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SPOTLIGHT ON PRACTICAL SUSTAINABILITY

The Collaboration Imperative

**New partnership models can protect the
environment and create value for everyone.**
*by Ram Nidumolu, Jib Ellison, John Whalen,
and Erin Billman*

Spotlight

ARTWORK Julie Dodd, *Blood Cells*
2012, print and wire, 5" x 7"





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The Collaboration Imperative

New partnership models can protect the environment and create value for everyone.

by Ram Nidumolu, Jib Ellison, John Whalen, and Erin Billman

“BUSINESS COLLABORATION” IS the great oxymoron of corporate sustainability. Countless efforts by companies to work together to tackle the most complex challenges facing our world today—including climate change, resource depletion, and ecosystem loss—have failed because of competitive self-interest, a lack of a fully shared purpose, and a shortage of trust. To be sure, smart companies have embraced sustainability as a business imperative, and many have successful ongoing initiatives in areas they can address on their own—streamlining their manufacturing processes or reducing their fleet emissions, for instance. But when it comes to developing collaborative solutions to systemic problems, very little progress has been made.

The good news is that in our sustainability consulting to governments, NGOs, and global companies, we are seeing both a growing awareness of the critical need for improved collaboration and the emergence of innovative models that create value for companies and drive systemic change. Optimal collaborations focus on both business processes and outcomes. They start with a small group of key organizations, link self-interest to shared interest, encourage productive competition, and, above all, build and maintain trust.

In this article, we'll examine the most effective models for systemic sustainability collaboration, using case studies in dairy, apparel, waste reclamation, and municipal water management. But first, let's look more closely at why collaboration is critical in addressing global sustainability challenges.

Systemic Solutions

The earth's natural commons—the atmosphere, natural resources, and biological ecosystems—provide enormous value to both business and society. However, much of that value is being destroyed through the suboptimal ways in which companies and other

stakeholders use these complex and fragile systems. The next frontier of value creation for business, we believe, is to find ways to preserve and protect the natural commons while unleashing their vast untapped potential.

Consider the world's tropical forests. Spread over 1.9 billion hectares, they are among the most complex environmental systems in the world. They provide vital ecosystem services such as climate regulation, water filtration and supply, and nutrient cycling. They also provide natural resources, including food, fiber, freshwater, medicines, minerals, and other raw materials. The economic value of the forests (typically assessed by estimating the cost of replicating them through man-made means) is an estimated \$4 trillion annually. Tropical forests also support 50% of the earth's terrestrial biodiversity. And, along with oceans, they are the world's most important global carbon sinks: natural reservoirs that capture and store more atmospheric carbon than they release.

Poor management has led to the disappearance of half of these forests in the past century, chiefly through their conversion to agricultural and com-

FOUR MODELS FOR SUSTAINABLE COLLABORATION

Each square in this matrix represents a different model for collaboration, based on the breadth of organizations involved and the desired goals. Most collaborations will and should evolve over time, leveraging aspects of various models as needs and circumstances change.

FOCUS	OUTCOMES	<p>KEY STRATEGY Develop <i>industry benchmarks and standardized systems</i> for measuring environmental performance across the value chain</p> <p>EXAMPLE The Sustainable Apparel Coalition's Higg Index</p>	<p>KEY STRATEGY Institute "<i>payment for ecosystem services</i>" models in which firms invest in funds that compensate local communities for improving conservation and protection outcomes</p> <p>EXAMPLE The Latin American Water Funds Partnership between Coca-Cola's largest bottler and upstream farmers and landowners</p>
	OPERATIONAL PROCESSES	<p>KEY STRATEGY Identify and share <i>industrywide operational processes</i> that reduce emissions, natural resource consumption, and waste and protect the environment</p> <p>EXAMPLE Dairy Management Inc.'s efforts to reduce milk's carbon footprint while producing renewable energy</p>	<p>KEY STRATEGY Initiate <i>extended collaborations</i> that engage the business community and noncorporate stakeholders in the pursuit of operational innovations and best practices that create shared value</p> <p>EXAMPLE Action to Accelerate Recycling's collaboration to change consumer behavior</p>
		COMPANIES ACROSS THE VALUE CHAIN	COMPANIES AND NONBUSINESS STAKEHOLDERS

PLAYERS

Idea in Brief**THE PROBLEM**

Addressing global sustainability challenges—including climate change, resource depletion, and ecosystem loss—is beyond the capabilities of even the largest company.

THE ANALYSIS

To tackle these threats, and unleash new value, companies and other stakeholders must collaborate in new ways that focus on both processes and environmental impact.

THE SOLUTION

Optimal collaborations start with a small group, bring in project management expertise, link self-interest to shared interest, encourage productive competition, create quick wins, and, above all, build and maintain trust.

mercial land. This is a classic case of sacrificing system value in favor of profits reaped by a few individual companies. Although business and society would ultimately benefit more in economic terms by preserving forests, shorter-term incentives for individual companies or sectors have led to their rapid destruction. Other vital natural commons—the atmosphere, oceans, watersheds, wetlands, coral reefs, and rivers—are experiencing similarly significant adverse impacts.

Preserving natural commons and tapping their full, long-term value require new collaboration models that consider ecosystems as a whole.

New Collaboration Models

In our work with global companies such as Walmart, Microsoft, Nike, Alcoa, and Waste Management, as well as with many NGOs and governmental organizations, we've identified four collaboration models that address systemic challenges and create systemwide value. These models have two defining characteristics: (1) They engage carefully selected stakeholders and (2) they focus collaborative effort on innovation in either operating processes or business outcomes. (See the exhibit "Four Models for Sustainable Collaboration.")

Stakeholder inclusion. While sustainability collaborations typically engage a variety of players, including NGOs, academia, and governments, successful systemwide change requires participation by the right players. These are the key stakeholders that will be affected by sustainability initiatives and that, by changing their practices and other behaviors, can protect and capture system value. There are two such types of collaborations:

- *Corporate collaborations* include manufacturers, suppliers, distributors, retailers, and other players across the business value chain. Noncorporate players such as NGOs, academics, and government

may offer input, but they are not integral operational partners. It is the corporate players whose behavior must change to drive the requisite innovations.

- *Extended collaborations* are those in which both businesses and noncorporate partners—local governments and other stakeholder communities—are integral to the process.

Processes and outcomes. The second dimension characterizing effective collaboration models is an explicit focus on improving either business processes or environmental impact outcomes.

- *Coordinated processes.* Stakeholders identify and share new operational processes that reduce resource consumption and waste and protect natural resources.

- *Coordinated outcomes.* Stakeholders work together to define desired outcomes, create standardized metrics for measuring environmental impacts, and benchmark performance.

Most sustainability collaborations will and should evolve over time, moving from one model to another or taking on features of multiple models. Let's look at each model in turn.

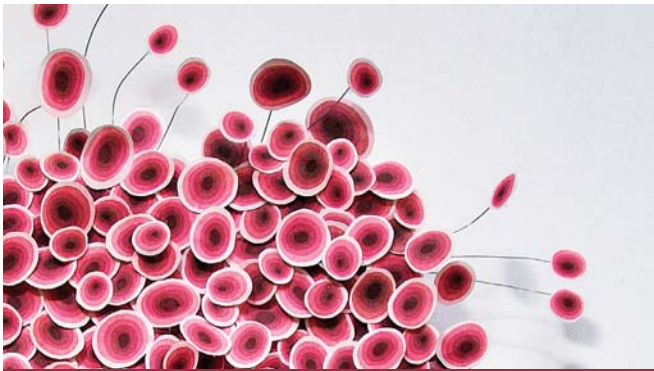
**Corporate Collaborations Focused on Processes****CASE STUDY: DAIRY MANAGEMENT INC.**

Among the most effective ways companies can unlock the value in natural ecosystems is to collaborate on improving operations. Collaboration can focus on a particular node in the supply chain or address processes that span the value chain.

Consider the U.S. dairy industry. In 2007, key business leaders realized that the increasing pressure from NGOs, retailers, and consumers to reduce the industry's carbon footprint—especially from dairy operations and methane emissions—threatened the whole industry. In response, they began collaborating to identify inefficiencies and foster

operational innovations across the value chain. For instance, they realized that manure, one of the biggest sources of carbon emissions, represented an untapped resource that could generate new revenue for farmers while reducing emissions.

However, the collaboration faced enormous barriers. Dairy farmers saw sustainability as a code word for government regulation and increased costs. The industry had no experience or skills in measuring or addressing its carbon footprint. In addition, there was no history of voluntary collaborative action among the farmers, processors, and retailers. To the contrary, the key players saw themselves as rivals in a zero-sum competition for profits.



Despite these challenges, Dairy Management Inc. (DMI), an industry group funded by dairy farmers, launched an initiative to reduce carbon emissions across the value chain by 25% by 2020. To govern this effort, DMI created the Innovation Center for U.S. Dairy, engaging CEOs of companies representing 75% of milk sales in the United States.

To overcome the skepticism of many industry leaders, DMI reframed the challenge by helping dairy farmers see that sustainability had long been a core value of the industry: In maintaining their family farms on the same land for generations, farmers had developed important capabilities that were directly relevant to the challenges ahead. DMI also pointed out that the farmers' biggest corporate customers were increasingly concerned about carbon emissions—a compelling reason to work together to reduce them. Finally, DMI promised the participants that only actions that were good for business would be considered.

With the farmers' support, DMI worked with the University of Arkansas's Applied Sustainability Center to develop a life-cycle analysis of milk's carbon footprint, which included primary research with hundreds of dairy farmers. This gave the industry a single shared knowledge base about carbon in the

Building and Maintaining Trust

Without trust, most collaboration efforts are unlikely to survive, however noble the cause and worthy the participants. Two practices can help organizations lay the groundwork of trust among stakeholders.

Practice appreciative inquiry.

Pioneered by Blu Skye's academic partner David Cooperrider, from Case Western Reserve University, the appreciative inquiry method is based on research in the field of positive psychology. Appreciative inquiry helps focus attention in a specific direction. If we focus on problems, we often find more problems. If we focus on strengths and possibilities, we become more inspired and innovative. The approach is designed to create in a short time a true spirit of collaborative innovation among participants.

We have adapted this model to address systemic sustainability challenges. Several projects described in this article employ the methodology in overall project management and in the ongoing facilitation of member communications and meetings. For example, the U.S. dairy industry's sustainability summit was focused on an inquiry that crystallized the promise of win-win solutions: "How might we work together to reduce the carbon footprint of the dairy value chain and create business value for our companies?"

value chain. DMI also created a sustainability council, which convened 270 industry leaders and stakeholders in a three-day summit to identify opportunities for collaboration. An array of operational innovation projects were proposed, including initiatives to improve methods for growing feed crops, increase the use of methane digesters to turn manure into renewable energy, and boost energy efficiency for farms and dairy processing plants. DMI estimated the potential business value of these projects at more than \$250 million.

The corporate collaboration has strengthened trust and commitment among retailers, milk producers, and dairy farmers, and seven years later, it is going strong. A number of innovation projects have been fully implemented, and the industry continues to develop more-sophisticated tools for measurement and continuous improvement in farming, transport, and processing. The U.S. dairy industry has received millions of dollars in government grants from the USDA to support implementation of these projects. DMI was also recognized at the 2010 UN climate change summit in Copenhagen as a model for how the agriculture sector can unlock system value by simultaneously addressing climate change and creating business value.

Create deep meaning. To foster a strong sense of identity and belonging among members from different organizations, we suggest that individuals participate as a group in extended experiences that connect the head and the heart. Executive field trips such as white-water rafting, mountain climbing, and other wilderness trips, combined with storytelling and other shared experiences, strengthen bonds among collaborators and intensify their commitment to the group's goals.

The beauty of such deep engagement is that its effects persist even after the initial goals of the project are met. As Jason Kibbey, executive director of the Sustainable Apparel Coalition, put it, "What is unique about the SAC is the sense of personal mission and fulfillment among the individual members....This culture created the possibility for SAC's success and is continuing even after we've fulfilled our initial mission."

Corporate Collaborations Focused on Outcomes

CASE STUDY: THE SUSTAINABLE APPAREL COALITION

One of the best ways to improve corporate sustainability is to set clear targets for desired outcomes and then measure progress. Likewise, one of the most effective ways to drive systemic collaboration is through the development of industrywide performance standards. In the highly competitive apparel industry, early innovator Nike invested years and many millions of dollars in developing internal tools for measuring the environmental impacts of apparel sourcing and manufacturing. However, Nike came to realize that as big as the company was, its measurement tools would have little systemic impact unless a critical mass of apparel brands and retailers adopted them as well.

In 2010 the unlikely pairing of behemoth Walmart and niche player Patagonia convened a group of 10 apparel companies in the belief that the adoption of a single, standardized index would drive efficiency and innovation across the apparel value chain and reduce environmental impact and supply chain risks.

The Sustainable Apparel Coalition, as the collaboration is known, developed a measurement tool called the Higg Index, which allows companies to compare environmental performance outcomes in areas such as energy efficiency, material waste, water use, and sustainable raw materials. It provides benchmarks at the company, product, and factory level. Drawing on work already done by Nike and the Outdoor Industry Association, the coalition quickly built a prototype and began testing it, in the fall of 2011, across more than 50 brands, retailers, and suppliers. The SAC's benchmarks have mobilized a "race to the top," in which companies that score lower than competitors on the index are motivated to improve their ratings.

The Higg Index is not just driving better outcomes; it is influencing capital investment decisions and changing operational behavior. Target and other major retailers have integrated the index into their supplier scorecard, using the measures to select suppliers. Apparel brands have used the index to help reduce fabric waste through improved product design. And manufacturers have used it to justify investments in new capabilities like wastewater recycling and improved energy efficiency. The index even improves performance within companies, as departments compare their scores and engage in productive competition.

More important, the Higg Index is enabling systemic collaboration on innovative practices that achieve desired outcomes, such as used-apparel recycling, are adopted across the industry. The SAC now includes well over 100 organizations, representing a combined 30% share of the global apparel market. The coalition has fostered a strong culture of trust, openness, and collaborative spirit among fierce competitors. As one member explained, the SAC is like a training camp for Olympic athletes. “Together we challenge each other to stretch and improve our performance. Then we go out and compete.”

Extended Collaborations Focused on Processes

CASE STUDY: ACTION TO ACCELERATE RECYCLING

In extended collaboration models, noncorporate stakeholders—such as local communities (and the NGOs that represent them)—are integral partners in developing and implementing sustainability initiatives.

One such extended collaboration is the Action to Accelerate Recycling (AAR). AAR was formed, in 2012, to capture untapped value from recycling that no single company could on its own. Alcoa and other leading companies had been working for years to increase aluminum recycling rates but had achieved only incremental improvements. Every year in the United States, 54.3% of aluminum cans are recycled; the rest, worth \$900 million, end up in landfills. The recycling rates for glass and PET plastic bottles are even lower (33% and 29%, respectively).

Boosting recycling clearly requires a systemwide collaboration. Recycling rates for aluminum depend heavily on the recycling of packaging and printed materials of all types, so the AAR initiative encompassed a spectrum of business stakeholders: Alcoa business leaders, consumer beverage brands, consumer packaged goods companies, materials manufacturers and packaging companies, retailers, and recycled content haulers and users. And because the success of recycling ultimately depends on consumer behavior, local municipalities, governments, and NGOs had to play a key role in developing AAR programs.

Six projects have been identified by this extended collaboration, including expanded curbside recycling programs; pilots for vending machines that accept consumers’ returned cans; on-premise recycling at bars, restaurants, and workplaces; integrated awareness campaigns; and work with trade associa-

tions to collect key recycling data. The deliberately ambitious goal is to increase such “PPM” recycling—aluminum cans, glass and plastic bottles, paper and paper board, and steel—by 20% in three years. This stretch target was set to drive participants to seek significant system solutions, rather than solutions aimed at only one segment of the value chain. The increases called for in each of the PPM categories would produce an estimated \$2.7 billion in recovered material value, reduce CO₂-equivalent emissions by 3.7 million metric tons, and create hundreds of thousands of green jobs.

The extended collaboration has reinvigorated efforts at the company level. For instance, Alcoa supplemented its AAR efforts with a \$2 million commitment to expand education programs and improve recycling processes.

Extended Collaborations Focused on Outcomes

CASE STUDY: LATIN AMERICAN WATER FUNDS PARTNERSHIP

Companies have always competed in their use of forests, watersheds, rivers, oceans, and other ecosystems. But an emerging class of collaboration models coordinates investment in and use of shared ecosystem services by focusing stakeholders’ efforts on improving beneficial outcomes. The goal is to enable a steady supply of critical natural resources to corporations by working with local communities that affect, or are affected by, these businesses.

One of the most useful extended collaboration models is called payments for ecosystem services. PES models, as they’re commonly known, maintain a steady flow of specific services (such as freshwater and timber from watersheds, forests, and other biodiversity habitats) in exchange for payments by corporations that use the services. Payments are made by corporations to local communities not simply as compensation for the use of the ecosystem services but as investments in their preservation and protection.

Consider the Latin American Water Funds Partnership (LAWFP), a PES initiative launched in June 2011. The partnership comprises corporations including Coca-Cola FEMSA (the world’s largest bottler of Coca-Cola products), water utilities, NGOs such as the Nature Conservancy and the Global Environment Facility (the largest public funder of environmental projects), and the Inter-American Development Bank.

Together, the participants invest in a fund to pay upstream farmers and landowners, as well as local governments, to take actions that conserve the watersheds. Efforts include forest restoration, improvements in livestock grazing practices, sustainable agriculture to reduce soil erosion, and the shoring up of watershed boundaries to reduce sediments and improve water quality.

The LAWFP currently comprises 32 local funds totaling \$27 million, based in Brazil, Colombia, Mexico, and other Latin American countries. The funds seek investments that will produce the highest returns (or eliminate the most cost) by increasing the quality and quantity of drinking and irrigation water, maximizing the efficiency of hydropower, and mitigating

is clear, these types of collaborations are difficult because of the complex human and organizational issues involved.

In particular, a deficiency of trust can undermine even the best-intentioned sustainability effort: Participants struggle to establish a shared vision and governance model, disagree on how investments and rewards are divvied up, and worry about the “free rider” problem, in which benefits accrue to nonparticipating actors. Making matters worse, many sustainability efforts suffer from a lack of independent, overarching project management capability.

The late C.K. Prahalad pioneered the concept of “next practices” as a way to enable breakthrough innovation in organizations. (See “Why Sustainability

To prevent logjams, start by convening a small “founding circle” of participants that share a common motivation and have mutual trust.

flood risks. The collaboration is expected to benefit 50 million people and improve 3 million hectares of natural ecosystems.

Funds of this type are typically trusts designed to provide long-term investment in sustainability over several decades. For corporate investors, the payoff takes several forms: The funds ensure both the quality and quantity of ecosystem services and reduce the need for expensive mitigation efforts in the future. A \$1.5 billion New York City water fund, for example, supports farmers, landowners, and other upstream stakeholders in protecting and maintaining the Catskills-Delaware watershed, which supplies the city. Thanks to initiatives supported by the fund, the city has avoided the need to build a water filtration plant at an estimated cost of \$8 billion to \$10 billion—a 600% return on its investment.

“Next” Practices

By design, many sustainability collaborations embrace a diverse array of stakeholders from the very beginning. Unfortunately, this approach dooms many efforts: By including participants with opposing intentions at the outset, progress is often stalled or killed before productive momentum can build. Even when the economic benefit to all participants

is now the key driver of innovation,” HBR September 2009.) Let’s look at seven next practices that enable successful sustainability collaborations.

Start with a small, committed group. To prevent the logjams that can occur when many stakeholders with conflicting goals try to work together, start by convening a small “founding circle” of participants. The members must have a common motivation and have mutual trust at the outset. This group develops the project vision and selectively invites subsequent tiers of participants into the project as it develops. Ultimately, all stakeholders, including NGOs, governments, universities, and local communities, should be represented.

Careful selection of participants at each stage is critical. For example, in the dairy industry case, invitees were selected following a six-month interview process designed to identify participants who could bring the most knowledge, ability, and leadership skills. The nucleus of the Sustainable Apparel Coalition, which we advised, comprised a group of companies that had already demonstrated sustainability leadership in the industry. Walmart hosted the first meeting and invited the group (including several direct competitors) to tour its apparel offices and listen in as Patagonia’s founder and CEO, Yvon Chouinard,

talked about sustainability to the Walmart staff. This openness was so countercultural that some invitees wondered if the offer was genuine. As the initial group made progress in terms of both governance and action, the group reached out to more companies to participate. Then, as the SAC's vision, action orientation, and trust-based culture became more broadly recognized, it began to attract other industry players that wanted to drive change.

Link self-interest to shared interest. To be successful, collaboration initiatives must ensure that each participant recognize at the outset the compelling business value that it stands to gain when shared interests are met. Such was the case with Coca-Cola FEMSA and its Latin America Water Funds partners. The bottler understood that the essential input into its operation—water—is best secured by investing in upstream efforts of farmers and other stakeholders at the river's headwaters to maintain a high-quality supply of water downstream.

Monetize system value. The key to linking self-interest and shared interest is to quantify how the collaboration reduces costs or generates revenue for each participant. FEMSA, for instance, reaps substantial financial benefits from its water-funds investment in the form of avoided costs; it won't need to build expensive water treatment plants to ensure the quality of its water supply.

Data analytics and business process analysis are also useful tools in monetizing system value at the group and individual level. In the case of the Latin American Water Funds Partnership, advanced analytics software helped identify which of the proposed protection and restoration activities would benefit the watershed and stakeholders the most. Projects were prioritized accordingly.

Create a clear path with quick wins. Successful collaborations convert a shared vision and individual passions into an action plan. However, many collaborative sustainability initiatives develop ambitious long-term goals that are only marginally relevant in the short term. To generate momentum and commitment, the action plan must also emphasize quick wins. Business thrives on visible and immediate results, and sustainability collaborations are no exception. Even if these wins are small initially, the cost savings or incremental revenues provide proof to other executives inside participants' organizations that the investment is worthwhile.

The dairy industry summit led to a mix of projects that included longer-term initiatives, such as ef-

Large-scale sustainability collaborations must be structured to drive healthy competition among players.

orts to reduce cattle methane emissions, as well as ventures with immediate financial benefit, such as energy audits and energy-efficiency improvements that could lower operating costs for both farmers and processors in less than a year.

Acquire independent project management expertise. Sustainability collaborations can be complicated by participants' conflicting priorities of the various participants. Therefore, these partnerships should be designed and overseen by independent project-management specialists with demonstrated competence in trust building among diverse stakeholders. Additionally, the project management function must be seen by all participants as neutral and committed to the success of the project, rather than to any individual stakeholder. NGOs can often be quite effective in this role, but they must be committed to creating solutions that work for all participants, and the project managers must have the requisite skills.

Build in structured competition. The founding circle must find a way to sustain the focus on ambitious outcomes established at the outset. Healthy competition is often effective in generating long-term momentum. Unlike the self-interested competition that sinks many collaborative efforts, competition within large-scale sustainability collaborations must be explicitly structured to support shared goals. The Sustainable Apparel Coalition's Higg Index drove such structured competition, as players with low scores sought to improve while those at the top strove to remain there. The index also enabled transparency, which is central to most collaborations' success.

Nurture a culture of trust. Given the central importance of trust in successful collaborations, building and maintaining trust is an ongoing practice foundational to every other practice during the collaboration project. (See the sidebar "Building and Maintaining Trust" for two approaches to nurturing trust.)

ULTIMATELY, THE BEST WAY to scale collaboration is through markets that have the right incentives in place. We expect these markets to take off once the collaboration practices described here become widely adopted. When the full power of markets is brought to bear in unlocking environmental systems value, the good of the commons will truly become the common good of business. ▾

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