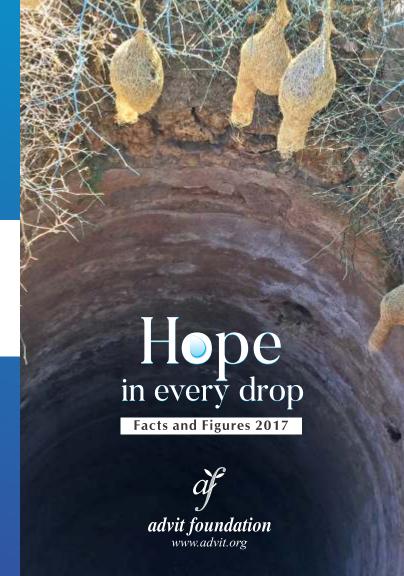


The initiatives by Advit Foundation have been supported by various corporate CSR programmes.



Advit Foundation is a not for profit development organization, 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 booklet offers a clear insight of the scale of impact in the lives of beneficiaries and communities that Advit works with. As the number of beneficiaries rise, so does our 'Hope' to conserve, preserve and enhance lives.

Water structures in Phagi block - Jaipur district

Below mentioned is the water storage capacity achieved in each village of the block (From 2006-2017).

- Bheempura: 6,000 cu.m.
- Keeratpura: 6,000 cu.m.
- Sanwal: **6,000 cu.m.**
- Chandawas: 6,000 cu.m.
- Nawal Kishorpura: 6,000 cu.m.
- Awandiya: 24,000 cu.m.
- Jhodinda Bhojpura: 15,000 cu.m.
- Sawa Ka Bas (2 structures): **30,000 cu.m.** + **10,000 cu.m.**
- Pachala (2 structures): **50,000 cu.m.** + **12,000 cu.m.**
- Awandiya (Gawario Ki Dhani): 4,950 cu.m.
- Sultaniya (Musalmano Ki Dhani): 4,950 cu.m.
- Sultaniya: **7,500 cu.m.**
- Bookni: 6,000 cu.m.
- Govindpura Basra: 6,000 cu.m.
- Bhankrota: **6,000 cu.m.**



Reduction in salinity and fluoride level in the ground water

Ground water in Phagi block is predominantly contaminated with fluoride, but most of the bore wells and open wells close to the water structures that we have built have been found to have lower fluoride levels.

Average fluoride concentration in Phagi block: > 1.5 mg/l (As per the Central Ground Water Board Report 2017)

Average fluoride concentration in wells and bore wells close to some of the water structures built in the villages:

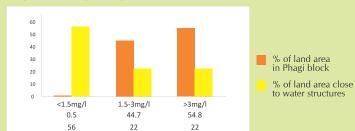
• Sawa Ka Bas: 0.75 mg/l

Bhankrota: 0.6 mg/lz

Sultania: 1.05 mg/lBasra: 0.6 mg/lPachala: 0.6 mg/l

Others are still under observation. (As per Advit monitoring)

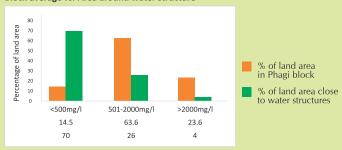
Comparison of ground water fluoride levels: Phagi block average *vs.* regions around water structure



The graph above shows that more than 50% of our water structures have had a positive impact

Reduction in TDS levels in Phagi ground water

Comparison of ground water TDS levels: Block average vs. Area around water structure



70% of open wells and bore wells around the water structures have become sweeter (TDS levels have gone below 500mg/l) as compared to just 14.5% of the block average.

Increase in ground water level

The average water level depth in Phagi block varies between 10-20 m, depending on the season.

(As per the Central Ground Water Board Report 2017)

The water structures we have built have increased the ground water level in the open and bore wells surrounding it. Following are the average water levels close to the water structures:

• Sawa Ka Bas: **7.3 m**

Gawario Ki Dhani: 12.3 m
Musalmano Ki Dhani: 10 m

Sultania: 8.6 m

• Basra: **3 m**

Bookni: 2.7 m

Keeratpura: 7.75 mBhankrota: 14.9 m

Water structures & increase in agriculture

- There has been almost 50% increase in agricultural land usage, which was earlier lying barren (From 2016)
- The crop (sown in October) yield has doubled in the last 5 years. In village Pachala, black gram production increased from 8 quintals to 16 quintals per acre (From 2016)
- The communities grow 2 crops in a year (July and October) as compared to 1 previously sown in July (From Sept. 2016)
- Farmers have started cultivating cash crops such as mustard, cumin, fennel (From 2016)
- The number of cattle and their yield in the village has gone up by 10% (From 2016)



Letter from Panchayat head

कार्यालय गाम पंचायत प्रचाला

पंचायत समिति फागी, (जिला-जयपुर) राजस्थान

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10-126 Jan 2017

We are thankful to Advit foundation for its continued effect in improving the value scanario in the villages under Packala parchayat. Furthermore, we are happy to inform you that as a result of the efforts taken in 2016 (4 structures built across savia ka base, sultamia and Awardigo) the farming lands under the fanchayat in sultamia have become more than 80% irribated from from this, the underflound works level have also increased in the areas near the water bodie built. The floride livel in the water have also decreased and the water have become sweater All the will empower the farmers and villagers to increase the yield from their farmlands.

foundation and it partners argument on and we los forward to your continued support to undertake development projects in the area.

> ग्राम पंचायत पंचाला य. श. फागी लयपुर

Income enhancement: Bag making skill training

A rural self-employment training centre, Aarohan, is set up in village Pachala in Phagi (Oct. 2016). Local women are trained and provided with necessary infrastructure and resources to make paper bags and cloth bags.

- Number of local village women trained: 70
- Number of trainers identified and trained: 2
- Production capacity of each women: 150 paper bags or 15 cloth bags/day
- Additional livelihood income of each women if the entire production capacity is utilised: ₹8,000 - ₹9,000/month
- The paper bags and cloth bags are currently given to 5 of our corporate partners







Income enhancement: Spice processing entrepreneurship model

Aarohan, our rural self-employment training centre at Pachala, Phagi, houses a masala grinding and packaging unit. Two local youth have been trained in the operation and maintenance of the spice processing unit. Women have been trained in packaging.

- Spices processed and packaged: Cumin, Turmeric Red chilli, Coriander
- Number of local village women trained: 30
- Production capacity of the unit: 10 kg/day
- Additional livelihood income of each youth: ₹ 6,000/month







Energy access and women empowerment: Energy efficient cooking stoves

90% of the households in Phagi block still use chulhas, which are highly inefficient and cause a lot of indoor air pollution as well as inhalation of fumes. According to MNRE reports, village women in India inhale smoke from stoves equivalent to 100 cigarettes per day. 1.3 million people in India die annually of diseases caused by indoor air pollution.

In order to address this issue; improvised, efficient cooking stoves were distributed to these community members. These cooking stoves are designed to improve the combustion of the fuel and result in significant reduction in smoke emissions.

Number of households impacted: 100

Reduction in indoor air pollution: 90%

• Reduction in GHG emissions: 1,700 kg Co₂e

Estimated cost savings for the beneficiaries: ₹14,000/annum



Entrepreneurship model: Solar cookers set up and training

Solar cookers use the sun's energy to cook food and animal feed, thereby eliminating the need to use polluting biomass based fuels such as cow-dung and wood. These solar cookers are simple in construction and can be made using locally available materials. It is expected that at least one meal in a day can be cooked with the solar cooker.

Type of solar cooker: Brick and cement fixed type cooker

Number of units installed: 6

• Number of beneficiaries: 100

Estimated cost savings for the beneficiaries: ₹18,000



Energy access and women empowerment: Set up of biogas plants

Biogas plants are ideal for households which have at least 3-4 cattle. The dung from the cattle is fed into the biogas plant which converts it into usable manure while producing biogas that can be used as a fuel for cooking and heating. This process is highly efficient as compared to the conventional method of open storage of cattle dung to make cakes. Open storage of dung releases large quantities of methane, a highly potent greenhouse gas (GHG). Usage of biogas plants not only leads to better utilization of the dung, but also reduces methane emissions; thereby contributing to reducing global warming and mitigating climate change.

- Number of plants installed per village: 5 households
- Capacity of each bio-gas plant: 2 cu.m.
- Quantity of GHG emission reduction of 5 plants: 262 tonnes of CO₂e (in 20 years)
- Cost savings per household: ₹640/month (No LPG cylinder is being bought since 2016)





Impact



2 cu.m. biogas plant



Enough to meet cooking energy needs of a family



10 kg of CO₂ emission reduction per day



4 biogas plant in a region



Reduction of 13.2 tonnes of CO, per annum



4 biogas plants in **20** years



Reduction of 264 tonnes of CO.



Removing 60 cars from road



Saving as much as
6.5 kg of
firewood per day

Renewable energy promotion

Solar street lights:

Solar street lights have been installed to improve the access to renewable energy technology. The community and local fabricators have been trained in the assembly & maintenance of these street lights

- Number of systems installed per village: 5
- Quantity of GHG reduction per annum: 200 kg of CO₂e



Solar mobile charging station:

Advit Foundation designed a solar powered mobile phone charging station. Two such systems have been installed in village Pachala. The communities have been trained on the usage and maintenance of these systems. Village youth have been trained on fabrication and installation in an entrepreneurship model.

- Number of systems installed per village: 2
- Charging capacity: 40-50 phones per day per system
- Quantity of GHG reduction per annum: 1 tonne of CO₂e



Upgrading existing skills: Improvised pottery kilns

- Potters in Phagi block still use inefficient pottery kilns which causes health complications to community living close by, as well as causing environmental degradation.
- Advit team has initiated to work with the potters and improved pottery kilns are being designed and set up at village Keeratpura and Gohandi of Phagi block (April 2017).
- It is estimated that energy efficiency would increase by 30% and fuel consumption would reduce by more than 30%; thereby increasing the profit of the potters.

