Delivering Sustainable Food Supply chains

Stuart Lendrum
Sainsbury’s Head of Sustainable & Ethical Sourcing
• Our context
• Our approach
• Underpinning our work
  • Taking a total value chain approach
  • Data benchmarking & best practice
• New challenges need new solutions
• Designing in sustainability
• All the way through to our customers
• New networks & collaborations
• Insights
• What does the future hold
The context

**ENERGY**
50% by 2030 (IEA)

**FOOD**
Increased demand 50% by 2030 (FAO)

**WATER**
Increased demand 30% by 2030 (IFPRI)

**CLIMATE CHANGE**
Declining...

Land availability: 50% of available land mass used to grow food

Resource availability

Agricultural land use change: 11% of global GHG emissions

Agriecosystems: 60% degraded

Severe flooding: will double in Europe by 2050

Stable & predictable climate

Global Fish Stocks: >85% over or fully exploited, or in decline

Global GHG emissions: 24% from agriculture

Global Food Reserves: 50 year low

Extreme drought events per 100 years will double (IPCC)
Increasing...

**UK Population:** 10M more people in 20 years

**Food:** 50% by 2030
- UN FAO

**Food Poverty:**
- 1.3 billion tonnes a year
- 4.7 million people in UK

**Demand for resources and food**
- 50% by 2030
- (IEA)

**Energy Demand:**
- 50% by 2030
- (IFA)

**Ill Heath:**
- circa 1bn ‘stuffed’ or ‘starved’

**Competition for Water:**
- 30% by 2030
- IFPRI

**Food Prices**
- (104%) & Price Volatility (>3-fold)

**Global population:**
- 2-2.5 billion by 2050

**Food:**
- 50% by 2030
- UN FAO

**UK:**
- Products & services = 75% of personal CFP

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Our Context

>1,000 Stores

>25m Transactions

>150,000 Colleagues

>12,000 Products

>770 Suppliers

>2,000 Sites

>10,000’s Farms
A UK Retailer but a global business

We source £Billions of Own Brand products from 72 countries around the world.
Our UK value chain

FROM FIELD...

- 17,000+ Farmers & Growers
- 2,000+ Suppliers
- 23 Depots
- 1,000+ Stores
- 12,000 Own Brand Products
- 157,000 Colleagues
- 25 Million Customers

TO FORK...

we are Sainsbury's
Our approach 20x20

- 14 commitments focused on our products and supply chains
- 35 key raw materials
- 67 key delivery goals

Customers

Securing supply

Reputation, recognition & regulation
We need...

Best suppliers

Best people

Best information

CREATING

SHARED VALUE

SUSTAINABLE

COMPLIANT
Total value chain

- Seed to customer
- Pre farm
  - Engineering in resilience / reduced waste
- Underpinned by relationships
  - Data capture
- Benchmarking and sharing best practice
  - Understanding structural differences
  - Pre competitive collaborations vs IP
- Reduce waste
- Create value
Data, benchmarking & best practice

• Sustainability standards
  • Key raw material approach, addressing both manufacturing and agricultural supply chains.
  • Addresses key raw material hotspot issues, social, economic, environmental.
  • Use existing standards as an accepted basis wherever possible.

• Sustainability Scorecard
  • Avoid duplication with other certification schemes wherever possible.
  • Disproportionate benefit for stakeholders versus the additional requirements.
  • Supports benchmarking & continuous improvement.
  • Produces real time value chain data for all stakeholders.

• Certification
  • We only audit additional requirements beyond existing standards that are in place.
  • Improves transparency & traceability within our supply chains.
Sainsbury's Sustainability Standards and certification

- Independent standards designed to address the economic, social and environment aspects of sourcing our raw materials across the supply chain in the UK and globally.
- The standards will bear external scrutiny.
- The standards will for key raw materials.
- Sustainability standards will be both self assessment and 3rd party independently audited where appropriate.

<table>
<thead>
<tr>
<th>Standards</th>
<th>Standard Sourcing Model</th>
<th>Sustainable Sourcing Model</th>
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</thead>
<tbody>
<tr>
<td>BRC / GLOBAL GAP</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MSC/ASC</td>
<td></td>
<td>x</td>
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<tr>
<td>Sainsbury’s Sustainability Standard</td>
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<td>x</td>
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New challenges need new solutions

- Complex Value Chains
- Issues are interdependent
- Science is still evolving
- Good data is scarce
- New skills
Designing in sustainability

Smart Development Process & Tools

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3 &amp; 4</th>
<th>Stage 5</th>
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<tbody>
<tr>
<td>SELECT PROJECT &amp; DEFINE STRATEGY</td>
<td>ASSESS IMPACTS</td>
<td>VISION &amp; ROADMAP</td>
<td>REVIEW &amp; REVISE</td>
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<tr>
<td>What product or range should you work on?</td>
<td>What are the main eco- and social impacts of your product or range?</td>
<td>How do you 'design-out' these impacts?</td>
<td>What does good look like and how do you get there?</td>
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<tr>
<td>1.1 Identify the right strategy and product or range using:</td>
<td>2.1 Identify long-term trends and disruptions to your product or range:</td>
<td>3.1 Idea generation improvements &amp; innovation to tackle your sustainability hotspots:</td>
<td>4.1 Define a vision for the 100% ‘sustainable’ version of your product or range using Vision Tool:</td>
</tr>
<tr>
<td>- Product Plan</td>
<td>- Complete Sustainability Hot Spot Profilers Tool to identify main sustainability hotspots:</td>
<td>- Review and filter these on business, cost, consumer &amp; sustainability using Ideas Capture Tool:</td>
<td>- Review results 6+ months using the Sustainability Hot Spot Profilers Tool</td>
</tr>
<tr>
<td>- Category Heat Map Tool</td>
<td>- 2.2 Benchmarks your product using Sainsbury’s Product Benchmarking Tool:</td>
<td>- 3.2 Build a critical path to get there using Road Map Tool:</td>
<td>- Gate 1</td>
</tr>
<tr>
<td>- Key Raw Materials</td>
<td>- 2.3 Coaching / supporting session:</td>
<td>- Gate 2</td>
<td>- Gate 2</td>
</tr>
<tr>
<td>- Key Products</td>
<td></td>
<td>- Gate 3-4</td>
<td>- Gate 5</td>
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<tr>
<td>- Key Suppliers</td>
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<tr>
<td>- Key Opportunities</td>
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 Gate 1

Gate 2

Gate 3-4

Gate 5

we are Sainsbury’s
All the way through to our customers
New networks and collaborations
Insights

Conflicting demands
Can’t optimise all the levers
Data is scarce
Science is evolving
Issues are complex
Many interdependencies

Requires Judgement Calls based on best quality information
Yesterday

We focussed on “Safe and Legal” aspects of food production and labelling.

Quality was managed by quality control procedures at the end of the growing and manufacturing process.
Customers want a dialogue with brand owners

Today

End to end value chains become more transparent

Longer term planning balances short term tactical initiatives

Working deeper down supply chains

Technology begins to offer solutions

Landscape & stakeholder thinking approaches to structural issues
Tomorrow

Sustainable equals the most cost effective value chains

Programmes vs projects

Technology will underpin the authenticity, sustainability and integrity of products as well as the safety, legality and quality of those products

Data will be key

Relationships will be more important than ever
Thank you