

Table S3 Application and evaluation of approaches to combat degraded ecosystem in typical regions

Category of restoration technology	Name of restoration technology	Technical Evaluation					
		Potential to transfer	Easy to use	Readiness	Effectiveness	Suitability	Evaluation index
Biological	Aerial Seeding	3.00	4.00	4.00	5.00	4.00	0.80
	Protective/Buffering forests	3.17	3.67	4.33	3.83	4.33	0.77
	Artificial afforestation/ grass	3.94	3.68	3.67	4.05	3.98	0.77
	Plant breeding	3.00	2.89	4.33	4.11	4.78	0.76
	Fruit tree plantations	3.33	2.67	3.67	4.33	3.00	0.68
Engineering	Solid waste backfilling	5.00	5.00	5.00	5.00	4.00	0.96
	Riverbed sludge dredging	4.00	5.00	5.00	4.00	5.00	0.92
	Mechanical+biological sand barriers	4.00	4.00	3.00	5.00	5.00	0.84
	Straw checkerboards	4.00	4.00	4.50	4.00	4.50	0.84
	Grain for green	4.50	4.00	5.00	2.50	5.00	0.84
	Check dams	5.00	5.00	3.50	4.00	3.50	0.84
	Terraces	2.00	4.00	5.00	4.00	5.00	0.80
	Rainwater harvesting	4.00	4.00	3.00	5.00	4.00	0.80
	Storage reservoirs	3.00	3.00	2.00	4.00	3.00	0.60
	Stereo-agriculture	4.50	4.50	4.50	4.50	5.00	0.92
Agricultural	Agro-forestry	4.25	3.50	3.25	3.75	3.75	0.74
	Contour strip farming	4.00	2.00	1.00	4.00	4.00	0.60
	Groundwater irrigation	4.00	2.50	2.00	2.00	1.50	0.48
	Fallow/No-tillage/ Minimum tillage	1.00	2.00	1.00	3.00	2.00	0.36
	Prohibiting/Rest/Rotational grazing	3.60	4.70	4.10	4.90	4.10	0.86
	Ecological compensation	4.00	5.00	2.00	5.00	4.00	0.80
Management	Grazing exclosure	3.70	4.20	3.70	3.50	3.90	0.76
	Using Grass to Settle Livestock	2.00	3.00	4.00	4.00	5.00	0.72
	Natural restoration	3.50	3.00	4.00	2.50	4.00	0.68
	Participatory forest management	3.00	3.00	4.00	3.00	3.00	0.64
	Improving land management laws and regulations	1.00	2.00	1.00	2.00	2.00	0.32