

Supplementary material 1. Benefits of gully rehabilitation measures in the perspective of local communities

Factors	Women Group						Men Group					
	GHT	GRP	LRC	VLC	GC	F-Category	GHT	GRP	LRC	VLC	GC	F-Category
Enables additional income						Economic	✓	✓	✓	✓	✓	Economic
Uses locally available materials	✓	✓		✓		Economic						Economic
Facilitates movement of people and livestock		✓	✓	✓	✓	Social	✓	✓	✓	✓	✓	Social
Creates opportunities for fattening		✓			✓	Economic		✓				Economic
Increases access to food and food diversity in HHs						Social	✓	✓	✓	✓		Social
Conserves water/increase access			✓		✓	Environmental						Environmental
Improves the scene of the environment						Environmental		✓				Environmental
Improves agricultural production	✓	✓		✓	✓	Economic	✓					Economic
Increases land productivity	✓	✓	✓	✓	✓	Economic	✓	✓			✓	Economic
Increases access to productive land			✓			Economic						Economic
Improves soil fertility	✓	✓		✓	✓	Environmental				✓		Environmental
Increases availability of livestock feed	✓	✓	✓		✓	Economic	✓	✓	✓	✓	✓	Economic
Rehabilitates degraded lands						Environmental			✓			Environmental
Increases livestock products		✓				Economic		✓				Economic
Improves soil moisture content		✓			✓	Environmental	✓	✓	✓	✓	✓	Environmental
Reduces damage caused by flood						Social	✓	✓	✓		✓	Social
Regulates micro-climate						Environmental					✓	Environmental
Easy to construct and takes less labor						Economic	✓			✓		Economic
Lasts for longer time						Economic			✓			Economic
Serves as a learning site						Social		✓	✓	✓		Social
Prevents farmland loss	✓	✓	✓	✓	✓	Economic						Economic
Reduces soil erosion	✓	✓	✓		✓	Environmental	✓	✓	✓	✓	✓	Environmental
Reduced run off	✓	✓	✓	✓	✓	Environmental						Environmental

Note: GHT refers to gully head treatment, GRP – gully reshaping and planting, LRC – loose rock check-dam, VLC – Vegetation log check-dam, GC – gabion check-dam and F-category – factor category.

Supplementary material 2. Costs of gully rehabilitation measures in the perspective of local communities

Factors	Women Group					F-Category	Men Group					F-Category
	GHT	GRP	LRC	VLC	GC		GHT	GRP	LRC	VLC	GC	
Takes more productive lands	✓					Economic		✓				Economic
Construction takes time			✓		✓	Social						Social
Requires energy and labor	✓	✓	✓	✓	✓	Economic	✓	✓	✓		✓	Economic
Needs to be done in large scale						Economic	✓	✓		✓		Economic
Causes accidents to people and livestock		✓	✓	✓	✓	Social			✓		✓	Social
Requires collaboration among farmers						Social					✓	Social
Does not last long	✓		✓	✓		Economic				✓		Economic
Costly	✓	✓	✓		✓	Economic					✓	Economic
Less effective in reducing runoff/erosion				✓		Environmental				✓		Environmental
Could cause conflict among farmers		✓			✓	Social						Social
Lack of locally available materials	✓	✓	✓	✓	✓	Economic	✓	✓	✓	✓	✓	Economic
Requires integration with biological measures						Environmental			✓		✓	Environmental
Requires skilled labor & technical support			✓		✓	Social		✓	✓		✓	Social
Requires maintenance and protection from theft of stones						Economic			✓			Economic
Requires farm implements	✓	✓	✓		✓	Economic		✓	✓		✓	Economic
Shortage of seedlings						Economic		✓				Economic
The wood and materials like nails are exposed to theft				✓		Social						Social