

Engaging Soft Commodities

A Strategic Landscape Review of Non-Governmental Organizations (NGO's)

Commissioned by Environmental Defense Fund
Conducted by DEKRA and TRUTHstudio
May 2013

PUBLIC VERSION

A set of thinking tools
for strategic analysis

The following series of slides were commissioned by the Environmental Defense Fund (EDF) to support internal strategic planning related to EDF's work on soft (agricultural) commodities. The primary goal of these slides is to provide a framework for understanding the landscape of NGO's working along the supply chains of soft commodities, and to document key system-level insights that emerged from interviews with the leadership of these organizations, when available.

These slides are not intended to prescribe a specific path forward, but to portray the range of strategic options and opportunities available for consideration. In general, we suggest that these materials, together with independent research, may be used to identify priorities and potential collaborators.

The information contained here is based, in large part, on interviews conducted by TRUTHstudio and DEKRA with NGO leaders. EDF seeks to honor this generosity of time and insight by sharing non-EDF-specific portions of the slides with the broader NGO community, in the hope that this research may enhance the collective effectiveness of all of our work.

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Acknowledgments

We are tremendously grateful for the generosity of time and insight provided by the NGO leaders whom we interviewed for this study. The research and analysis simply would not have been possible without their contributions, and we would like to thank, in particular, the following individuals for sharing their perspectives at length: Brooke Barton (CERES), Doug Boucher (UCS), Anne-Marie Brouder (Forum for the Future), David Cleary (The Nature Conservancy), Emeline Fellus (Sustainable Agriculture Initiative), Hal Hamilton (Sustainable Food Labs), Kate Horner (Environmental Investigation Agency), Andrei Klimenko (Sustainable Fisheries Partnership), Josh Levin (WWF), Fred Luckey (Field to Market), Agustin Mascotena (Roundtable on Responsible Soy), Kranti Mulik (UCS), Kai Robertson (BSR), Elizabeth Schueler (WWF), Nathalie Walker (NWF), Darrel Webber (Roundtable on Responsible Palm Oil).

We also benefited tremendously from the insights of EDF staff and consultants, including: Larry Band, Lee Coker, Gus Silva Chavez, Suzy Friedman, Tom Grasso, and Elizabeth Sturcken. The project team at EDF, led by Andrew Hutson and Namrita Kapur, supported by Alexandra Deprez and Hana Kajimura, also fundamentally shaped the initial research questions and expertly guided the project through to completion.

The overall research attempts to document a community of practice, and we have attempted to accurately distill and represent this community's individual and collective insights. To the extent that the resulting analysis is strategically useful, the majority of credit goes to the people we interviewed and the organizations whose work they helped us to understand. Any errors or omissions are entirely our own.

Jason Pearson
TRUTHstudio

Jennifer Cooper
DEKRA

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Context: **The Supply Chain of Soft Commodities**

Soft commodities such as foods, grains, timber, and fish, are grown, caught, or harvested from ecosystems. Like all commodities, they are bought and sold as generic materials, often in futures markets, with traders actings as intermediaries between producers and consumers.

EXAMPLE

The Supply Chain of Palm Oil

Palm oil is an edible vegetable oil derived from the fruit of the oil palm. Palm oil is widely used in the commercial food industry. Palm oil and its production waste are also used as a feedstock for biofuels.

Palm oil plantations benefit from the services provided by healthy regional and global ecosystems: good soil, clean air, available water, stable climate, and the complex interplay of species that maintains ecosystem balance.

Sime Darby Plantation

Malaysia's Sime Darby is the largest listed palm oil company globally, based on plantation area and fresh fruit bunch production. The world's second-largest palm oil producer is also in Malaysia.

Cargill

Over 75% of palm oil is grown in one part of the world for consumption elsewhere. Cargill is a major soy trader, the biggest commoditiy trader in the world and the largest privately held company in the U.S.

Unilever

Some 70% of all palm oil production is used in processed and packaged food. Among the leading companies that buy palm oil for this purpose are Nestlé and Unilever.

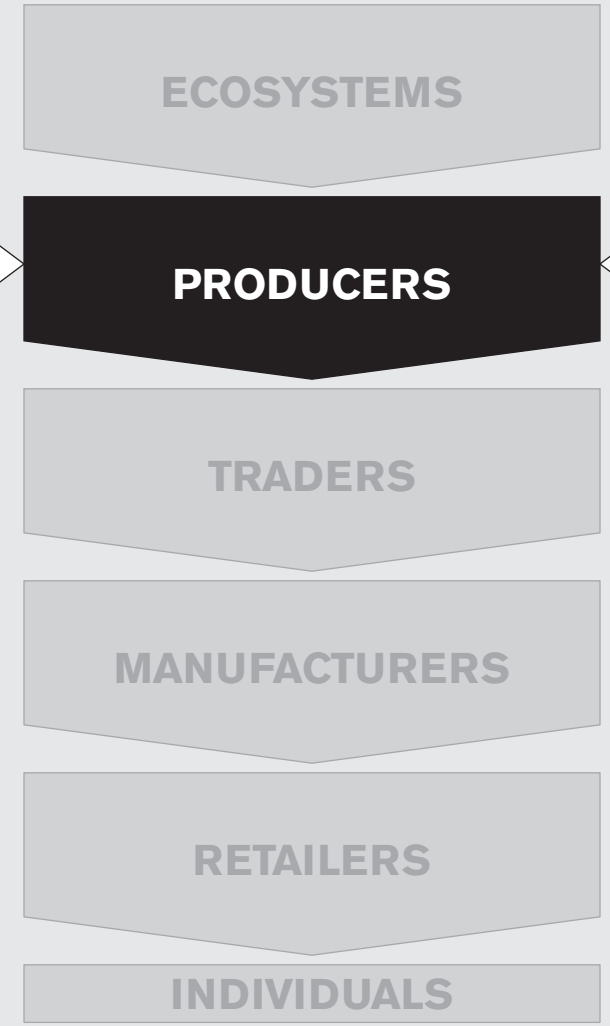
Walmart

Palm oil and its derivatives are found in half of all processed and packaged foods, most of which are sold in grocery stores or other retail outlets. In the U.S., Walmart has 20% of dry grocery market share.

Context: **Social and Environmental Costs of Production**

Non-governmental organizations (NGO's) focus on commodities, in general, and soft commodities, in particular, because of the social and environmental costs associated with production practices. These costs vary by commodity, but all occur primarily in the production phase.

Social and environmental costs associated with soft commodities mostly derive from production practices.



Context: **Social and Environmental Costs of Production**

In the case of palm oil, for example, deforestation to create palm plantations in Malaysia, Indonesia, and elsewhere results in biodiversity and habitat loss, increases in greenhouse gas (GHG) emissions, soil erosion and degradation, as well as other environmental and social impacts.

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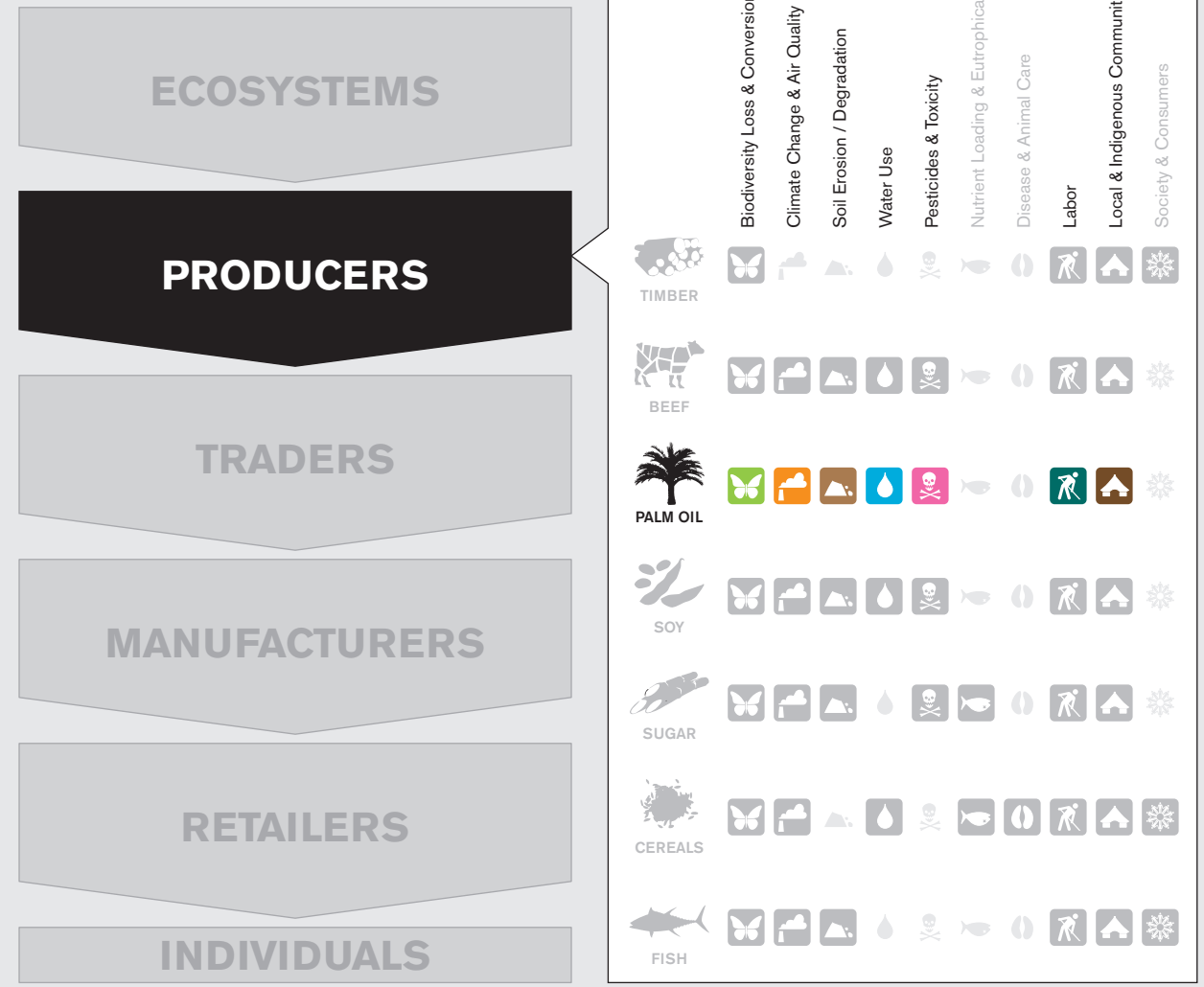
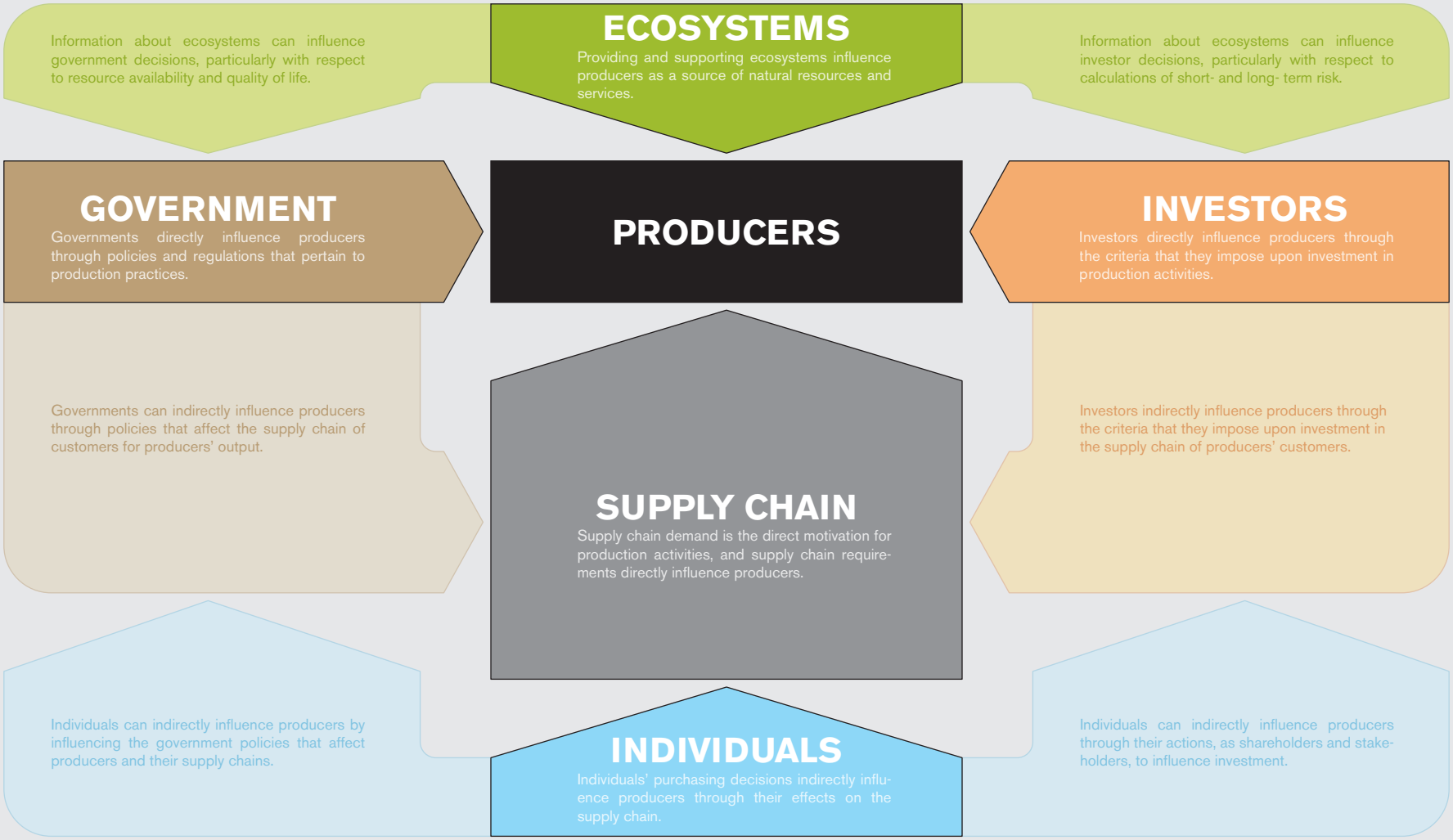


Source: The 2050 Criteria: Guide to Responsible Investment in Agricultural Forest, and Seafood Commodities (WWF 2013)

Context: **Influences on Production**

A range of **ecosystem**, **policy**, **financial**, **market**, and **social** factors **influence production**, both directly and indirectly. NGO's intervene throughout this system to create a network of influence that encourages sustainable on-the-ground production practices.



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Strategies: **A Network of Influence**

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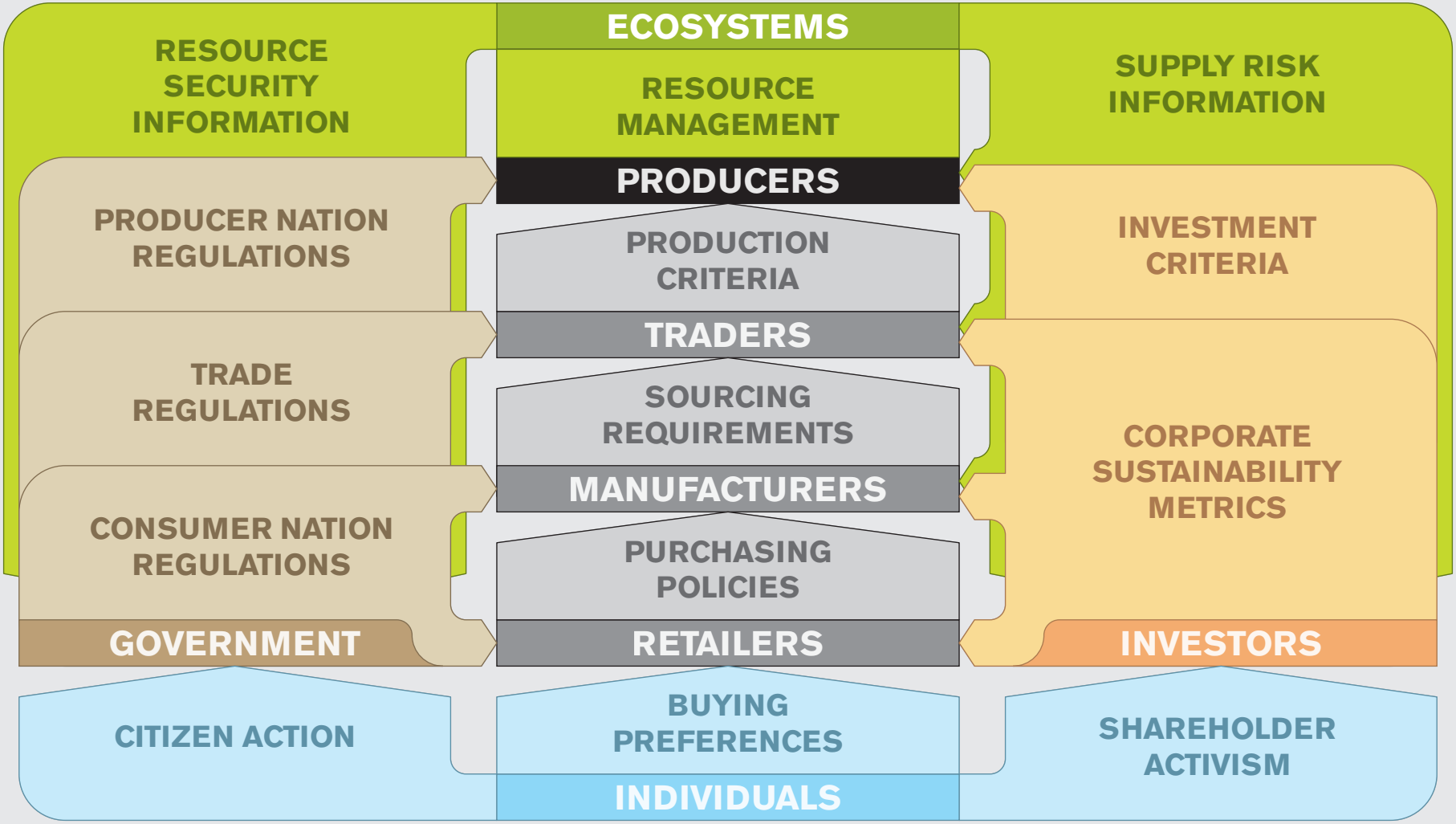

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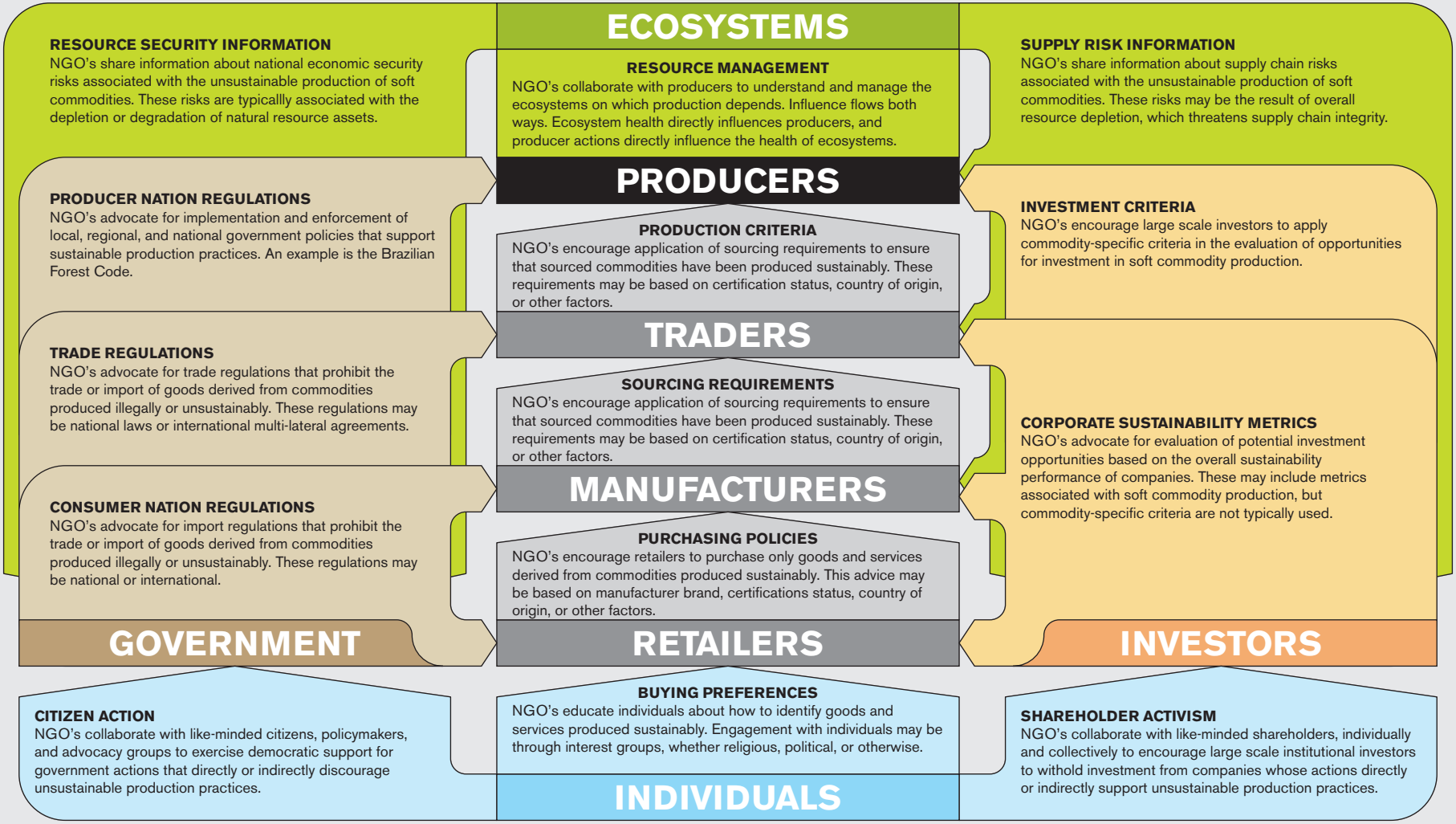
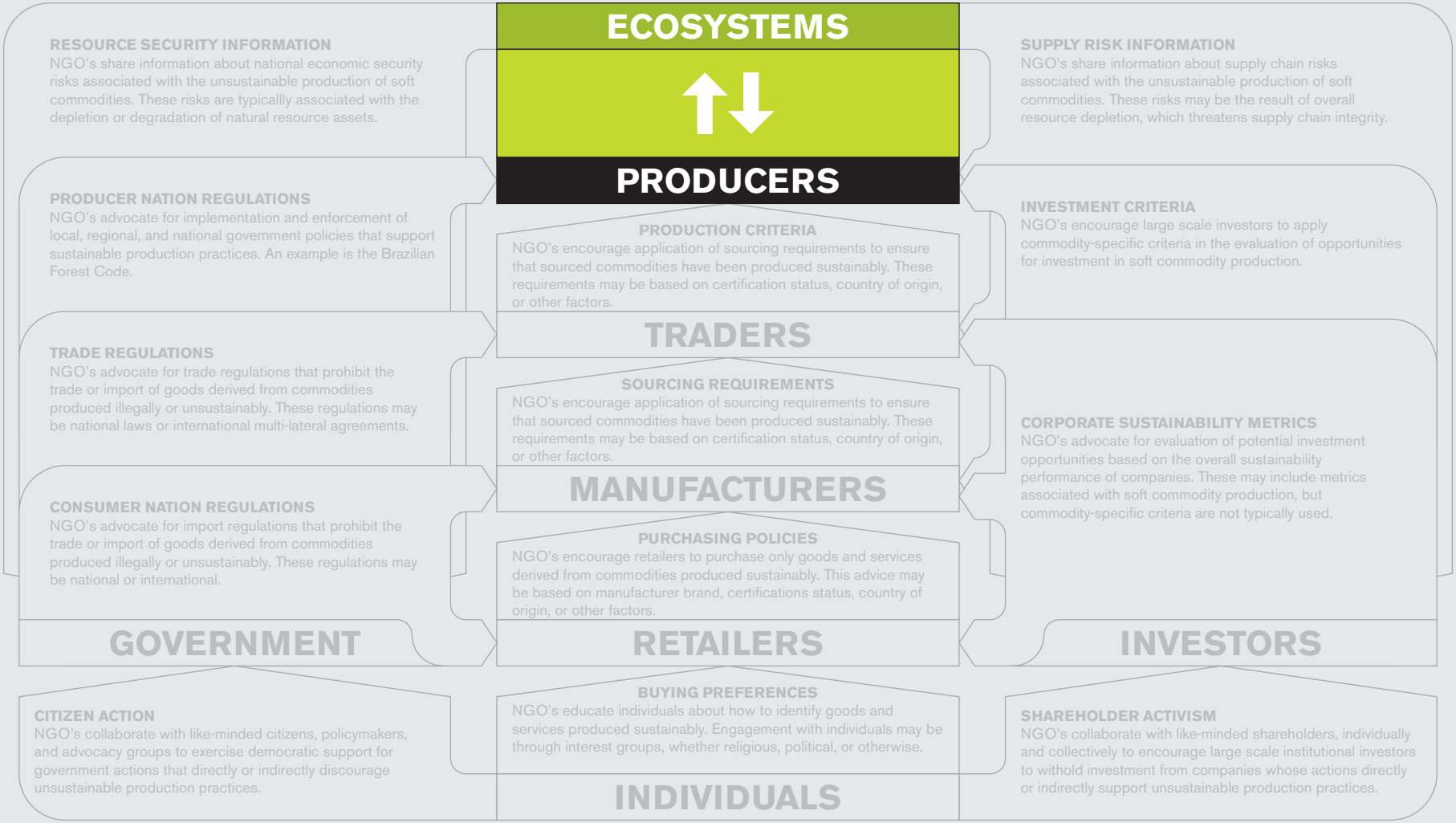


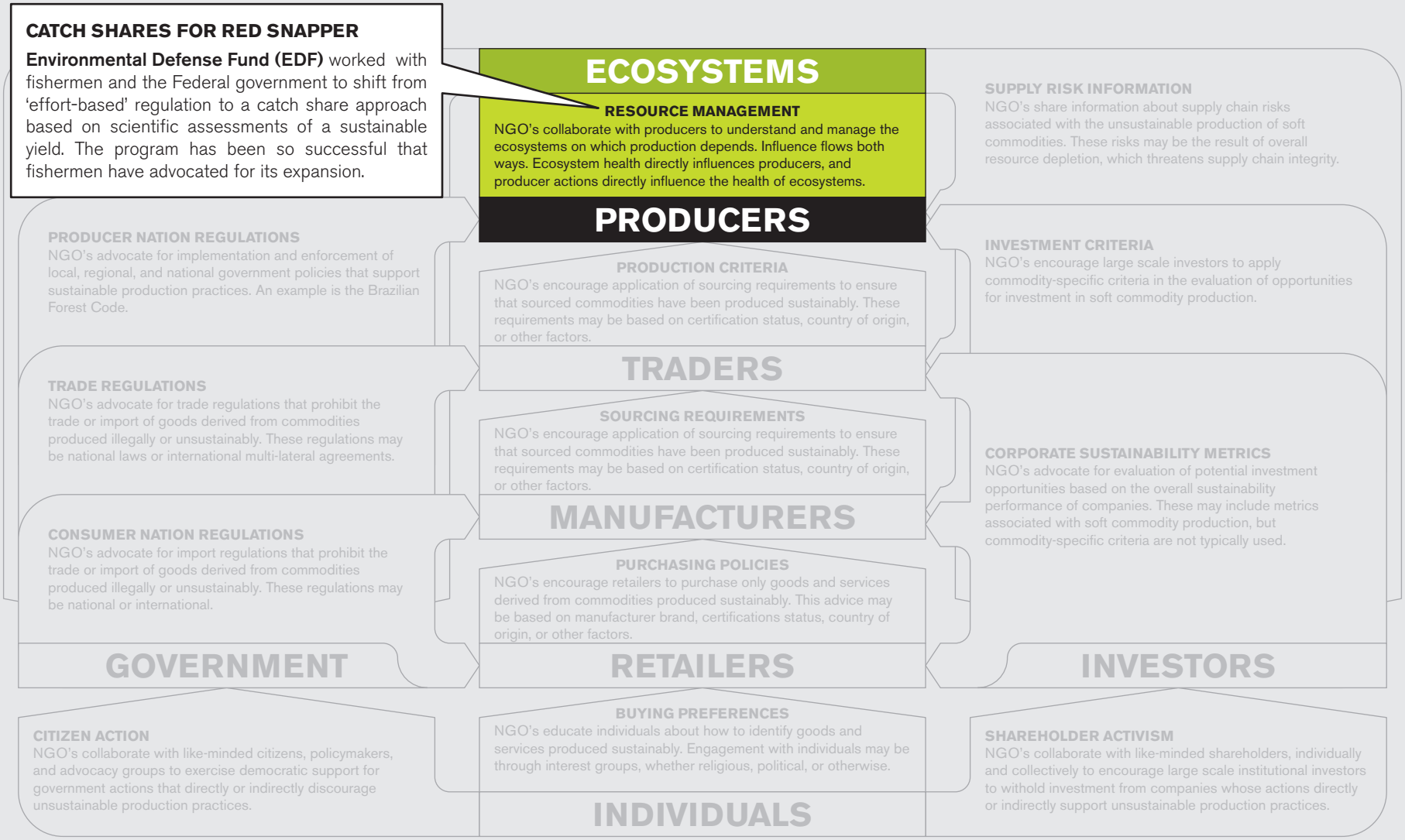
Strategies: **Reciprocal Relationships**

For most environmental NGO's, soft commodities are a focus because of **reciprocal relationships** of influence between producers and ecosystems. Production practices can have a huge impact on the health of ecosystems, and the health of ecosystems is fundamental to production viability.



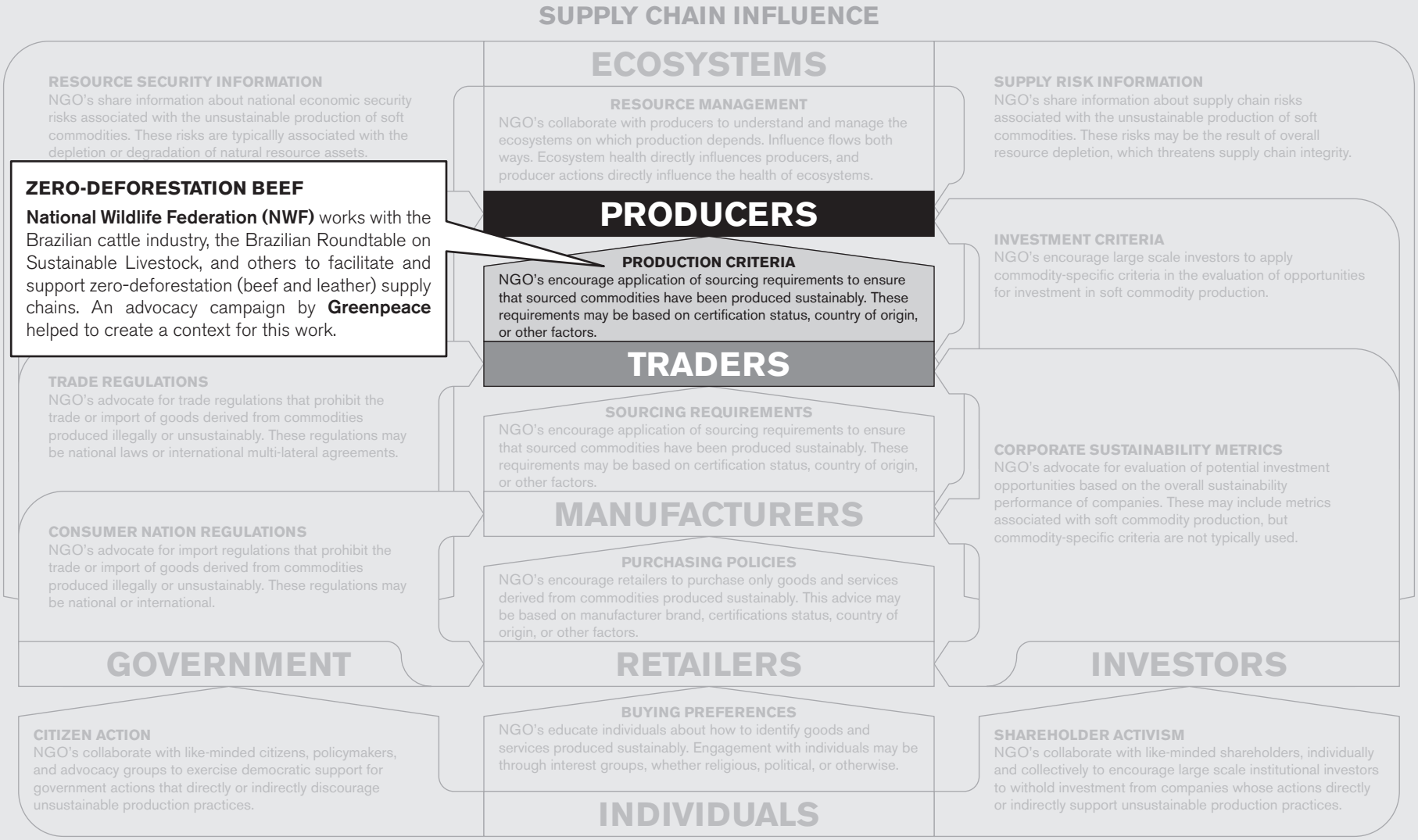
Strategies: **Resource Management**

Some NGO's collaborate with producers to develop and implement **resource management** strategies for the ecosystems on which production depends. EDF's work on catch shares in the Gulf of Mexico is exemplary of the alignment of incentives that is often the basis of such work.



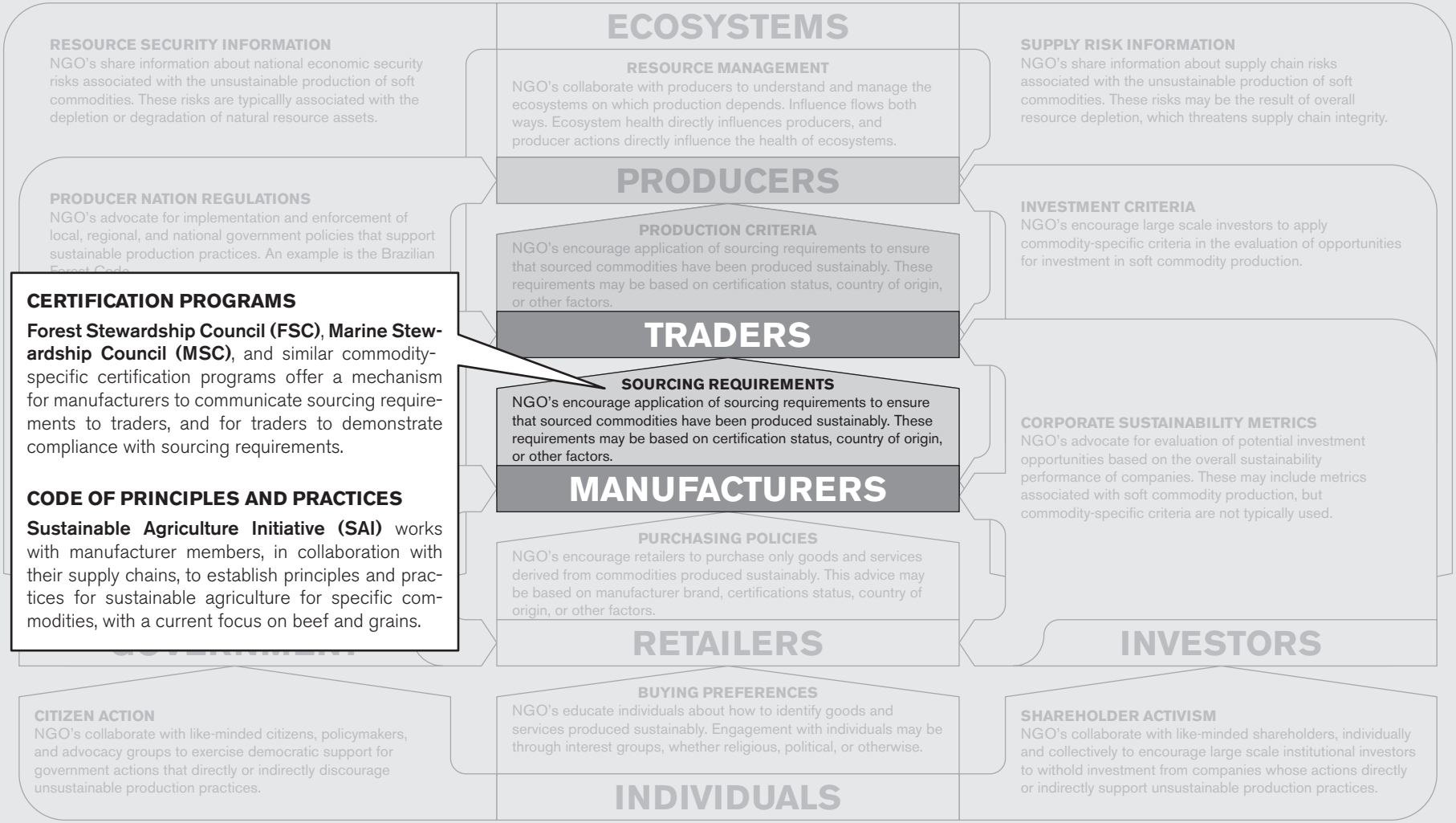
Strategies: **Production Criteria**

Commodity producers receive their most direct market feedback from traders: those companies that purchase directly from producers and then deliver commodities to the global marketplace. Some NGO's work directly with traders to develop **production criteria** as an effective market signal.



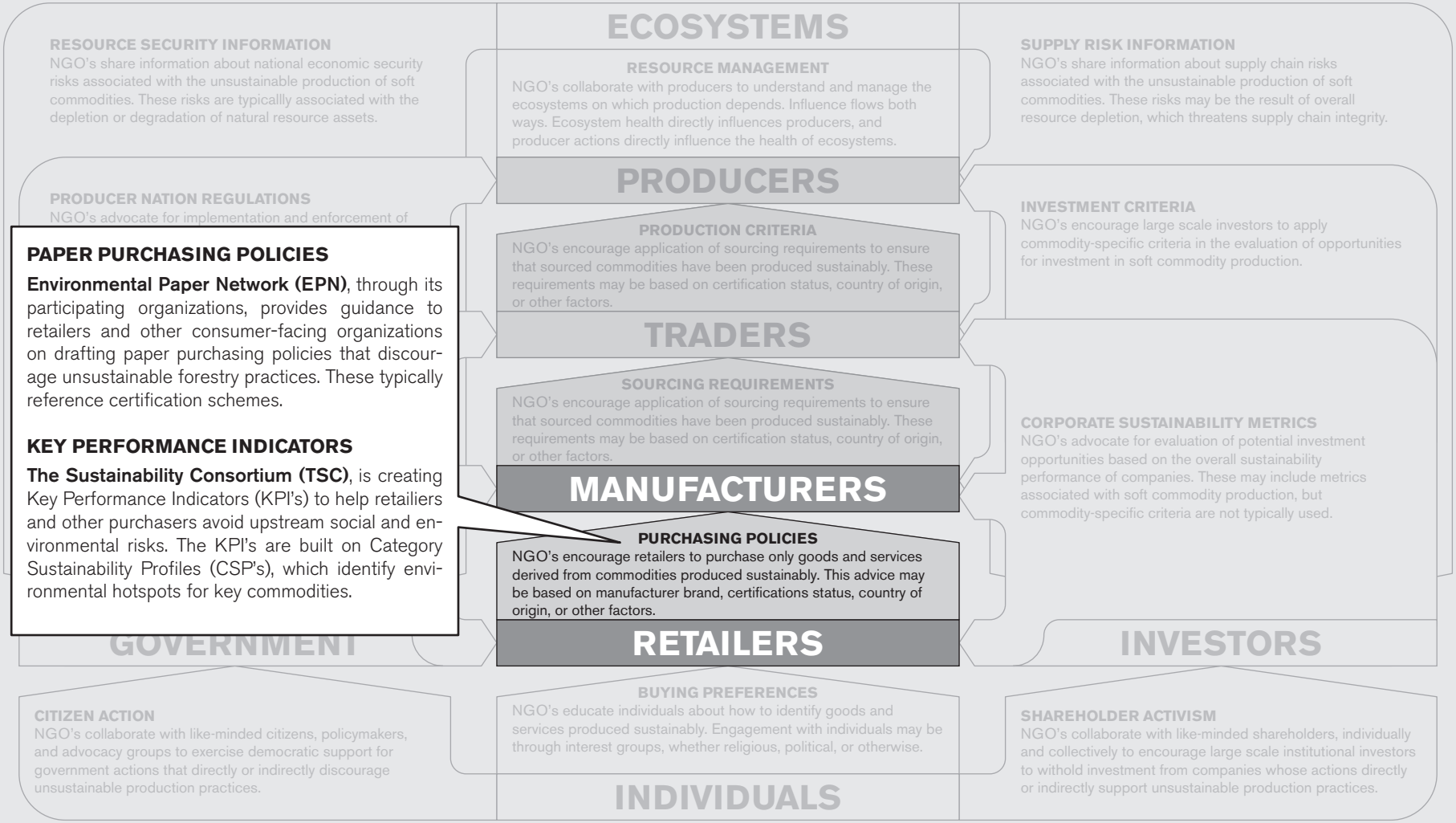
Strategies: **Sourcing Requirements**

Manufacturers influence producers indirectly, by imposing **sourcing requirements** on commodities purchased from traders on the global market. These requirements may be based on certification status, country of origin, supply chain transparency, or other factors.



Strategies: **Purchasing Policies**

Retailers can send indirect market signals to producers through **purchasing policies** that explicitly prefer commodities sourced from sustainable production systems. NGO's encourage the adoption of such policies through advocacy campaigns, strategic advice, and collaborative engagement.



PAPER PURCHASING POLICIES

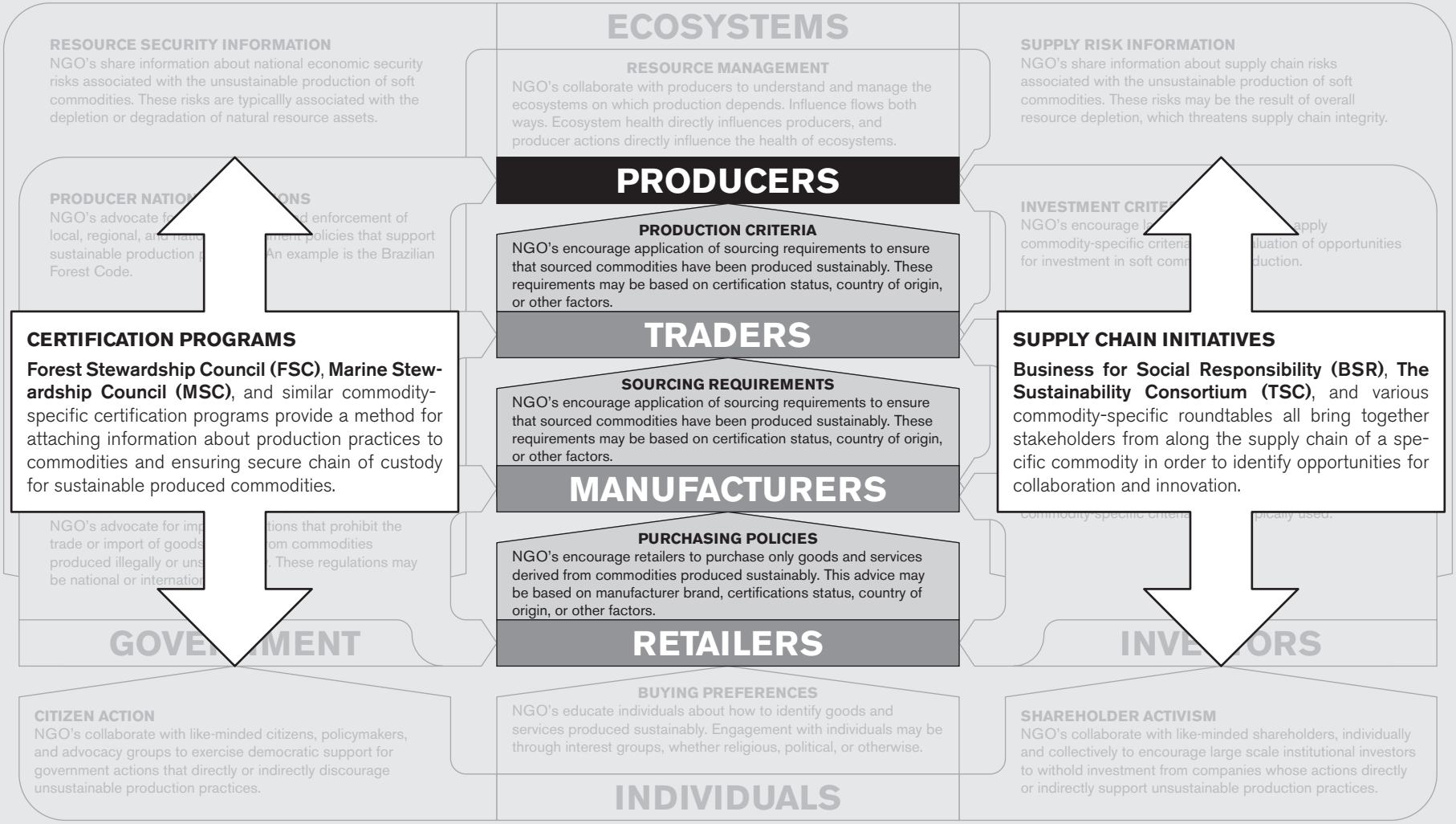
Environmental Paper Network (EPN), through its participating organizations, provides guidance to retailers and other consumer-facing organizations on drafting paper purchasing policies that discourage unsustainable forestry practices. These typically reference certification schemes.

KEY PERFORMANCE INDICATORS

The Sustainability Consortium (TSC), is creating Key Performance Indicators (KPI's) to help retailiers and other purchasers avoid upstream social and environmental risks. The KPI's are built on Category Sustainability Profiles (CSP's), which identify environmental hotspots for key commodities.

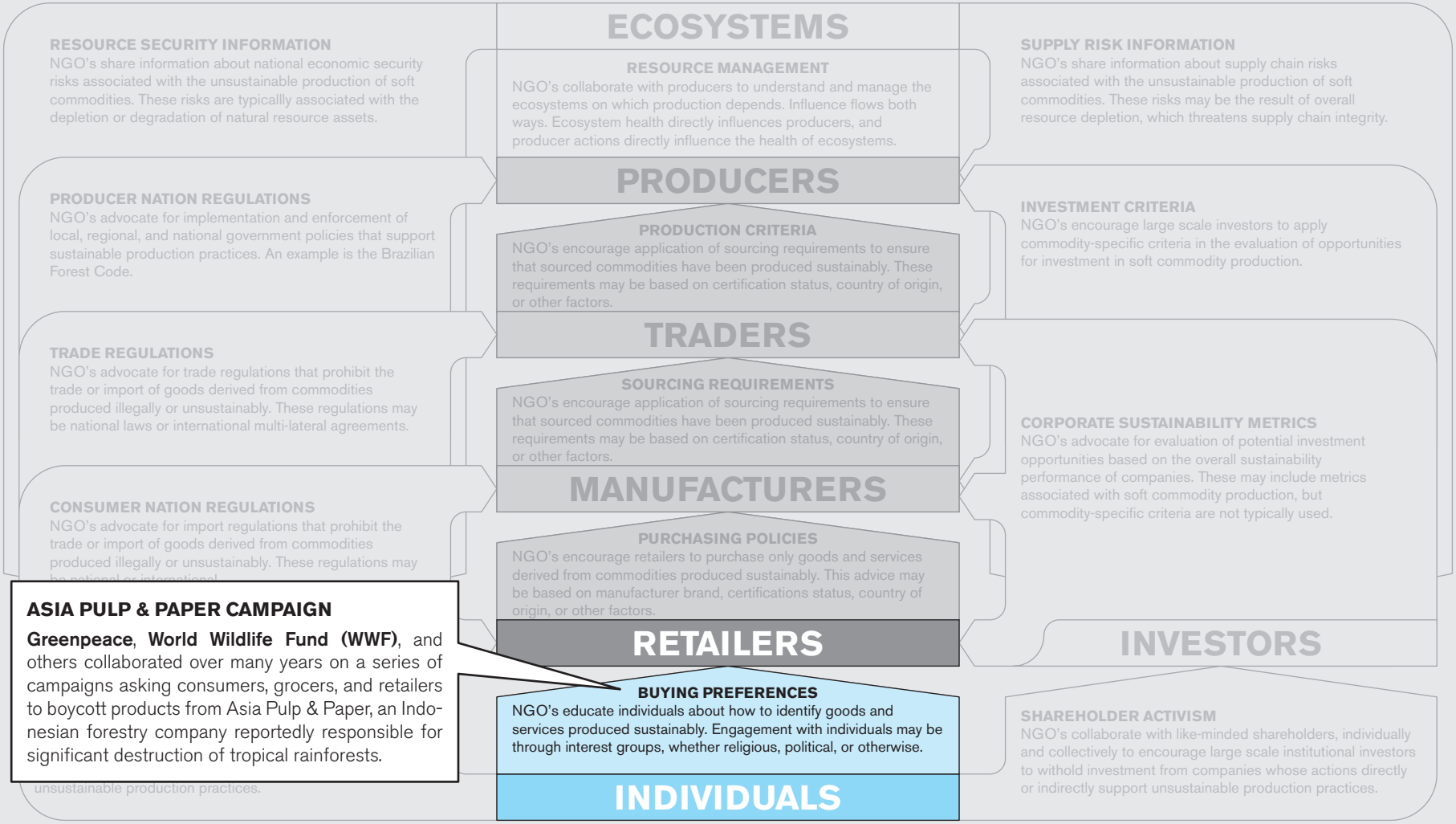
Strategies: **Integrated (Cross-Cutting) Strategies**

Some NGO activities are specifically designed to work as cross-cutting, integrated strategies along the length of commodity supply chains, forging multiple links in **chains of influence**. Typically, such stragegies provide a mechanism for information sharing to support informed decisions.



Strategies: **Buying Preferences**

Economic demand from individuals drives the entire industrial supply chain of commodities. Some NGO's work to indirectly influence production practices by shaping consumer **buying preferences**, educating individuals through direct advocacy or indirect engagement through interest groups.

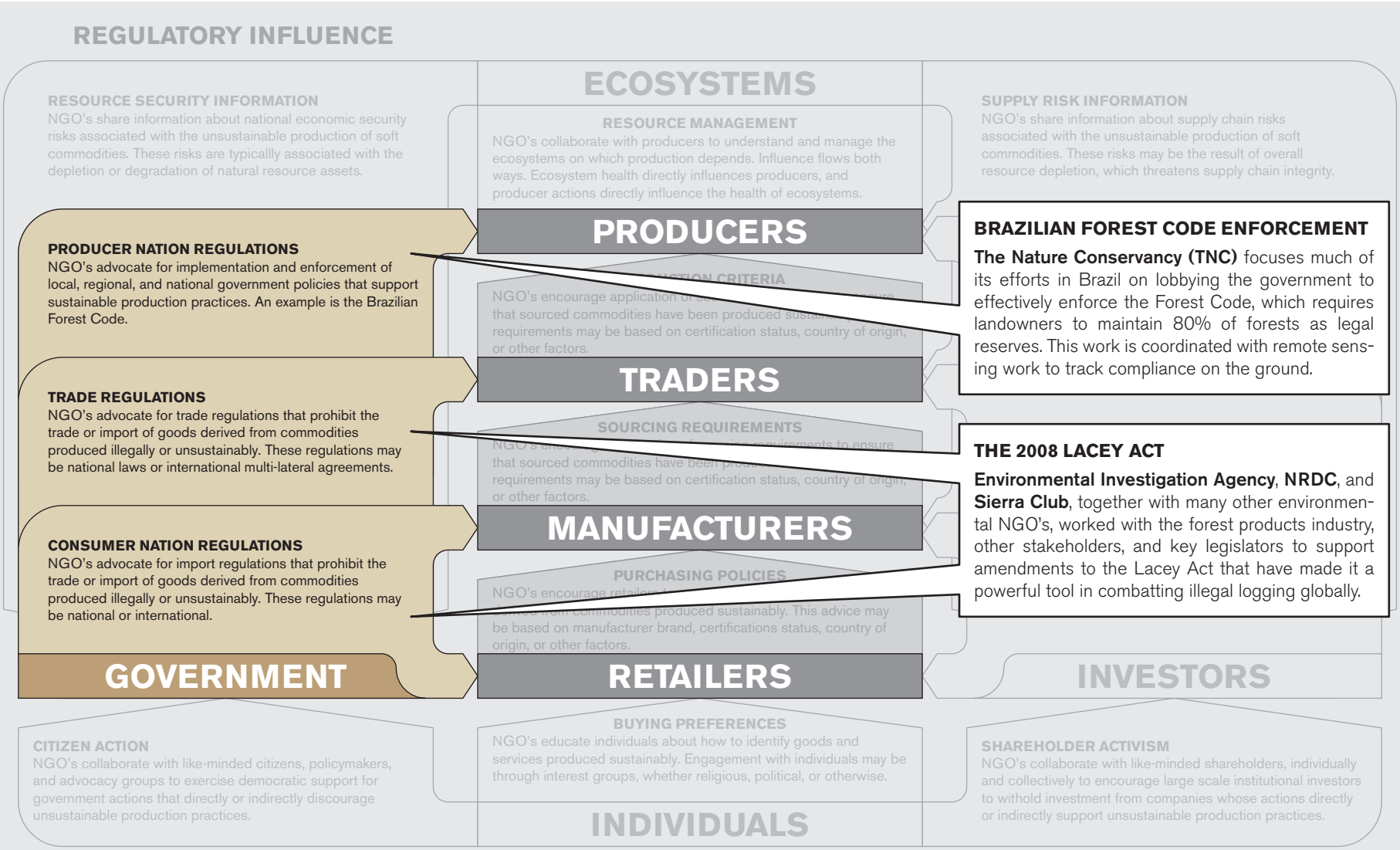


ASIA PULP & PAPER CAMPAIGN

Greenpeace, **World Wildlife Fund (WWF)**, and others collaborated over many years on a series of campaigns asking consumers, grocers, and retailers to boycott products from Asia Pulp & Paper, an Indonesian forestry company reportedly responsible for significant destruction of tropical rainforests.

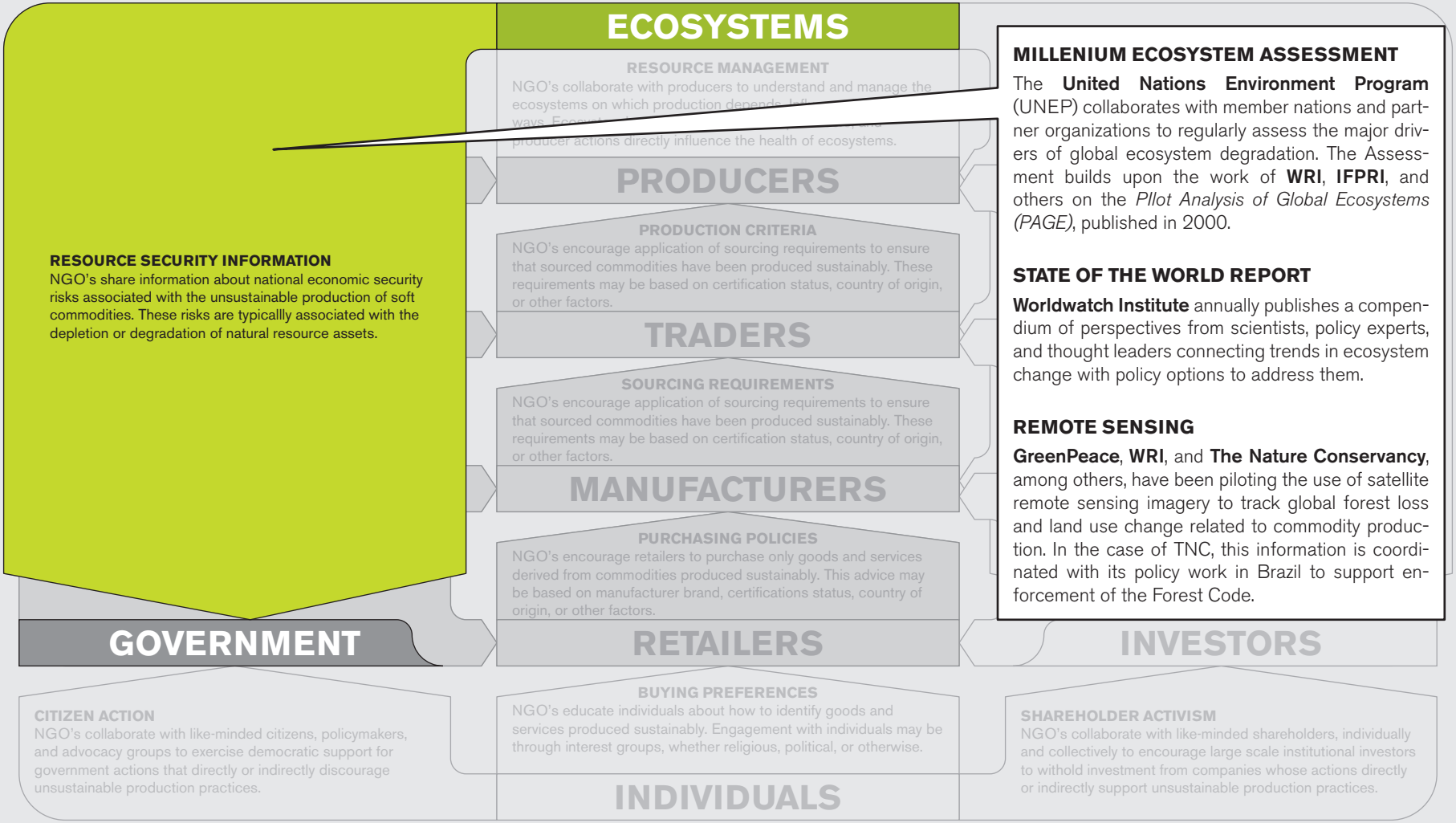
Strategies: **Influencing Government Policy**

Governments can influence the entire supply chain through producer nation, trade, and consumer nation regulations. NGO's engage directly with governments by providing technical support for policy development and indirectly by advocating publicly for policy change.



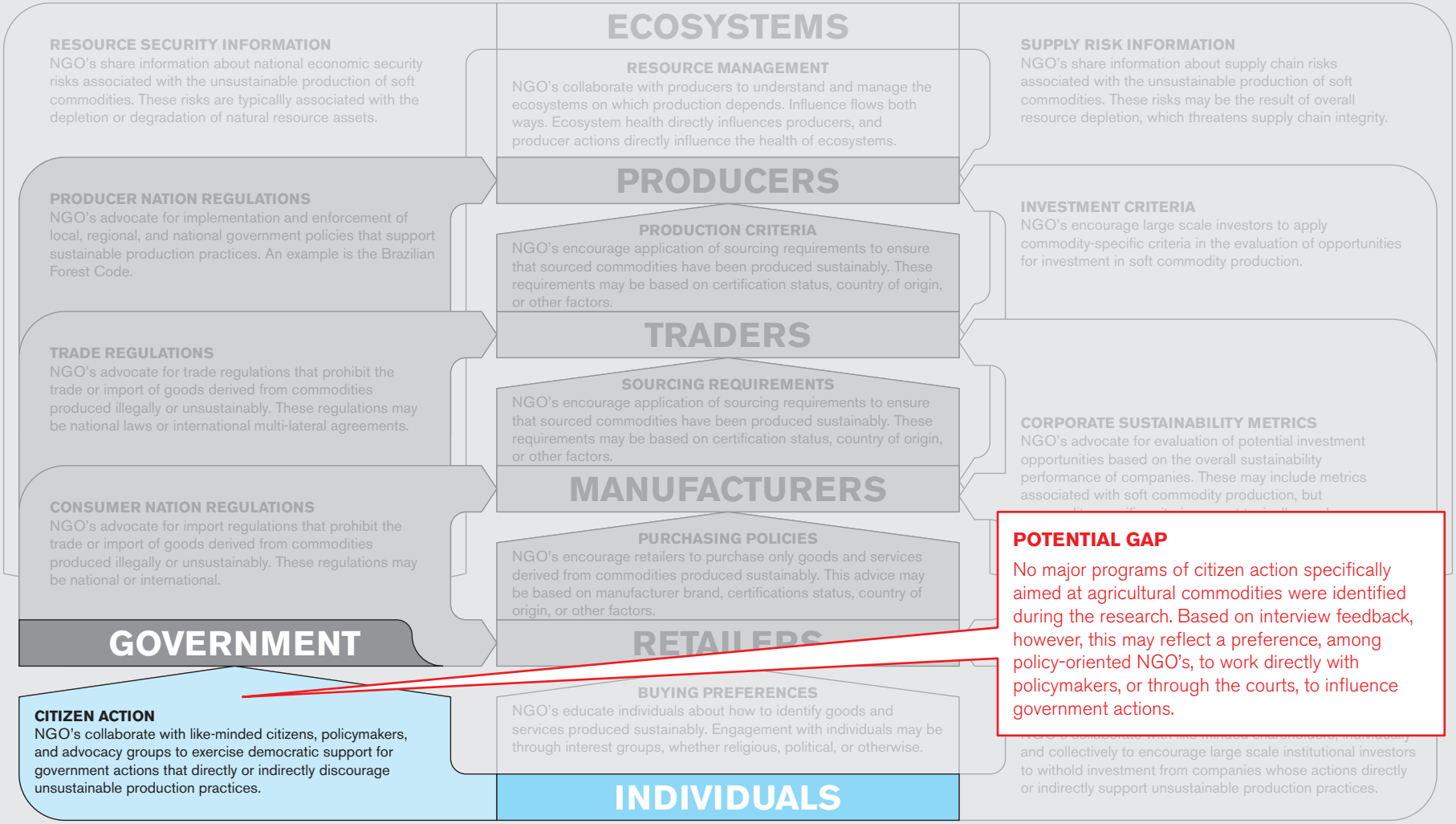
Strategies: **Resource Security Information**

Ecosystem health can affect social, environmental, and economic security of communities at all scales. Local, regional, and national governments are accountable for this security, and NGO's share information about relevant **resource security** risks associated with commodity production practices.



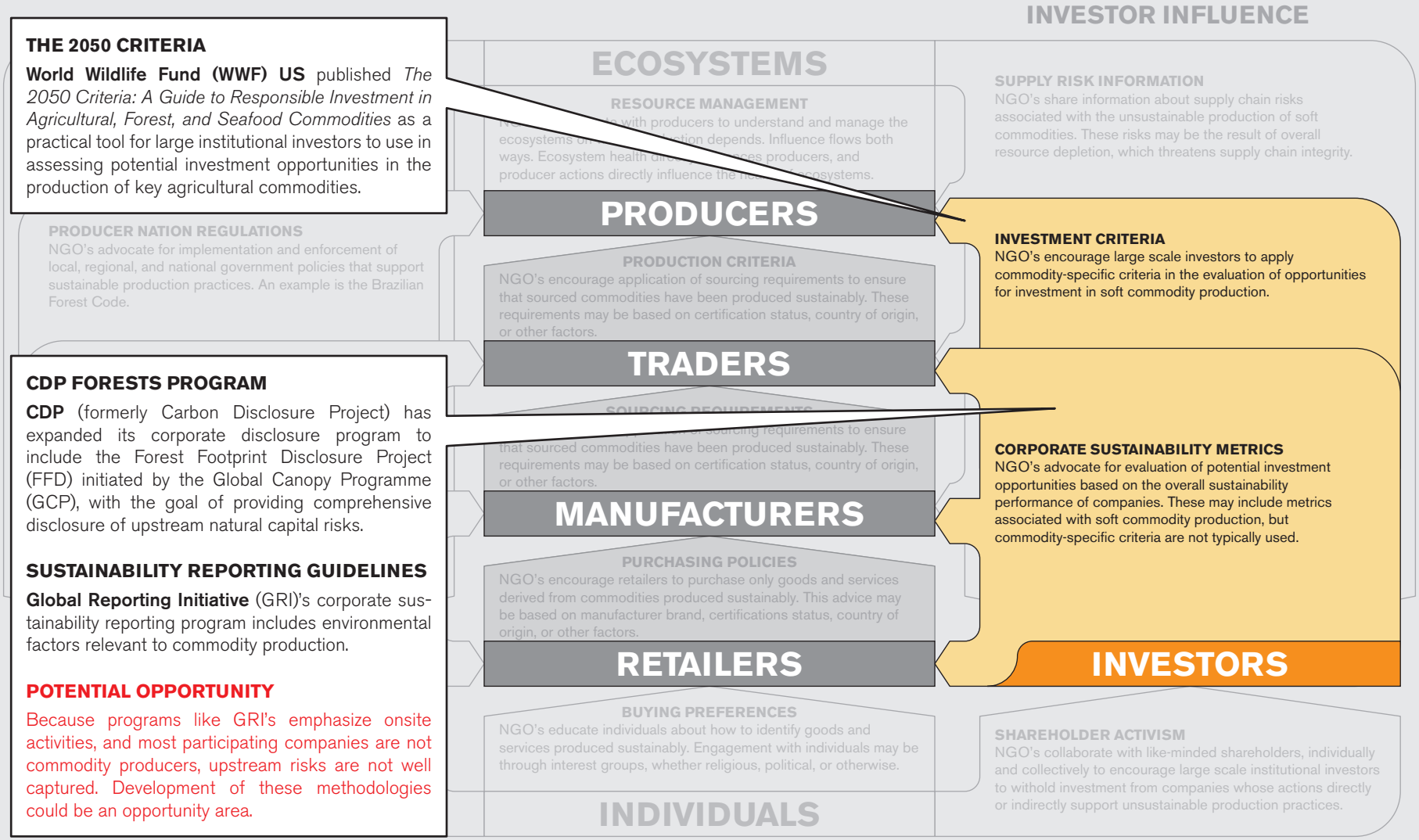
Strategies: **Citizen Action**

In democratic societes, governments' stated role is to act as the collective agent and voice of individual citizens, who are the foundation of government authority. NGO's work to focus democratic **citizen action** in support of policies that discourage unsustainable commodity production.



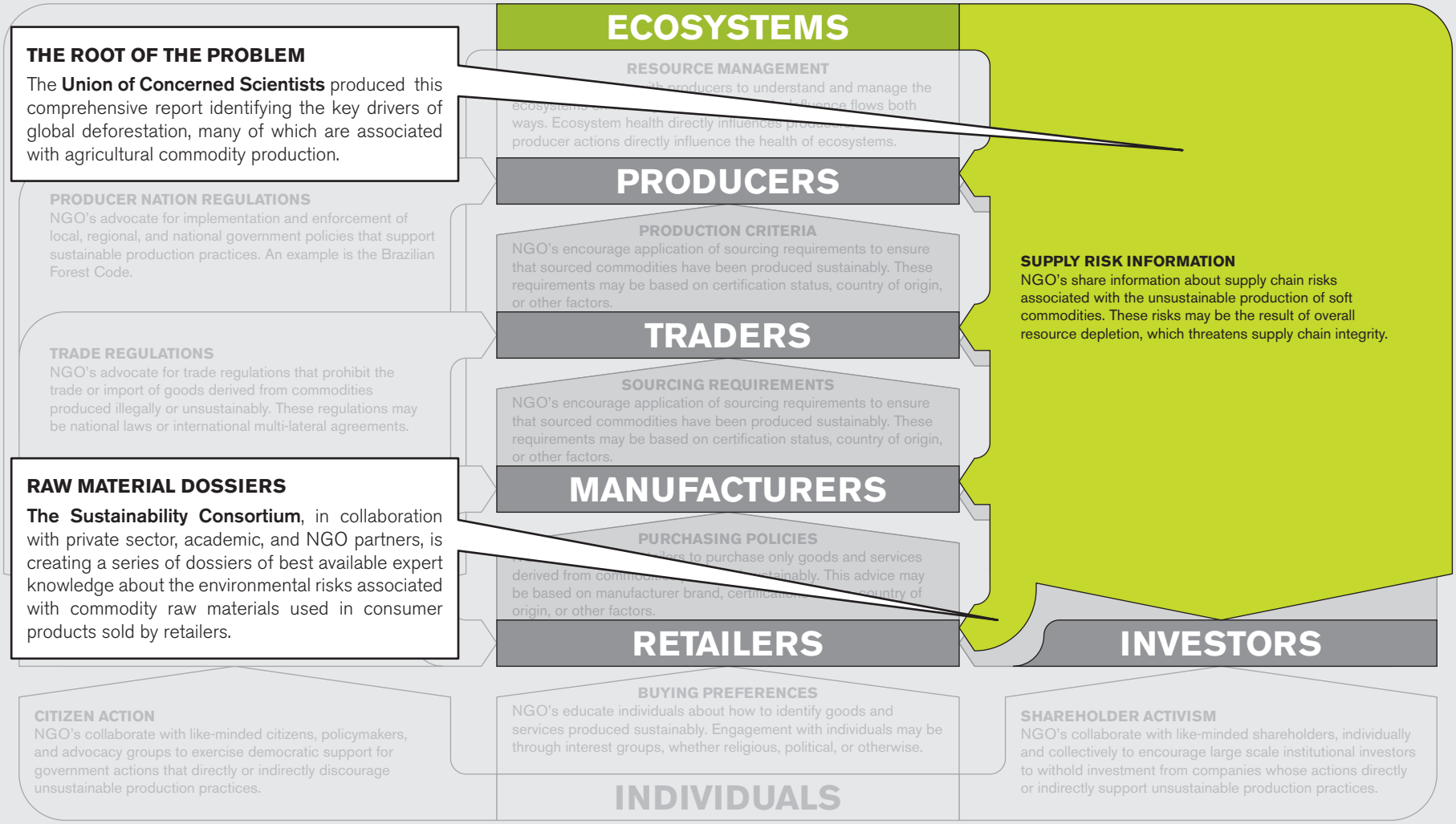
Strategies: **Influencing Investors**

Institutional investors can influence the entire supply chain of commodities through commodity-specific **investment criteria** imposed on production enterprises and **corporate sustainability metrics** applied to traders, manufacturers, and retailers.



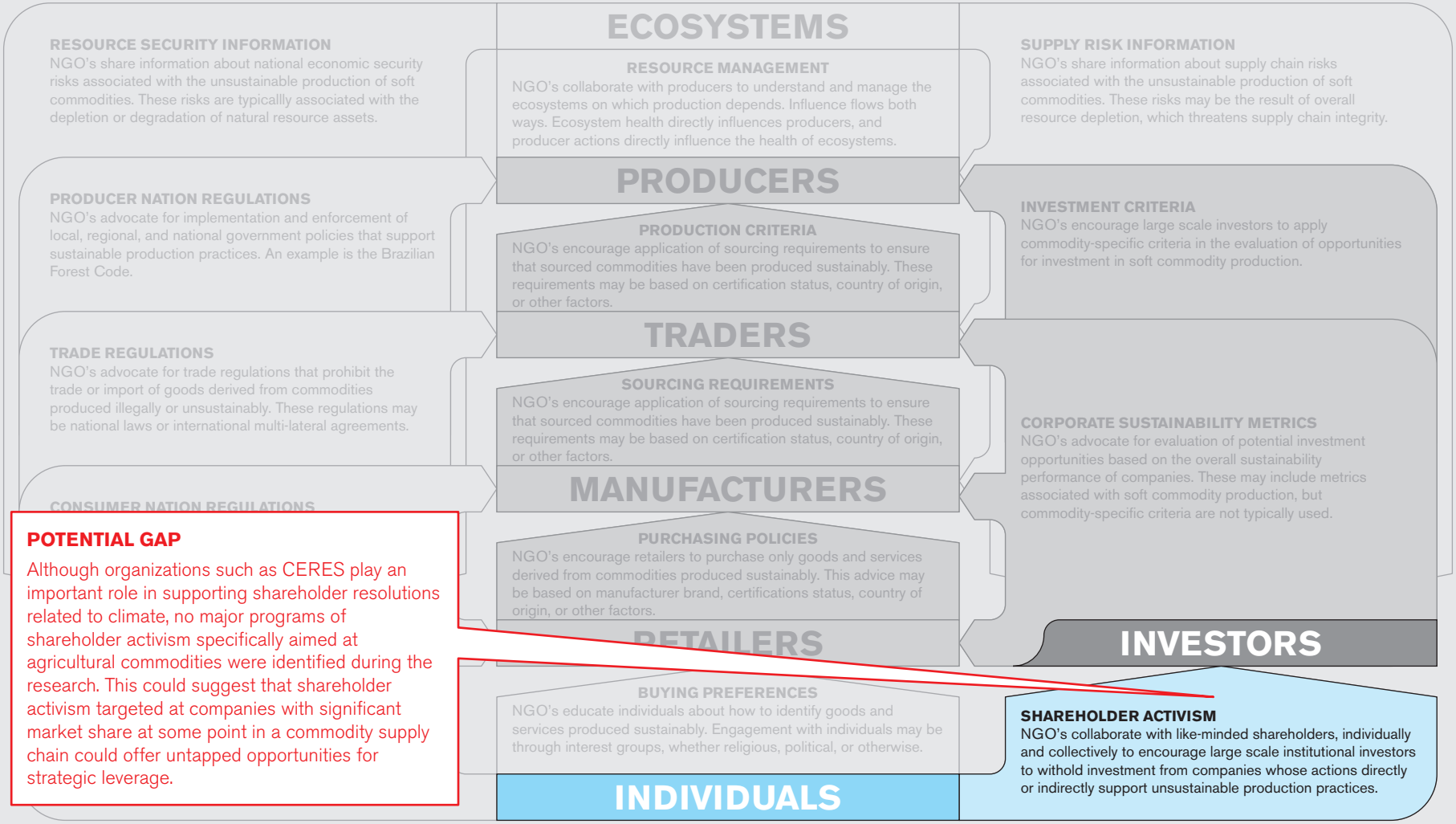
Strategies: **Supply Risk Information**

The long-term health of ecosystems affects the entire commodity marketplace, and it is therefore relevant to all supply chain participants. Some NGO's therefore work translate scientific data about ecosystem health into supply risk information to support decision-making by commercial actors.



Strategies: **Shareholder Activism**

Individuals and interest groupscan shape the investment environment for the entire supply chain by exercising their influence as investors and shareholders. NGO's seek to influence behavior through **shareholder activism** campaigns to discourage investment in unsustainable production chains.



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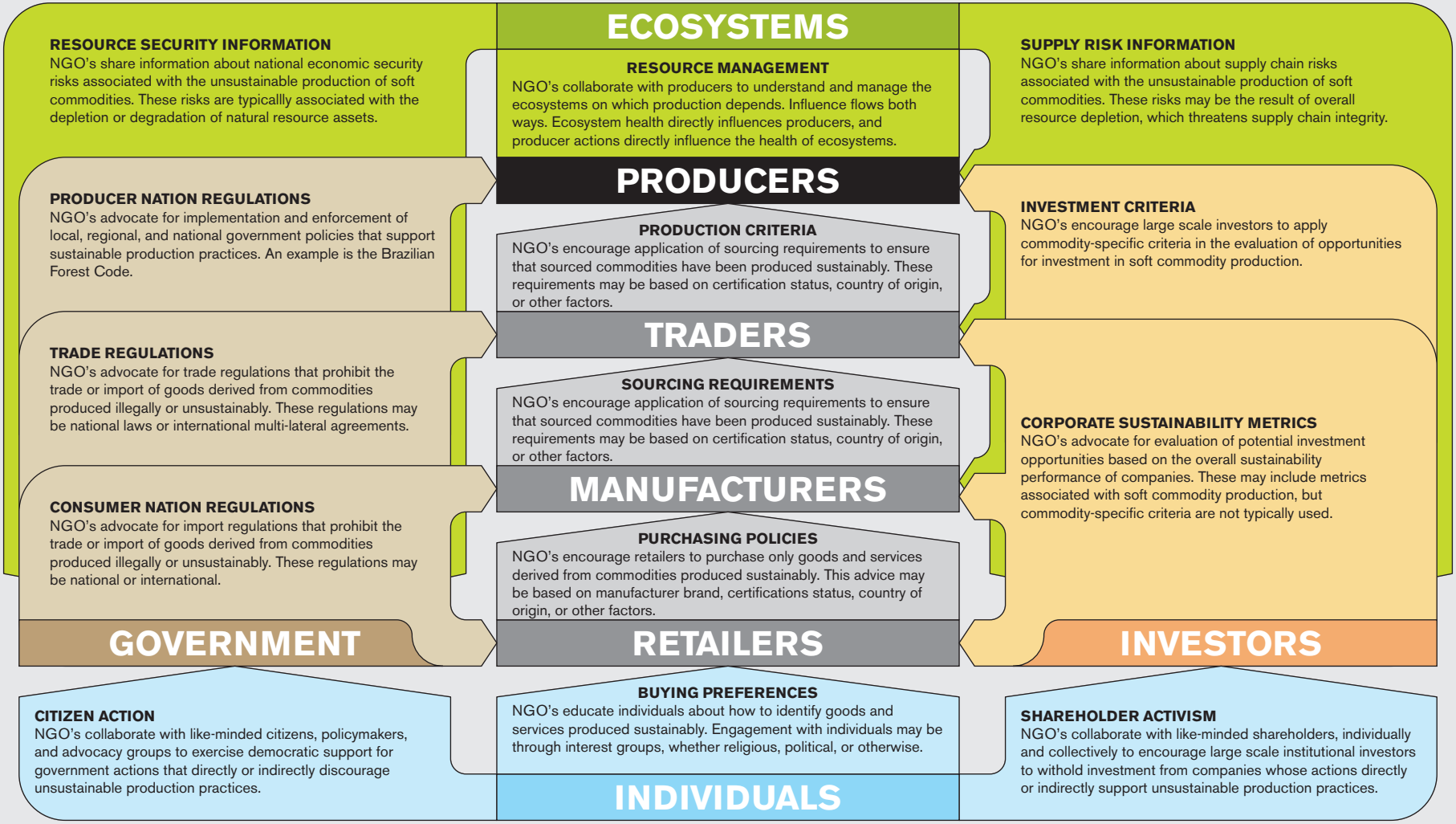


Strategies: **A Landscape of Experimentation**

NGO's deploy a range of strategies across commodities and geographies, and most use multiple strategies at once to influence production practices. The following chart indicates activities identified during the research, but it may not be a comprehensive document of all relevant activities.

DISCLAIMER:
As noted above, this chart is based on information collected during a relatively brief research study. It may not accurately reflect the full portfolio of activities undertaken by the organizations shown, nor are all relevant organizations necessarily included. We welcome feedback on the accuracy or completeness of the information, and we will update future versions of this chart to include additional information received.

		Source		Commodity Focus							Regional Focus						Modes / Strategies														
		Profiled (web)	Interviewed	General	Cereal Grains	Beef	Soy	Palm	Timber	Fish	International	Africa	Asia	Europe	Latin America	North America	Campaigns (corporate)	Campaigns (policy)	Certification (development)	Certification (promotion)	Corporate partnerships	Engagement (producers)	Engagement (traders)	Engagement (consumers)	Engagement (multi-company)	Engagement (multi-stakeholder)	Policy development	Field work	Research	Tool development
Type	**Organization**																													
Conservation	World Wildlife Fund (WWF)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	The Nature Conservancy (TNC)	●	●	●	●	●	●	○	●	○	●	●	●	○	●	●	●	●	○	●	●	●	●	●	○	●	○	○	●	○
	Conservation International (CI)	●	○	●	○	●	●	●	●	●	●	●	○	○	○	○	○	●	○	○	○	●	○	○	○	●	●	●	●	○
	National Wildlife Federation (NWF)	○	●	○	●	●	○	○	●	○	●	○	●	○	●	○	○	○	●	●	○	○	○	○	○	○	○	●	●	○
Research/Policy	Union of Concerned Scientists	●	●	●	○	○	○	○	○	○	●	○	○	○	○	●	○	○	○	○	○	○	○	○	○	●	●	○	●	○
	World Resources Institute	●	○	●	○	○	○	○	○	○	●	○	●	○	●	○	●	●	○	○	●	●	●	●	○	●	●	○	○	●
Commodity-Specific	Global Roundtable for Sustainable Beef	●	○	○	○	●	○	○	○	○	●	○	○	○	○	○	○	●	○	○	○	●	●	●	○	●	○	○	○	○
	Rainforest Alliance	●	○	○	○	○	○	○	●	○	●	○	○	○	○	○	○	○	●	●	○	●	●	●	○	●	○	○	○	○
	Roundtable on Responsible Soy	●	●	○	○	○	●	○	○	○	●	○	○	○	●	○	○	○	●	●	○	○	○	○	○	●	○	○	○	●
	Sustainable Fisheries Partnership	●	●	○	○	○	○	○	○	●	●	○	○	○	○	○	●	○	○	○	●	○	○	○	○	●	●	○	●	○
Regional	Field to Market	●	●	○	●	○	●	○	○	○	○	○	○	○	○	●	○	○	○	○	○	●	○	○	○	●	○	○	●	●
	IPAM	●	○	●	○	○	○	○	○	○	○	○	○	○	●	○	○	●	○	○	○	●	○	○	○	●	●	○	●	○
Market-Oriented	BSR	●	●	●	○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	●	●	○	●	●	○	○	○	●	○
	Forum for the Future	●	●	●	○	○	○	○	○	○	●	○	○	●	○	○	●	○	○	○	●	●	●	●	●	●	○	○	○	○
	Sustainable Agriculture Initiative	●	●	●	○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	●	○	○	○	○	●	○	○	●	●
	The Sustainability Consortium	●	○	●	○	○	○	○	○	○	●	○	○	○	○	●	○	○	○	○	○	○	○	○	○	●	○	○	○	●

Strategies: **Overview**

Non-governmental organizations (NGO's) use a range of strategies to influence production practices. **Direct** strategies aim at producers themselves. **Indirect** strategies aim at others factors that influence production. **Cross-cutting** strategies transmit market signals along supply chains.

ECOSYSTEMS

PRODUCTION

TRADE

CONSUMPTION

MONITOR ECOSYSTEMS

Ecosystems provide the raw materials for all soft commodity production, and the entire supply chain depends upon their continued health. NGO's monitor and comunicate risks associated with ecosystem degradation.

INFLUENCE PRODUCERS

Production practices are directly influenced by legal codes, social expectations, market demands, and the health of the ecosystem itself. NGO activities seek to engage these factors to support sustainable production.

INFLUENCE TRADERS

As producers' primary customers, traders are in a position to exert significant influence over production practices. NGO strategies seek to create incentives for traders to exercise that influence.

INFLUENCE CONSUMERS

Corporate consumers are the source of original demand for commodities. NGO strategies seek to shape that demand to encourage improvements in production practices.

TRANSMIT MARKET SIGNALS

NGO's work along the supply chain to communicate market signals, either through engagement with specific actors or through the creation of tools, resources, and market mechanisms that transmit supply and demand signals.

MODES OF ENGAGEMENT: DIRECT | INDIRECT | CROSS-CUTTING | SUPPORTING

Strategies: **Types of Influences**

NGO's seek to exercise three types of influence on production practices: regulatory influence, supply chain influence, and investor influence. Each has its own own strengths and weaknesses, from the perspective of long-term effectiveness.

	REGULATORY INFLUENCE	SUPPLY CHAIN INFLUENCE	INVESTOR INFLUENCE
Level of difficulty	●	○	◒
Durability of change	●	○	◒
Return on investment	●	◒	◒
Preconditions	Strong rule of law	Consolidated supply chain Financially secure partner	Dependence on external capital
Example	EDF collaborates with fishermen in the Gulf of Mexico to create a new regulatory regime for red snapper	BSR collaborates with SAI and others to create a sustainable sourcing guide for agricultural raw materials	WWF develops the *2050 Criteria* to help institutional investors assess social and environmental risk prior to investment

KEY ● high ◒ medium ○ low

Based on a conversation with Larry Band, Senior Advisor, EDF

Contents

This section highlights insights gained from interviews with NGO leaders, supplemented by independent research. In general, these insights are not based on quantitative analysis, but on expert opinion or anecdote. For that reason, this section should be understood as a starting point for strategic conversation and exploration, rather than as a prescription for action. When possible, specific sources are noted.

Insights
from NGO leaders

A number of insights emerged from interviews with leaders of non-governmental organizations (NGO's) working on soft commodities. Each insight is listed thematically below and explained in detail on a following slide.

Effective Strategies	Where feasible, well-enforced laws should be a priority.
	Producers can be advocates for strong regulation.
	Carrots and sticks are complementary.
Market Complexity	Market complexity requires cross-commodity strategies.
	Best practices (and crops) vary by context.
	Demand-side leverage may not work for commodities.
	The future of certification is unclear.
Emerging Opportunities	There is an opportunity for big-picture collaboration.
	Agroecological zoning could be a growth area.
	Food waste could be an opportunity area for campaigns.

Insights: Effective Strategies

Where feasible, well-enforced laws should be a priority.

Laws trump voluntary approaches.
Many NGO's employ a diverse portfolio of strategies for influencing production practices, but their expert staff generally concur that, where possible, strong, well-enforced laws regulating production practices are, by far, the most effective mechanism for reducing environmental degradation and stewarding natural assets. Private sector analysts tend to concur with this assessment of legal approaches as the most consistently effective.*

Legality can be a proxy for resource conservation.
In the case of Brazil, for example, The Nature Conservancy prioritizes efforts to strengthen the Brazilian Forest Code and its enforcement, and the Union of Concerned Scientists notes the important role that the Forest Code has played in dramatically reducing rates of deforestation. For traders, manufacturers, and consumers, a focus on whether goods are derived from commodities produced in countries where natural resource laws are strong and well-enforced offers an efficient proxy for environmental footprint.**

Import regulation can be highly effective.
The legality of commodity production can also become the basis of trader- and manufacturer-oriented laws, as is the case in the 2006 amendment of the U.S. Lacey Act, which outlawed the use of timber from illegal sources. According to the Environmental Investigation Agency (EIA), which has led efforts to amend and enforce the Lacey Act for timber, the Act has been tremendously effective in reducing illegal logging globally.***

Other approaches may complement legality and governance work.
Implementing and enforcing robust natural resource management laws remains a challenge throughout much of the world. A range of other market-based approaches—including producer collaborations, corporate partnerships, advocacy campaigns, and other strategies—may act as a complement to governance reform efforts. But all NGOs should be attentive to ensuring that market-based approaches do not inadvertently gloss over or mask illegal activity.

Sources: * Doug Boucher (UCS), Kate Horner (EIA); ** David Cleary (TNC); *** Kate Horner (EIA)

Insights: Effective Strategies

Producers can be advocates for strong regulation.

The work of several NGO's suggests that some of the most robust strategies are those that harness market signals in ways that result in producers advocating for positive regulatory change.

Voluntary action can lead to policy advocacy. The Sustainable Fisheries Partnership worked with producers in the Russian pollock fishery, who sought to demonstrate to international customers that they were making active progress toward more sustainable practices. A key challenge was underreporting of catch based upon an inaccurate pollock roe recovery rate. While regulatory change was impossible that that time, a group producers agreed to voluntarily use a more realistic ratio of roe to roundish, than the ratio required by the government. By demonstrating their ability to voluntarily improve total catch reporting, as well as other voluntary actions, producers were able to maintain market access, and later successfully lobbied the Russian government to change the regulation to require use of a more accurate row recovery rate for all producers..*

Aligning incentives supports producer advocacy. In its work on red snapper in the Gulf of Mexico, EDF worked with fishermen and the government to develop a new catch-based management system to replace the existing 'effort-based' input controls such as size of net, power of engine, etc. The incentive, for fisherman, was to eliminate an overly burdensome set of regulations, and EDF was able to convince them to switch to a catch-based system, allocating a certain percentage of the overall catch to individuals, groups, or communities, using a scientific assessment of stocks to establish the overall quota. This shifts the incentive structure from focusing on catching as many fish as possible to focusing on getting maximum value out of the allowed quota: 'fishing for dollars rather than fishing for fish.' The system has completely transformed the commercial side of red snapper fishery, to the point that the fishermen recently appealed to congress to actually lower the total allowed catch in order to ensure continued vitality of the fishery.**

Both examples suggest that careful, well-designed, market-based engagement with producers can lead to improved regulatory frameworks supported by the producers themselves.

Sources: * Andrei Klimenko (SFP); ** Tom Grasso (EDF)

Insights: Effective Strategies

Carrots and sticks are complementary.

Campaigns lay the ground for collaboration.
A number of NGO's engage with the private sector in a collaborative mode, particularly on the demand side, working with brand-owners and manufacturers to identify business risks associated with the unsustainable production of soft commodities. All of these NGO's acknowledge that a 'carrot-and-stick' or 'good cop-bad cop' dynamic provides the foundation for these engagements. Some note that, even when they are able to demonstrate significant supply chain business risk, companies are often unwilling to invest in making improvements until they are targeted by an advocacy campaign which threatens their consumer brand.*

As an example, the highly successful soy moratorium in Brazil would never have happened without the advocacy work of Greenpeace, and its continued renewal is supported by ongoing collaboration and monitoring by other organizations.**

Some NGO's play both roles.
In some cases, NGO's prioritize trust-building with companies, but also reserve (and exercise) the right to call the companies out if they don't live up to their commitments.*** This is true, for instance, with WWF, which has a long history of both working collaboratively with individual companies and also of conducting public campaigns around specific issues.

For strategic purposes, this suggests that collaborative work will be most effective if mechanisms for reputational pressure are available as a lever, either directly or through coordination with other organizations' efforts.

Sources: * Nathalie Walker (NWF); ** The Root of the Problem (Union of Concerned Scientists, 2011, p.34); *** Andrei Klimenko (SFP)

Insights: Market Complexity

Market complexity requires cross-commodity strategies.

Narrow strategies risk rebound effects.
Commodities, by their very nature, are traded as undifferentiated materials on the global market. As a result, production changes that reduce negative impacts in one place may simply displace those impacts to another place.

This issue has been central to ongoing debates about indirect land use change (ILUC). For biofuels, for example, if fuel crops are grown on land that was previously used for other agricultural commodities, the resulting shortage of supply in those commodities may encourage conversion of forest land to agricultural land in other places, potentially cancelling out the presumed environmental benefits of biofuels relative to gasoline.

The phenomenon is not limited to biofuels. A recent study in Brazil showed that conversion of existing agricultural lands to soy production resulted in significant deforestation to accommodate cattle ranching elsewhere. Similar studies have been used to argue, in Brazil, for intensification of cattle ranching and promotion of oil palm as a crop, due to its high nutrient yield per acre.

Coordination across commodities is needed.
These nuances are even more complex at the boundary between land- and marine-based commodities, where some have argued, for instance, that if we do not fully exploit marine fisheries by fishingn them to the maximum sustainable level, global nutrient demands will be met by land animal proteins, at much higher environmental cost.*

Such complexities argue for NGO strategies or collaborations that engage multiple commodities simultaneously, with particular sensitivity to the role of international supply chains in global commodity market dynamics. There might also be an opportunity for more active coordination and collaboration between the multi-stakeholder roundtables that have been established for each commodity, but which reportedly do not often coordinate with one another.**

Sources: * Ray Hillborn (WWF Fuller Seminar, May 22, 2013); ** Gus Silva Chavez (EDF)

Insights: Market Complexity

Best practices (and crops) vary by context.

Intensification and expansion are necessary.
Intensification of crop yields and expansion into new areas of cultivation are both approaches that increase agricultural yields, and both are expected to be necessary to address growing global demand for food and nutrients.

Strategies cannot be standardized.
Different approaches are required based on regional variations in crop, market, soil, and geographic conditions. The following table documents a mental model for making sense of the challenges posed by the two dominant responses to increasing demand for food.*

Response to demand	**Intensification**	**Expansion**
Regional stereotype	Bread basket	Poor/degraded lands
Economic state	Developed	Developing
Regulatory regime	Stronger	Weaker
Expansion potential	Small	Significant
NGO strategy	Optimization	Intensification
Challenges	Inertia of existing practices	Political instability; lack of infrastructure
Approach	Education/comparison	Prescription

Sources: * Fred Luckey (Field to Market)

Insights: Market complexity

Demand-side leverage may not work for commodities.

Commodities resist demand-side differentiation.
For NGO's that work on demand-side approaches (e.g., market campaigns and purchaser policies), the nature of commodities—responding to demand pressures by finding other markets—is a challenge. Commodities go into so many value-added goods and services that, depending on size of the market and relative influence of purchaser, price premiums or purchasing policy changes may not be sufficient to result in a significant shift in the production dynamics of a commodity.*

Impacts can 'leak' in a complex marketplace.
If the market is constrained in one place (e.g., with a certification requirement), the supplier may simply find a different market. In a recent example, orange roughy was largely locked out of retail in the United States due to NGO campaigns, but it mostly moved to food service uses in response, though probably at a lower price.*

Traceability and monitoring are difficult.
Because commodities are difficult to trace, effective monitoring of supply chains is difficult, but the success of demand-side leverage depends upon effective chain of custody accountability.**

Demand-side leverage depends on consolidation.
Not all supply chains are consolidated, and artisanal production systems may not respond to demand-side leverage. Field to Market notes that demand-driven supply chain engagement (e.g., certification), motivated by consumer leverage, may work well for consolidated production systems, but not for artisanal production. By focusing on producers and production practices, instead of consumers and purchasing practices, Field to Market seeks to enable supply chains to "flow downstream" based on changed production practices.***

Working further upstream may be more effective.
Organizations like EDF, who work directly with fishermen to secure a fishery through quotas and catch management, change market dynamics and shift control of pricing from the trader to the producer. This avoids the risk, present in strategies that seek to control the market through demand signals, that traders will respond to demand pressures (e.g. legality requirements) by simply substituting one commodity for another and finding an alternative market for commodities not meeting the demand requirements of a more stringent market.****

Sources: * Andrei Klimenko (SFP); ** Hal Hamilton (Sustainable Food Labs); *** Fred Luckey (Field to Market); Andrei Klimenko (SFP); Larry Band (EDF); **** Tom Grasso (EDF)

Insights: Market Complexity

The future of certification is unclear.

Evidence of effectiveness is lacking.
While some of the more established certifications have achieved respectable market penetration, it is difficult to tell whether certification, as a whole, has meaningfully affected global rates of environmental degradation, or has simply codified best practices in areas where production practices were already relatively good.

As a strong supporter of certifications, WWF is conscious of these concerns and continues to support the strategy while also funding assessments of its effectiveness. Separately, NWF, EDF, and NASA are collaborating on a 3-year project that will include assessment of certification effectiveness.

Momentum may be slowing.
A number of well-informed expert observers* express skepticism that certification is an effective long-term strategy, and even the leadership of some existing certifications express uncertainty about the future of their initiatives. It is thus appropriate to remain cautious about the relative merits of certification as a strategy for meaningfully influencing production practices.

Certification may be inadequate to the challenge.
Concerns raised by interviewees generally suggest that, while certification may do some good, it is inadequate to the scale of challenges posed by commodity production, based on the following:

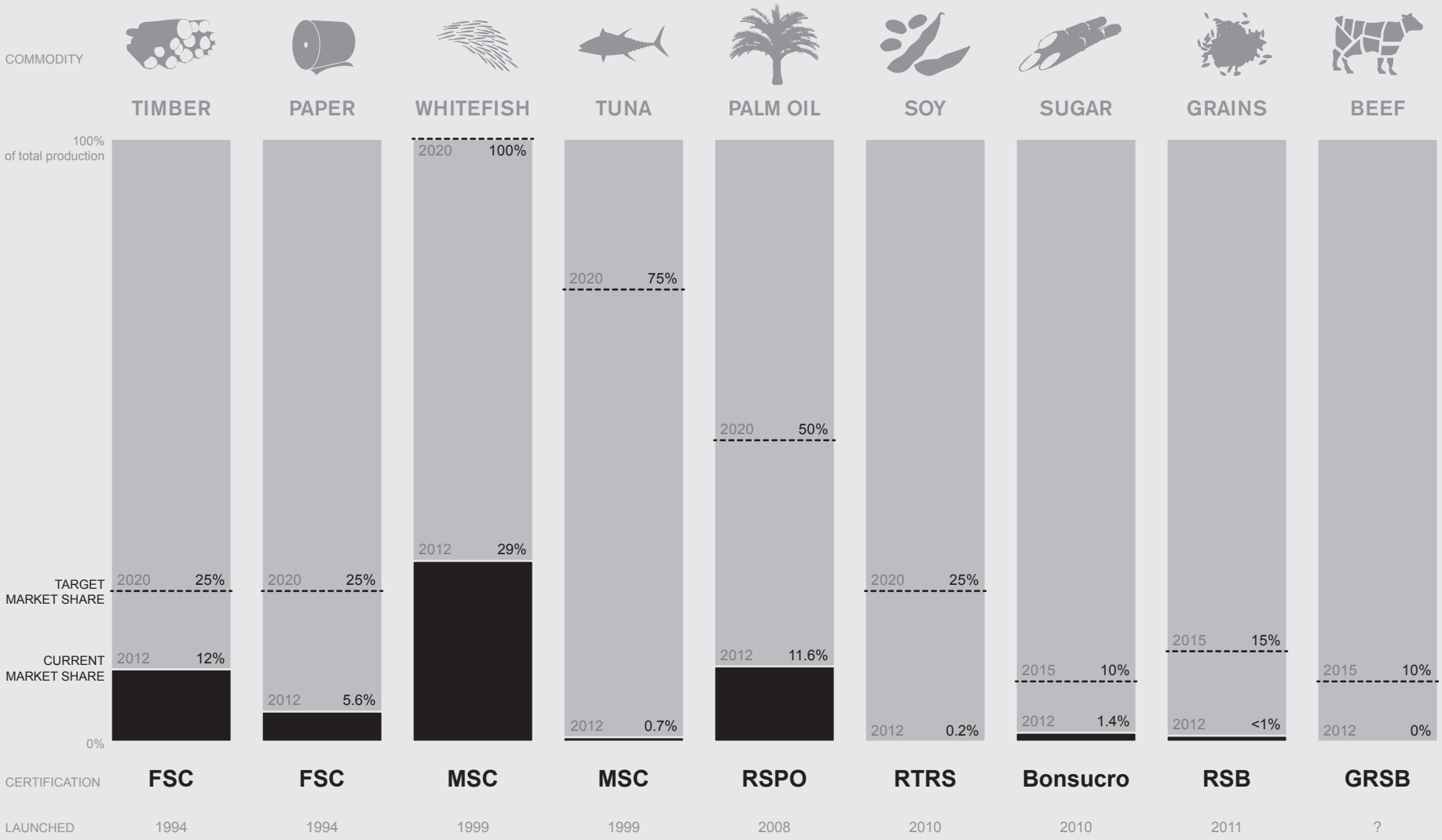
- Certification works best in already well-regulated conditions, but most environmental degradation occurs in poorly regulated conditions.
- Certification works best for commodities whose production is consolidated and industrialized, but much commodity production is (and may continue to be) artisanal.**
- The aims of certification may be better achieved by rewarding producer nations, as a whole, for creating and enforcing effective natural resource management laws, including through market pricing incentives such as REDD+.
- For many agricultural commodities, different approaches are required for different market, soil, and geographic conditions, rendering standardization difficult.***

Sources: * Doug Boucher (UCS), David Cleary (TNC), Larry Band (EDF); ** Andrei Klimenko (SFP), David Cleary (TNC); *** Fred Luckey (Field to Market), David Cleary (TNC)

Insights: Market Complexity

The future of certification is unclear.

This chart documents the relative progress of the dominant environmental certification scheme for each key commodity, with the certified shared of the overall market for the commodity is shown in black, and a dashed line showing the stated target level of certification by 2015 or 2020.



Source: *Better Production for a Living Planet* (WWF, 2012)

Insights: Emerging Opportunities

There is an opportunity for big-picture collaboration.

Commodity supply chains are complex.
The global economic system of commodity supply and demand is complex, exacerbated by numerous factors:

1. The sheer scale of the global supply chain for any single commodity is daunting for any single organization to apprehend, let alone fully engage.
2. The substitutable nature of commodities means that cross-commodity strategies are required to address potential indirect impacts.
3. Different commodities vary in their level of consolidation among producers, traders, and manufacturers, thus requiring different strategies to influence production practices.

Key players are revising strategic plans.
It is a measure of the above complexity that a majority of the major NGO's interviewed for this study were in the midst of—or had recently completed—a strategic analysis of their current work on global supply chains and commodities. Currently, these analyses appear to be occurring independently of one another, but collaborative coordination would be ideal.

Coordination across NGO's could be enhanced.
Further, the landscape of NGO's working on soft commodities is not systematically coordinated or integrated. Perhaps for this reason, the challenges of engaging global commodity supply chains seem to have produced an appropriate humility on the part of NGO's, reflected in the frequent acknowledgment that much of their current work is necessarily experimental. As the nuances of indirect land use change (ILUC) have become better understood, for instance, NGO's are more prepared to set aside prescribed 'solutions' and collaborate, with one another and with the private and public sectors, to explore a range of possible paths forward.

Funders can foster collaboration.
Funders whose support spans multiple organizations could be in a position to further encourage such collaborative humility by supporting a commodity focused event ('Summit') or platform ('Network') to facilitate shared learning and strategic coordination of NGO actions. On the domestic policy front, the recently formed Agree initiative may provide such a platform.

Insights: Emerging Opportunities

Agroecological zoning could be a growth area.*

Some momentum already exists.
For land-based commodities, a number of experienced, well-informed experts suggested that large-scale agroecological zoning—such as that implemented by Presidential decree in Brazil for sugarcane and palm and contemplated as a replacement for the Indonesian deforestation moratorim—is the logical complement to market-based pricing and incentives, moving forward.*

NGO's can help facilitate needed collaboration.
As envisioned, countries would zone the growth of commodities away from forests and toward already cleared areas, away from the forest frontier and toward already developed areas. Notably, such zoning would ideally occur through public-private partnership, since companies, in many cases, already have detailed information about soil conditions, crop viability, water availability, and profitability potential for specific land areas. NGO's could play an important role in facilitating such public-private collaboration.

A global approach is ideal.
Taking into account the lessons of recent research on indirect land use change (ILUC), agroecological zoning would ideally be undertaken with a global perspective, focusing not so much on which crops should be grown, but on which crops make sense for which locations. Potentially, these conversations might ultimately need to happen in the context of global, multilateral agreements, since soft commodity production is ultimately responding to global demand for food, fiber, and fuel. Agroecological zoning at the glocal scale would enable intentional management of the response to that demand, with the ultimate goal of creating incentives and rewards that ensure that the right crops are grown in the right places to optimize productivity and minimize externalized costs.

"It is not a question of good crops or bad crops. It's a question of which make sense where."

Fred Luckey, Field to Market

Sources: * Doug Boucher (UCS), David Cleary (TNC), Fred Luckey (Field to Market)

Insights: Emerging Opportunities

Food waste could be an opportunity area for campaigns.

Waste reduction offsets upstream impacts.
Fundamentally, there are two ways to reduce production-related impacts:

1. change production practices; or
2. reduce overall demand.

With respect to the second, one of the most efficient and straightforward ways to reduce overall demand, theoretically, at least, is to reduce waste, since reductions in waste reduce the need to purchase new products. In actuality, however, food waste has not so far proved an effective platform for demand reduction.*

Waste reduction is not an economic priority.
Despite the fact that waste reduction solutions are often simple and straightforward, they typically require up front capital investment, and businesses, in general, have not been willing to make those investments. Many restaurants and restaurant chains, for example, assume that a fairly significant portion of their food will be wasted, but because it is not a significant part of overall expenses (relative to labor, for example), it is not prioritized. Buying more and wasting more is perceived as more profitable than increased efficiency.*

Campaigns could shift the balance.
Although internal economic factors may not be sufficient to justify investments in food waste reduction, extermal market factors could shift this calculus. It is possible that a model for motivating companies to take food waste more seriously might be found in the successful use of advocacy campaigns to motivate companies to address supply chain business risks that had otherwise gone unaddressed.

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