

5 OCTOBER 2017

Natural Capital Valuation

Experiences from Emerging and Developing Countries

SESSION E



**Methodological aspects
on the internalization
of external costs**

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Development Policies
Manager
Fairtrade Germany*



**Opportunities and
Challenges for SMEs in
emerging economies**

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Environmental
Management
Natura*



*Andreas Gettkant
Private Business Action
for Biodiversity
GIZ*





Methodological Aspects of the Internalization of External Costs

Martin Schüller

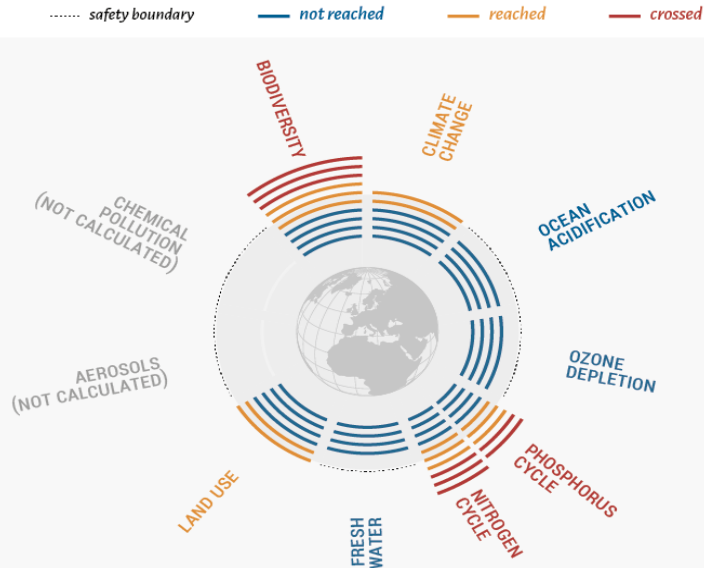
TransFair e.V. (Fairtrade Deutschland)



WHY SHOULD A PRICE BE PAID FOR THE USE OF NATURAL RESSOURCES / OF NATURAL CAPITAL?

Planetary boundaries

By 2015, we reached or crossed the boundary between safe operating levels and dangerous conditions in five planetary trends.



https://www.newclimateforpeace.org/sites/default/files/NewClimateForPeace_all_graphics_png/NewClimateForPeace_Planetary%20boundaries.png

Because...

- ...the economy depends on a functional ecology, not the other way around
- ...already in 2015 humankind has reached or breached „safe operating levels“ in five out of 10 planetary trends
- ...business as usual based on the predominating economic model/the growth & consumption paradigm is the main culprit for this development; creating poverty, inequality and environmental destruction
- **...the use of natural resources has no price, or a price far too low**

HOW DOES FAIRTRADE CONSIDER THIS?

- Adding social aspects on the realization that **the use of natural resources has no price, or a far too low price; on top of this human resources at the producer level are almost generally exploited.**
- Building on this, Fairtrade has introduced the „**Fairtrade Minimum Price**“ (FMP) to ensure all attributable costs to determine the FMP are considered by using the „**COSP-Approach**“ „Costs of sustainable Production“.
- But: „**Natural Capital**“ so far not internalized.
- **Starting point:** to internalize externalized costs into the COSP-approach.
- **Objective:** to be able to internalize the „true“ **environmental** and **social** costs to determine the FMP.

STANDARD OPERATING PROCEDURE FOR THE DEVELOPMENT OF FAIRTRADE MINIMUM PRICES AND PREMIUMS


Approved by: Andreas Kratz

Approved on: 23.06.2016

Audience: Fairtrade stakeholders

Contact for comments: standards-pricing@fairtrade.net

For further information: www.fairtrade.net



FAIRTRADE
INTERNATIONAL

RECENT RESEARCH DIRECTED ON DETERMINING „TRUE“ ENVIRONMENTAL AND SOCIAL COSTS

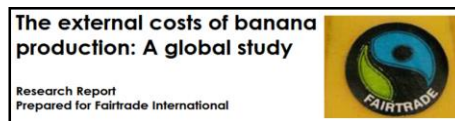
Three Pilot Studies commissioned by Fairtrade International and Fairtrade Germany to build on:

- „Costs of sustainable Production“-approach (more internalization of external costs)
- Global Living Wage Coalition-approach (ISEAL) on „living wages“ (-> workers)
- Newly developed project on „living income“ (-> smallholder farmers)

“Assessing Coffee Farmer Household Income”, study by True Price, commissioned by Fairtrade International 2017*

“Externalities from Fairtrade Cotton Farming”, study by Trucost & Gist Advisors, commissioned by Fairtrade Germany 2017

“The external costs of banana production”, study by True Price & Trucost, Research Report commissioned by Fairtrade International 2017



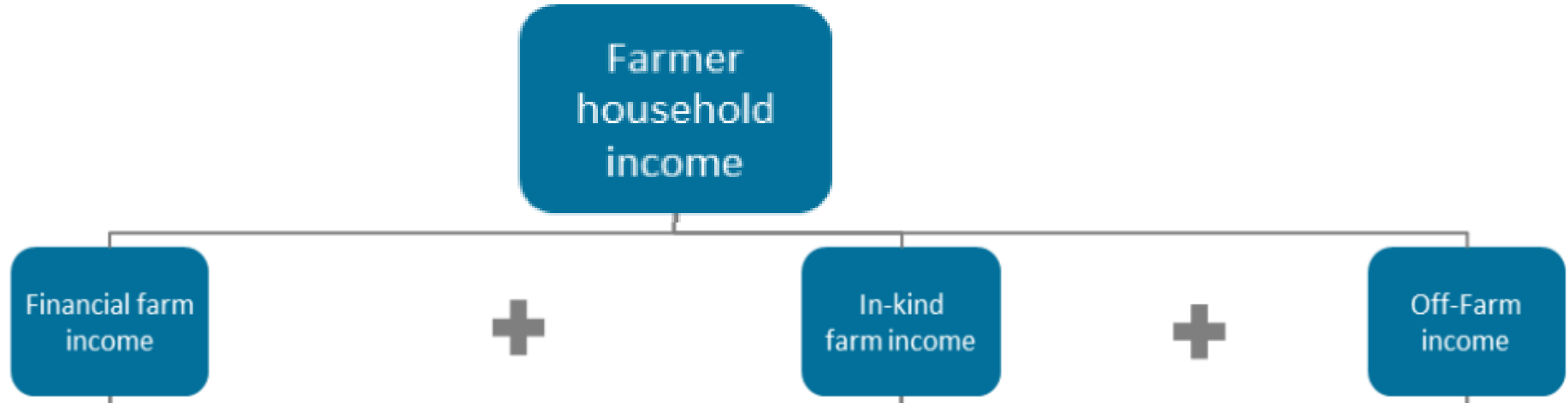
“Assessing Coffee Farmer Household Income”, research study by TRUCOST, “Complex Approach”

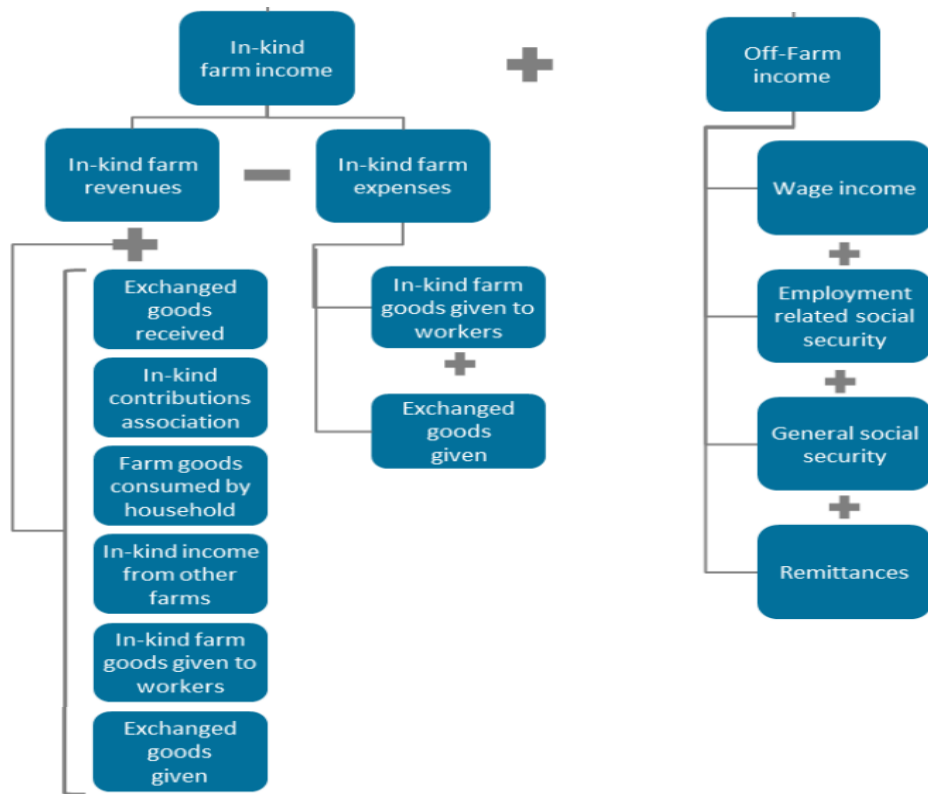


- **Issue: Determine Farmer Household income;** defined as *“All income that a farmer can have, both on and off-farm and both financial and in-kind, minus all financial and in-kind costs the farmer has for the production of coffee and other farm goods”*.
 - > however, determination of farmer household income is not so easy!
- **Objective:**
 - Improve Fairtrade Minimum Price (FMP) calculation by developing a method that is rigorous, yet sufficiently practical to be scaled up and used as a permanent tool **to improve the calculation of the Costs of Sustainable Production (COSP)**.
- **Method:** co-developed by True Price and Fairtrade. Based on several methodologies: Brealey & Myers (2013), Damadoran (2012) and Koller, Goedhart and Wessels (2015). To tailor the methodology to income of smallholder coffee farmers aspects of the methodologies of COSA¹ and INCAE² were used. This approach could be used/modified in future projects for efficiently assessing farmer household incomes – **including internalizing external social and environmental costs**.

"Assessing Coffee Farmer Household Income":

Farmer Household Income Model





Each „data area“ is based on a comprehensive list of criteria

"Assessing Coffee Farmer Household Income":

Criteria

Financial farm income	Financial income from the household's farm(s)
Increase in working capital	Monetary value of coffee stock increase in last crop year
Net profit other goods	Revenues of goods besides coffee that are sold for cash minus the extra costs of these other goods (including costs of goods sold, overhead costs, non-operating costs and net investment outlays)
Net investment outlays	Investment costs on capital assets, spread out over the useful life years. This includes costs of structures, facilities, tools, materials, machinery and equipment and establishment costs of new coffee trees
Overhead costs	Overhead costs include book keeping costs, memberships fees to the SPO and other member organizations, insurance, pre-studies and analysis and possible other overhead costs (i.e. certification cost)
Interest	Interest costs on outstanding loans
Taxes	Government taxes
Subsidies	Subsidies in cash received from the SPO or other parties
Revenue coffee	Financial revenues of coffee sold for cash
COGS (costs of goods sold) coffee	Operational costs of coffee including input costs and hired labour costs; all costs from coffee crop management, coffee processing, coffee packing and storage and coffee transport
Financial income from other farms	Net profit from other farms than the primary farm

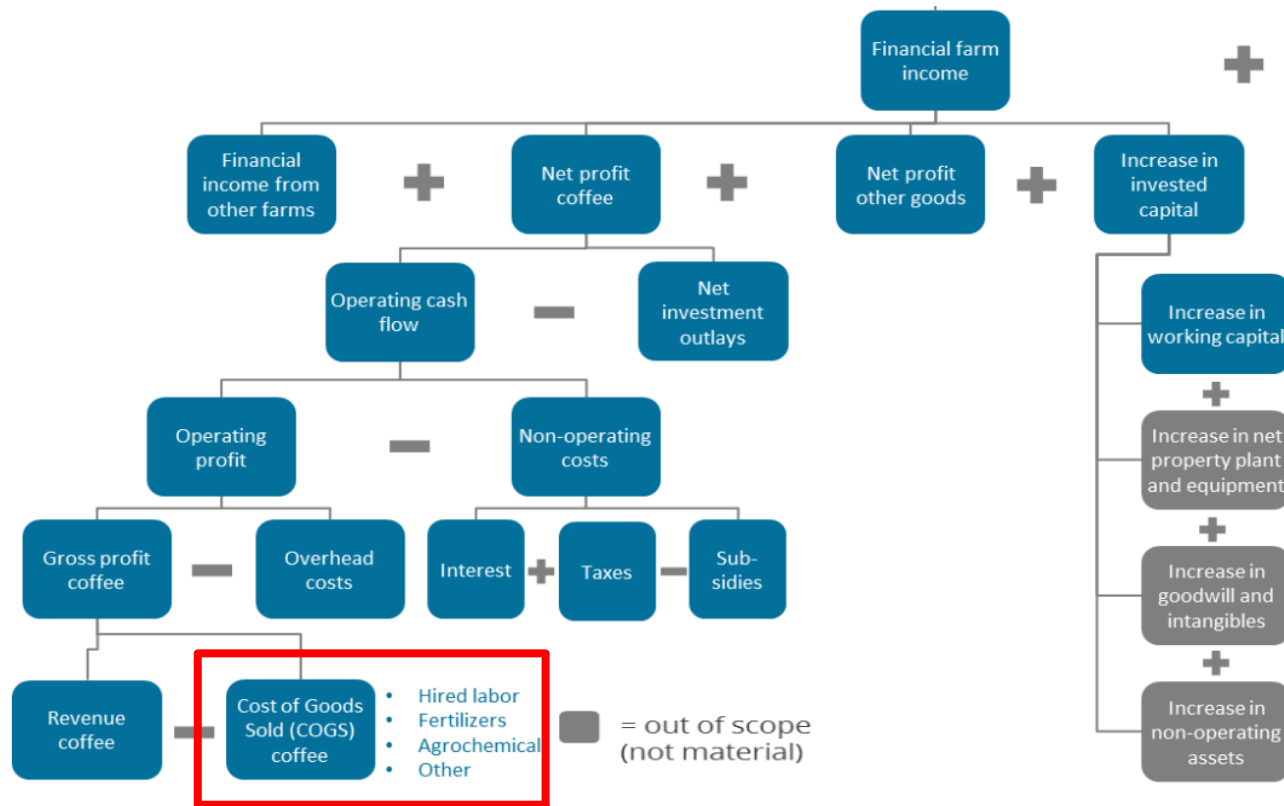
To be added?

- Costs of transition to organic production
- Costs for efficient drip irrigation
-

To be added?

- minimum/living wages
- occupational safety costs
- ...

Each „data area“ is
based on a
comprehensive list
of criteria



"Assessing Coffee Farmer Household Income": Suggestion to include environmental costs

Costs of Goods Sold (COGS)

- Hired Labor
- Fertilizers
- Agrochemicals
- Other

+

Environmental Costs

- Land clearing/Land use
- Water use/pollution
- Soil pollution
- Biodiversity loss/increase**
- GHG emissions
- ...

"Assessing Coffee Farmer Household Income":

Adding it all up - modified to internalize environmental costs

Assessing coffee farmer household income



4.2 Results

4.2.1 Distribution of farmer household income

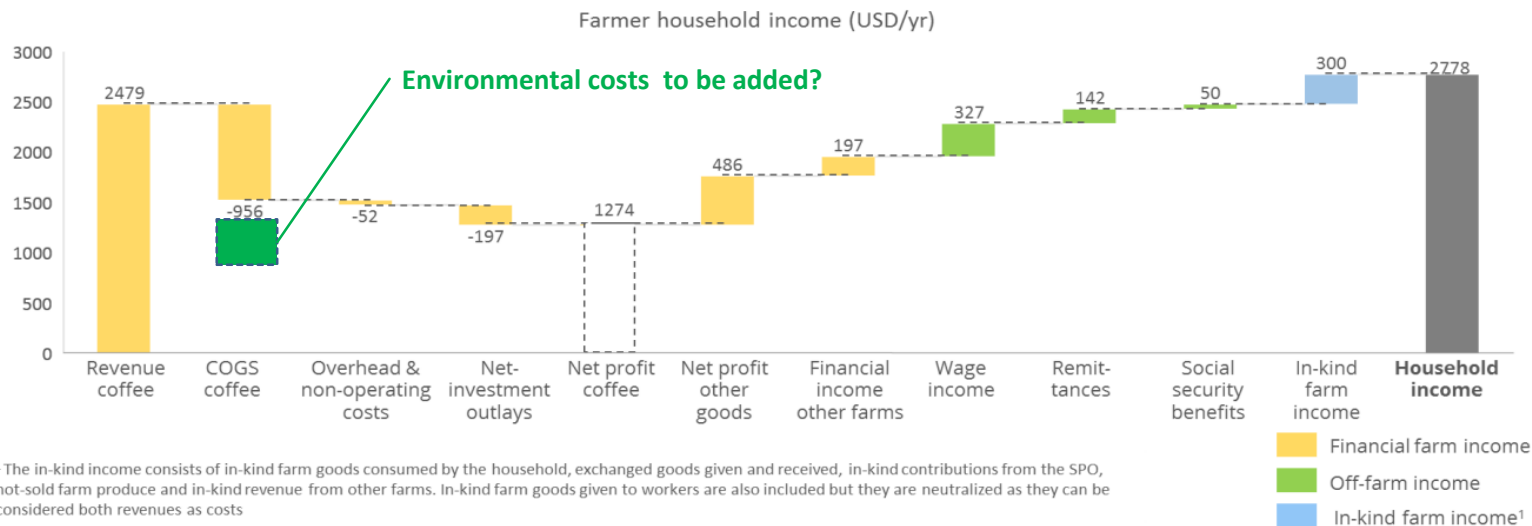


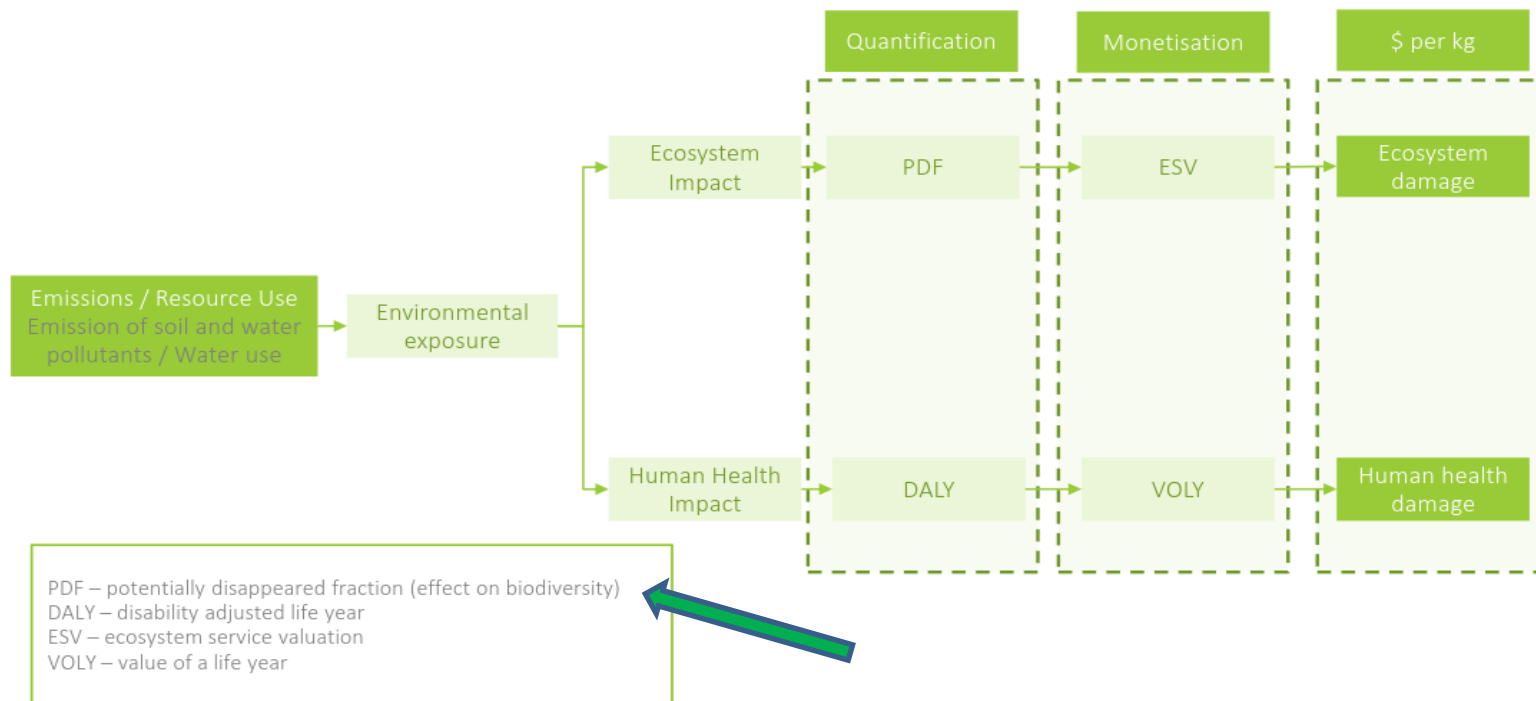
Figure 4: Distribution of farmer household income, divided in financial farm income, off-farm income and in-kind farm income

“Externalities from Fairtrade Cotton Farming”, research study by TRUCOST & Gist Advisors; “Simplified Approach”

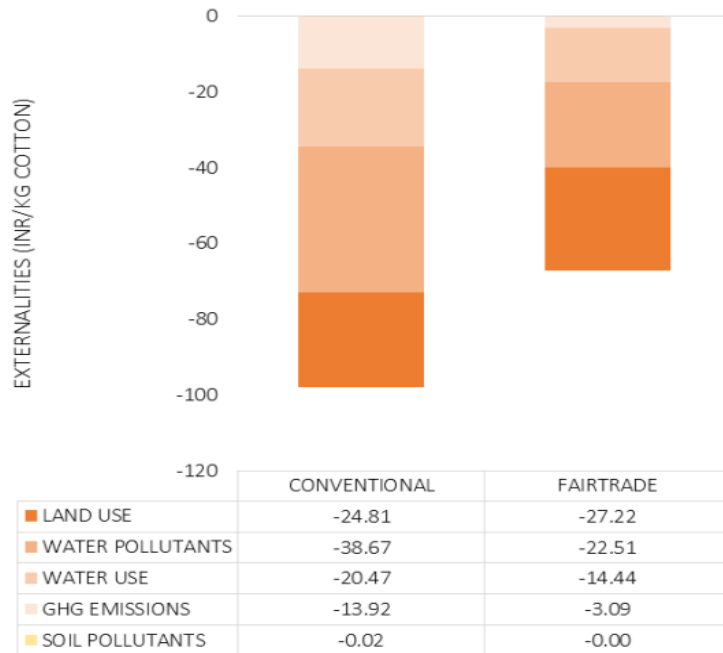


- **Issue:** Benchmark comparison of social costs/benefits and environmental costs of Indian smallholder cotton farmers in Gujarat and Madhya Pradesh, Fairtrade compared with conventional farming
- **Objective:**
 - Identify key hotspots and material externalities of Fairtrade cotton farming
 - Prioritize reduction of externalities impact to decrease external risks
 - Support Fairtrade communication strategy
- **Methodology:** Comparison of Fairtrade cotton primary data (collected through mix of tools) and secondary research data on conventional cotton, identifying and quantifying **social** and **environmental** externalities

HIGH LEVEL ENVIRONMENTAL VALUATION



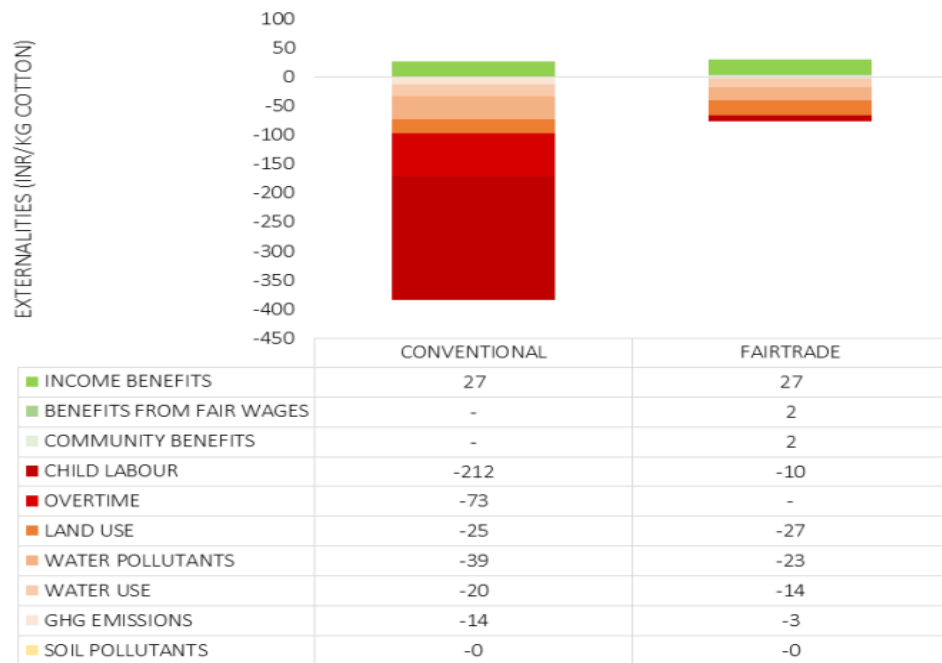
DETAILS ON ENVIRONMENTAL COSTS



Benchmarking:

- A **similar pattern** was found between conventional and Fairtrade cotton farming with:
land use OR water pollutants > water use > GHG emissions > soil pollutants.
- However, Fairtrade performed better for all indicators except for land use (as there is lower yield per acre for organic farming practices)

OVERALL ASSESSMENT – COSTS AND BENEFITS



Fairtrade cotton farming had **external costs 5 times lower than conventional** cotton farming:

- 31% lower for the environmental components
- 97% lower for the social components

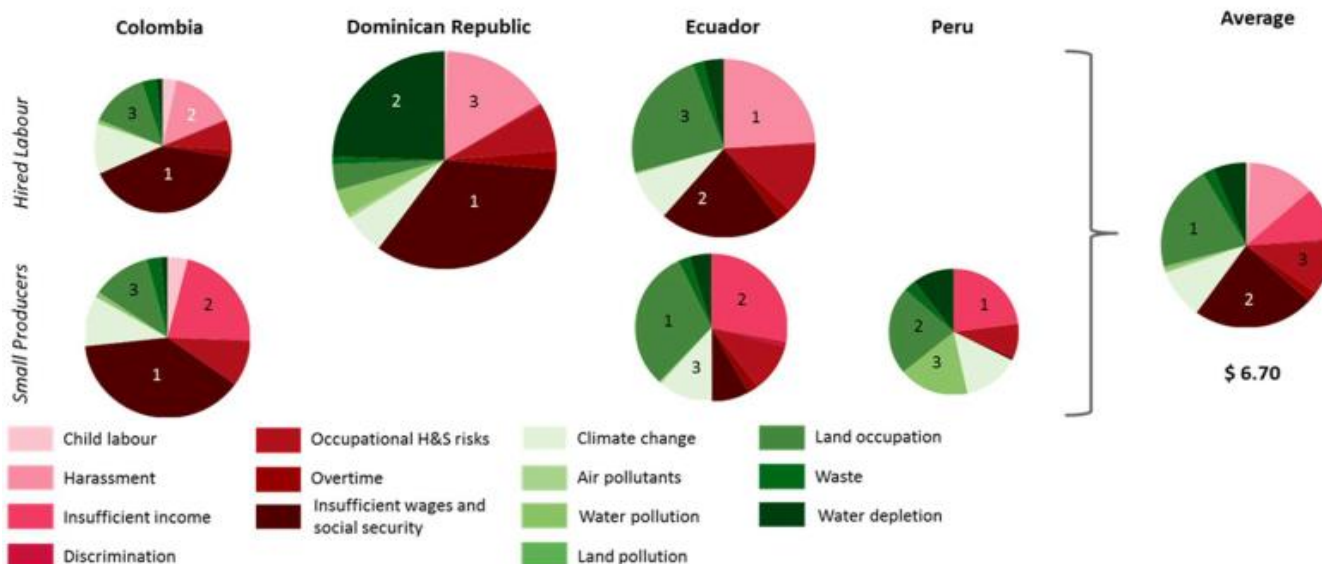
In this study, Fairtrade cotton farming had **external benefits that were inexistent in conventional cotton farming**, such as benefits from fairer wages and community benefits.

“The external costs of banana production”: research study by True Price & TRUCOST, 2017; “Country-Specific Approach”



- **Issue:** Banana production has negative effects on the environment and society. This causes environmental and social costs that **until now are not captured in prices/considered in pricing**. At the same time, supply chain actors and stakeholders demand more sustainability and transparency, which creates the **necessity for businesses to internalize those external costs**.
- **Objective:**
 - Determine external social and environmental costs of the banana sector
 - Compare external costs of Fairtrade bananas to the external costs of the banana sector
 - Identify opportunities to reduce the external costs of the banana sector
- **Methodology:** Analysing primary data on **social** and **environmental impacts** from 15 Fairtrade plantations and 97 Fairtrade small producers

“The external costs of banana production”: Sector averages of external costs & top 3 largest external costs (in US\$) per box of bananas of hired labour & small producers

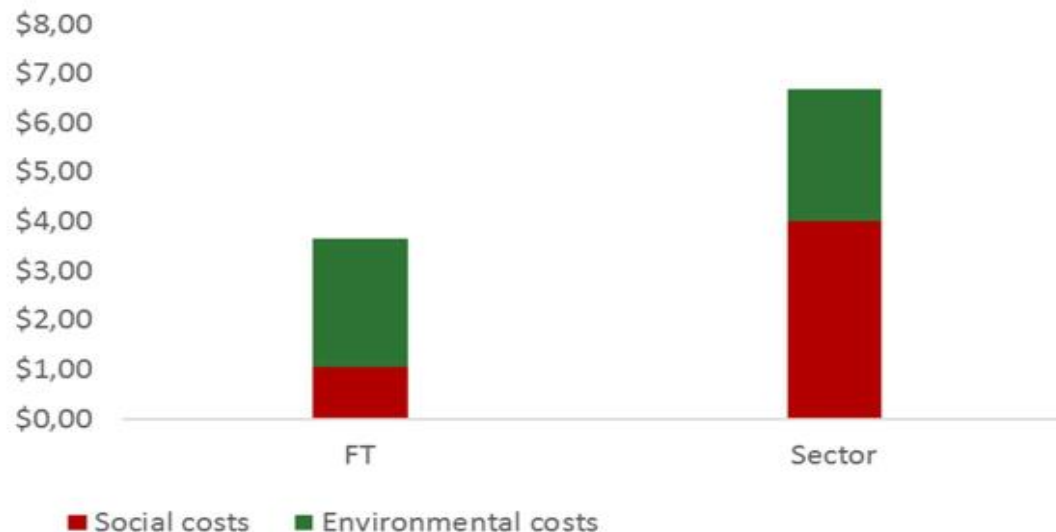


Total external costs

Costs per box of bananas		Colombia	Dominican Republic	Ecuador	Peru
Hired labour	Social costs	\$3.50	\$6.95	\$4.70	NA
	Environmental costs	\$1.65	\$4.65	\$2.95	NA
Small producers	Social costs	\$4.70	NA	\$2.70	\$1.30
	Environmental costs	\$1.70	NA	\$2.70	\$2.65

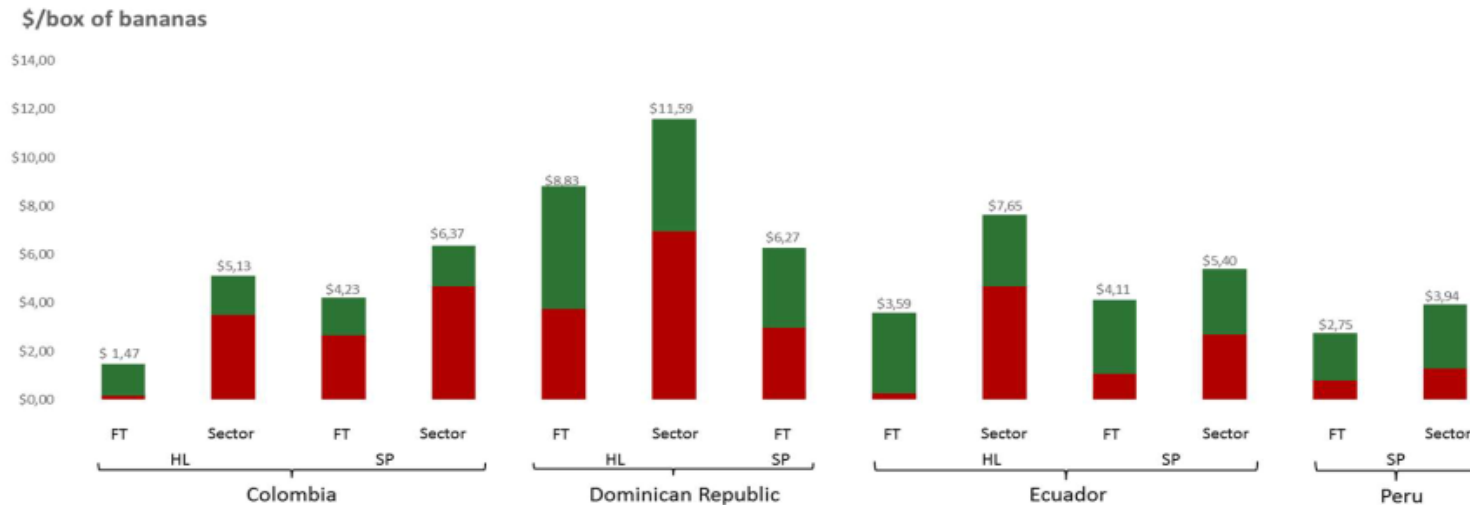
	Average
Social	\$4,00
Environmental	\$2,68

“The external costs of banana production”: External costs per Fairtrade (FT) and sector average box of bananas



	Fairtrade	Sector
Social costs	\$ 1.05	\$ 4.00
Environmental costs	\$ 2.60	\$ 2.68

“The external costs of banana production”: Social and environmental costs per box of bananas for FT & sector benchmark



EXTERNAL COSTS PER IMPACT (US\$ PER BOX OF BANANA) - ALL COUNTRIES, HIRED LABOUR (HL) AND SMALL PRODUCERS (SP)

	Colombia				Dominican Republic			Ecuador				Peru	
Impact category	FT HL	FT SP	Bench- mark HL	Bench- mark SP	FT HL	FT SP	Bench- mark HL	FT HL	FT SP	Bench- mark HL	Bench- mark SP	FT SP	Bench- mark SP
Child labour	\$0.00	\$0.00	\$0.17	\$0.25	\$0.03	\$0.00	\$0.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Forced labour	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Harassment	\$0.00	\$0.00	\$0.78	\$0.00	\$0.02	\$0.00	\$1.84	\$0.00	\$0.00	\$1.83	\$0.00	\$0.00	\$0.00
Insufficient income	\$0.00	\$0.94	\$0.00	\$1.37	\$0.00	\$0.87	\$0.00	\$0.00	\$0.48	\$0.00	\$1.52	\$0.75	\$0.90
Discrimination	\$0.03	\$0.01	\$0.02	\$0.02	\$0.00	\$0.03	\$0.04	\$0.02	\$0.02	\$0.03	\$0.05	\$0.00	\$0.00
Occupational H&S risks	\$0.05	\$0.10	\$0.37	\$0.58	\$0.13	\$0.10	\$0.81	\$0.10	\$0.01	\$0.99	\$0.57	\$0.02	\$0.35
Overtime	\$0.01	\$0.00	\$0.09	\$0.00	\$0.21	\$0.17	\$0.31	\$0.04	\$0.13	\$0.18	\$0.12	\$0.00	\$0.00
Insufficient wages and social security	\$0.08	\$1.60	\$2.07	\$2.45	\$3.36	\$1.80	\$3.90	\$0.10	\$0.42	\$1.66	\$0.43	\$0.02	\$0.03
Climate Change	\$0.38	\$0.69	\$0.62	\$0.64	\$0.96	\$0.79	\$0.70	\$0.93	\$0.79	\$0.68	\$0.62	\$0.58	\$0.56
Air Pollutants	\$0.01	\$0.05	\$0.01	\$0.01	\$0.26	\$0.11	\$0.07	\$0.05	\$0.06	\$0.03	\$0.02	\$0.00	\$0.00
Water Pollutants	\$0.17	\$0.04	\$0.04	\$0.06	\$0.38	\$0.50	\$0.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.02	\$0.69
Land Pollution	\$0.01	\$0.00	\$0.00	\$0.00	\$0.02	\$0.00	\$0.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Land Occupation	\$0.63	\$0.65	\$0.71	\$0.73	\$0.49	\$0.63	\$0.45	\$2.07	\$1.85	\$1.83	\$1.67	\$0.94	\$0.89
Waste	\$0.00	\$0.00	\$0.17	\$0.18	\$0.00	\$0.00	\$0.13	\$0.00	\$0.00	\$0.15	\$0.13	\$0.03	\$0.12
Water Depletion	\$0.11	\$0.16	\$0.08	\$0.08	\$2.97	\$1.27	\$2.84	\$0.28	\$0.34	\$0.27	\$0.25	\$0.38	\$0.41
Total social	\$0.16	\$2.65	\$3.50	\$4.67	\$3.74	\$2.97	\$6.96	\$0.25	\$1.06	\$4.69	\$2.70	\$0.80	\$1.28
Total environmental	\$1.31	\$1.58	\$1.63	\$1.70	\$5.08	\$3.30	\$4.64	\$3.34	\$3.05	\$2.96	\$2.70	\$1.95	\$2.66
EXW price	\$10.35	\$10.35	\$10.35	\$10.35	\$9.60	\$9.60	\$9.60	\$9.05	\$9.05	\$9.05	\$9.05	\$8.55	\$8.55

- **It is possible to plausibly calculate environmental and social external costs, but difficult to do exact measurements.** The more exact the method, the more costly it is.
- Measuring/estimating biodiversity criteria values are a particular challenge. **Therefore, practical and scalable approaches are necessary**, e.g. applying regionally validated and accepted valuation criteria & factors, using scientific databases & empirical data.
- It will take time in practice until such methods are regularly applied. **However; business as usual will no longer work in a world with limited natural capital.**

„Save your supply chain and pay up for the **social & environmental costs that your business causes. Otherwise: no more business in the long run.
You cannot negotiate with nature“.**

THANK YOU



FAIRTRADE

COSP-areas of cost determination

Figure 7 Stages of production included in a COSP sheet

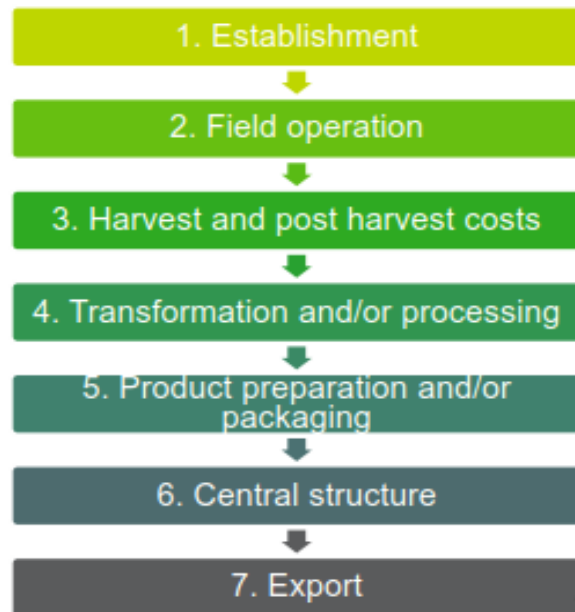
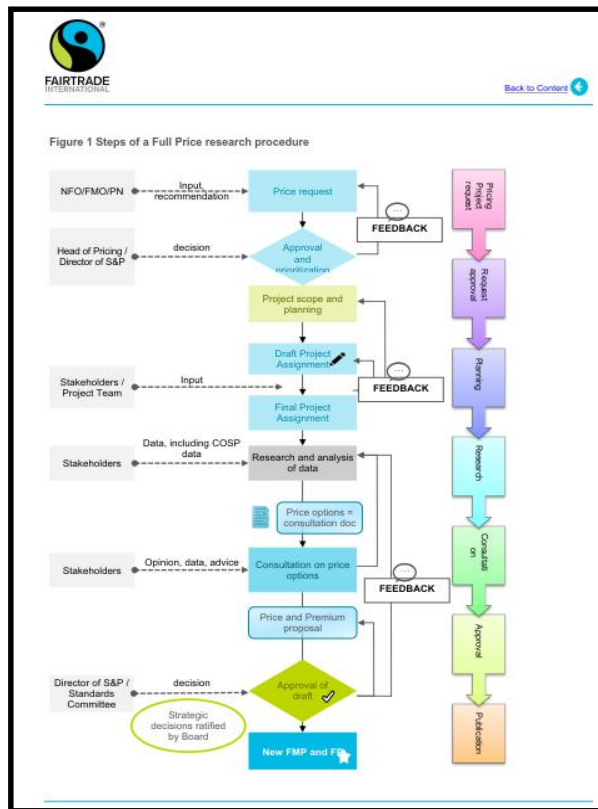


Figure 8 Items per stage of production in a COSP sheet

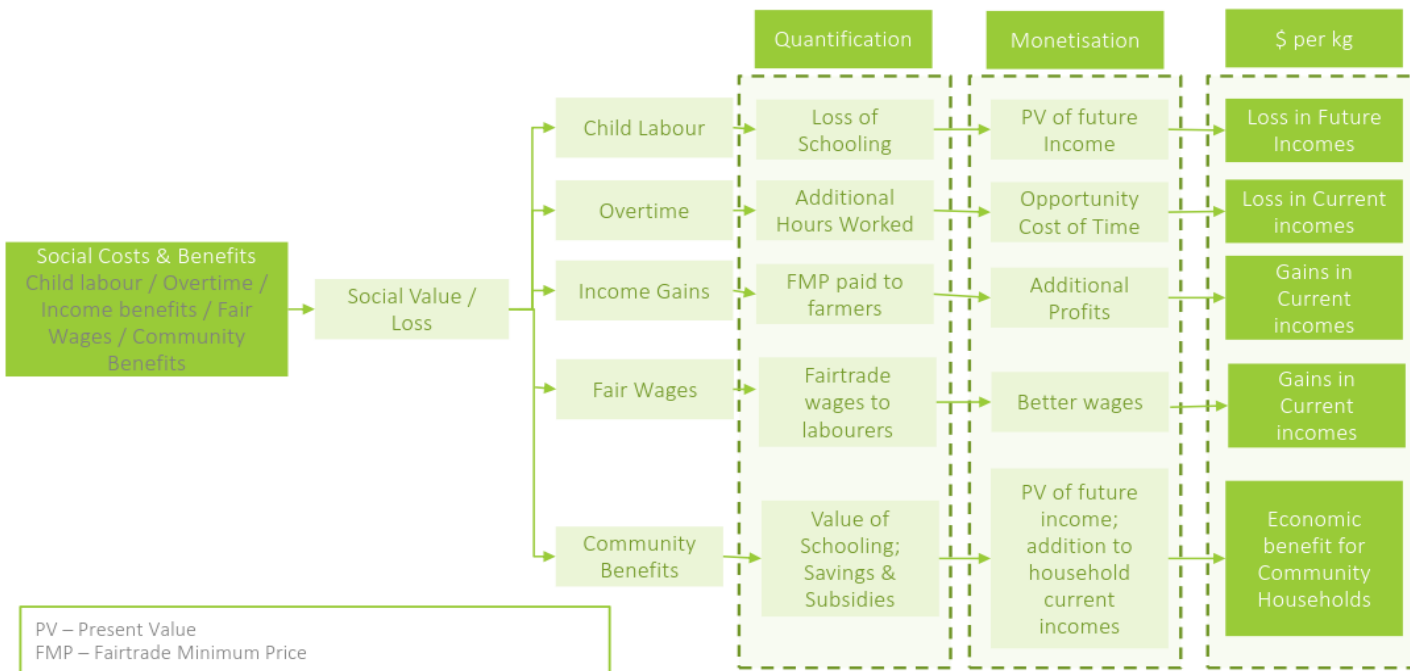


COSP-procedure of cost determination



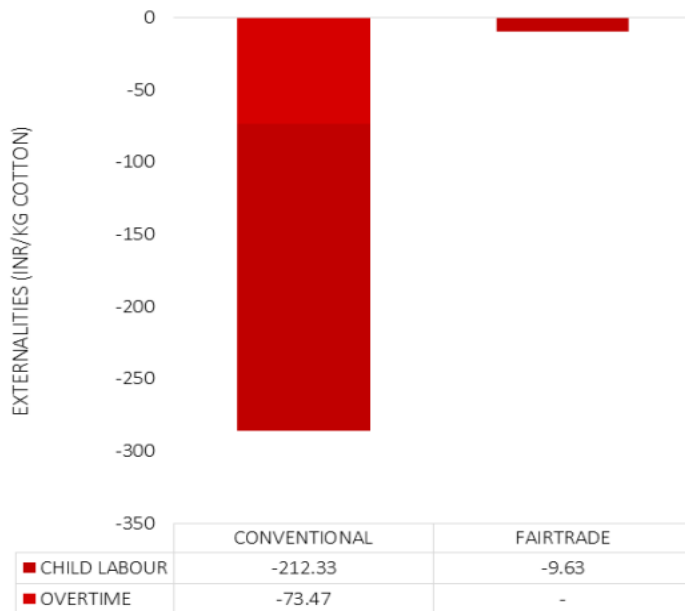
SOCIAL EXTERNALITIES

HIGH LEVEL SOCIAL VALUATION



CRITERIA TO DETERMINE SOCIAL COSTS

DETAILS ON SOCIAL COSTS



Benchmarking:

- Social costs associated with cotton cultivation are **significant for conventional cotton farming**. Rural labour market in India continues to be characterized by child labour, long working hours and low wage rates.
- Fairtrade **performs better** on both counts due to strict requirements on worst form of child labour and excessive overtime as per Fairtrade Standards.

KEY FINDINGS

EXTERNAL COSTS

Fairtrade cotton had costs **5 times** lower than conventional cotton

- 31% lower for the environmental components
- 97% lower for the social components

MATERIALITY FOR FAIRTRADE

ENVIRONMENTAL	SOCIAL	
COSTS	BENEFITS	COSTS
1. Land use	1. Income Benefits	1. Child Labour
2. Water pollutants	2. Fair wages	2. Overtime (n.a.)
3. Water use	3. Community Benefits	
4. GHG emissions		
5. Soil pollutants		

BENCHMARKING

- For all environmental kpis except land use, Fairtrade cotton performed better than conventional cotton. This can be explained by the lower level of inputs per kg cotton and appropriate crop residue management practices. Land use is higher for Fairtrade cotton on average, as yields are slightly lower for organic practices.
- Fairtrade cotton farming has lower social costs and higher social benefits associated than conventional cotton farming. This is due to the absence of overtime and the existence of community benefits and fairer wages.



Integrating Natural Capital into Your Business

Global Nature Fund (GNF)

Sergio Talocchi
October, 2017



Who we are

Natura is a Brazilian cosmetics, fragrances and toiletries multinational company guided by a commitment for developing products that express sustainable values and practices.

Our business model is grounded on Sales through Relationships.

The Natura brand positioning – Viva sua beleza viva (Live your Live Beauty) – is an invitation to reflect on the singularity of each type of beauty.

The Natura World

The geographical distribution of our businesses

- Countries in which Natura operates
- Countries with Aesop stores
- Cities with Natura stores



Natura Consultants:

1,300,000	161,000	74,000	88,000	126,000	94,000
Brazil	Argentina	Chile	Colombia	Mexico	Peru

Aesop:

20	64	180	41 new
countries	cities	stores	stores in 2016

Natura in numbers

1.8

million

Consultants
(Brazil / Latam)

6.4

thousand

Employees
(Brazil / Latam)

1.5

thousand

Employees
(Aesop)

100

thousand

Natura Digital
Consultants

1.7

million

Customers at
Rede Natura

FACTORIES IN:
CAJAMAR
BENEVIDES

Logistic Hub in
Itupeva + 8 DCs

DISTRIBUTION IN
LATIN AMERICA

5 DCs (ARG, CHI,
COL, MEX, PER)

16

Stores

Distributed in
SP, RJ, NY,
Paris

Sou
3100

Drugstores

Raia / Drogasil,
Drogaria SP

Faces

50 Drugstores

1st semester
of 2017



Our Essence

Beliefs

Life is a chain of relationships. Nothing in the universe stands alone. Everything is **interdependent**.

Natura believes that **valuing relationships** is the foundation of the great human revolution in the pursuit of peace, solidarity, and life in all of its manifestations.

Continuously striving for improvement develops individuals, organizations, and society.

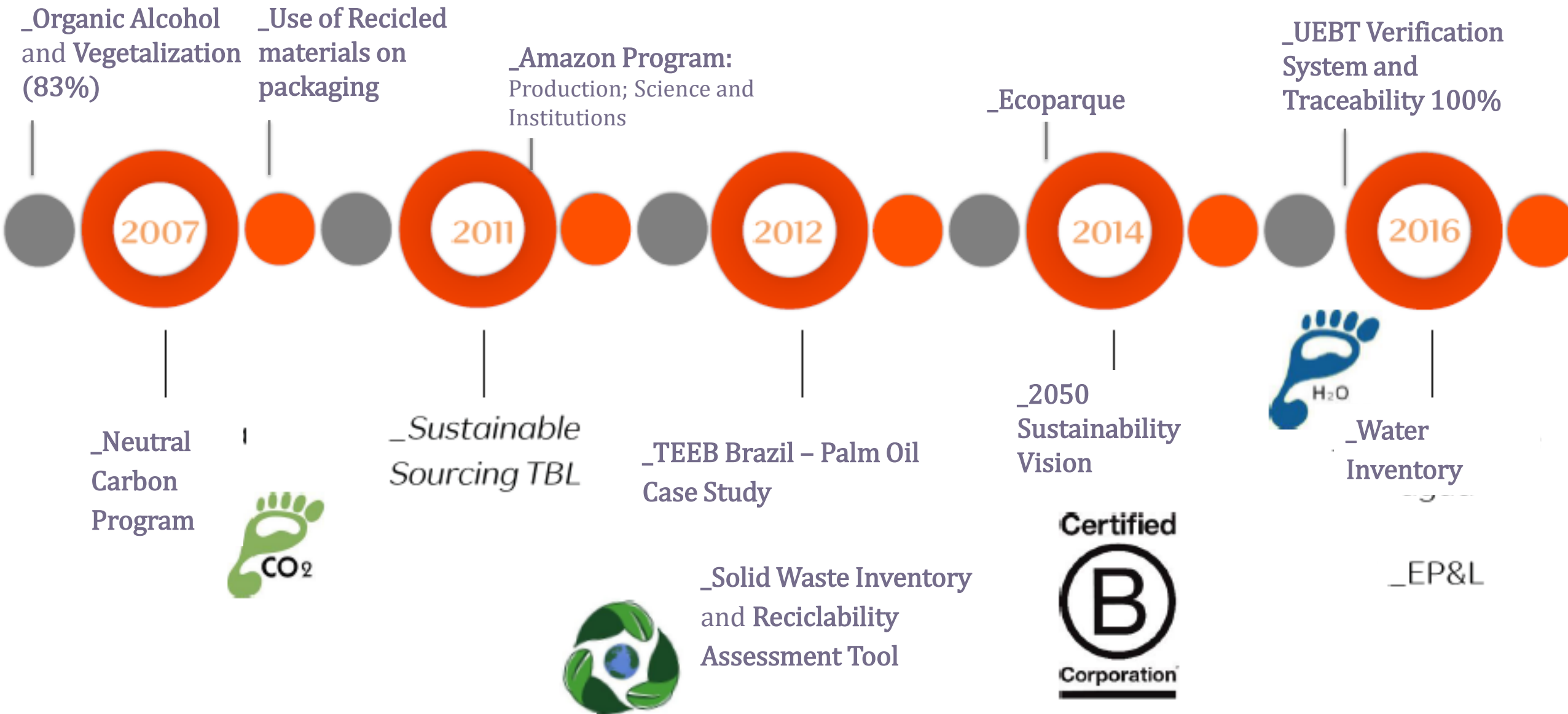
Commitment to the truth is the route to enhance quality in relationships.

The greater the individual **diversity**, the greater the wealth and **vitality of the whole system**.

The pursuit of beauty, a genuine aspiration of every human being, should be free of preconceived ideas and manipulation.

The company, a living organism, is a dynamic set of relationships. Its value and longevity are connected to its ability to contribute towards the evolution of society and its sustainable development.

Natural Capital at our Business Model

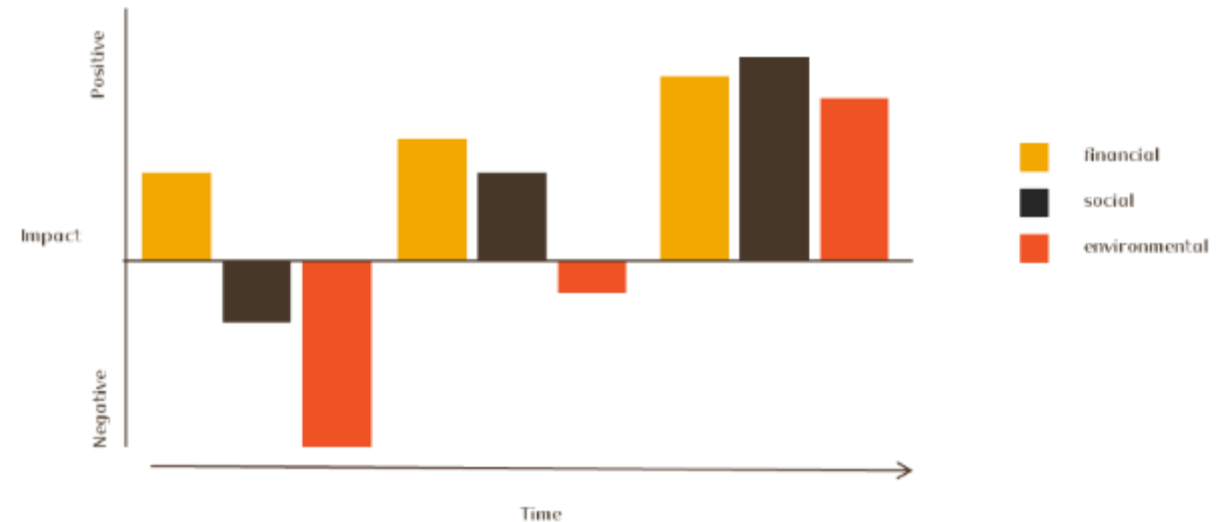


2050 Sustainability Vision



Launched in 2014 in alignment with business strategy, our Vision is intended to transform Natura into a company that generates a **positive impact** in three spheres: economic, environmental and social, rupturing the current paradigm of merely reducing and mitigating impacts.

It comprises strategic directives for 2050 and ambitions and commitments for 2020.



Natura EP&L



tCO_{2e}



tonnes of
waste



liters of water



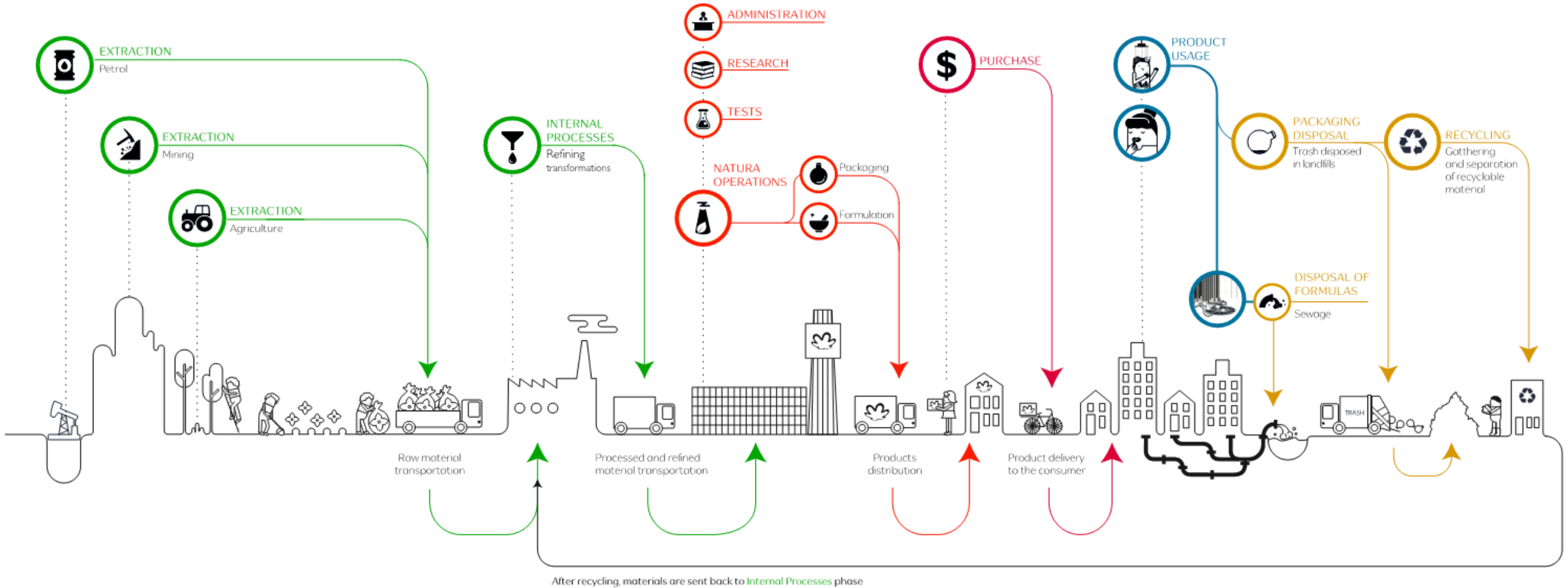
air pollution



water
pollution



hectares of
land



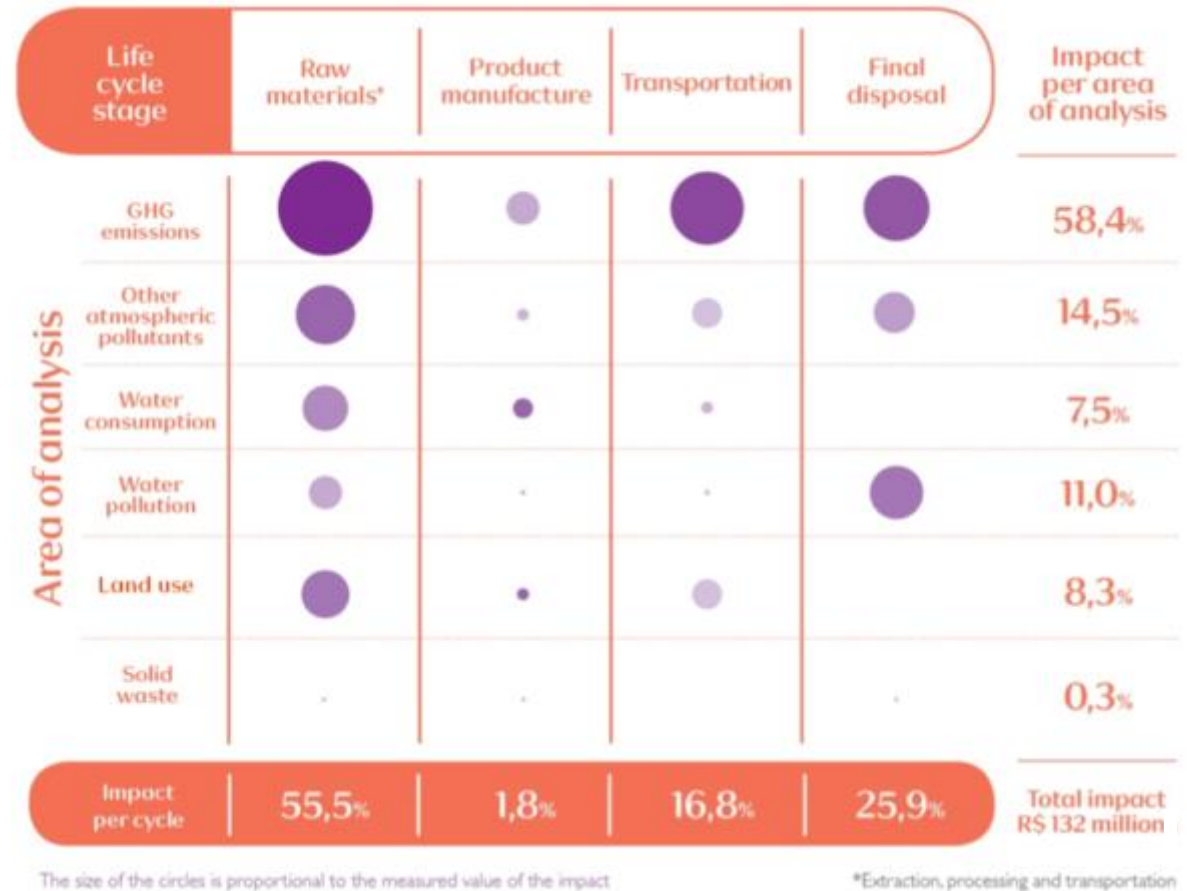
Natura EP&L – Environmental Profits and Losses

Natura is the first company in Latin America to **monetize its businesses' impacts** on the environment and on society using EP&L (Environmental Profit & Loss) methodology.

The study involves an in-depth analysis of the **product life stages**, from the extraction of raw materials to disposal of the end product and packaging.

The study estimated the Natura chain environmental impact at R\$ 132 million (for 2013, the first year assessed). This impact **would have been higher** (equivalent to R\$ 164 million) without the company's Carbon Neutral program.

Examples of CO2 reduction: organic alcohol; green plastics; recycled PET; refilling; SOU line; green logistics.



Socio biodiversity in Natura



PROGRAMA AMAZÔNIA

Rede de relações que gera
valor compartilhado

- Created in 2011, this initiative seeks to boost **local development** in an inclusive and sustainable manner with an economy that awards value to a standing forest.
- Up to 2020 we are committed to turn over R\$ 1 billion in the region, and 30% of our ingredients must be produced in the region (in value)
- **3 axes:**
 - Science, Technology and Innovation
 - Socio-biodiversity Productive Chains
 - Institutional Strengthening

Socio-biodiversity Productive Chains

- ✓ **Raw material** supplying
- ✓ **Benefit-sharing** for access to genetic heritage and the associated traditional knowledge
- ✓ Support for social organization, technical improvement and **local development projects**





33
comunidades

Actuation



2.841
families



8.476
people involved



18
pre-industrialized raw materials



257.000
impacted hectares



25
native species



+60
ABS contracts



Management Tools

Traceability

Use of Arcgis Software (GIS) to monitor 100% of raw materials supplying families

Benefit Sharing Payments

SAP Platform to calculate ABS Contracts payments, which result of net revenues of specific products sold

UEBT Verification

Check list with field aspects created to assure good social, environmental and economic practices, based on Biotrade principles.

_33 communities were audited, covering 65 types of certified supply chains .

Ecopark



Opened in 2014, the Benevides (PA) Ecopark, is part of the **Socio-biodiversity Productive Chain** pillar of the Amazon Project.

The Natura soap factory was the first unit to be installed at the location. Currently, **60% of the soaps** that supply Brazil and the International Operations are manufactured at the Ecopark.

100% of the local production provides the Community with **economic and social value**. Our source of Palm Oil for soap and cosmetic oils is local and RSPO certified.

It was originally designed to harbor eco-efficient companies, based on **industrial symbiosis**. Symrise, which produces oils and scents, has been operating in the Ecopark since 2015.





Thank you!

Awards and recognition highlights

In Brazil

- **Most admired company** in the cosmetic, toiletry and fragrance sector in Brazil (and 3rd in overall ranking)
Carta Capital Magazine
- **1st in environmental preservation category**, in Top of Mind ranking
Datafolha and Folha de S. Paulo newspaper
- **Most innovative consumer goods company in Brazil** (and 3rd in the overall ranking), in the 2016 Valor Innovation Brazil award.
Valor Econômico newspaper and Strategy
- **Champion in consumer goods sector** in the Exame magazine Biggest & Best ranking
Exame Magazine
- **First place in the Exame IBRC excellence in customer service ranking.**
Exame Magazine

Worldwide

- **Champions of the Earth Award** (Entrepreneurial Vision category)
UNEP/United Nations
- **Top 20 most sustainable companies in the world – first in Brazil**
Corporate Knights
- **Most valuable brand in Latin America**, according to the Best Retail Brands ranking
Interbrand
- **14th most valuable cosmetics brand in the world**
Brand Finance
- **9th most influential brand in Brazil**, according to the Most Influential Brands ranking
Ipsos
- **One of the most ethical companies in the world**
Ethisphere Institute