Wana Nusa – Reforestation & Water Regeneration Pilot (Ilngei, Maluku)

Lead: Irfana S.

Location: Desa Ilngei, Tanimbar, Maluku

Pilot Size: 2 hectares (family land)

Problem & Opportunity

Coastal erosion, declining soil fertility, and dry-season water stress affect local livelihoods in Ilngei. The pilot aims to restore native vegetation, improve infiltration and soil moisture, and create a scalable model for carbon and water benefits.

Objectives (12 months)

- Establish native mixed-species reforestation on 2 ha with ≥80% year-1 survival.
- Implement water-regeneration measures (micro-catchments, contour bunds, check-dams/berm swales) to increase infiltration and reduce runoff.
- Set up baseline & MRV protocols that can scale to a larger program.

Interventions

- Site prep & community engagement; enrichment planting + assisted natural regeneration.
- Water structures on contours; mulching; soil micro-basins around seedlings; invasive control.
- Capacity building with local workers and youth.

Baseline & MRV (pilot-appropriate)

- Boundaries & plots: GPS polygon; permanent sample plots (20x20 m), fixed-photo points.
- Indicators: tree survival & growth (DBH/height), canopy cover (NDVI), soil moisture (portable probes), infiltration tests, erosion pins.
- Frequency: baseline (month 0), checks at months 3/6/12; dashboard & data sheets.
- Standards alignment: compatible with ARR methodologies; pilot treated as pre-credit demo to de-risk scale-up.

Co-benefits

Local jobs, skills, shade/cooling, biodiversity habitat, and improved dry-season water availability.

Implementation Timeline (12 months)

| M0-M1 | Finalize design, nursery/seedling sourcing, baseline. |
|--------|--|
| M2-M4 | Site prep, planting, first water structures. |
| M5-M12 | Maintenance, infill planting, monitoring, learning report. |

What Support We're Seeking

- Technical: review of baseline/MRV design; sampling strategy; data templates.
- Partnerships: intros to funders/intermediaries focused on nature-based solutions & water.
- Seed Funding (pilot): nursery, tools, labor, monitoring equipment, and MRV ops.

Team & Assets

Family-owned 2 ha site in Ilngei; local labor network; initial maps & coordinates; early field photos.