



Hecho en Monteverde:

Evaluation of and improved criteria for a sustainability certification





Monteverde's reliance on the environment



MV has a delicate, unique cloud forest ecosystem.

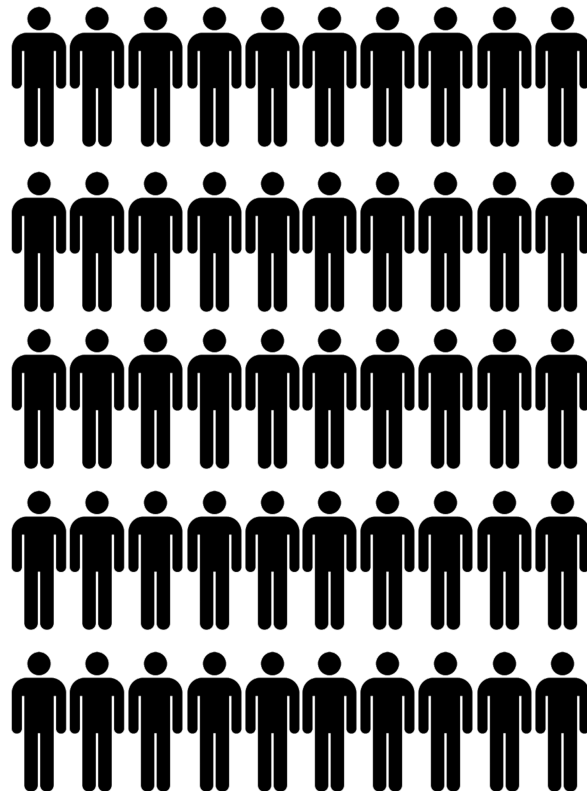
Ecotourism is driven by attractiveness of the environment.

Unsustainable practices and climate change jeopardize resilience and sustenance.



Touristification of Monteverde

5,000 RESIDENTS



250,000 TOURISTS



Monteverde: a vulnerable tourism-based economy



Touristification, a growing global economy, and environmental degradation hinder resilience of local businesses

Hecho en Monteverde wants to strengthen social, environmental, and local values through circular and orange economies



6 CLEAN WATER
AND SANITATION



7 AFFORDABLE AND
CLEAN ENERGY



8 DECENT WORK AND
ECONOMIC GROWTH



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



14 LIFE BELOW
WATER



15 LIFE
ON LAND



17 PARTNERSHIPS
FOR THE GOALS



Sustainable Development Goals (SDGs)



Benefits of a certification

1 Hybrid governance

Private companies and people set standards

2 Policy ecosystem

Fills policy gaps and lenient regulations

3 Market attractiveness

Distinguishes certified businesses

4 More profits

Increased revenue due to certification

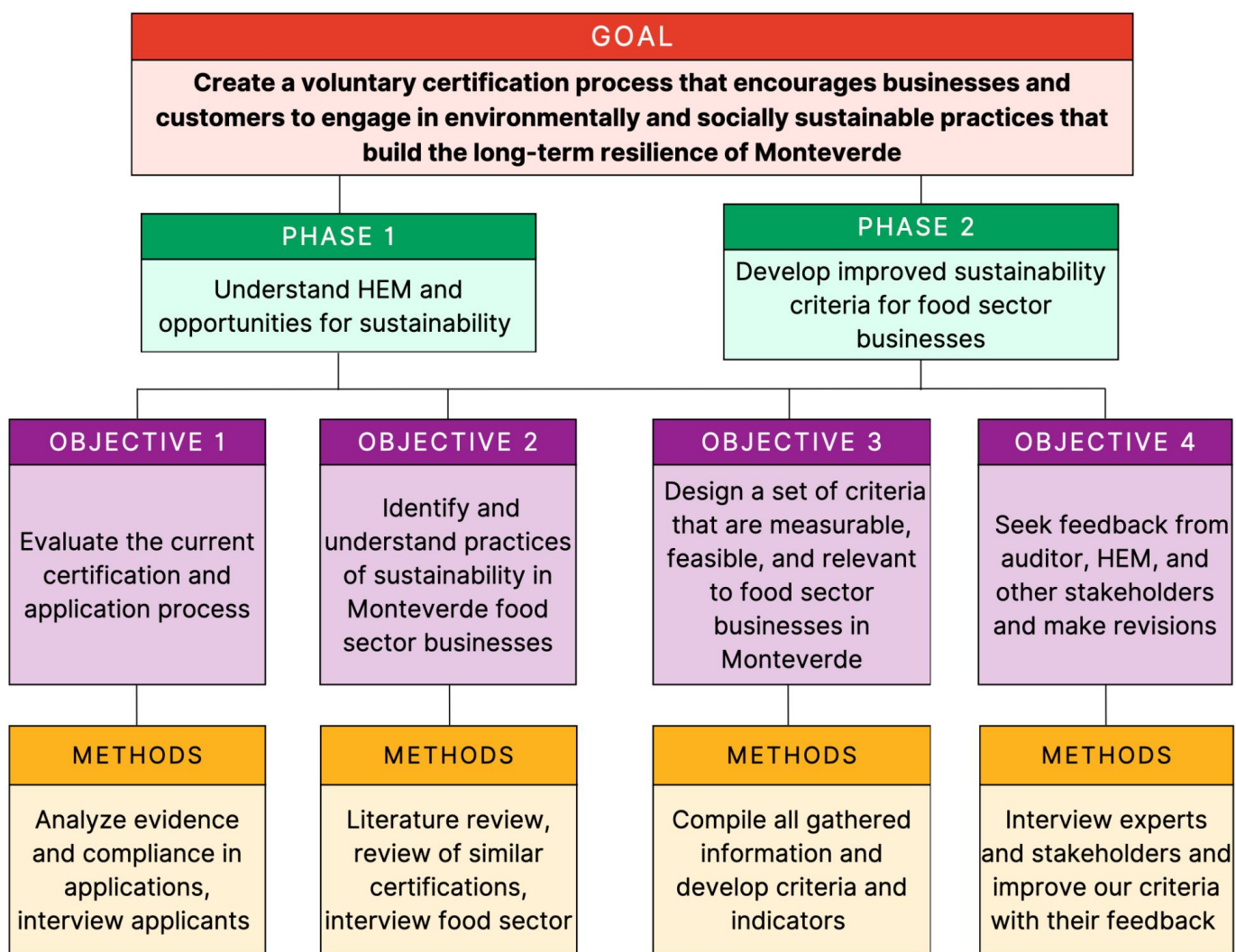
5 Green values

Reinforces environmental sustainability

6 Social well-being

Ensures the ethical treatment of people

Goal and objectives





Results from applicant interviews

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STRENGTHS OF THE APPLICATION

Contained all necessary questions
Encouraged documentation

WEAKNESSES OF THE APPLICATION

Some questions did not apply
Hard to fill out without help

W

O

OPPORTUNITIES FOR HEM

Provide a list of possible evidence,
templates, and guides
Create a paper/in-person format

THREATS TO HEM

Not enough instruction
Not enough benefits to justify the time
Technological illiteracy and inaccessibility

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Critique of an HEM criterion: An example for fossil fuels



“The organization reduces the use of fossil fuels: gasoline, diesel, bunker, etc.”

Indicators: (1) Fossil fuel purchases, (2) plans to reduce consumption, (3) energy-efficient appliances, (4) periodical energy audits, (5) offsetting efforts, (6) transportation methods, (7) local and seasonal ingredients

	Strengths	Weaknesses
Measurability	Easily measurable through bills and receipts	“Reduces” is not defined, timeline is not defined
Feasibility	Businesses should be able to acquire this kind of evidence	Reducing fossil fuel consumption is not always possible
Relevance	Businesses consume fossil fuels in kitchens or for transportation	N/A

Draft of a new criterion: An example for fossil fuels



“The organization reduces the use of fossil fuels: gasoline, diesel, bunker, etc.”

Proposed criterion:

“The organization:

1. Monitors metrics of fossil fuel usage monthly, reduces usage, and utilizes renewable energy when possible.
2. Designed and adheres to an annual fossil fuel usage plan that reduces emissions of carbon dioxide and other greenhouse gases.
3. Promotes cleaner methods of transportation, participates in collective transport, and/or increases efficiency in routes.”



23 proposed sustainability criteria for the food sector



Waste management

1. The organization properly separates and treats waste in the following categories: ordinary (separated into glass, packaging, paper and cardboard, and organic), hazardous, and special treatment.
2. The organization weighs and tracks its waste, as well as develops and adheres to a comprehensive plan for waste management (including organic waste) in accordance with the requirements of Law No. 8839.

Waste reutilization and minimization

3. The organization uses biodegradable, reused, recycled, and recyclable materials whenever possible.
4. The organization minimizes waste in the complete life cycle of the product offered.
5. The organization has developed and adheres to an annual plan to reduce waste production.

Wastewater

6. Wastewater, including gray and black water, is appropriately filtered, treated (through a septic tank, wastewater garden, or other), and discharged when applicable per Regulation No. 33601: Regulation of Discharge and Reuse of Wastewater and Regulation No. 42075: Regulation for Groundwater Discharge of Treated Wastewaters.
7. The organization reuses or repurposes water whenever possible. The organization uses products without harmful or persistent chemicals.

Water consumption

8. The organization monitors metrics of water usage from all water sources utilized monthly. The organization calculates water usage per person or unit of production.
9. The organization has developed and adheres to an annual plan that decreases water consumption and maximizes efficiency of water usage.
10. The organization utilizes water efficient appliances and/or has a plan to phase inefficient ones out following their life cycles.

Fossil fuels

11. The organization monitors metrics of fossil fuel (gasoline, diesel, bunker, liquefied petroleum gas, etc.) usage monthly, reduces usage, and utilizes renewable energy when possible.
12. The organization has designed and adheres to an annual fossil fuel usage plan that reduces carbon dioxide and other greenhouse gas emissions.
13. The organization promotes cleaner methods of transportation (walking, biking, EVs), participates in collective transport, and/or increases efficiency in routes.

Electricity

14. The organization monitors metrics of electricity consumption monthly and performs periodic energy audits of the business.
15. The organization incorporates energy efficient appliances, lighting, and kitchen layout (if applicable), and/or has a plan to phase out inefficient ones following their life cycles. Periodic maintenance is performed on appliances and equipment to ensure their efficiency.
16. The organization has developed and adheres to a plan that minimizes electricity consumption and maximizes energy efficiency. The plan aims to get electricity from clean sources and diminish the impacts of light pollution on the community and wildlife.

Biodiversity conservation

17. The organization tracks and makes an effort to source ingredients from local, sustainably certified, non-GMO, non-monoculture, and/or organic suppliers. The organization uses seasonal ingredients when possible. The organization does not include any threatened or invasive species in its products.
18. The organization plants native species and removes invasive species from its grounds. The organization minimizes the use of pesticides and synthetic fertilizers on its grounds.
19. The organization does not feed the local biodiversity and does not lure or exploit wildlife.

Education, awareness, and action

20. The organization has developed sustainability policies and trains its staff to follow them.
21. The organization educates its staff, customers, collaborators, and the community about environmental sustainability.
22. The organization actively participates and encourages others to participate in sustainability practices and initiatives that reflect the values of HEM, specifically in the areas of water conservation, reduction of greenhouse gas emissions, and biodiversity conservation.
23. The organization carefully chooses suppliers that follow sustainable environmental and social practices. The organization diminishes reliance on supplies from large corporations that do not adhere to sustainability goals.

Main findings

The certification and network matter:

1. HEM marketing materials attract customers
2. The network promotes sustainability through business collaboration



Main findings

A lack of communication and marketing slows HEM's progress:

1. Certified applicants do not indicate benefits yet
2. HEM was unknown among interviewed food sector businesses
3. One annual meeting is not enough





Main findings

Objectivity and truth can only exist to a certain extent:

1. No established standards or tolerances can lead to unreliable evaluations among auditors
2. In general, certifications do not always measure target goals



Recommendations to HEM

Continue revising food sector certification	Revise criteria for other sectors/areas of concern	Improve accessibility	Improve marketing & outreach
Improve scoring for criteria (points and tolerances) Conduct pilot tests	Use our process to guide further criteria development	Buddy system Add explainers and evidence suggestions Have product certifications too	Market to tourists and prospective businesses Establish education and training programs

Conclusions

Measurability, feasibility, and credibility are key characteristics of an effective voluntary certification.

In order for more sustainable practices to be implemented, businesses need to be aware of their environmental impacts.

Sustainability certifications guide and encourage sustainable practices.

In order for Monteverde's economy to be truly sustainable, both locals' and tourists' demands need to be addressed in solutions.

Monteverde's environment and community will benefit from supporting a circular, orange, and sustainable economy.

Thank you!

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