Sustainability Assessment Report

Location: Site Assessment Area

Year: 2024

Quick Summary:

• Solar: Excellent potential

• Wind: Not feasible

• Water Harvesting: Fair potential

• Green Coverage: Good

Results Table:

Category	Measureme nt	Value	Rating	Notes
Solar	Radiation	5.202 kWh/ m ²	Excellent	Excellent potential! Installing solar is a great investment.
Wind	Feasibility	N/A	Poor	Land use not suitable for wind farms.
Water	Harvesting Score	0.463	Fair	Based on rainfall (0.855), soil (0.06), and slope (0.087) scores.
Plants	% Green Coverage	21.23%	Good	Meets the feasibility criteria of >20% green coverage and >10% barren.

Suggestions:

- Prioritize solar panel installation given the excellent solar radiation potential.
- Explore alternative renewable energy sources besides wind, given its infeasibility due to land use restrictions.
- Investigate water harvesting techniques despite the fair potential; improvements in soil and slope management could increase the overall score.

Top Recommendation: Solar panel installation.

Secondary Action: Further investigation into water harvesting techniques.

Monitoring Needs:

- Regular monitoring of solar panel performance.
- Track rainfall, soil moisture, and slope stability for water harvesting optimization.
- Monitor green coverage to ensure it remains above the required threshold.