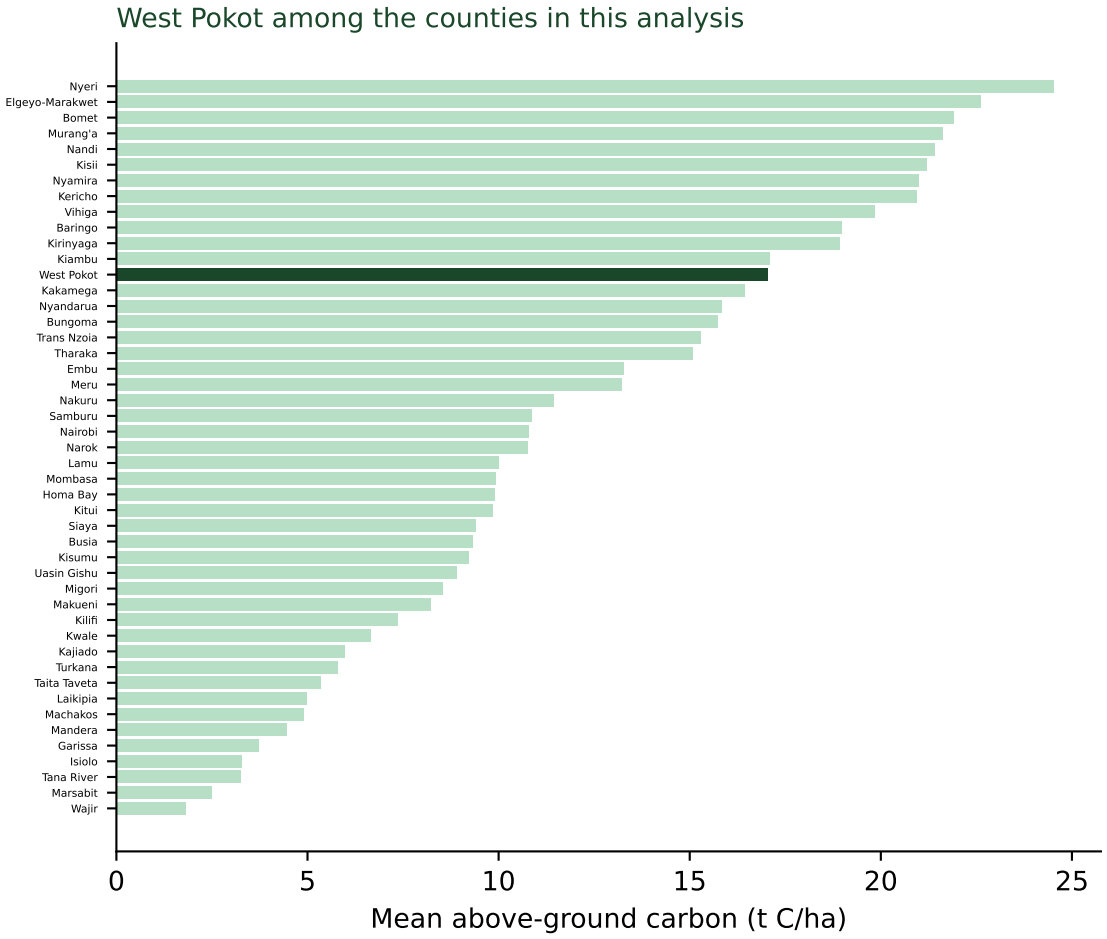
# West Pokot County

## Carbon stock screening report for county climate planning

Carbon-Eye analysis 52a2006ae7c0, run on 2026-11-18

| Figure | Value |
|---|---|
| Mean above-ground carbon | 17.0 t C/ha |
| Total above-ground carbon | 15.45 million t C |
| As CO2 equivalent (x 44/12) - a stock, not emissi | 56.63 million t CO2e |
| Range across the county | 0 - 70 t C/ha |
| Tree-cover loss recorded (Hansen, since 2001) | 2.2% of the county |
| Rank by carbon density | 13 of 47 counties in this analysis |
| Rank by total carbon | 8 of 47 |
| Share of the analysis's carbon | 4.1% |



# Where these numbers fit in county planning

### CIDP - environment and natural resources

A baseline indicator: above-ground carbon of 17.0 t C/ha on average (56.63 million t CO2e in total). Re-run the same analysis yearly to report the trend.

### County Climate Change Action Plan

The mitigation baseline for land and forests, and where carbon is concentrated. Pair it with recorded tree-cover loss to show where it is under pressure.

### FLLoCA investment proposals

Screening evidence for where restoration or protection would keep or add the most carbon. Proposals still need ward-level consultation and field checks.

### Tree-growing and restoration targets

Compare low-carbon land against neighbouring forest to show how much carbon restoration could add; Carbon-Eye's restoration tool gives the estimate for a chosen site.

### Forest protection and enforcement

2.2% of the county shows tree-cover loss since 2001; the Forest Change tab locates recent alerts for patrols and follow-up.

## How the numbers were made

Three machine-learning models (Random Forest, Gradient Tree Boosting, Support Vector Machine) are trained in Google Earth Engine on the ESA CCI biomass 2020 reference map, using Sentinel-1 radar, Sentinel-2 optical imagery, terrain, climate and soil layers from 2024-11-01 to 2026-11-01. Their weighted average is the carbon map; carbon is above-ground biomass x 0.47 (IPCC default).

## What it can't support

- These are screening estimates, not a forest inventory or verified carbon accounting; they cannot be sold as carbon credits.
- Above-ground carbon only: roots, dead wood and soil carbon are not in these totals.
- Dense forest is usually under-estimated and very sparse drylands are the least certain.
- Agreement is measured against a modelled reference map, not field plots; field plots (Carbon-Eye's plot planner gives the number and locations) are the next step before relying on a figure.