

THE STANDING FOREST · CHAPTER SEVEN

The Forest That Was Paid to Stand

Chapter Seven of The Standing Forest

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A NOTE BEFORE YOU READ

This work is offered for education and leadership development. It is not legal, financial, accounting, investment, medical or psychological advice; take the advice of a qualified professional who knows your circumstances. Companies and events are described from the public record as the author understands it; characterisations are the author's analysis. Examples are illustrative, and no particular outcome is promised to any reader.

ABSTRACT

This book has quoted, more than once, a sentence from Santa Anna's Ecstatic Economics that states the accounting problem at the heart of the subject: "A forest standing contributes zero. Cut it down, and GDP increases." In the 1990s a small country in Central America tried to turn that sentence over. It built a national programme to pay landowners for keeping forest standing, and for planting it back. Costa Rica's payments for environmental services, known by their Spanish initials as PSA, became one of the most studied environmental programmes in the world. They belong in this book for two reasons. The first is that they are the plainest public attempt to put the doughnut's ceiling into a ledger: to make the standing forest appear as income to the person who keeps it. The second is that they have been studied closely enough, by economists who were not their advocates, that the results can be stated with their error bars. The honest result is more modest than the legend and more instructive.

CHAPTER SEVEN

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The sentence turned over

This book has quoted, more than once, a sentence from Santa Anna's *Ecstatic Economics* that states the accounting problem at the heart of the subject: "A forest standing contributes zero. Cut it down, and GDP increases." In the 1990s a small country in Central America tried to turn that sentence over. It built a national programme to pay landowners for keeping forest standing, and for planting it back. Costa Rica's payments for environmental services, known by their Spanish initials as PSA, became one of the most studied environmental programmes in the world.

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The background

For much of the twentieth century Costa Rica cleared forest at a rapid rate, largely for cattle pasture. By the late 1980s the country's forest cover had fallen, on commonly cited estimates, to around a fifth of its land. It has since recovered to around half.[61] Those two figures travel together in almost every account of the programme, and they invite a conclusion the evidence does not support: that the payments caused the recovery. Hold the conclusion for a few pages. The order of events matters.

In 1996 Costa Rica passed a new Forestry Law. Among other things, it prohibited the conversion of mature forest to other land uses, and it recognised in law that forests provide services to society: the mitigation of greenhouse gas emissions, the protection of water for urban, rural and hydroelectric use, the protection of biodiversity, and natural scenic beauty. It created a national fund, the Fondo Nacional de Financiamiento Forestal, FONAFIFO, to pay landowners who agreed to protect or restore forest on their land. Payments began in 1997, financed at first largely from a share of a national tax on fuel, and later also from loans, grants and charges on water users.[62]

The structure is simple to describe. A landowner applies, a forestry professional draws up a plan, and the owner signs a contract, typically for five years, to keep existing forest intact, or to reforest, or to manage land under agroforestry. The fund pays a fixed amount per hectare per year. The contract is monitored, and payment stops if it is broken.

What the programme set out to do

Read in the language of this book, the programme did three things at once.

It named the services. The 1996 law did what Chapter 2's Two-Ring Ledger asks of a household in its first quarter: it wrote down, in a public document, the flows that a standing forest provides to the people downstream of it. Carbon held, water slowed and cleaned, habitat kept, a landscape that brings visitors. Until they were written down, they had no owner and no price.

It found the beneficiaries. A service has users, and users can be asked to pay. The fuel tax made road users, as emitters of carbon, pay for carbon held. The later water charges asked the people and firms who drink and use the water that forested catchments protect to pay for the protection. Stefano Pagiola, reviewing the programme for *Ecological Economics* in 2008, judged that it had made more progress in charging water users than in charging the users of biodiversity or carbon.[63] That is an important finding for any leader. The services whose beneficiaries are close, identifiable and dependent are the easiest to fund. The services whose beneficiaries are diffuse, distant or not yet born are the hardest.

It paid the steward. The person who kept the forest, and who bore the cost of not clearing it, received an income for doing so. In the house's terms, the programme restored a reciprocity: a giving for a taking, a payment answering the service.



What the evidence shows

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What the evidence shows

Here a careful reader has to slow down, because the evaluations tell a more complicated story than the forest-cover figures.

The difficulty is the counterfactual. To know what the payments achieved, one has to know what would have happened to the same land without them. By the time payments began in 1997, several other things had changed. The 1996 law had already prohibited clearing mature forest. Cattle prices had fallen, which

made pasture less profitable. Tourism had grown, which made standing forest more valuable to some landowners regardless of any payment. Deforestation had been slowing before the programme began.

Economists who compared enrolled land with similar land that was not enrolled have generally found that the programme's direct effect on deforestation was real but small. A World Bank evaluation by Erin Sills and colleagues, reported in 2008, concluded that the programme resulted in a small but statistically significant increase in the area of forest conserved.[64] Other studies, with different methods and periods, have reached broadly similar conclusions: much of the land enrolled in the early years would probably have stayed forested anyway, because it was steep, remote or otherwise unattractive to clear. Later rounds of the programme tried to target payments more carefully, towards land at higher risk of clearing or of higher value for water and habitat.

This is not a story of failure. It is a story about what a payment can and cannot do on its own. The forest recovered because a law, a market, a tourist economy and a payment scheme all pointed in the same direction at once. The payment's own marginal contribution was modest. Its contribution to the whole, by making stewardship a recognised and paid occupation, by building an institution that could later be targeted better, and by changing what the country counted, is harder to measure and probably larger.

Santa Anna's book, discussing a different case, uses a phrase that fits this one exactly: the framework is "necessary but not sufficient." A payment for a standing forest, without a law against clearing it and an economy that values it, would have bought little. A law without a payment would have asked landowners to bear the whole cost of a service everyone else enjoyed.

The house's reading

The Costa Rican programme is usually discussed as environmental economics: a way to correct a market failure by creating a market. The living-systems reading of Chapter 4 sees it slightly differently, and the difference changes what a leader would copy.

Santa Anna's book draws from regenerative agriculture an image of what happens when the economy and the ecology stop working against each other:

> *The farmer prospers because the soil prospers.*[65]

The PSA programme, at its best, made that sentence true for a forest owner. The owner's income came from the forest's health, so the owner's interest and the forest's interest pointed the same way. That is a feedback loop restored: the signal from the standing forest, which used to arrive nowhere, now arrives in a bank account once a year.

The book also distinguishes between doing less harm and doing more good:

> *Sustainability aims to do less damage. Regeneration aims to increase life.*[66]

The programme had both kinds of contract. Protection contracts paid owners not to clear: less damage. Reforestation and agroforestry contracts paid owners to plant: more life. The evaluations have concentrated on the first kind, because avoided deforestation can be compared with a control. The second kind, the slow thickening of a landscape over decades, is the part of the story that a five-year comparison is least able to see, and the part a regenerative enterprise would most want to copy. The neighbouring book in this lineage on regenerative and circular economics, regenerative economies, takes that distinction further.

The five readings, applied

Chapter 4 offered five ways of reading any organism in its habitat. Applied to the Costa Rican programme, they show where its strengths and its gaps lie more clearly than a single evaluation can.

Nesting. The programme sits inside the country's law, which sits inside its economy, which sits inside a set of watersheds and forests. Its designers understood this. The payment was never meant to work alone; it was one part of a nested arrangement whose outer layer was the 1996 prohibition on clearing mature forest. A firm that tries to copy the payment without the outer layer, without its own commitment not to buy from cleared land, will find the payment does less than it hoped.

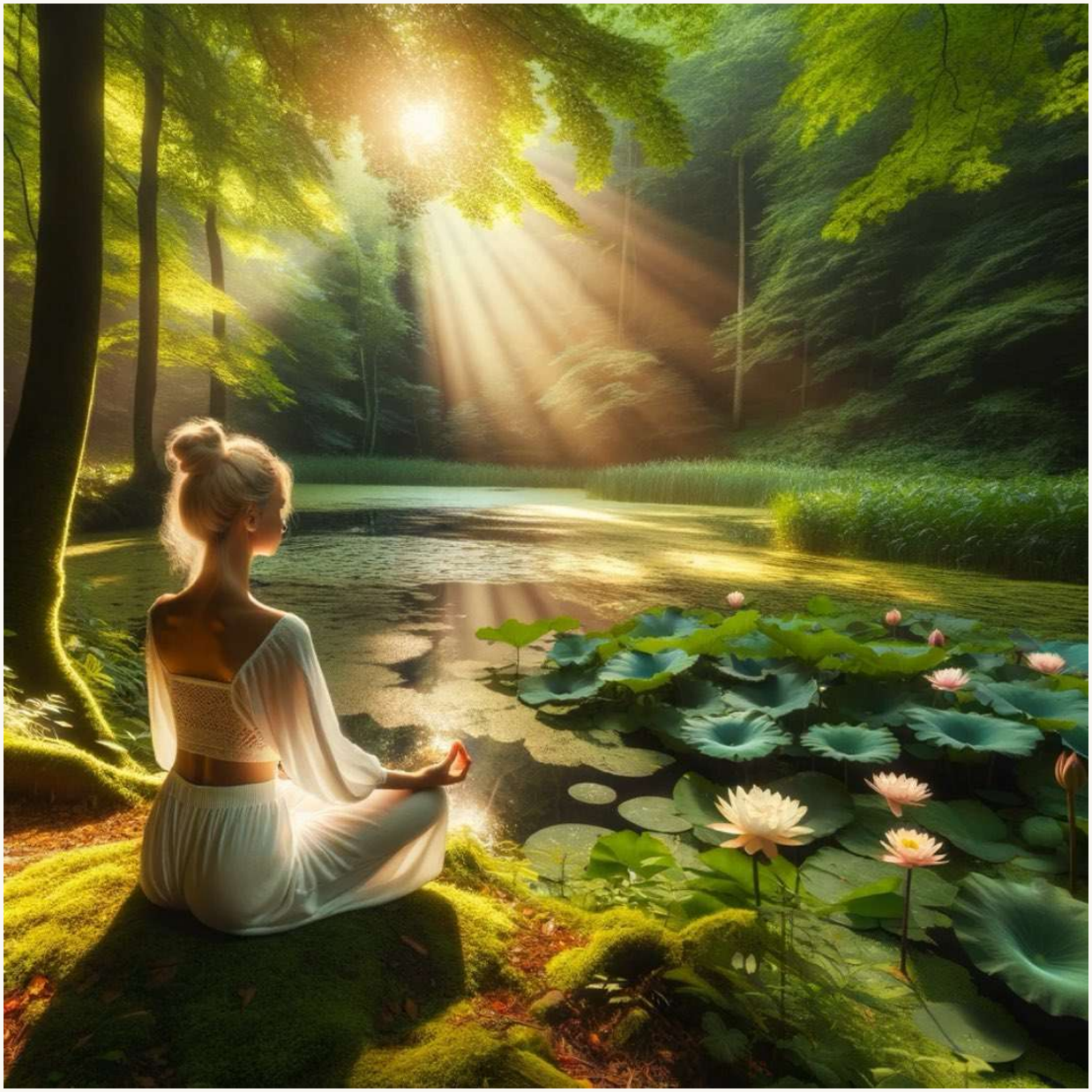
Metabolism. The programme changed the diet of the national economy only slightly. Timber, beef and coffee still flowed out of the country; fuel still flowed in. What changed was the condition of one part of the body: the stock of standing forest. Boulding, in Chapter 2, said that on a closed ship the measure of success is the condition of what you hold. The programme is one of the few public policies anywhere whose explicit aim was the condition of a stock rather than the size of a flow.

Feedback. The payment restored a signal that had been lost: the value of a standing forest to the people downstream now reached the person upstream who decided whether to keep it. The weakness, which the evaluators found, is that the signal reached many people who would have kept the forest anyway. A feedback loop is only useful where it changes behaviour, and the later targeting of payments was an attempt to send the signal where it would be heard.

Reciprocity. The water charges are the programme's clearest reciprocity: the town that drinks from a forested catchment pays the people who keep it forested. Pagiola's finding that this was where the programme progressed furthest is, in the house's terms, unsurprising. Reciprocity is easiest between parties who can see each other.

Vitality. No evaluation cited in this chapter measured whether the people who held PSA contracts felt differently about their land, their work or their future. It is the question the house would most want answered, and the one the record cannot address. A five-year contract that turns a forest owner from a

person waiting to clear into a person paid to keep may change something in how that person lives on the land. Whether it does is an empirical question, and an open one.



The finer points, for a firm

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The finer points, for a firm

Most organisations will never run a national fund. Many depend on a forest, a watershed, a farm or a fishery they do not own, and some can do at small scale what Costa Rica did at national scale. Five lessons transfer.

Name the service before you price it. The 1996 law listed four services. A firm that buys timber, food, water or fibre can list, in a paragraph, what the land it depends on provides beyond the commodity: water held in a catchment above its plant, soil kept on a supplier's farm, habitat on the edge of a field. The list is the first step and costs nothing.

Find the beneficiaries who are close. The Costa Rican programme found water users easier to charge than carbon users. A firm will find the same. The service the firm itself depends on, the water its process needs, the soil its supplier's yield needs, is the one whose value it can see and is most willing to pay for. Start there.

Pay the steward, and pay on time. A payment that arrives late, or that the steward cannot rely on, buys little behaviour. Chapter 5's composite furniture maker found it was paying its smallest suppliers slowest. A firm that wants a supplier to keep soil in heart pays enough, early enough, for the supplier to afford to.

Target, then re-target. The programme's evaluators found that early payments went disproportionately to land that was not at risk. The same will happen to any firm's first scheme: the suppliers who sign up first are often those already doing the right thing. That is not wasted money; it rewards good practice and keeps it. But the second round should look for the places where the payment changes what happens.

Measure the counterfactual honestly. If a firm pays a grower to protect a hedgerow, the right question is not whether the hedgerow is still there in five years but whether it would have been there anyway. Often the honest answer is "probably", and that is worth knowing. The money may still be well spent, as a reward and a relationship. It should not be reported as a result it did not cause.



The finer points, for a household

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The finer points, for a household

A household cannot pay a forest. It can do three smaller things that follow the same logic. It can find the land its food, water and wood come from, at least in outline, and notice which of those places it has never thought about. It can, where it has a choice, pay a little more to a grower or a maker whose practice keeps the land in heart, and pay them promptly. And it can treat its own garden, window box or allotment as a stand of forest in miniature: a stock whose condition it keeps, not a flow it consumes. Chapter 11 takes these further.

What this chapter cannot show

The forest-cover figures are national estimates, made with different methods in different years, and they are reported here as they are commonly cited, not recalculated. The evaluations compare enrolled with unenrolled land, and their conclusions depend on how well the two were matched. None can isolate the programme's contribution to the country's broader change in what it valued. And the financing details changed over the programme's life; the description here is of its design, not of any particular year's budget.

What the case does show is that a country can write the services of a standing forest into law, find people willing to pay for some of them, and pay the people who keep them, for more than a quarter of a century. It also shows, through the patience of its evaluators, that a payment works best as one part of a system pointing in one direction, and that the honest measure of a programme is what it changed, not what happened beside it.

The Tool: The Stewardship Contract

A one-page agreement between an organisation and a steward it depends on: a grower, a landholder, a community that keeps a catchment, a supplier. It is drafted together, not handed over.

1 · The service, named. One paragraph, in plain words, describing what the steward's land or practice provides beyond the commodity sold: water held, soil kept, habitat, a landscape. Both parties sign the paragraph.

2 · The practice, agreed. Three to five specific practices the steward will keep or begin, each observable: a hedgerow kept, a cover crop sown, a riverbank left unploughed for five metres, a stand of trees not felled.

3 · The payment. A fixed amount per year, or per hectare, or per unit bought, stated in money. Paid within thirty days of each agreed date. Not conditional on the steward's yield.

4 · The term. Five years, matching the Costa Rican contracts and long enough for a practice to become habit. Renewable by agreement.

5 · The counterfactual question. One sentence, written by both parties at the start: *What do we think would happen to this land without this agreement?* Re-read it at renewal, and answer it again honestly.

6 · The record. One visit a year, by someone from the organisation who is not in purchasing, with one photograph from the same spot each time and a short note on each practice. Keep the photographs together. After five years, lay them side by side.

7 · The reciprocity line. One sentence on what the steward receives besides money: early warning of changes in demand, a place at the annual supplier meeting, help with certification. The payment buys a practice. The line keeps a relationship.

A NOTE FROM THE HOUSE

A firm that pays a steward to keep what it depends on is buying a gain it has not yet counted: water held, soil kept, a supplier still farming when the contract is renewed. Luminous Prosperity Inc. counts and opens that kind of gain inside organisations as a gainshare, paid as a share of what is found.

REQUEST A CONVERSATION

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