Decision Support Tool For Sustainable Beef Purchasing

Chidum Ayeni, Erin Connolly, Alice Hartley, Adiya Ode

Advisor: Rick Locke
Executive Summary

In the spring of 2011, Sodexo North America’s Office of Sustainability and Corporate Social Responsibility engaged a team from MIT’s S-Lab, the Laboratory for Sustainable Business at the Sloan School of Management. The objective of this five-week project was to develop a strategy for decision-making related to beef purchasing in Sodexo’s North American operations.

The outcome of the project is an Excel-based prototype tool, developed with input from Sodexo and key partners from the World Wildlife Fund. The tool is based on a strategic assessment of the beef value chain and Sodexo’s role within it. Since the impacts of beef production vary by stage of the value chain, the tool is intended to help make sense of a complex landscape of social and environmental considerations. In addition, it encourages Sodexo to focus on the decisions where it has the most leverage as a purchaser. Goals for the tool included a simple design and easy-to-use format, which would be scalable for future use with other products besides beef.

The tool is intended to be developed further, either as an internal document or as a survey for use by suppliers. After researching best practices in the beef industry and developing the prototype tool, the S-Lab team recommends that Sodexo continue building on this project in the following ways:

1) Develop internal policies to prioritize sustainability issues and impact opportunities in beef purchasing. Certain opportunities, such as more regional sourcing, are within Sodexo’s direct control, while others may require a longer-term approach.

2) Continue to refine the tool for use with new and existing suppliers. The content of the tool should be reviewed by those with deep industry experience, and tailored to Sodexo’s purchasing process.

3) Work toward the long-term goal of a transparent, industry-wide standard for sustainable beef. Partnerships with non-government organizations and participation in industry roundtables are good ways to advance toward this goal.
Objectives

Sodexo is a global food service and facilities management company, based in France and operating at 33,900 sites in 80 countries around the world. Food service accounts for half of all services the company offers globally, with roughly forty percent of business activity occurring in North America. Among other services, Sodexo manages food service for higher education institutions, including four dining venues at MIT.

Sodexo has made a commitment to pursue sustainability across its global operations. The company was first listed in the FTSE4Good Index in 2001, joined the UN Global Compact in 2003, and formally integrated sustainability into its business plan in 2005. Since 2007 Sodexo’s Office of Sustainability & CSR in North America, based in Gaithersburg, MD, has worked to develop and implement the company’s strategic sustainability plan, now known as the ‘Better Tomorrow’ Plan.

Sodexo’s 14 Better Tomorrow commitments focus on three broad areas: environment, local community, and health/wellness/nutrition. By publicly reporting on the progress towards specific targets in each area, Sodexo intends to set an example within its industry for transparency and reporting as well as helping other businesses, including competitors, learn how to improve their performance. Of the 14 Better Tomorrow commitments, five were priorities for the S-Lab team’s scope of work: carbon; water; waste; local, seasonal, and sustainable food; and supply chain code of conduct.

The 2011 S-Lab team was asked to develop a strategy for decision-making around sustainable food purchasing. Specifically, our focus was the beef supply chain in North America, a high value and high-impact food category. Our objective was to develop a decision-support tool for beef purchasing, taking into account both social and environmental sustainability. The end product of this work would be a prototype tool, for use by Sodexo category managers and potentially others involved in beef purchasing decisions. We wanted to design a tool that would be easy to use, would contain the most
relevaninformation for the decision-maker, and would balance precision with the ability to impact change.

While the main focus of the tool was to evaluate Sodexo’s direct suppliers, a secondary goal was to provide guidance for second-tier suppliers. Although Sodexo may not have direct interaction with these suppliers, its policies can send an influential message and promote more sustainable practices in upstream stages of the beef supply chain. Sodexo may also be in a position to influence other food service companies, particularly national and regional companies that buy large amounts of beef, such as chain restaurants and grocery stores. Since Sodexo North America sources most of its beef from the US and Canada, we limited the scope of our project to these countries.

Sodexo’s strategic goals in pursuing this project include 1) supply chain risk mitigation, 2) promoting value and quality, and 3) corporate citizenship. Motivated by similar factors, a few national companies have set an example by establishing beef sustainability standards for their supply chains, as discussed below. In some cases these efforts began as a follow-on to food safety initiatives, and expanded to include issues of animal welfare and carbon emissions. Likewise, Sodexo may find that its sustainable beef initiative yields overlapping benefits and addresses multiple goals of the Better Tomorrow Plan.

**Impacts of Beef Production**

The impacts of beef production have been well documented, although debate still exists within the industry about the relative severity of impacts along different stages of the supply chain. Using a methodology that considers the entire commodity chain, an FAO report released in 2006 estimates that livestock are responsible for 18 percent of greenhouse gas emissions, a bigger share than that of transport. Livestock accounts for nine percent of anthropogenic carbon dioxide emissions, most of it due to expansion of pastures and arable land for feed crops. The study found that it generates even bigger shares of emissions of other gases with greater potential to warm the atmosphere: as much as 37 percent of anthropogenic methane, mostly from enteric fermentation by
ruminants, and 65 percent of anthropogenic nitrous oxide, mostly from manure. In addition to GHG emissions, local air quality can be impacted by dust, particulates, and odors caused by beef production. The study further suggested that the sector is responsible for 8% of human water use; it is the largest sectoral source of water pollutants, principally animal wastes, antibiotics, hormones, chemicals from tanneries, fertilizers and pesticides used for feed crops, and sediments from eroded pastures.

In addition to direct environmental impacts, beef production raises concerns about human health and the safe and humane handling of livestock. For example, opponents of feedlots assert that this practice carries a huge cost in terms of animal and human health. A 2003 study in the Canadian Journal of Animal Science found that “Digestive disorders account for approximately 25 to 33% of deaths in feedlot cattle, as excessive production of acid in the rumen is often either the cause of or a significant contributing factor to metabolic and nutritional disorders, including acute or sub-acute (chronic) acidosis, liver abscesses, and “feedlot bloat”, and likely contribute to decreased performance and efficiency of production”. In addition, Margaret Mellon et al. suggested in 2001 that non-therapeutic livestock use accounts for 70 percent of total antimicrobial use in the United States. The widespread use of antibiotics also leads to water pollution and development of antibiotic-resistant strains of bacteria. There are nutritional considerations as well; grass fed beef is lower in unsaturated fats while grain fed beef has been shown to contain only about 15-50% as many Omega 3 fats as grass fed.

In committing to continuous improvement in the sustainability of its supply chain, Sodexo has undertaken the task of understanding such impacts, weighing them against its internal priorities as a company, and implementing changes in its policies, practices, and relationships with both suppliers and customers. Sodexo purchases approximately 50 million pounds of beef per year, and is one of the top three food service providers in the U.S. The company’s purchasing power is therefore significant, giving Sodexo the opportunity to lead real improvement in the beef industry.
Methodology and Background Information

Our methods included secondary research and primary interviews, as well as development of a functioning, Excel-based prototype tool. Key insights came from Margaret Henry, Director of Sustainability and CSR Performance at Sodexo North America; Mitch Greenberg, Sodexo’s North American Category Manager for proteins; Alex Bjork, Program Officer at World Wildlife Fund; Lily Russell, Sloan MBA and Summer 2010 Sustainable Supply Chain Intern at McDonald’s Global Supply Chain; and Christina Ingersoll and Christof Walter, Sustainable Food Lab/Unilever partnership.

We also researched which stakeholders and suppliers in the beef industry have the most leverage, as well as how other players in the food and food service industry are addressing sustainability issues. Finally, we looked at how factors could be categorized by degrees of ease of implementation: from the easily changeable, such as providing shelter to grazing animals in inclement weather, to the more difficult, such as a cow’s natural digestive process, which releases methane gas and causes the majority of the beef industry’s greenhouse gas emissions.6

Our research included documentation of other tools of a similar nature already in the marketplace, both for food supply choices, as well as other sustainable production initiatives, such as the Nike Considered Index. We collected nine examples of relevant tools (see References) and compared their structure, scoring mechanisms, user interfaces, and transparency. These factors became critical considerations in the design of the prototype tool for Sodexo. The key research questions that framed our project were:

1. What does “good beef” mean for a food service company? How should standards of sustainability be defined for Sodexo, given other purchasing requirements (e.g. volume, quality, cost)?

2. What are best practices for sustainable beef in the food service industry?

3. How can Sodexo ensure that sustainability is taken into account in the beef purchasing process?
4. What degree of information do category managers need and want in order to support preferred purchases, and when and how is this best delivered?

Overview of the Beef Value Chain

A pragmatic decision-support tool for beef purchasing needs to reflect a thorough understanding of the beef supply chain. As shown in Figure 1, there are four primary stages in beef production:

- **Cow/calf operators**, traditional ranchers and farmers breed cows to produce calves, which are kept onsite until weaned at 6-10 months of age
- **Stocker operators** put additional weight on the animals through pasture or range; *backgrounding operations* confine the cattle and give them hay, wheat, or other forage; both types of operation bring cattle to 600-800 pounds, or 8-14 months
- **Feedlot operators** feed grain to the animals (at this stage called “feeder cattle”) and bring them to slaughter weight of 900 to 1,400 pounds, or 12-22 months
- **Packer/processors** slaughter the cattle and package and/or process the beef

Figure 1 – Beef Supply Chain

Source: Center for Globalization, Competitiveness, and Governance, Duke University/EDF
Sodexo primarily deals with beef packers/processors and distributors (depicted in Figure 1 as wholesalers): approximately 40% of Sodexo’s beef purchases are made under contract with a large US national packing company, while the remaining 60% are sourced from various foodservice distributors. However, many of the factors that contribute to sustainability impacts occur farther up the beef supply chain, all the way to cow/calf operators. Further complicating the situation is the lack of vertical integration in the beef industry. Large numbers of small cow/calf and stocker/backgrounder companies supply the feedlots, and it is therefore very difficult to trace beef back through this chain, especially for products like ground meat. As a result, Sodexo’s decision-support tool should address as many sustainability factors as possible, while also understanding that Sodexo’s primary points of contact currently demand limited transparency throughout their supply chains.

The magnitude of different social/environmental impacts also varies throughout the different stages of the value chain, so a good tool should take this into account.

Fig. 2: Impacts by category at each stage of the value chain
As illustrated above, as a purchaser of large quantities of beef Sodexo has the most direct impact at the processor/packer and distributor stages of the value chain. However, the company recognizes its role as a major food service provider, and is interested in sustainability practices in upstream stages of the beef industry\(^8\). Our intent with the tool is to support Sodexo as it seeks to provide industry leadership throughout the value chain.

The conceptual basis for our tool began with WWF’s Draft Questionnaire for beef sourcing. The questionnaire reflects the importance of traceability in the supply chain, offering three different paths to completion depending on the supplier’s answer to initial traceability questions. Based on the key insight that impacts vary by stage of the beef production process, we developed a supply chain diagram and then a matrix to map sustainability impacts to each stage of the chain. The resulting diagram (Figure 2) became our guiding framework in developing the tool.

**Example: Greenhouse Gas (GHG) Impacts of Beef Lifecycle**

The US Environmental Protection Agency report, “Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2004,” states that beef cattle accounted for 71 per cent of methane emissions in US in 2004.\(^9\) The primary contributions to GHG emissions from livestock management can be attributed to feed issues and manure management:

<table>
<thead>
<tr>
<th>Category</th>
<th>Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilizer Production</td>
<td>14%</td>
</tr>
<tr>
<td>Energy Used by Equipment in Food Crops/Farm Production</td>
<td>14%</td>
</tr>
<tr>
<td>Off-gassing from manure and cattle’s digestion process, called enteric fermentation (belching)</td>
<td>32%</td>
</tr>
<tr>
<td>Loss of CO2 storage on lands devoted to feed crops</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: Center on Globalization, Governance and Competitiveness

In this example, feed choice is the most instrumental factor in greenhouse gas emissions
over a cow’s lifecycle. On a global basis an estimated 40% of the greenhouse gas impact of beef production is attributable to the loss of carbon sinks\textsuperscript{10} on land cleared for feed crops. In addition, Fiala 2009\textsuperscript{11} reports that an estimated 32% of beef’s overall contribution consists of greenhouse gas emissions from the animals themselves, through enteric fermentation and through their wastes. It is not surprising therefore that the emerging industry best practices are mainly based on choices in the use of feed.

![Figure 3: Lifecycle Environmental Impacts of the Beef Industry](image)


Lifecycle Analysis (LCA) is an approach for evaluating the total environmental impacts of a product or activity, starting with production of raw materials and including production processes, transport, use, and disposal. The Global Conference on Sustainable Beef, a consortium of major stakeholders in the beef industry, is seeking to further develop this methodology for beef production through its Beef Lifecycle Assessment Working Group, which convened in June 2010 in Washington, DC. At the moment, there is still significant debate within the beef industry about the application and outputs of the
LCA approach; we expect this debate to continue as the beef industry seeks to define sustainability, which will affect the content of any environmental decision-making tool.\textsuperscript{12}

**Existing Industry Definitions & Standards**

Several definitions have emerged that address one or more key sustainability criteria for beef production. Important definitions and certifications include:

**Grass Fed:** Grass fed cattle are grazed on pasture all their life. Economic considerations have increased the use of grains, animal byproducts and other additives in feed for beef and dairy cattle in the United States. Grass fed animals graze for an average of four years but may also graze on land that has been treated with synthetic fertilizers and sometimes doused with herbicides. Standards include the Grass Fed Marketing Claim Standard issued via the Federal Register Notice in 2007, which defines what constitutes the lifetime diet of a “grass fed” animal; and the American Grass Fed Association’s (AGA) Grass Fed Ruminant Standards, which are certified through a program approved by the AGA and verified by an independent, on-farm audit by Animal Welfare Approved.

**Organic:** Organic beef comes from cattle that have been grazed on grass that is free from synthetic fertilizers or herbicides, pesticides and other chemicals. These cattle are not necessarily grass fed, but have been fed feed made of grains and other components that are free from synthetic fertilizers and other chemical additives. The organic standard is maintained by the USDA.

**All Natural:** This categorization is used for beef without chemical or other synthetic additives. However these may be beef from cattle in feedlots, and not necessarily grass fed. It is also to be distinguished from organic beef, which requires a stringent third-party certification process.

**Concentrated Animal Feeding Operation (CAFO):** The term CAFO was first coined to describe facilities that have a potential pollution profile. A CAFO is an animal feeding facility that confines animals for more than 45 days in an area that does not produce...
vegetation during the growing season. Once designated as a CAFO, a farm is subject to regulation by the US Environmental Protection Agency (EPA). The standard mostly regulates wastewater impacts.

**U.S. Department of Agriculture (USDA):** USDA is a familiar agency in the beef industry. In addition to defining the organic standard, USDA quality standards are based on measurable attributes that describe the value and utility of the product. For example, beef quality standards are based on attributes such as marbling (the amount of fat interspersed with lean meat), color, firmness, texture, and age of the animal, for each grade. Standards for each product describe the entire range of quality for a product, and the number of grades varies by commodity. There are eight grades for beef.

**Animal Welfare Approved:** The Animal Welfare Approved program audits and certifies family farms raising their animals humanely, outdoors on pasture or range. Farmers who earn the AWA seal benefit from having a third-party verification of their welfare practices. Animals are raised outdoors on pasture or range on true family farms, with the “most stringent” humane animal welfare standards, according to the World Society for the Protection of Animals. Annual audits by experts in the field cover birth to slaughter.¹³

**Analysis and Results**

**What is Good Beef?**

We agreed that a major starting point for the project was to agree on a common definition of “good beef” between Sodexo and ourselves. Like others in the food industry, Sodexo is already familiar with certain standards for beef, such as USDA certification. Unfortunately, a convenient and trustworthy USDA label for sustainability in beef does not yet exist.

Our research, based on secondary and publicly available information, confirmed that there was no industry-wide accepted definition of *good beef*. While the USDA and EPA regulate segments of the beef industry and there are a number of standards guiding
compliance, this seems to be accepted as only a minimum baseline. Industry leaders including major food retailers and farmers groups have therefore established other standards in response to growing health concerns by consumers.

<table>
<thead>
<tr>
<th></th>
<th>Part of Value Chain</th>
<th>Whole Value Chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Water</td>
<td>✓ (CAFO) EPA wastewater regulation</td>
<td>X</td>
</tr>
<tr>
<td>Human health</td>
<td>✓ USDA grades</td>
<td>✓ Grass fed (certification)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Organic (USDA certification)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ All natural</td>
</tr>
<tr>
<td>Animal welfare</td>
<td>✓ Animal Welfare Approved</td>
<td>✓ 5-Step Animal Welfare Program (Whole Foods and Global Animal Partnership)</td>
</tr>
<tr>
<td>Waste</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Labor</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Land Conversion</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Figure 4: Patchwork of existing standards defining “Good Beef”

As shown in Figure 4 above, there are few standards for sustainability that take into account the entire beef value chain, and no industry-wide standards yet exist for greenhouse gas emissions, waste management, labor practices or land usage.

Some companies go further than industry standards to ensure some sustainable qualities of their beef. For example, Whole Foods has developed the 5-Step Animal Welfare Program, in partnership with the Global Animal Partnership, a non-profit organization that grades animal welfare across the entire value chain. In human health, Whole Foods has gone further than most other retailers, prohibiting antibiotics, supplemental growth hormones, animal products in animal feed, irradiation and artificial ingredients. It is worth noting that Whole Foods can charge a premium for its beef due to these high standards, but such standards only apply to a minority of beef sold in the United States.
McDonald’s, Wal-Mart, and other large players have sought to fill the standards gap through their leadership in the Global Conference on Sustainable Beef. Their involvement helps ensure that sustainable beef standards will be addressed at all price levels of the market. In 2008, McDonald’s internal Global Beef Board determined that sustainability “should be a top priority for 2009-2011”;\textsuperscript{14} the company has developed animal welfare standards in collaboration with Dr. Temple Grandin, and is working to strengthen its existing land use guidelines for beef sourced in Brazil. Since 2009 McDonald’s has used an Environmental Scorecard with its direct suppliers of beef in its nine largest markets, which requires suppliers to provide annual data for energy, water, air and waste relative to units of production.\textsuperscript{15} Data is collected through an online software system, and best practices are shared throughout McDonald’s supply chain. The company also participates in the Global Reporting Initiative, and shares its scores publicly on its website.

In the food service industry Bon Appetit Management Company has taken a strong position, under the banner of “food services for a sustainable future”.\textsuperscript{16} Their commitments include purchasing all seafood in accordance with the Monterey Bay Aquarium’s Seafood Watch program, purchasing Certified Humane and cage-free eggs, and a “Farm to Fork” program that prioritizes seasonal ingredients produced within 150 miles of each restaurant. Its partnerships include collaboration with Oxfam America and United Farm Workers, which led to a recent document entitled “Inventory of Farmworker Issues and Protections in the United States” (2011). In 2007, Bon Appetit switched all of its hamburger meat to “natural” ground chuck, committing suppliers to using no antibiotics, no added growth hormones, no animal byproducts in feed, and humane treatment of animals. However, many practical challenges remain, including lack of transparent third-party certifications and viable commercial supplies of approved beef.
Implications for Sodexo

In deciding which standards to adopt for their definition of good beef, there are several important considerations for Sodexo. The primary one is cost, as any increases in the cost of production translate into higher final costs to the customer, in an industry with slim margins. However this may be offset by the appeal to an expanding consumer niche and so can be a source of differentiation to their clients. Sodexo’s volume and market power is a second consideration. Sodexo interacts mainly with Packers/Processors and some Distributors; their level of influence with these stakeholders will be an important factor in their ability to effect change using the beef sustainability tool.
**Good Beef Tool: Overview and User’s Guide**

The purpose of the Good Beef Tool is to measure the environmental impacts of Sodexo’s suppliers. In the long term it could assist in the sharing of best practices and encourage improvements along the supply chain. Our goal in designing the tool was to help Sodexo advance the efforts of its existing suppliers and/or to evaluate potential new suppliers, to get them started on working towards sustainability. This would enable Sodexo to add value to its business because it would readily identify where on the supply chain it may be exposed to risks such as litigation, due to practices further up the supply chain that damage the ecosystem or human health.

**Tool Design**

This tool looks at eight categories of social and environmental impacts: legal, labor, water, waste, greenhouse gas emissions, human health, animal welfare, and land conversion. It scores suppliers based on their performance and practices. The tool allows users to select various combinations from a list of criteria, and then calculates a score based on these ratings. The tool contains a tab on which users can change assumptions and parameters, a tab for viewing the summary scorecard, and several other tabs with relevant data for the eight categories.

**Choice of Tool Platform**

Besides being the tool of preference for Sodexo, we used MS Excel because it has the capabilities to perform the required calculations and is also commonplace enough that most people are familiar with it. It enabled us to create a comprehensive but easy tool that would help Sodexo monitor the sustainability performance of its vendors. The use of Excel also makes it easier for Sodexo to further enhance and extend the tool in the future. On the other hand, Excel also has some features that make it less easy to scale. Designing a user interface in Excel can cumbersome, time consuming, and could be vulnerable to...
faulty data entry. If the tool has to be scaled further, then Sodexo would have to consider migrating it to a more scalable platform.

Criteria and Questions
To support the further development of this Tool, we have included sample questions and criteria for each of the eight impact categories. However, it should be noted that the content of the tool is a work in progress, and will need to be further developed. Sodexo may choose to develop these criteria internally, with assistance from other third parties such as WWF. Alternatively, it could decide to participate in a broader effort to develop criteria with peer companies in the beef industry. It is important that Sodexo selects criteria that are unambiguous and where possible, quantifiable. The criteria could be developed to reward greater transparency and defensibility of claims. This tool should be seen as a near-term solution; ultimately Sodexo would like such a tool to be vetted and supported by a third party auditor/certification agency, similar to the way food safety audits currently work.

Data Collection Approach
There are various ways that Sodexo can gather data for entry into the tool. Data accuracy needs to be assured by each of these processes. The higher the accuracy of the data, the more effective the decision made from the tool will be to Sodexo. Data validation and verification are absolutely necessary, but these will be maintained outside the tool. Sodexo should establish these procedures internally.

Currently Sodexo uses these existing procedures to gather data, which may be adaptable to include sustainability questions:
- annual business reviews with its suppliers
- ongoing dialogue
- food safety audits

Another approach for collecting the data would be to send a survey to suppliers or ask them to participate in an online questionnaire. Suppliers that source from multiple
feedlots and/or cow/calf operations would aggregate the scores for each set of operators within their supply chain stage, before these are entered into the tool.

**Scorecard and Method of Use**

The scorecard is designed to accommodate extensions to the categories and additional categories could be added, for example a stage tab for transportation. Responses to the questions are graded on a scale of 1-3, where 1 = Excellent, 2 = Good, and 3 = Needs Improvement.

The design of the tool has been simplified to make data entry easy for the user. The scoring scale and list of criteria have both been predefined, so all the user has to do is to select from the list of existing questions for each criteria within the categories. Each worksheet represents a stage in the value chain: cow-calf operations, stockers/backgrounders, feedlot operators, packers/processors, and distributors. A supplier can fall within one or more of these stages, and for such a supplier the necessary worksheet(s) will have to be completed. The inputs to the tool are twofold.

- The user is required to point and click on selection boxes which hold the various criteria under each issue category.
- The user also has the opportunity to change any of the parameters used in performing the calculations, such as the weighting assigned to each categories.

**Categories**

Within each of the stages (worksheets) is a listing of standard questions. The categories can be extended – additional categories added, or additional standard questions included. As the user makes the selections on the criteria, and also if the user makes changes to the relevant parameters, the tool constantly recalculates and updates the scorecard displayed, based on the criteria given for scoring. The calculation reflects the percentage contribution of each of the worksheets (categories) based on the assigned weights per category.
**Tool Output - Scorecard Result**

On the first row of each of the category forms, a summary score indicates the performance of the supplier for that category. The worksheet called ‘Scorecard’ is a summary of the supplier’s total performance based on the responses entered in each of the categories and the applied calculations.

**Assumptions**

The worksheet called Assumptions is to be used for entering weights for each of the categories. This can be done per supplier, and the output on the ‘Scorecard’ worksheet in the section called ‘Summary Per Supply Chain Stage’ can be used to compare across suppliers based on the weighted values.
Figure 6– Assumptions Worksheet

Figure 7 – ‘Summary Per Supply Chain Stage with Weighting Applied on the categories

Figure 8– Scorecard reflecting the score for a vendor.
Recommendations

The Tool is intended to serve as a prototype, demonstrating a scorecard approach to sustainability reporting. As Sodexo further develops this Tool, we recommend that the company consider the following, related to its internal policies:

- Focus first on areas where Sodexo has leverage and can make a direct impact. For example, implementing some degree of regional sourcing would reduce GHG impacts from long-haul transportation.
- Make strategic decisions about what issues to prioritize and how far to go in committing to supply chain sustainability.
- Integrate the tool with SMART and other internal reporting processes.

In its relationships with suppliers, we recommend that Sodexo:

- Consider ways to give suppliers incentives to participate and disincentives to “game” the system.
- Decide what to do if supplier performance does not meet minimum expectations.
- Develop guidelines for all suppliers describing how they can perform better on the Tool, and share best practices as appropriate.

As noted in discussions between the S-Lab team and Sodexo, the beef industry as a whole needs, and is asking for, a common standard for good beef. Sodexo should take an active role in driving such an industry-wide initiative by:

- Participating in the Global Conference on Sustainable Beef.
- Partnering with other, non-competitive purchasers of beef, and consider working pre-competitively with peer companies to influence upstream suppliers.
- Collaborate with NGOs and projects such as the Sustainable Food Lab, which could apply their past experience to help advance an industry-wide standard.
Conclusion

This project highlighted the practical challenges in introducing sustainability measures into a food service business. Due consideration should be given to the market share and level of influence of that Sodexo holds within the value chain. Our discussions and analysis suggest that broad partnerships can increase the chances of success in implementing sustainability standards, and may also help Sodexo access external resources. Successful implementation of any supply chain sustainability strategy requires the commitment of many stakeholders engaged at different levels of the value chain. However, securing this commitment from the onset is a very ambitious goal. We therefore think that a pragmatic approach, starting where there are identifiable champions in the industry and obvious entry points, while keeping the big picture in mind, will enhance the chances of Sodexo’s success.
References

3 Mellon, Benbrook and Benbrook, “Hogging it”, Union of Concerned Scientists, January 2001
4 www.johnrobbins.info/blog/grass-fed-beef/
5 Interview with Mitch Greenberg
6 According to the Global Conference on Sustainable Beef, approximately 80% of greenhouse gas emissions originate before harvesting the animal. GCSB Beef LCA Working Group, June 2010.
7 Interview with Mitch Greenberg
8 Interview with Mitch Greenberg
9 www.environmentalistionline.com/.../what-s-on-your-plate-agriculture-meat-and-carbon
12 Lifecycle Analysis does not typically address social and economic aspects of a production process, so this approach is not a comprehensive method of evaluating sustainability.
13 http://www.animalwelfareapproved.org/
15 McDonald’s Corporation Worldwide Corporate Social Responsibility 2010 Report

Figure References:
