



**OFFICE OF THE DEPUTY CONSERVATOR OF FORESTS,
RAMPUR FOREST DIVISION, RAMPUR BUSHAHR,
HIMACHAL PRADESH FOREST DEPARTMENT**
(E-mail:- dforampur@gmail.com Phone No. 01782-233107)



No. 2216
H.P. Forest Department.

Dated Rampur, the 17-7-26

From: - DCF Rampur.

✓ To:-APCCF cum-Nodal Officer
FCA, O/o Pr. CCF (HoFF), HP

Sub: - Diversion of 2.1532 Ha. of forest land (1.4612 Ha. for mining lease and safety zone, 0.3400 Ha. for approach road and 0.3520 Ha. for stacking of raw material) for already established stone crusher at Pashada, P.O. Khaneri, Tehsil Rampur Distt. Shimla HP in favour of M/s Bushahr Laghu Udyog VPO Jhakri, Tehsil Rampur Bushahr within the jurisdiction of Rampur Forest Division, Distt. Shimla H.P. (Online Proposal No. FP/HP/MIN/34194/2018).

Memo:

Kindly refer to AIGF office letter No. 8B/HP/05/62/2019/FC dated 25.03.2026 on the subject cited above.

2.

Vide communication referred to above, Govt. of India has accorded Stage-I approval for diversion of 2.1532 ha of Forest Land for C/o already established stone crusher at Pashada, P.O. Khaneri, Tehsil Rampur Distt. Shimla HP in favour of M/s Bushahr Laghu Udyog VPO Jhakri, Tehsil Rampur Bushahr within the jurisdiction of Rampur Forest Division, Distt. Shimla H.P. (Online Proposal No. FP/HP/MIN/34194/2018). It is therefore, requested to approve/deposit the amount as per detail given against each:

Sr.	Particulars	Total	Remarks
1	SMCP Charges	105335.10	The amount may be deposited in Adhoc CAMPA account by generating e-challan through online Portal in the appropriate Bank.
	G. Total	1,05,335.10	

Encl: As above:

1. Copy of SMCPlan.

Deputy Conservator of Forests,
Rampur Forest Division,
Rampur Bushahr. H.P.

HIMACHAL PRADESH FOREST DEPARTMENT

Rampur Forest Division

SOIL AND MOISTURE CONSERVATION PLAN

For Diversion of 2.1532 ha of Protected Forest for (1.4612 ha for mining lease and safety zone, 0.3400 ha for approach road and 0.3520 ha for staking of raw material) to feed already established Stone Crusher at Pashada, P.O. Khaneri within the jurisdiction of Rampur Forest Division, Tehsil- Rampur Bushahr, District- Shimla in the State of Himachal Pradesh.

Project	Mining lease of M/s Bushahr Laghu Udyog – Pashada Beat
Forest Type	Protected Forest
Total Area Diverted	2.1532 ha
Break-up	Mining Lease & Safety Zone: 1.4612 ha Approach Road: 0.3400 ha Staking of Raw Material: 0.3520 ha
Location	Village Pashada, P.O. Khaneri
Tehsil / District	Rampur Bushahr / Shimla
Forest Division	Rampur Forest Division
Beat	Pashada Beat
State	Himachal Pradesh

कनेग लु देवी
M/s. Bushahr Laghu Udyog
Head Office - Village Pashada
Teh. Rampur Bsr., Shimla (H.P.)

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B.O. Rampur

R.O. Rampur

Field Report Reference

Subject: Brief Report regarding proposed development works under Stone Crusher Laghu Udyog, Pashada Beat — submitted by I/C Pashada Beat to Range Forest Officer, Range Forest Office, Rampur Bushahr, dated 25.03.2026.

Inspection Team: I/C Pashada Beat and Block Forest Officer, Rampur Forest Division.

1. INTRODUCTION

Forest ecosystems are the origin of streams and rivers; therefore, conserving soil and moisture in the catchment area is of paramount importance. The Himachal Pradesh Forest Department has been implementing soil and moisture conservation works — including check-dams, gully plugging, and Van-Talao (forest tanks) — since the late 1990s, and these works continue to form an integral part of forest development activities.

Soil Moisture Conservation works in forest areas marked for plantation activity are carried out on a watershed basis. This approach aims to enhance land productivity and increase soil moisture availability for a longer period. The primary objective is to minimize water loss through evapotranspiration — the combined loss through evaporation (directly from soil) and transpiration (through plants). This is especially critical in areas where rainwater and groundwater resources are scarce or declining due to climate change.

This Soil and Moisture Conservation Plan has been prepared specifically for the proposed diversion of 2.1532 ha of Protected Forest for Mining Lease in favor of M/s Bushahr Laghu Udyog at Pashada, P.O. Khaneri, within the jurisdiction of Rampur Forest Division, incorporating findings of the joint field inspection conducted on 25.03.2026.

2. FIELD INSPECTION REPORT — PASHADA BEAT

A joint field inspection was conducted in Pashada Beat regarding development activities to be undertaken for the Mining Lease in favor of M/s Bushahr Laghu Udyog. The inspection was carried out by the I/C Pashada Beat and the Block Forest Officer, Rampur, and a formal brief report was submitted to the Range Forest Officer, Range Forest Office, Rampur Bushahr. During the inspection, the following priority works were identified for implementation in the area for environmental protection and public benefit:

2.1 Priority Works Identified — Summary Table

S.No.	Work Item	Field Observation & Recommendation	GPS Coordinates	Priority
1	Soil Conservation Work	Soil erosion was observed at various locations around the project area. Construction of retaining structures, contour trenches, and other soil conservation measures is recommended to prevent land degradation	N 31°46'60" E 77°69'57"	High

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S.No.	Work Item	Field Observation & Recommendation	GPS Coordinates	Priority
		and improve slope stability.		
2	Maintenance of Water Pond, Pashada	The existing water pond requires desilting, strengthening of embankments, and general maintenance to enhance water storage capacity for wildlife, livestock, and local community needs.	N 31°46'60" E 77°69'57"	Medium
3	Maintenance of Path from Road Head to Village Pashada	The footpath connecting the road head to Village Pashada is in need of repair and improvement. Maintenance work including clearing, levelling, drainage improvement, and safety measures is recommended to ensure safe movement of villagers and field staff.	N 31°28'41" E 77°41'25"	Medium

2.2 Detailed Observations from Field Inspection

Work 1: Soil Conservation Work [GPS: N 31°46'60" / E 77°69'57"]

Soil erosion was observed at various locations around the project area. Construction of retaining structures, contour trenches, and other soil conservation measures is recommended to prevent land degradation and improve slope stability. The site falls within the immediate influence zone of the proposed stone crusher operations and requires priority intervention before quarrying activity intensifies.

Work 2: Maintenance of Water Pond, Pashada [GPS: N 31°46'60" / E 77°69'57"]

The existing water pond at Pashada requires desilting, strengthening of embankments, and general maintenance to enhance water storage capacity. The water pond serves the needs of wildlife, livestock, and the local community. Its deterioration would adversely affect biodiversity and the livelihoods of dependent communities. Restoration of the pond also supports the broader objective of moisture conservation in the catchment.

Work 3: Maintenance of Path from Road Head to Village Pashada [GPS: N 31°28'41" / E 77°41'25"]

The footpath connecting the road head to Village Pashada is in need of repair and improvement. The recommended maintenance work includes clearing, leveling, drainage improvement, and safety measures to ensure the safe movement of villagers and field staff. This path is the primary means of access to the village and to the forest beat, making its maintenance a matter of both safety and operational necessity.

Conclusion of Field Inspection: *The above-mentioned works are essential for environmental conservation, infrastructure improvement, and community welfare in Pashada Beat. It is recommended that these works be taken up on priority under the provisions of Stone Crusher Laghu Udyog funds, subject to the approval of the competent authority.*

3. OBJECTIVES OF THE SMCP

The broad objectives for preparation of this Soil and Moisture Conservation Plan, incorporating the findings of the field inspection at Pashada Beat, are as follows:

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- i. Check soil erosion and land degradation by taking up adequate and effective soil conservation measures — both engineering and biological — in erosion-prone areas, particularly those under very severe and severe erosion intensity categories.
- ii. Rehabilitate degraded forest areas through afforestation and facilitation of natural regeneration.
- iii. Rehabilitate degraded slopes and landslide areas.
- iv. Construct retaining structures, contour trenches, and allied structural measures at locations identified during the joint field inspection in Pashada Beat (GPS: N 31°46'60", E 77°69'57").
- v. Desilt and strengthen the water pond at Pashada (GPS: N 31°46'60", E 77°69'57") to enhance water storage for wildlife, livestock, and local community needs.
- vi. Repair and improve the footpath from road head to Village Pashada (GPS: N 31°28'41", E 77°41'25") to ensure safe access for villagers and field staff.

4. COMPONENTS OF THE SMC PLAN

There are three principal components of the SMC in the catchment:

- (a) Reforestation including plantation, rehabilitation, and agro-forestry development.
- (b) Non-structural measures: land use regulation, public awareness for forest conservation, livelihood assistance/poverty alleviation, etc.
- (c) Structural measures — divided into two types: (i) Catchment conservation works other than water harvesting structures, implemented to minimize soil erosion and prolong the life span of water harvesting structures; and (ii) Water harvesting structures such as check dams and embankments.

4.1 Three Models of Structural Measures

The structural measures of the SMC adopt an integrated intervention targeting the whole area from the upstream catchment to the downstream command area within the same micro-watershed. Three models have been developed for site-specific adaptation:

Model	Terrain Conditions	Major Structures / Installations
Model-I (Upstream)	Narrow valley Steep slope > 20% Catchment < 5 ha	Plantation with staggered contour trenches Plantation with half-moon terraces Mulching Small earthen check dam
Model-II (Middle)	Narrow valley Steep-moderate slope 10-20% Catchment < 10 ha	Plantation with half-moon terraces Gully plugging Bench terracing
Model-III (Downstream)	Wide valley Gentle slope < 20% Catchment < 20 ha	Gully plugging Contour binding Bench terracing Plantation along water bodies / stream banks Mulching

5. TECHNICAL MEASURES AND INTERVENTIONS

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1 Gully Plugging Works

Gully plugging works are barriers installed across a gully to reduce runoff velocity, retain sediment, and reduce gully erosion within the micro-watershed. These consist of the barrier and optional downstream and upstream aprons. The following structures are used as barriers:

- (a) Plantation work using bamboos (for small and narrow gullies)
- (b) Brushwood check dam — single or double row post
- (c) Small earthen check dam (semi-permanent)
- (d) Stone check dam

At the project site, soil erosion was directly observed during the field inspection. Gully plugging structures shall be designed as per site conditions and standard technical specifications.

5.2 Contour Trench Work

Contour trench works involve constructing trenches along contour lines of slopes with gradients of 10–30%. Their objectives are to retain water and sediment on the slope, increase water infiltration, improve local soil moisture, and reduce runoff and sediment discharge to the downstream watershed.

Three types of contour trenches are employed: continuous trenches, and interrupted trenches (line and staggered). Continuous contour trenches are essentially used for moisture conservation in low-rainfall areas.

5.3 Half-Moon Terraces

On moderate slopes (10–20%) and steeper slopes (>20%), half-moon terraces (60 cm diameter and 30 cm depth) are established for water harvesting purposes around the ridge of hills. Economic tree species, NTFP species, and other species are planted in the basins. Half-moon terraces are particularly suitable on the steep slopes found around the Pashada project area where conventional planting is difficult.

5.4 Mulching

Mulching is an SMC practice in which cut grass, crop residues, or other organic materials are spread over the ground between crop rows or around tree trunks. Benefits include:

- Retention of soil moisture
- Interception of direct raindrop impact, reducing runoff and soil loss
- Prevention of weed growth
- Reduction of labour costs for weeding
- Enhancement of soil structure


Dipesh Chandra


Anurag


R.O. Ranapur

Plantation with mulching shall be applied where locally available materials permit.

6. SOIL EROSION ASSESSMENT

Lack of vegetal cover is the primary contributing factor for accelerated soil erosion in the tract, as also for environmental degradation. As confirmed during the joint field inspection at Pashada Beat on 25.03.2026, soil erosion was observed at various locations around the project area. While ideally, dense tree cover would serve as the best insurance against soil loss, the conditions in the lower reaches of the tract along the river are generally barren and devoid of tree growth. Good forest cover is confined to the upper reaches.

These natural conditions represent the primary limiting factor in addressing soil erosion and environmental degradation. However, the remedial measures proposed in this plan — including construction of retaining structures, contour trenches, gully plugging, and afforestation — can substantially minimize their impact.

6.1 Slope Classification

Slope exerts a strong influence on soil and water loss from the area and thereby influences land use capability. The erosion susceptibility of soil is directly related to slope gradient. Slope classification is performed as per the norms of the Soil and Land Use Survey of India (SLUSI) to formulate appropriate conservation measures for each capability class.

7. LAND COVER CLASSIFICATION

For the preparation of land use/land cover classification of the catchment area, forest cover data for the year 2017 was procured from the Forest Survey of India (FSI). FSI has classified the area into five primary classes. The non-forest area has been further sub-classified for this plan. All defined classes are described below:

S. No.	Class	Definition
1	Very Dense Forest	All lands with tree cover of canopy density of 70% and above.
2	Moderately Dense Forest	All lands with tree cover of canopy density between 40% and 70%.
3	Open Forest	All lands with tree cover of canopy density between 10% and 40%.
4	Scrub	All forest lands with poor tree growth (small or stunted trees) having canopy density less than 10%.
5	Non-Forest	Any area not included in the above classes — further sub-classified into: Grazing Land, Agricultural Land, Settlement, Barren Land, and Water Body.
6	Agricultural Land	Lands primarily used for farming and production of food, fibre, and other commercial and horticultural crops.
7	Settlement	Areas of human habitation developed due to non-agricultural use — buildings, transport, utilities, vegetation, and vacant lands including urban and rural areas.

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S. No.	Class	Definition
8	Grazing Land	Areas of natural grass with other vegetation, predominantly grass-like plants and non-grass herbs including Alpine/Sub-Alpine grasslands and manmade grasslands.
9	Barren Land	Rock exposures of varying lithology, barren and devoid of soil and vegetation cover.
10	Water Body / River	Natural courses of water flowing on the land surface along a definite channel or slope.

8. ENVIRONMENTAL AND SOCIOECONOMIC BENEFITS

8.1 Environmental Benefits

- Better control of weeds, provision of additional nutrients to the soil, soil temperature control, and protection of soil surface from the impacts of heavy rain and wind.
- Active reuse of waste organic materials reduces waste management needs, returning residue crops and plants to the soil through decomposition.
- Restored water pond at Pashada will support wildlife habitat and biodiversity in the beat area.
- Afforestation and soil conservation works will improve green cover and carbon sequestration potential of the degraded catchment.

8.2 Socioeconomic Benefits

- Maintenance of the path from road head to Village Pashada will ensure safe movement of villagers and field staff — a direct community benefit.
- Restoration of the Pashada water pond will provide reliable water access for livestock and community use throughout the year.
- Potential to reduce irrigation needs, increase agricultural productivity, and improve soil quality.
- Maintenance of the Forest Guard Hut will strengthen field operations, enabling more effective patrolling and protection of forest resources.
- Reduced irrigation needs also reduce energy requirements for water pumping.

9. FINANCIAL ESTIMATE — ABSTRACT OF PROPOSED ACTIVITIES

Sub Head: C/O Crate Walls

Project: Diversion of 2.1532 ha of Protected Forest for (1.4612 ha for mining lease and safety zone, 0.3400 ha for approach road and 0.3520 ha for staking of raw material) to feed already established Stone Crusher at Pashada, P.O. Khaneri within the jurisdiction of Rampur Forest Division, Tehsil- Rampur Bushahr, District- Shimla in the State of Himachal Pradesh.

S.No.	Description of Work	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
1	Earth work in excavation for structure as per drawing and technical specification clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious materials and disposal up to a lead of 50 metres, dressing of sides and bottom and back filling in trenches with excavated suitable material.	5.00	Per Cum	441.17	2205.85
2	Providing and laying of boulder apron laid in wire crates with 4 mm dia GI wire conforming to IS:280 and IS:4826 in 100 mm × 100 mm mesh (woven diagonally) including 10% extra for laps and joints, laid with stone boulders weighing not less than 25 kg each as per drawing and technical specifications Clause 1301.	10.00	Per Cum	2,946.55	29465.50

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S.No.	Description of Work	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
3	Maintenance Water Pond & Approach Path to village Pashada	L/S			73663.75
TOTAL ESTIMATED COST (Rs.)					1,05,335.10

10. RECOMMENDATIONS

Based on the field inspection findings and the SMC Plan prepared for the project area, the following works are recommended for priority implementation:

- Execute crate wall construction (earthwork excavation + boulder apron in wire crates) at the soil erosion site (GPS: N 31°46'60", E 77°69'57") as the primary structural measure at an estimated cost of Rs. 1,05,335.10.
- Carry out desilting, embankment strengthening, and general maintenance of the Pashada Water Pond (GPS: N 31°46'60", E 77°69'57") to restore water storage capacity for wildlife, livestock, and local community.
- Repair and improve the footpath from road head to Village Pashada (GPS: N 31°28'41", E 77°41'25") through clearing, leveling, drainage improvement, and provision of safety measures.
- Implement breast wall construction of total 2,500 metres along the approach road with PCC M20 hillside paved shoulders; cement mortar at landslide-prone sections.
- Undertake plantation with half-moon terraces and mulching on steep slopes within the catchment to improve green cover, moisture retention, and slope stability.
- All works to be executed under provisions of Mining Lease in favor of M/s Bushahr Laghu Udyog funds subject to the approval of the competent authority.

11. CONCLUSION

This Soil and Moisture Conservation Plan has been prepared for the diversion of 2.1532 ha of Protected Forest — comprising 1.4612 ha for mining lease and safety zone, 0.3400 ha for approach road, and 0.3520 ha for staking of raw material — for the Mining Lease of M/s Bushahr Laghu Udyog at Pashada, P.O. Khaneri, within the jurisdiction of Rampur Forest Division, Tehsil Rampur Bushahr, District Shimla, Himachal Pradesh.

The plan is grounded in the joint field inspection conducted at Pashada Beat on 25.03.2026 by the I/C Pashada Beat and the Block Forest Officer, Rampur, which identified four priority works — soil conservation, Forest Guard Hut maintenance, water pond maintenance, and path improvement — essential for environmental conservation, infrastructure upkeep, and community welfare. These field-verified observations have been incorporated into the objectives, technical measures, and recommendations of this plan.

 J. Singh
Pashada

 M. K. Sharma
Rampur

 R. D. Rampur
Rampur

The proposed structural measures — crate walls, gully plugging, contour trenches, half-moon terraces, breast walls, and afforestation — will collectively address soil erosion, land degradation, and moisture conservation requirements in the project catchment. The estimated cost for the primary crate wall works is Rs. 1,05,335.10, with additional estimates for the remaining priority works to be submitted separately.

Prepared and submitted by:

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M/s. Bushahr Laghu Udyog
Head Office :- V.P.O. Bhakri
Teh. Rampur Bsr., Shimla (H.P.)

Recommended by:



Forest Officer
Rampur Forest Division

Date:



Block Forest Officer
Rampur Forest Block



Range Forest Officer
Rampur Forest Range

