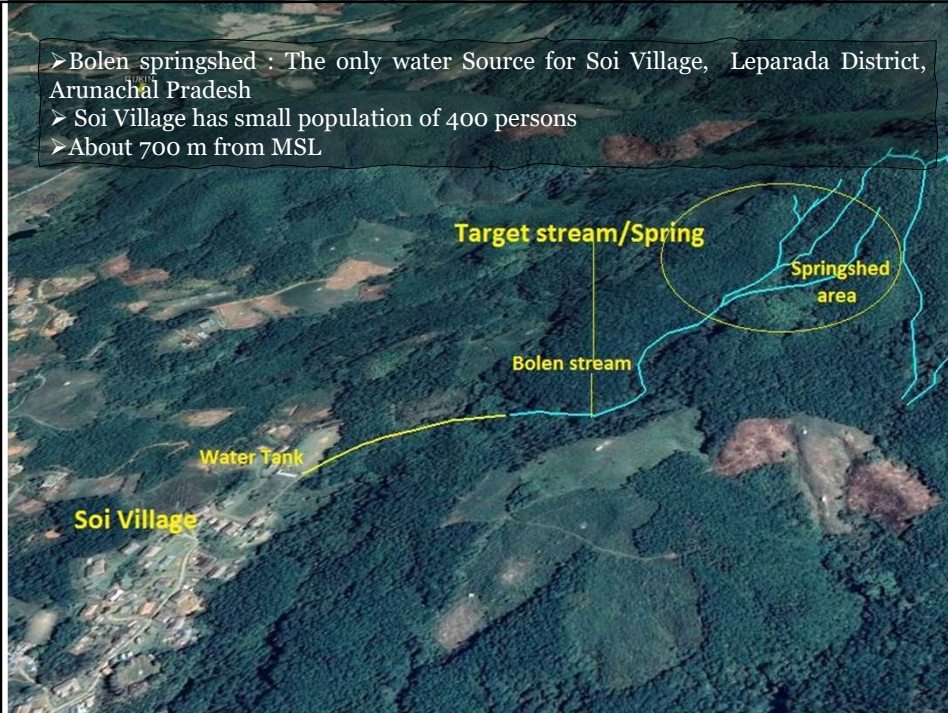




**Rejuvenation of
BOLEN SPRINGSHED**

**An
Experience from
EB-Project Nature, Arunachal
Pradesh**

**-Adopted as a model for training
under Jal Jeevan Mission by
SWSM**



➤ Bolen springshed : The only water Source for Soi Village, Leparada District, Arunachal Pradesh

➤ Soi Village has small population of 400 persons

➤ About 700 m from MSL

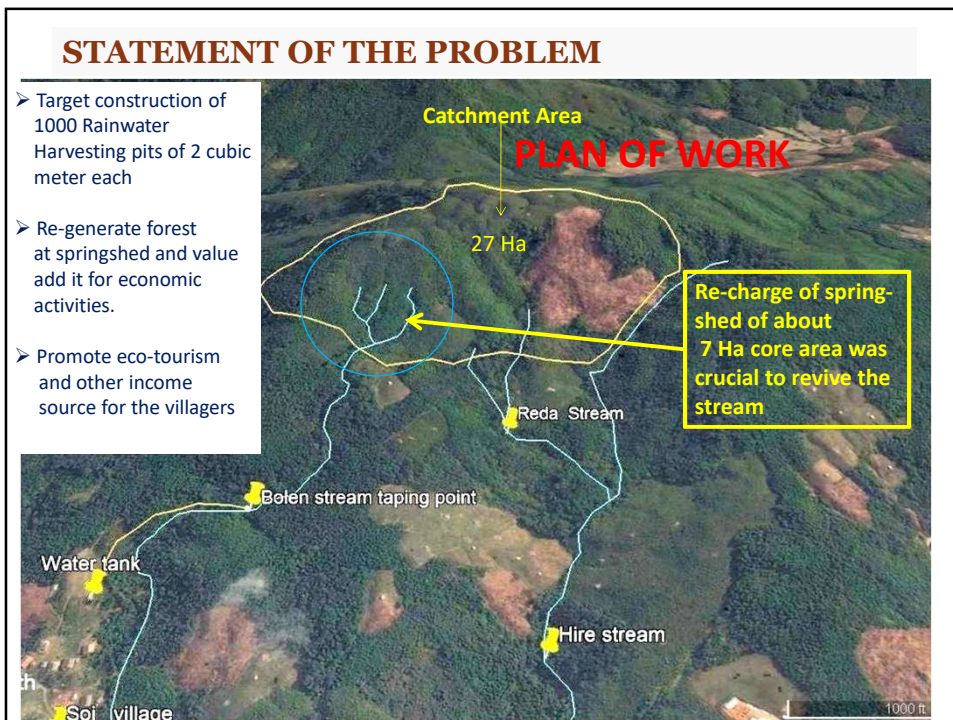
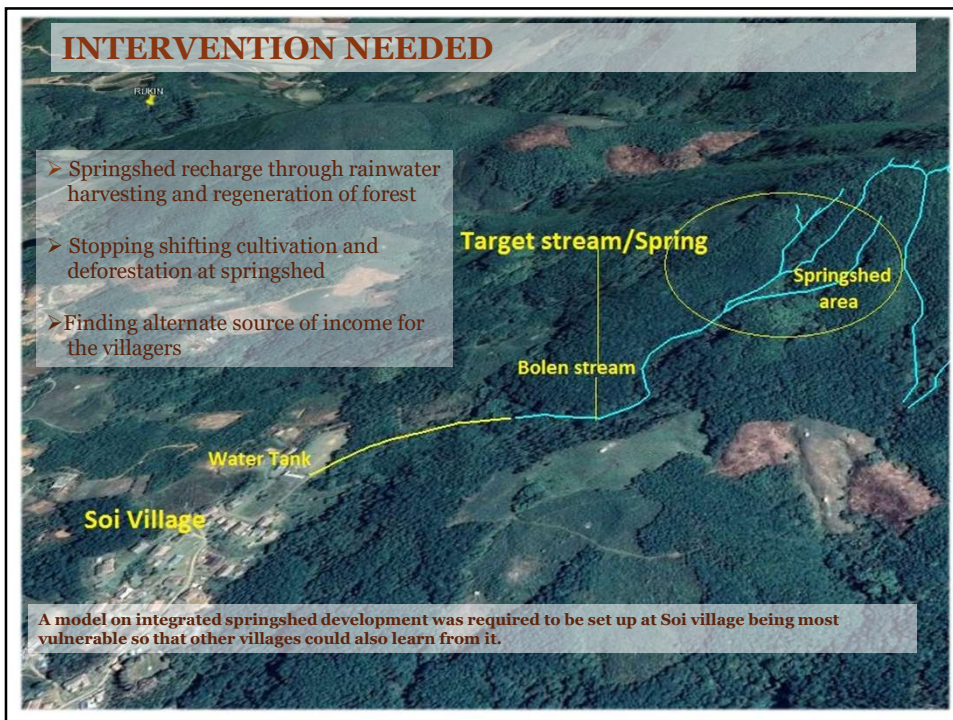
Target stream/Spring

Springshed area

Bolen stream

Water Tank

Soi Village



EXECUTION OF PLAN (2011)

Rainwater Harvesting and springshed recharge ..1

➤ Pit digging started in 2011 with initial target of 1000 pits.

➤ Pit size (average) 2X1X1 cu.m (2000 Lt.) Depth of 1 m maintained to avoid drowning of animals.

➤ Pits were dug in cascading manner along the drainage line

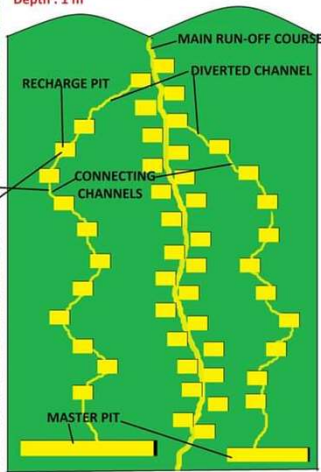
➤ Master pit of size is 15 x 2 x1.5 cub.m was dug at the lowest point. The purpose of master pit was to collect overflows from all pits above

Rainwater Harvesting and springshed recharge ..2



SPRING REJUVENATION PLAN IN HILL AND SLOPY AREAS
(THROUGH RAINWATER HARVESTING AND RECHARGE)

Recharge Pit size
Length : 2 -8 m (on availability of plain area)
breadth: 1-4 m (one availability of plain area)
Depth : 1 m



SIZE OF MASTER PIT : Any size depending on availability of space with depth 1.5 to 2 m. Master pit should be well protected.

Rainwater Harvesting and springshed recharge ..3



Rainwater Harvesting and springshed recharge ..4



Rainwater Harvesting and springshed recharge ..5



VALUE ADDITION IN FOREST

..01

- Orchid conservation and beautification of springshed forest
- Created an Orchid Park in the forest
- Created an Orchidarium for orchid conservation. Above 70 native species conserved till date.
- Orchids are collected from vulnerable areas like highway construction sites, shifting cultivation areas etc.

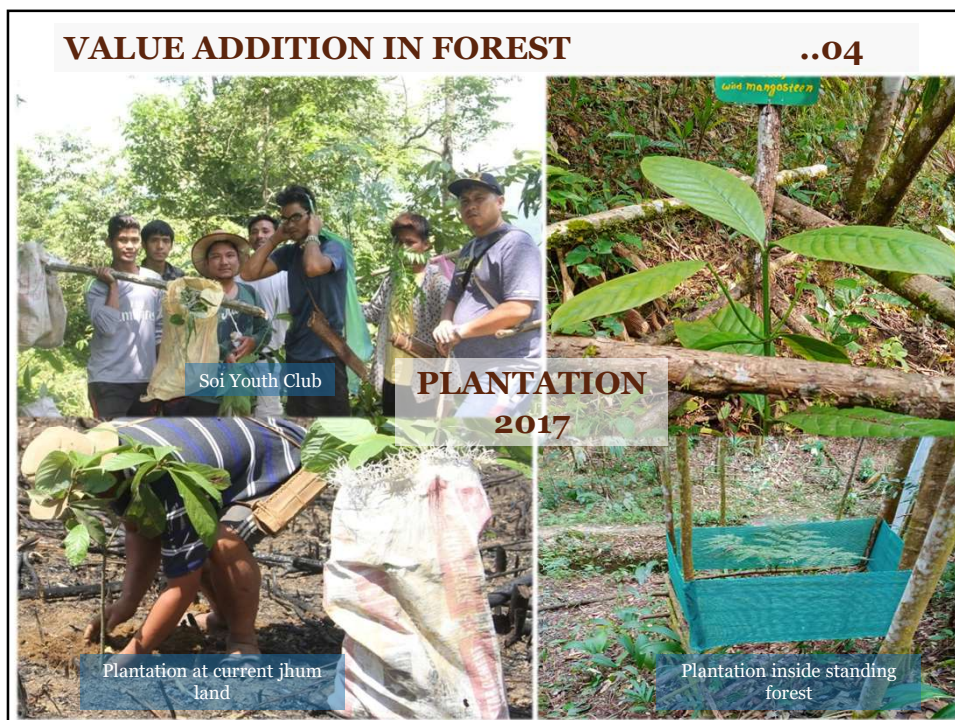


VALUE ADDITION IN FOREST

..02

**Created eco-trails
&
Forest Walk
for local and tourists'
visits**





OUTCOME OF THE PROJECT

2009

2017

2019 : Overflowing water tank, water being used for irrigation

...01

Water Augmentation

- Bolen spring was revived to perennial flow in 2017 (As we reached above 250 RWH pits)
- Soi village gets sufficient potable water throughout the year
- Community watertank overflows most of the time since 2019.
- Over-flow water is used to revive abandoned paddy fields.
- The water tank was revamped through augmentation

OUTCOME OF THE PROJECT

E6-Project Nature Sustainable Mountain Village Initiative: Sustainable agriculture , Soi Village

Farmer: Sh. Marbom Basar, with his revived wetland rice cultivation field which was abandoned decade ago due to lack of irrigation water

Impact on Agriculture
Revival of Wet Land Rice Cultivation (WRC)

Farmer: Sh. Kenpin Basar with his revived wetland rice field

...02

Shri Marbom Basar Had abandoned WRC Field for several years. He revived them in 2019 due to availability of irrigation water.

Shri Kenpin Basar's WRC productivity raised from 0.65 MT/Ha to 1.94 MT/ Ha

OUTCOME OF THE PROJECT

...03

**Impact on allied activities
(other income generating activities)
Introduction of fisheries (2020)**

Unemployed youths of the village are now taking up fishery activities assisted by the project



Fish pond of Shri Kenpin Basar

Under constructed fishpond of Shri Gamsen Basar

Impact on AGRICULTURE (other income generating activities)

Introduction of protected horticulture (December 2020)

- Youths and women are being assisted to go for protected cultivation of vegetables and spices for self employment.
- Pilot attempt on commercial cultivation of organic tomato and king chilly by youths. The project has constructed 20 numbers of low cost polyhouse in the village.

Youths of Soi Village are now encouraged to take up protected cultivation of commercial vegetables in the Village



Tomato

King Chilly



Impact on forest conservation

- 27 Ha of springshed is restored to medium dense forest
- Above 100 ha of forest has been protected from any kind of deforestation activities at various location in Gori and Soi village jurisdiction
- 3 Sacred grooves protected

Forest Restoration

On the ground, the projects lead to conservation of forests which was denuded due to shifting cultivation. 27 Ha of forest has been converted to medium dense forest at the catchment area. There are above 100 Ha of forests conserved including scared groove at various locations by the project.



IMPACT ON NATIVE WILD FRUITING PLANT CONSERVATION

About 5000 numbers of seedling belonging to above 30 native (wild) fruiting plants has been conserved at springshed forest



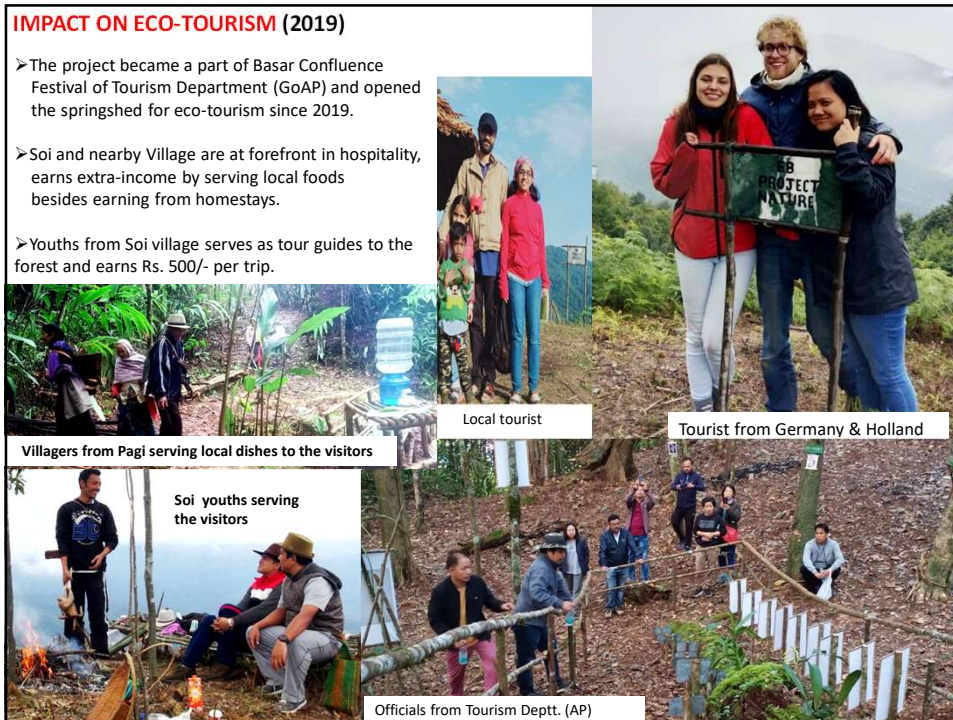
IMPACT ON ORCHID CONSERVATION

Above 70 species of native orchids are conserved which includes extremely rare and threatened



IMPACT ON ECO-TOURISM (2019)

- The project became a part of Basar Confluence Festival of Tourism Department (GoAP) and opened the springshed for eco-tourism since 2019.
- Soi and nearby Village are at forefront in hospitality, earns extra-income by serving local foods besides earning from homestays.
- Youths from Soi village serves as tour guides to the forest and earns Rs. 500/- per trip.



Local tourist

Tourist from Germany & Holland

Villagers from Pagi serving local dishes to the visitors

Soi youths serving the visitors

Officials from Tourism Deptt. (AP)

Eco-tourism during BasCon Festival: Flocking of visitors where villagers served local dishes.



**VIP Visits:
Hon'ble Union Minister of Law and Justice, Shri Kiren Rijju, visiting
the project's Orchidarium**



**VIP Visits:
DIG, ITBP to the core
conservation area.**



Impact on wildlife

Barking Deer
 Asiatic wild dog
 Asiatic Black Bear
 Wild Boar
 Porcupine
 Pangolin
 Civet
 Yellow Throated Marten
 Squirrels

Birds

Crested Serpent Eagle
 Chestnut breasted Partridge
 Khalij Pheasant
 Jungle fowls
 Green Pigeons
 Asian Paradise Flycatcher
 Woodpeckers
 Laughing Thrush
 Drongos

Seasonal Birds

Hornbill
 Mountain Imperial Pigeon

**HUNTING IS STRICTLY BANNED
 INSIDE PROJECT AREA**

Camera trapping at Orchid Park
 April, 2020
 Courtesy: WWF-India (Tezpur)



Barking Deer

Impact on community resilience:

- 34 Villages of the area has been inspired to take up water conservation activities under the aegis of a local NGO called GRK (Gumin Rwgo Kwajju) in Kisan Mela organised in Basar.
- Communities from other districts also learn from the project.
- Spreading awareness in invited programmes (Kisan, Melas, Festivals and Conferences)



SAGO VILLAGE



GORI VILLAGE



NYIGAM VILLAGE

Village-wise digging of recharge pits







Visitors from East Siang



Visitors from West Kameng (Garung Thuk NGO)



Participation on invite at Joram, Lower Subansiri

Impact on Government policy :

1. Success story of EB-Project Nature was presented in AP Legislative Assembly during Legislator’s Dialogue, 2018 by Integrated Mountain Initiative (IMI). As an outcome of the dialogue, Govt. of Arunachal Pradesh provided fund of Rs. 5 Cr for rejuvenation of 20 drying springs in Budget of 2019-20.
2. The project was also invited by the Task Force on Jal Jeeval Mission, Govt. of India to share its experience. The task force commended the project as one of the best practice on water and bio-diversity conservation suitable for replication under the mission.



AP Legislator’s Dialogue, 2018



5th Meeting of Task Force, JJM, Feb, 2020

Adoption of project as a model for training on Springshed Rejuvenation by Jal Jeevan Mission, Arunachal Pradesh



Consultants/ Hydrologist from JJM Cell, Itanagar visiting the project site

