

Driving the transition towards sustainability

The four phases of market transformation

This *NewForesight Insight* is part of a series of actionable primers on our core thinking tools, used to drive sustainability strategies in a complex world. The models presented in these papers have been developed and honed through years of work in over fifteen international agri-food sectors, mainly coffee, cotton, cocoa, seafood, and palm oil; but you will find that the thinking applies equally to sectors outside agriculture. For more *Insights* and other supporting material, visit the ever-growing collection of knowledge on NewForesight.com.



About NewForesight

In a time where we are confronted with increasingly complex and global sustainability challenges, the question is not whether we will deal with them, but how. At NewForesight we turn these tough challenges into shared opportunities and added value, on the intersection of business strategy, global value chains, and local realities. Since 2008 we have been supporting the world's leading multinationals, multistakeholder platforms, and public and not-for-profit organizations to turn their vision into real-world impact.

Abstract

This *NewForesight Insight* introduces a powerful system thinking tool: the Sustainable Transformation Curve ('S-Curve') and the associated Market Transformation Matrix. This cornerstone 'phases thinking' framework helps change makers understand how an agricultural sector's progress towards sustainability is not linear, but instead a dynamic process consisting of four phases of 'maturity': (i) Inception; (ii) First movers; (iii) Critical mass; and (iv) Institutionalization. Each of these phases has its own dynamics, different actors driving the transition, and levels of awareness and organization. Additionally, each phase is characterized by different opportunities for, and barriers to, sustainable progress. These models equip you with the required frame of mind to think in terms of systemic change, to recognize what phase specific sectors are in, and to devise strategies that recognize and leverage the dynamics of a sector to catalyze the transition towards the next phase. It not only shows you where you are in the journey to a sustainable sector—it also shows you where to go next and how to organize getting there.

This *Insight* is complemented by an illustrated overview of the theory that is the ideal tool to accompany discussions and brainstorming on driving sustainable change.

Introduction: the need for sustainable market transformation

In spite of growing environmental and demographic pressures, our global agricultural system—which provides livelihoods for one in every seven people on the planet—remains marred by poor working conditions, child labor, pervasive poverty, and unsurpassed environmental degradation. These challenges are only set to grow: projected doubling of food demand over the next 50 years poses enormous challenges for the sustainability of food production practices, and the resilience of our land and water ecosystems.

At the same time, public and private sustainability initiatives over the last 20 years have arguably achieved limited to no structural impact, since they have targeted symptoms rather than root causes of unsustainability. They focus on local projects, without

addressing the structural market forces that reward unsustainable behavior in the first place. As a consequence, these initiatives remain focused on output, rather than outcomes—and define success as relative improvement over their competitors or the baseline, rather than as absolute progress. As a result, we are still stuck on a path of 'unsustainability'—encountering unwanted behavior and perverse incentives at every turn.

In contrast, we recommend a holistic *systems approach*, that we hope will help you understand the full range of sector dynamics, and how to use these insights to create meaningful and lasting change.

In this primer, we explore how the application of such a systems approach allows for identifying constructive approaches that accelerate sustainable market transformation. This requires an understanding of the elements of sustainable market transformation:

the distinct phases of market transformation, the different opportunities and barriers per phase, and the type of strategies appropriate to push the sector towards improvement.

The Systems Approach as an essential tool

A *systems approach* looks beyond establishing individual sustainable practices, seeking to first understand the sector dynamics and the 'system' of incentives which lead to—and perpetuate—unsustainable outcomes. Using such insights, stakeholders throughout the value chain can be supported in building systems which reward farmer professionalism and responsible production practices and erode systemic and region-specific barriers to sustainability.

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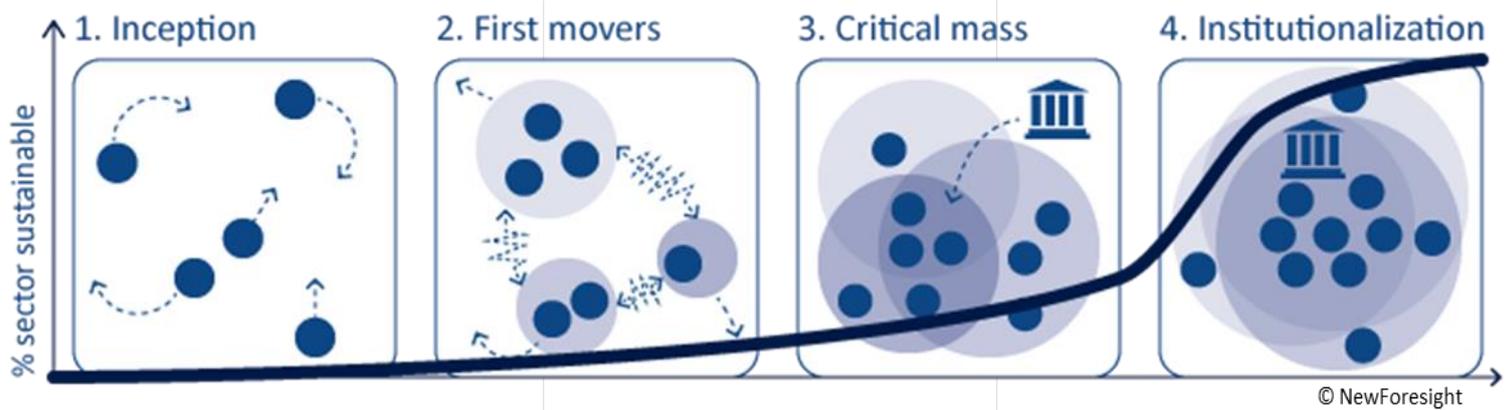


Figure 1: The Sustainable Transformation Curve

Market Transformation

Sustainability is not a linear path to a single goal, but instead a complex process, consisting of distinct phases towards system maturity. This is important to understand for anyone guiding the transition of a sector towards sustainability. Experience in driving market transformation in different commodity markets over the last few decades have revealed identical transition patterns towards more sustainable production systems. A useful tool for visualizing these patterns is the Sustainable Transformation Curve or ‘S-Curve’ (see Figure 1), first described by Lucas Simons in his book ‘Changing the Food Game’¹.

Interestingly, the thinking as visualized by the S-Curve can be successfully applied at different levels—from internal organizational processes of a single stakeholder, sector dynamics at a national level, to awareness at global level. Progressing along the market transformation curve, actors at these different levels of organization undergo four distinct phases. Because each new phase introduces different dynamics, levels of organization, risks, and opportunities, each phase calls for a different set of strategies and tools to achieve progress and safeguard the momentum and gains already achieved.

Characterizing the four phases

1. The Inception Phase: awareness and projects – a major crisis emerges and raises general awareness in the sector about the underlying sustainability problems. First, industry stakeholders downplay the problem or deny their responsibility. Yet, public pressure can increase the sense of urgency and thereby stimulate frontrunner industry stakeholders to initiate high-profile, though isolated projects.

2. The First Mover Phase: competition on sustainability – the isolated projects in phase 1 turn out inadequate for addressing the real problem. Smart industry players realize that sustainability can be a product differentiator providing competitive advantage. Their certifications and standards are mimicked, but not copied, by industry competitors. As a result, an explosion of sustainability-promoting activities occurs, competing on their added value.

3. The Critical Mass Phase: sector cooperation – sector stakeholders increasingly understand that competition on standards and certification will not result in a truly sustainable value chain. In contrast, responsible production is in their shared interest. Multi-stakeholder

initiatives are set up which convene industry, government, civil society and academia. Together, stakeholders define a sector-wide vision and develop a roadmap consisting of interventions. At this stage, increased scrutiny and transparency make it highly likely that a number of other crises emerge, regarding the many different facets of sustainable production.

4. The Institutionalization Phase: a level playing field – the outcome of the multi-stakeholder initiatives, sustainable practices are perceived as the ‘new normal’ by companies, consumers and policymakers. Frontrunners lobby for institutionalization of this ‘new normal’, making sustainability part of the legal framework and enabling environment, further rewarding responsible behavior and punishing laggard stakeholders that still benefit from unsustainable practices.

All along the market transformation process, stakeholders gain a new level of understanding of what sustainability means within the sector and what is required to achieve it. The phase descriptions highlight various elements that can be triggered and managed to ensure successful market transformation. Instead of seeing ‘sustainable growth’ (up the Y-axis) as the ‘% of companies adopting sustainable practices’, or another

quantifiable indicator, this curve is more qualitative. It embodies progressive growth on a range of dimensions, such as: public (and sector) awareness of the sustainability issues, broader stakeholder recognition of responsibility, businesses' recognition of market opportunities and costs of not acting, the proportion of producers adopting sustainable practices, cooperation between stakeholders on sustainability, and pre-competitive organization of sector stakeholders.

Our experience in applying system thinking to more than fifteen commodity sectors inspired us to develop the Market Transformation Matrix (see Table 1), which you can use to recognize the four phases of market transformation, as well as barriers and opportunities of each phase. We have chosen to make this framework publicly available to allow committed change agents to anticipate and leverage the sector dynamics to maneuver the system towards the next phase of sustainability. This matrix shows how the dominant dynamic of a given sector can slowly mature from competition to collaboration, and gives insight into the different roles key actors such as NGOs, industry, and government should ideally take in different phases. This is important, as yesterday's vanguard of change (e.g. NGOs leveraging public pressure in phase 1) can inadvertently become today's defenders of the status quo (e.g. NGOs and capacity builders with vested interests in the 'project industry'). Stakeholders can therefore use this matrix as a roadmap that

outlines both priorities and pitfalls at every stage of the transformation process.

Transitioning through the phases

The Market Transformation Matrix seems to predict a clear progression from ignorance to awareness, individualism to collaboration, and irresponsibility to sustainability. Yet, the description of the barriers and opponents to change already shows that a sector's transition from one phase to the next is far from an inevitable evolution, and can be extremely challenging. In fact, some sectors have remained trapped in the Inception or First mover phases for decades. A step to the next phase requires key stakeholders to, amongst others, feel a sense of urgency and be sufficiently willing to collaborate, reorganize the sector and redefine roles and responsibilities. All this requires a change in which behavior is rewarded, i.e. the 'incentive structure'. This will not happen by itself, nor is there a quick fix. However, change agents can trigger and manage each of these phases of market transformation, based on the insights from the Market Transformation Matrix.

Rather than a single 'magic bullet' approach, effective and durable market transformation requires that we understand in what phase a sector is located; what are the possible barriers which prevent us from making progress; and what are the critical success factors for making the transition to the next phase.

The key is to recognize and understand the elements and forces at play when attempting to improve a system, rather than simply reacting to them. Transitions from one phase to the other generally follow the same development, with identical barriers and similar approaches to overcome these barriers (see also Table 1).

How to advance to the next phase

Unless governments pro-actively introduce new legislation to incentivize responsible production (examples of which are scarce), it is not possible to for a sector to 'skip a step': awareness, connectedness, and the trust and need to collaborate need time to grow. Nor is it effective to apply market transformation approaches from a specific phase to a sector that is still in an earlier phase; they might even prove counter-productive. To use the analogy of growing up; it is a waste of effort to teach math to a baby, and trying to do so is likely to leave everyone involved frustrated. A sector's failure to move forward can cause public outcry, create cynicism, or a proliferation of symbolic efforts—for example, the wild-growth of certifications and standards which are increasingly losing credibility, added value and differentiation in the market place.

One problem in driving market transformation is that collaborative action between competitors does not happen naturally. It can only happen when stakeholders recognize the need and urgency as being high, in a neutral environment that enables stakeholders with competing interests to look past their own agendas, focus on the longer-term outcome and help them get organized.

"Some sectors have remained trapped in the Inception or First mover phases for decades."

How to characterize the transitions

Phase 1 to phase 2: from PR problem to competitive opportunity

The actual impact of the projects in phase 1 remains limited and fragmented. New crises drive public awareness of the problem or companies identify a competitive opportunity; accelerating the transformation process. The transition can be slowed down when emerging practices don't create sufficient value for first movers, or when organizations that benefit from phase 1 successfully resist the move towards more competitiveness.

By sparking the competition on sustainability between frontrunner companies, change agents can smoothen the path towards phase 2.

Barriers

- Emerging practices do not create sufficient value for first movers
- When organizations that benefit from phase 1 successfully resist, undermine or lobby against new practices

Opportunities for progress

- Create best practices/standards that give a competitive advantage to first movers
- Spark competition by gathering positive attention for first movers and build pressure on laggards

Phase 2 to phase 3: from competition to collaboration

While efforts in phase 2 are more effective than in phase 1, they are still unable to address all negative systemic feedback loops. While added value of standards diminish, due to the saturated label-market, the realization grows that structural sustainability issues are not being solved.

The move towards collaboration requires a growing awareness of the need for joint action in tackling the systemic issues affecting the sector as a whole. This marks a shift in industry thinking away from "how can we beat our rivals at sustainability?" to "how can we effectively organize the path towards a sustainable sector?".

To make collaboration a success, stakeholders need to open up, build trust and align behind a common vision and strategy that has a viable business case.

Barriers

- Companies that start to work together have a 'wait and see' attitude and do not actively contribute to grow the collaborative, non-competitive movement
- Companies, NGOs, and standard organizations can successfully resist and undermine collaboration between actors
- Companies don't trust each other sufficiently; then they won't really collaborate and instead stay in the competition phase
- This phase can also fail if governments do not provide leadership and demonstrate their willingness to change the policy landscape to institutionalize better practices
- Lack of resources to make the change mainstream

Opportunities for progress¹

- Bring industry leaders together to create a common, inclusive approach towards a sustainable sector; from standards and certification to sustainable transformation
- Develop a compelling Theory of Change and consistent, actionable strategy to align stakeholders
- Articulate clear roles and responsibilities to maximize synergy, ensure scalability and share costs
- Build a viable business case approach, creating incentives for desired behaviour
- Co-create a shared framework for M&E and reporting to ensure accountability
- Organize sector-wide learning to drive continuous improvement

Phase 3 to phase 4: joint action towards a sector tipping point – things are markedly improving.

But the work is not done yet: some stakeholders resist the transition, while unsustainably behaving companies profit from the improving industry image.

Frontrunner companies that lobby to institutionalize the new normal are held back by governments unwilling to change or by NGOs and standard-setting organizations feeling left out. It is therefore essential to align as much of the industry with the vision and actively lobby for institutionalization.

Barriers

- Governments are unwilling to make institutional change
- There is effective lobbying against transformation of the sector

Opportunities for progress

- Convene the critical mass of industry leaders willing to align with and contribute to this new vision
- Ensure a consistent message to all stakeholders and clear, fact-based lobbying towards policy makers

Within such an environment, frontrunning organizations first need to jointly define an **overarching vision**: “What should the desired ‘end game’ (a sustainable sector) look like?”. This vision needs to be compelling, ambitious, yet realistic. As a second step, frontrunners agree on **clear pathways and strategies towards that vision**, and define their own **roles and responsibilities**. Finally—and this step is crucial—they should create an environment in which every actor is rewarded for playing his new role and for contributing to the overarching objectives of the shared vision, rather than aiming for individual short-term benefits. This requires **progress tracking, reporting, learning, and continuous improvement**, clarifying a **business case for sustainability, an environment to drive its success**; and a **fit-for-purpose organizational structure** to coordinate the movement¹.

Conclusion

This article has offered a focused and conceptual overview of the phases and transitions of market transformation by introduction of the Market Transformation Matrix. As you have seen, the transformation of agricultural systems is an evolutionary and iterative process, involving various stakeholders who become more and more interconnected and develop an overarching vision. Eventually, this interconnectedness allows stakeholders to collectively change the rules of the game, such that their shared vision can be realized. New rules reward sustainable behavior and penalize

unsustainable behavior, rather than the other way around; which is the perverse reality of many sectors in- and outside agriculture today.

We consider these systems approach a marked improvement over many prevailing approaches to sustainability, which can be too reliant on—and thus restricted by—single tools or strategies. Instead of jumping to conclusions on which interventions will work, or getting stuck in the details of implementation, we have designed the S-Curve and Market Transformation Matrix as tools which support a meaningful discussion on the avenues towards improvement, breaking free from old ways of thinking, and hopefully unlocking new insights.

Various benefits exist to utilizing the ‘phase-thinking’ approach when mapping and addressing sustainability in a specific sector. By spotting present-day challenges and opportunities and by knowing the success factors for the next phase, key actors can proactively steer a sector towards structural positive

change. Yet, developing successful strategies for change also requires an understanding of a sector’s shape and prevailing dynamics, such as: supply and demand, enabling environment, and alternative livelihoods. For an in-depth analysis of these dynamics, see the *NewForesight Insight* ‘Shapes and Forces’.

The way forward

The model presented in this *Insight* is intended to simplify the complexity of real-world challenges and allow for a higher-level discussion on the way forward without immediately getting bogged down in the details of implementation. Even though the complexities of reality will resist any simplification, this model provides an intuitive way for stakeholders and change makers to understand and act upon the strategic landscape for sustainable market transformation, across a wide range of agricultural sectors.

Although this model has been successfully applied by NewForesight and a number of other forward-looking organizations in both the public and private sector, the Market Transformation Matrix is just one tool amongst a broader toolset necessary for achieving systemic change.



The S-Curve and Market Transformation Matrix are tools which support a meaningful discussion on the ways towards improvement, breaking free from old thinking, and hopefully unlocking new insights.

¹ Collectively, these six elements are referred to as NewForesight’s Six Key Elements of Market Transformation.

Table 1: The Market Transformation Matrix

Elements	Phase 1: Inception	Phase 2: First mover	Phase 3: Critical Mass	Phase 4: Institutionalization:
Triggers for change	- A publicly visible crisis raises awareness, and leads to public pressure to act	- Problems in the sector persist, but there is increasing realization that sustainability can be leveraged as a competitive advantage	- Industry actors realize that the problem will not be solved by competing organizations and isolated efforts, and efficiency can be found in collaboration - Increased awareness that sustainability issues cause supply chain risks and threaten business models	- Harmonized initiatives - Joint capacity building - Institutionalization - Involvement of national governments and international bodies
Initial response and level of awareness	- Initial projects start when public pressure offer a significant reputational risk - Problems are misunderstood resulting in isolated projects only addressing visible symptoms	- More should be done to address problems, otherwise they will persist - First Movers realize that they can benefit from first-mover-advantages and marketing sustainability - Laggards maintain a low profile hoping that attention to the topic fades	- High awareness of the severity of the problems as it threatens business continuity with the level of supply chain risks, and limited results of previous efforts - There is a need for the industry and national governments to collaborate, invest and change the rules of the game	- High level of awareness of the interconnectedness of the sector - How do we organize ourselves to change the rules of the game?
Willingness to collaborate with others	- There is a low level of confrontational relationships with industry competitors - There is growing willingness to cooperate on projects with those who have credibility, for shared resources and recognition	- Willingness to collaborate is growing and other (non-competitors) players can become partners	- Companies are aware that they need to collaborate , though they are still relatively suspicious in the beginning, as they remain competitors in the marketplace: there is a need to clarify competitive vs non-competitive issues	- Level of willingness to collaborate is high ; however, when regulation becomes effective, competitive behavior increases again
Drivers	- To avoid reputational damage - Quick fixes proposed as solutions - The focus is on storytelling and marketing —'being seen to act'	- NGO campaigning and media pressure continues; lawsuits appear - First Mover advantages include marketing & CSR promotion, whereas laggards experience limited pressure to change	- Longer term vitality of the sector - Securing sustainable sourcing - Efficiency of sustainability efforts - Sharing risks and costs - Collaboration increases influence on key stakeholders	- Compliance with standards becomes a qualifier for doing business
Limitations to impact & barriers to change	- Projects are fragmented and competitive with limited, temporary scope and impact - Projects are not scalable , with no real exit strategy, resulting in problems resurfacing due to the root causes not having been addressed	- Farmer change is mainly driven by premiums, expensive certification programs and NGO capacity building support for farmers; however, programs can only reach a certain number of farmers and resource use is inefficient due to proliferation, fragmentation, and competition of standards - At some point, the added marketing value declines , while the costs of the programs continue to rise	- To build trust between the parties to collaborate and share knowledge can be challenging, as well as determining where the industry works together and where it competes	- Despite having moved the sector on a particular issue, new issues have already been identified , progress on which is generally at the start of the curve
Main change agents	- NGOs, media, outsiders, concerned individuals, leveraging public pressure	- First mover companies - Standard organizations	- Neutral convening platforms and industry representative groups - Leading industry groups in which former competitors work together - At this point, governments may follow and support	- Industry lobbies for level playing field - Governments and trade organizations protect the rules - Law enforcement and monitoring
Main opponents to change	- Beneficiaries of the business-as-usual scenario, often industry, the financial sector, and (local) gov'ts	- Project owners of the first phase of market transformation - NGOs who resist working with the industry out of ingrained distrust - NGOs or capacity builders with vested interest in the booming 'projects industry'	- Resistance or heel-dragging may come from key change makers of previous phase (standard organizations, NGOs, companies), who perceive a threat to their central role as key change-makers; - National governments may resist change as they are expected to commit to something they have not been involved in creating	- Laggard companies, national governments - Standard organizations

While it helps in understanding broader patterns of sectoral development and the failure or success of sustainability campaigns over decades, this model cannot, by itself, offer easy insight into local market forces and enabling environment which determine the dynamics of a sector and any sustainability efforts. It requires an understanding of how the cultural, political, socio-economic, and ecological dynamics of developing sectors relate to the larger, macro-scale trends in for instance economics, trade, and global climate. Additionally, it requires investing in strategies for building trust and a shared vision, and an understanding of the factors shaping the business case throughout a value chain. Change makers seeking to realize a truly systemic approach therefore need to combine a phase-thinking roadmap with a larger toolset of strategies, approaches, and concepts.

The importance of publishing sustainability insights in the public domain

By making our thought leadership publicly available, we urge sustainability practitioners to work together on vital areas of improvement in the transition to sustainable (food) systems: from better organized and educated farmers operating in an environment that incentivizes the business case for sustainable production, through efforts to stabilize the ecosystem and revitalize degraded landscapes, to raising awareness of the far-reaching implications of our daily food choices.

Want to know more?

Would you like to know more? The Shapes & Forces model is a useful thinking tool; in isolation, this approach is useful to understand how a complex system leads to a certain outcome, and what may be the enablers of change.

However, it is designed to work within a larger set of frameworks, approaches, and concepts, which are covered in our other articles, including:

- **The brutal facts of sustainability | What do we need to change?** The organization of our global food systems, combined with the falling biodiversity and resilience of our natural landscapes, relentlessly leads us to the four 'brutal facts' threatening both people and planet;
- **The 'shapes & forces' of (un)sustainability | What determines why or how specific sustainability issues emerge in different sectors?** Understanding the key commodity sectors' archetypical *Shapes & Forces* helps understand both the opportunities and the barriers to sustainable sectors.

Visit www.newforesight.com for more sustainability insights and an overview of how we apply these models to the realities of multinationals, governments, multi-stakeholder platforms, standard setting organizations, and NGOs.

ⁱ Simons (2011), 'Changing the Food Game'

ⁱⁱ Food and Agricultural Organization., "FAO Statistical Yearbook 2012: World Food and Agriculture" (2012):10-11;

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ⁱⁱⁱ NCFH, 'Child Labor in Agriculture', National Center for Farmworker Health. *Farmworker Health Factsheets*. (2012)

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^{iv} Tittonell, Pablo & Ken E. Giller, 'When Yield Gaps are Poverty Traps: the paradigm of ecological intensification in African smallholder agriculture'. *Field Crops Research* 143(2012): 76-90,

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^v Barbier, Edward B. and Jacob P. Hochard, 'Geographical Poverty Traps in rural areas: A growing global problem'. *The World Bank*. (2015), <http://blogs.worldbank.org/developmenttalk/geographical-poverty-traps-rural-areas-growing-global-problem>

^{vi} Simons (2011), 'Changing the Food Game'