

BEST PRACTICES ON THE PROJECTs UNDER RIDF-XXV NABARD LOAN

The Divisional Soil & Water Conservation Officer of Jowai (Territorial) Division, West Jaintia Hills district has implemented 2 (two) nos. of schemes under RIDF XXV namely, Moolatyap RVP and Wahshangpet RVP with an objective to provide assured irrigation facilities to farmers, improve water availability and livelihood income to farmers. The projects are selected based on the conditions such as highly degradable land, erosion at the stream bank, access to water for cultivation, etc., and both the projects have been selected keeping in mind the above conditions.

Brief details of the projects is given below:

SN	Project 1	SN	Project 2
1	Name of Project- MOOLATYAB RIVER VALLEY PROJECT	1	Name of Project- WAHSHANGPET RIVER VALLEY PROJECT
2	Location: Mumbah of Mynsngat village.	2	Location: Wahiajer village.
3	Date of start of the Project- June, 2020	3	Date of start of the Project- June, 2020
4	Date of Completion of the Project- March, 2023	4	Date of Completion of the Project- March, 2023
5	Project Rs 2,12,09300.00/- (Rupees Two crores twelve lakhs ninety three thousand only)	5	Project Rs 1,99,93,700.00/- (Rupees one crore ninety nine lakh
6	Number of Household benefitted: 56 (Fifty Six) Nos	6	Number of Household benefitted: 52 (Fifty two) Nos
7	Benefitted area: 171.8 Ha	7	Benefitted area: 86.20 Ha

The projects are taken up to address the problems of land degradation and soil erosion (stream bank erosion) at the agricultural land (Command Area); decrease in cropping intensity and crop diversification; harvesting and channelizing of water for irrigation and distribution purposes. Through the RIDF XXV scheme, the farmers have been benefitted to a large extent through various works and activities which include Water Harvesting Structures, Dams and Weirs, Channels, Aqueduct, Protection Wall, Bench Terracing and Improvement of paddy field and infrastructural development.

Pre-project and Post-project scenario:

Pre-project period, both projects at Moolatyap RVP and Wah Shangpet RVP have highly degraded land and erosion occurring at high rate of sedimentation especially along the stream bank which has increase soil loss and decreases cultivable land. The farming community have approached and informed of the damage caused by stream bank erosion every year which has affected their agriculture land for which the project was taken up by the department.

Through the project, various soil and water conservation measures and interventions have been taken up in affected areas, the culturable command areas have increase significantly which have directly benefitted with assured irrigation facilities like channel, aqueduct, etc. Many nos. of protection walls have been constructed to address the damage caused by the stream/rivulets which the farmers have directly impress to take up. Water harvesting structures have directly improved water storage and management of water resources. Various other activities such as bench terraces have significantly improve in-situ water conservation and improve moisture content of the soil for cultivation purposes. Also, more areas have been brought under paddy cultivation through improvement of paddy field interventions.

Best Practices adopted:

The River Valley Projects was constructed with an intention to create a robust water harvesting system to improve irrigation facilities and facilitate improvement of cultivable land for agriculture. The following are the key areas where the farmers have been benefitted from the project.

- The approach road was constructed to facilitate the easy transportation of agricultural produce from the field to the village for the farmers. This greatly reduce labour cost and time as the farmers can transport their produce with the help of pickup truck directly to their home. To manage surface runoff and prevent erosion, a reinforced concrete culvert was constructed at strategic locations along the road alignment. The culvert, channel stormwater (surface runoff) from the roadway which are then diverted into the irrigation canal in the process ensuring adequate water supply for the downstream paddy fields.

- One of the major problems faced by the farmers in the project area is flash floods which results into stream bank erosion. Because of this, large tracts of agriculture land along the stream bank were loss and this causes great inconvenience to the farmers. To address the problem, through the project, areas were identified where damages was caused and stream bank protection wall was constructed. This helps in saving the fertile agriculture land and improve agriculture production and productivity by bringing more land under cultivation and improve productivity by controlling loss of fertile soil through erosion. It may be noted that in some areas care has been taken during construction of protection wall so that it can also serve as protection wall cum footpath. In one area especially, the protection wall was constructed in such a way that also enable pickup truck to cross from one farmer's field to another as there is no other means through which the vehicle can pass. This greatly help in the transportation of produce and also in the movement from one farmers' field to another.
- Initially most of the fertile land could not be cultivated and had to be left fallow due to unavailability of water for irrigation. This led into the farmers depending totally on rainfall for irrigating the crops. Many at times, due to irregular rainfall and delay in rainfall, the farmers could not take up cultivation in most of the paddy field. This causes great loss to the farmers. Taking this into account and through consultation with the beneficiaries, strategic locations were identified for construction of irrigation dam. In addition, irrigation channels and aqueduct were also constructed so that irrigation water can be brought to the paddy fields which previously did not receive irrigation water and this have greatly improved water distribution to command areas and enhanced crop production and productivity.
- Bench terracing is an important soil and water conservation measure, particularly effective in hill slopes. This technique not only helps control water flow and reduce downstream flooding but also minimizes surface runoff, prevents soil erosion, channels water effectively, and maintains soil moisture levels. The construction of bench terracing has enabled farmers to cultivate sloping lands, creating new opportunities for local employment within the village and provide food security. As a result,

farmers in the project area are now growing not only paddy on terraced fields but also a variety of nutritious vegetables such as tomatoes, beans, cucumbers, carrots, and mustard during the off-season. This diversification has improved household nutrition and enhanced agricultural productivity, thereby strengthening the financial condition of families living in the project area. Additionally, bench terraces serve as recharge zones for springs located downstream, further contributing to the sustainability of local water resources.

- To improve the quality and availability of clean drinking water to the community, a spring tapped chamber was also constructed through the project. Before the people had to wake up early in the morning in order to collect the water from the spring source and many times the water was muddy due to run off. Through the construction of spring tapped chamber, the water can be stored in the chamber and the people can collect the water any time without worrying about the turbidity as the run off has been diverted and could not seep into the chamber. It can be stated that about 50 – 55 Households depends on the spring for their water needs especially during winter season. Besides construction of spring tapped chamber, the community was made aware regarding the importance of springshed management and the needs to protect the forest areas that are present in the village.
- Initially the farmers could only take up one crop in the year that is paddy due to unavailability of water for irrigation. However, through the construction of dams and water distribution channels more area have been brought under assured irrigation and this has helped the farmers to diversify their cropping pattern through cultivation of high value crops such as tomato, potato, cabbage and mustard. This has helped not only in improving their socio-economic condition but also helps in augmenting the nutritional standard of the farmers.
- One of the many benefits that the project brings to the farmer community is an awareness regarding a sense of ownership and asset maintenance. The farmers were made aware regarding the importance of their involvement in maintenance of the various assets created in order to sustain their benefits.

Overall, it can be said that the project had brought about marked improvement in the overall development of the farmer community. The Project not only helps in increasing the net irrigation area but also brought tremendous benefits by allowing more crops be grown in a year thereby improving the gross irrigation area. Besides these benefits, the project has also brought upon many changes regarding the understanding of the community in matters related to soil and water conservation. Through the project, the community was also made aware that construction of the dam only helps in providing irrigation water but also in recharging of aquifers thereby reviving the springs in the downstream areas. The farmers were also made aware that through various soil and water conservation measures, erosion can be reduced thereby preventing siltation of dams downstream at the same time improve their productivity as loss of fertile top soil can be prevented.

Through the project, drudgery and hard work of the farmers has been reduced especially during cultivation area as construction of approach road has helped in bringing the farmers' field closer to their home. Through the project, clean drinking water has also been provided to the community through the construction of spring tapped chamber. Overall, it can be said that this project has been a game changer to the community as not only their socio-economic and health condition were improved but they have become aware of the technique and importance of natural resource management and conservation.

Moolatyap RVP





Fig. Culvert



BEFORE



DURING



AFTER

NAME OF WORK :	RCC WEIR (NO.7)		
LOCATION :	MUMBAH PYRDI		
G.P.S. CO-ORDINATES :	N25.631442	E92.251083	ELEVATION : 1007.0m
NAME OF BENEFICIARIES :	SMT. SI SATEIN & SMT DUR SATEIN		
BENEFITTED AREA :	3.80 Ha		



BEFORE

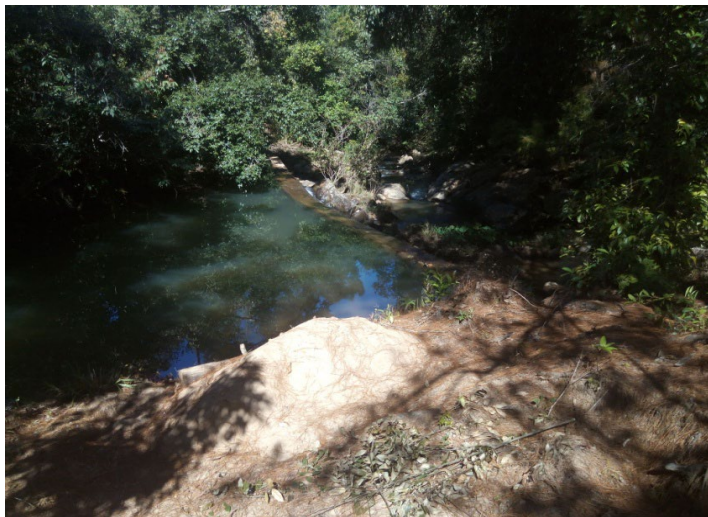


DURING



AFTER

NAME OF WORK :	P/WALL		
LOCATION :	MUMBAH		
G.P.S. CO-ORDINATES :	N25.632767	E92.254650	ELEVATION : 1043 m
NAME OF BENEFICIARIES :	SMT. SI SATEIN		
BENEFITTED AREA :	3.50 Ha		



BEFORE



DURING



AFTER

NAME OF WORK :	R.C.C WEIR (No.4)
LOCATION :	UMPAMIANG
G.P.S. CO-ORDINATES :	N25.663687 E92.248093 ELEVATION : 939 m
NAME OF BENEFICIARIES :	SHRI. HILLBA THUBRU,SMT.MIL LYTAN,SHRI.DWOT NONGRUM,SMT.BIMAI LYTAN SMT.LE BAREH,SMT.LANG LYTAN,SMT.MILO LYTAN,SMT.TNGEN NONGTDEH.
BENEFITTED AREA :	9.50 Ha



BEFORE



DURING



AFTER

NAME OF WORK :

R.C.C WEIR (No. 2)

LOCATION :

NOHSKAM

G.P.S. CO-ORDINATES :
m

N25.553253 E92.078011 ELEVATION : 1042

NAME OF BENEFICIARIES :

SMT. RIBHA DHAR

BENEFITTED AREA :

1.8 Ha



BEFORE



DURING



AFTER

NAME OF WORK :

C.C.CANAL (No. 2)

LOCATION :

NOHSKAM

G.P.S. CO-ORDINATES :
m

N25.553253 E92.078011 ELEVATION : 1042

NAME OF BENEFICIARIES :

SMT. RIBHA DHAR

BENEFITTED AREA :

1.8 Ha



BEFORE



DURING



AFTER

NAME OF WORK :

C.C.DAM cum C.C.CANAL

LOCATION :

KHAR RYMPHUM

G.P.S. CO-ORDINATES :

N25.644220 E92.236807 ELEVATION : 999 m

NAME OF BENEFICIARIES :

SHRI. RISHOT BANG

BENEFITTED AREA :

2.3 Ha



BEFORE



DURING



NAME OF WORK: C.C. CANAL

LOCATION: LYNTER

GPS COORDINATES N25.62564 E92.262229

NAME OF BENEFICIARY : SHRI. DIS DONG



BEFORE



DURING



AFTER

NAME OF WORK: C.C. DAM cum PROTECTION WALL

LOCATION: KREM SATAD (KDIAP)

GPS COORDINATES N25.646021 E92.227619

NAME OF BENEFICIARY : SMT. BIYOLA SIANGSHAI



BEFORE



DURING



AFTER

NAME OF WORK:	PROTECTION WALL
LOCATION:	MYRLANG (NONGSUTNGA)
GPS COORDINATES	N25.616998 E92.215292
NAME OF BENEFICIARY:	SMT. BISILDA PALE



BEFORE



DURING



AFTER

NAME OF WORK: CC DAM cum CC CANAL

LOCATION: SYN RANG PAILIANG

GPS COORDINATES: N 25.622099 E 92.260127

NAME OF BENEFICIARY: 1). SMT. BLIN PYRTUH

2) SHRI. DIS DONG



BEFORE



DURING



AFTER

NAME OF WORK:	DRINKING WELL
LOCATION:	WAHMYNSNGAT
GPS COORDINATE:	N 25.604143 E 92.232881
NAME OF BENEFICIARY:	YOORIM COMMUNITY

WAHSHANGPET RVP NABARD RIDF XXV 2019-2020



BEFORE



DURING



AFTER

NAME OF WORK :

WATER HARVESTING STRUCTURE (No.4)

LOCATION :

MADAN SABAH

G.P.S. CO-ORDINATES :
M

N25.529718 E92.164554 ELEVATION : 1259

NAME OF BENEFICIARIES :

SMT. DOLIN PYRTUH

BENEFITTED AREA :

3.60 Ha



BEFORE



DURING



AFTER

NAME OF WORK :

P/WALL (No.36)

LOCATION :

MADAN SABAHA

G.P.S. CO-ORDINATES :
m

N25.532766 E92.165805 ELEVATION : 1252

NAME OF BENEFICIARIES :

SMT. SHIDA LAMARE

BENEFITTED AREA :

4.70 Ha



BEFORE



DURING



AFTER

NAME OF WORK :

P/WALL (No.34)

LOCATION :

WAH KPER

G.P.S. CO-ORDINATES :
m

N25.533880 E92.165363 ELEVATION : 1254

NAME OF BENEFICIARIES :

SMT. MAIALANG DHAR

BENEFITTED AREA :

3.80 Ha



BEFORE



DURING



AFTER

NAME OF WORK :	P/WALL (NO.20)
LOCATION :	THWAI KAMAR
G.P.S. CO-ORDINATES :	N25.537480 E92.169573 ELEVATION : 1274
m	
NAME OF BENEFICIARIES :	SMT. SERINA DHAR
BENEFITTED AREA :	2.50 Ha



During



After

NAME OF WORK :

FOOTPATH

LOCATION :

WAHKPER

G.P.S. CO-ORDINATES :

N25.534600° E92.165104° ELEVATION : 1342m

NAME OF BENEFICIARIES :

COMMUNITY WAHIAJER

Ha i,

Divisional Soil & Water Conservation Officer
Jowai (Territorial) Division
Jowai

Phang: Jingsngewnguh ia ka jingiarap halor ka scheme RIDF NABARD

Sir,

Katkum ka phang ba la kdew haneng, ngi dap da ka jing sngewnguh ia ka Soil Department ba ka la ai jingkyrshan bad ka jingmyntoi ia ngi ki nongrep jong ka Wahshangpet Project kaba don ha ka shnong Wahiajer kaba la lah ban ai jing iarap da kaba la ioh ban tei ia ki ban um, ki nala um, ki protection wall bad ki jing pynbha ia ki pynthor rep kba bad kumta ter ter ha ki jaka jong ngi. Da kane ka jingiarap, ngi ki nongrep la lah ban rep kba, rep jhur bad rep kino kino ki jingrep baroh shisnem bad ka jingtei ia ka protection wall ha rud wah ka la lah shisha ban kyrshan na ka um slap ba la ju pynjulor ia ka khyndew man la ka por kaba la ktah ia ki jingrep jong ngi.

Kumta, kane ka scheme ka la kyntiew ia ngi shibun ha ka jing rep bad ngi ai khublei ia ka Soil Department ba kan dang lah ban iarap bad kyntiew shuh shuh ia ki nongrep lyngba kane ka scheme.

Khublei Shibun.


Wahshangpet
Wahiajer
Wahiajer Village P. O. Thadlaskeln
West Jaintia Hills Dist.

Ha i,

Divisional Soil & Water Conservation Officer
Jowai (Territorial) Division
Jowai

Phang: Jingsngewnguh ia ka jingiarap halor ka scheme RIDF NABARD

Sir,

Katkum ka phang ba la kdew haneng, ngi na ki nongrep ba la ioh jingkyrshan bad ioh jingmyntoi na ka Moolatyab Project kaba don ha Mumbah hapoh jong ka shnong Mynsngat, ngi ai ia ka kane ka shithi da kaba burom ia phi ba ngi dap da ka jing sngewnguh ia ka jingiarap jong ka Soil Department ban tei ia ki ban um, ki nala um, ki protection wall bad ki jing pynbha ia ki pynthor rep kba bad kumta ter ter ha ki jaka jong ngi ban ioh jingmyntoi bad pynheh ia ka rep ka riang jong ngi bad kumjuh ban pyllang ia ka um ban rep. Ngi sngew nguh ruh ba lyngba kane ka scheme, ngi la ioh ban leh bun jait ki jingrep ha ki pynthor naduh ka rep kba ha ki por lyiur bad ban rep jhur ha ki por tlang lyngba ka jing don um bad kane ka la kyntiew ia ka jing ioh jong ngi.

Kumta, ngi ai khublei ia phi ka Soil Department ba phin dang lah ban ai jingiarap shuh shuh na ka bynta ka lawei ka jong ki nongrep.

Khublei Shibun.

(Shri. Linus Phrangki Phawa)

Waheh Shnong
Mynsngat

25.08.22