

# Report on the Implementation of Soil Erosion Plan Kudawa Access Road, Sinharaja Forest Reserve



## Ecosystem Conservation and Management Project (ESCAMP)

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### Assessment

As per the proposed soil erosion remedies in the proposed soil erosion control plan (SECP), please find assessment on the implementation in the table below.

Remedy as per SECP	Number proposed as per SECP	Number built	Remarks
identification and clearing of all natural earth drains and gullies	5 earth drains	5 earth drains	100% complete and well executed
construction of natural check dams and stone storm water step pools	20 check dams	24 check dams	100% complete and well executed
identification and clearing of natural cross road rainwater gullies with fillings of coir roll, tree trunks and bamboo	8 crossroad gullies	10 crossroad gullies	50% completed. Laying of the mats on top of the gullies and leaving the ditch effect on the road without filling it as per the proposed plan requires current remedial work.
stone protection of cross road gully outlets	5 gully outlets	3 gully outlets	75% completed. extra mating protection used can be evaluated further and used elsewhere that has greater impact.
clearing of bend release drain and associated step pool constructions			100% complete and well executed
covering of exposed sand and rock piles			50% completed. There is a need to assess greater road erosion areas and lay the mating and coir rolls accordingly.
installing flow breakers on the road surface in cascade pattern			50% completed. There is a need to assess greater road erosion areas and lay the mating and coir rolls accordingly.
Overall			75% of work has been concluded as per the SECP. Remedy for the crossroad gully fillings and removal of the gully surface mating needs to be further assessed. Coir log relocation needs to be assessed.

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### Overall Assessment

Overall the proposed SECP has been executed well in the areas of cleaning the earth drains, construction of check dams and storm water pools, stone protection of cross road gully outlets, clearing of bend release drain, covering of exposed sand and rock piles. However, the cross road gullies have not been completed as per specifications and the positioning of the coir logs needs better evaluations of impact areas.

Current works have brought in a soil erosion control remedy of about 60%. This can be optimized to about 80% with further enhancement works of the material replacement and re-allocation.

### Material Stock Take

Material	Application	Quantity Ordered	Quantity on Site	Stock status
Rock 6"X9"	1. check dams 2. wall soil erosion strengthening 3. gully entrance/exit strengthening	4.25 ft <sup>3</sup> or 12 m <sup>3</sup>	4.25 ft <sup>3</sup> or 12 m <sup>3</sup>	Complete use of material on site
Coir Mat 3 m X 20 m	1. gully surface 2. road surface	3 numbers	3 numbers	Complete use of material on site
Coir Log 4 m	1. soil erosion barrier 2. gully filler	12 numbers	12 numbers	Complete use of material on site

### Recommendation

Cross road gullies have been dug and the coir roll mat has been put on surface. As this is a temporary solution I suggest reevaluation of cross road gully design. I also suggest re-evaluation of impact of soil erosion through this surface laying of mat.

Further evaluation of high impact placement of 12 X 4 m coir logs can be done and these coir logs can be relocated.