



US\$59.7 billion

real GDP gained, 2027 to 2060

US\$77.9 billion

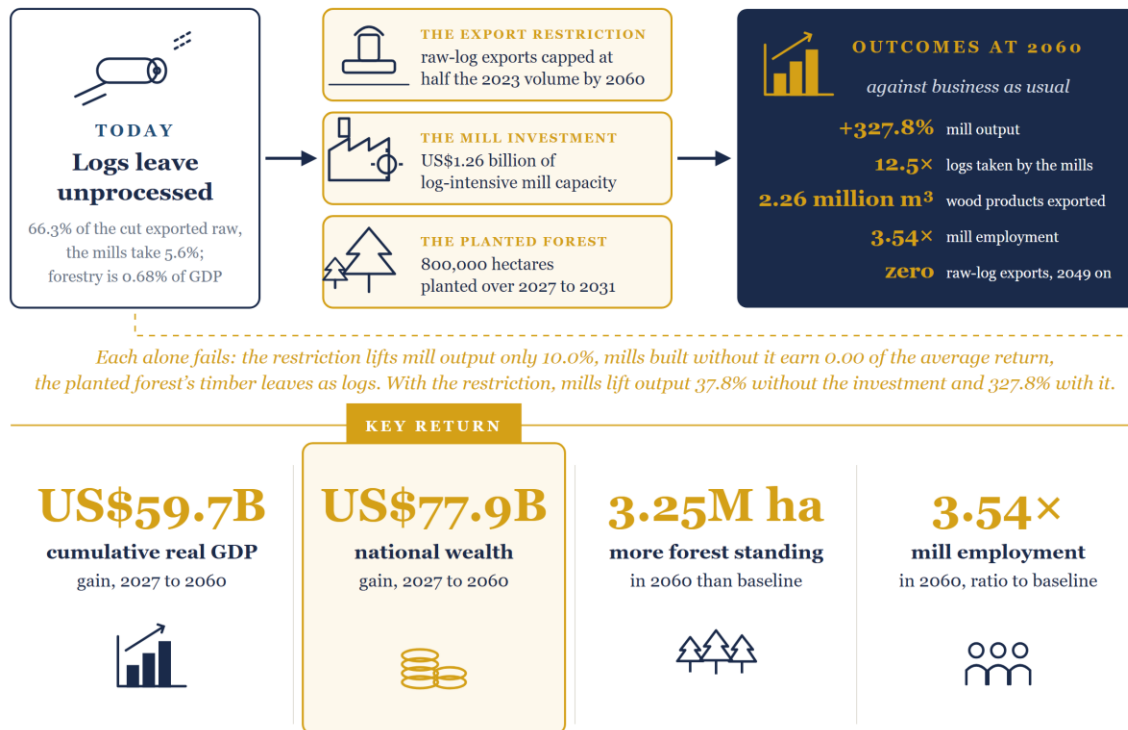
national wealth gained, same years

+327.8%

mill output in 2060, all three instruments

The answer for a funder. A cap on raw-log exports, US\$1.26 billion of mills installed as the planted forest harvest arrives and 800,000 hectares planted over 2027 to 2031 return US\$59.7 billion of real GDP and US\$77.9 billion in national wealth over 2027 to 2060, against program costs the study puts at US\$3.8 billion to establish the planted forest, US\$3.0 billion to replant it and US\$1.26 billion for the mills; the study states no single investment total, so this brief opens on the return. Figure 1 sets out the three instruments, what each does alone, what they do together and the four key results.

Figure 1. One policy, not three: each instrument alone, the three together and the four key results



Source: Open IEEM Platform, results set PARITY_20260901, as reported in Banerjee et al. (2026), Tables 3 and 4 and Figure 8.

Why exporting raw logs costs the country. In the model's base year the country harvests 4.6 million cubic meters of timber, ships 66.3 percent of it abroad unprocessed and sends 5.6 percent to its mills; forestry and wood processing are 0.68 and 0.11 percent of GDP. Under the strategy the mills take 12.5 times as many logs, processed wood exports climb from 61 thousand cubic meters to 2.26 million, mill employment is 3.54 times its baseline and no raw logs leave the country from 2049.

Why the mills have not been built. Capital goes where it earns most, and in this economy that is never wood processing. Mills built without the restriction earn 0.00 of the average return, and with it the installed capital earns 0.16 in 2060, so the build is public. Left to the market under the restriction alone, the industry grows by 37.8 percent and absorbs 2.6 million cubic meters of timber; with the directed investment it grows by 327.8 percent and absorbs 8.2 million.

What has to be true. The model treats the rules it is given as followed. Its results rest on conditions it cannot supply: the rule of law and enforcement in the forest sector, independent monitoring of export volumes and prices, a tax administration able to act on the gap between declared and overseas prices, free, prior and informed consent and benefit sharing with customary landowners, transparent award of permits, and the plant, the processing zone and the skills a mill needs.

A call to action. Papua New Guinea's forests can support an industry, employment and rising national wealth while they remain standing. Achieving that calls for sustained international support, and for support of a particular kind. It means investing in the evidence on which decisions rest, and standing behind the customary landholders who own the forest, the government agencies that administer it, and the academic and civil society institutions that hold both to account. The conditions set out above are what the model cannot deliver on its own. They are matters of law, transparency and consent, and they are built over years by people working in country. What the analysis shows is that the return is there. Mill capacity installed as the planted forest harvest arrives earns 0.16 of the average return, and pays instead in an industry, exports and employment. The planted forest estate adds US\$18.5 billion of wealth before it yields any income at all. Ecosystem service changes are small, 0.05 percentage points of GDP in 2060, because the forest is still standing and only the difference reaches the economy. Carbon finance is not what this case rests on. Ending deforestation with carbon payments gives the largest single income gain in the study, 2.92 percent of cumulative GDP, though it depends on payments of US\$44.1 billion at US\$25 a ton that no program has yet paid at that scale. The rest of the strategy stands without it. Figures 2 and 3 show the GDP and forest paths.

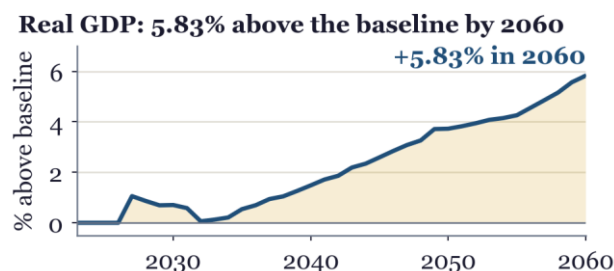


Figure 2. Real GDP under the package, percent above the baseline. Source: Open IEEM Platform, PARITY_20260901; Banerjee et al. (2026), Figure 4.

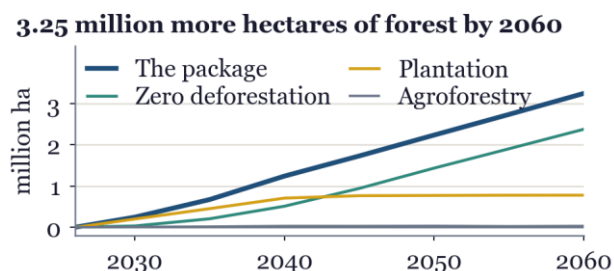


Figure 3. Forest area against the baseline by scenario, million hectares. Source: Open IEEM Platform, PARITY_20260901; Banerjee et al. (2026), Table 2.

Based on Onil Banerjee, Martin Cicowiez, Kenneth J. Bagstad, Colin Filer, Janaki Alavalapati, Jeff Connor, Renato Vargas, Sebastian Dudek, Angga Pradesha (2026). Forest conservation as a growth strategy: economy-wide evidence from Papua New Guinea. Submitted to Forest Policy and Economics. Full results, maps and animations: www.rmgeo.org/ieemesm/report/papua-new-guinea/