- Plant nursery techniques
- Basket weaving
- Rakhee making





At Aarohan, Village Pachala



Paper bag making.



At Aarohan, Village Pachala



Spice grinding and packaging were skills that were upgraded and connected to the market.





Village Kiratpura

Sessions on market linkages were undertaken. Financial inclusion was part of the sessions.





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an important impact created.



Besides income from off-farm activities, energy access and improved form of cooking has immensely improved livelihood.



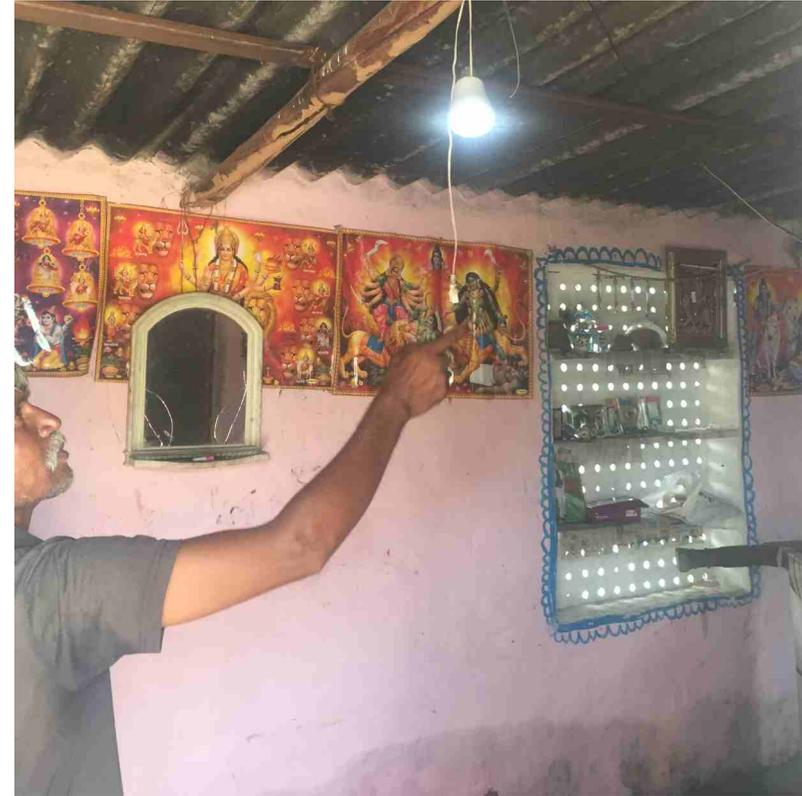
Solar electrification made a big head way.



Introduction of energy efficient and renewable energy technologies not only led to improved livelihood and income but also contributes to carbon offsetting.



Village Pachala



Village Jodinda

The sustainability of the interventions were measured and ensured through environment resource conservation, leading to economic empowerment and climate proofing.

In the coming years, the large number of water bodies could lead to an increase in humidity in the ambient air through evaporation. This along with transpiration from trees could lead to a temperature drop in the local region. The water cycle could improve too!



“A man can sustain himself without food for a few days but he cannot live without water for a single day.”

ATHARVA VEDA



Village Awandia

Words from the beneficiaries.

“ I have attended the 4 - day programme on Solar Electrical by Advit Foundation. I have been thinking about venturing into the solar business but I was not aware of the technicalities in it. This programme is an eye opener. The technicalities are explained very clearly and the training kits are good for practicals. Not only did the trainers explain the Solar concepts, but they also helped in clearing many basic electrical and electronics fundamentals. ”



Jatinder Singh
Solar training participant

“ I was inspired to Learn paper bag making with Advit Foundation to be economically independent and also to learn something new. Today I earn Rs. 3 per bag and I make up to 150 bags per day. ”



Hemlata
Village Pachala

Yogender Kaushik
Senior Technical Manager
(Skill Development) HARTRON



“ The dedicated team at Advit is a pleasure to work with. They have worked hard to put together the solar training programme. Their energy has charged us too and with them, we were able to train around 200 candidates last year in Solar Electricals. ”

Nand Singh
Village Pachala, Phagi



“ Previously, there used to be severe shortage of water in our village. The nearby villages under Pachala panchayat were also facing problems. Ever since madamji (Charu Jain) and her team has started their work here, we have seen improvement in water. Salinity and fluoride levels have improved. Availability has also improved. Our hand pumps and wells have enough water now to last for 2 years. ”



Ghoomar Singh
Village Awandiya

“ The biogas installed at our house has made cooking easier. There are no fumes while cooking so I no longer cough. I do not have to go to collect firewood. This saves time and prevents us from cutting trees too. We use the sludge from the biogas in our fields. Moreover, we now save Rs. 600 every month. We no longer buy LPG cylinder. Our daughter-in-law is also happy to cook on this. ”

“ I am 12th pass living in village Pachala. I have taken training on biogas installation and maintenance. I have helped Advit install biogas in 2 villages. I have learnt this work and I can now earn by installing in other houses too. ”



Chintu
Village Pachala

