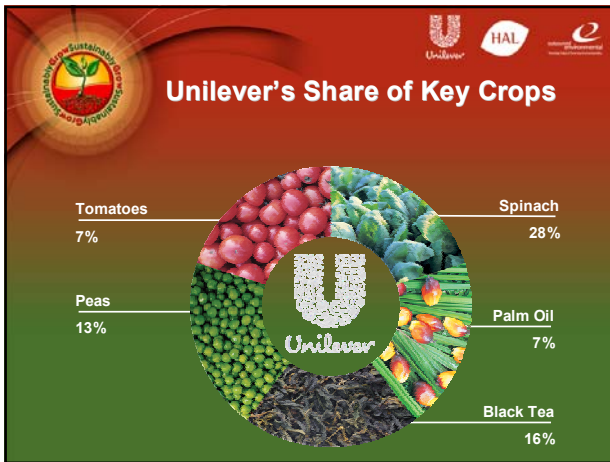




Origins of the initiative The Motivation & the Vision

- **Mission**
 - Agriculture provides 2/3 raw materials for Unilever branded goods
 - Agriculture under environmental pressure (erosion, water shortages, nutrient & pesticide pollution, loss of biodiversity, lack of available land)
- Unilever's long term access to raw materials depends on a sustainable agriculture
- Unilever wants market mechanisms to develop that allow consumers/customers to influence sourcing of agricultural raw materials through buying habits



Unilever Pilot Programs

- The sustainable agriculture initiative began in 1997
- Focus on five key crops and 15 pilot project, worldwide seeking ways to achieve sustainable production of raw materials.
 - Mixed Rotations pilot on Unilever's Colworth Farm, UK
 - Palm Oil (Ghana & the Ivory Coast)
 - Peas (UK)
 - Spinach (Germany & Italy)
 - Tea (India, Kenya & Tanzania)
 - Processing Tomatoes (Australia [HAL], Brazil, California & Greece)

Sustainable Agriculture Roadmap

3 Phases





1. Understand Challenges & Opportunities
2. Influence Agriculture Supply Chains
3. Contribute to Market Mechanisms

Sustainability to us means

The use of farming practices and systems which maintain or enhance:


- the **economic viability** of agricultural production;
- the **natural resource base**; and
- **other ecosystems** which are influenced by agricultural activities (neighbours, downstream etc).

- Operational**
 - Management Practices
 - Cultivation & Machinery
 - Irrigation Application
 - Fertilizer & Chemical
 - Crop Rotation
 - Crop Protection
 - Economics & Profitability
- Biological**
 - Biodiversity
 - Fauna & Flora
 - Seeds & Genetics
 - Micro Fauna & Flora
 - Crop Physiology
 - Crop Genetic Characteristics
- Physical**
 - Nutrition & Fertility
 - Climate & Weather
 - Tillage & Compaction
 - Erosion & Degradation
 - Soil Type
 - Soil Moisture

Four Fundamental Principles

- Produce crops with **high yield** and **nutritional quality** to meet existing & future needs, while keeping **resource inputs as low as possible**
- Ensure that **adverse effects** on soil fertility, water & air quality and biodiversity from agricultural activities are **minimised**
- **Optimise the use of renewable resources** while minimising the use of non-renewable resources
- **Enable local communities** to protect & improve their well being and environment






Unilever LAP Process

- Sustainability indicators: understand current practice and variations
- Understand key drivers behind these
- Leverage best practice and develop or adopt new
- Set timeline for growers to achieve specified standards
- Support compliance with Unilever and global standards
- Monitor progress
- Improve Unilever's supply chain footprint and share benefits with key stakeholders






10 Sustainability Indicators

| | |
|--|---|
|  Soil Fertility & Health |  Product Value |
|  Soil Loss |  Energy |
|  Nutrients |  Water |
|  Pest Management |  Social & Human Capital |
|  Biodiversity |  Local Economy |






Establishing Sustainability Standards

What are they;

- Principles & practices that;
 - Improve farm productivity & product value
 - Contribute to sustainable production
 - Reduce risks & impacts of agriculture
 - Improve the immediate & surrounding environment
 - Reflect triple bottom line principles (3 P's)
 - Result in changes in indicator performance
 - Facilitate compliance with international standards








Establishing Sustainability Standards

How have they been developed so far;


- Research & key learning's from Unilever LAPs (Australia, Brazil, California & Greece)
- Risk assessments, sustainable indicator data collection & review 00 to 04
- Consultation with Eurepgap, ISO 14001 & other emerging standards
- Review of existing GAP industry standards
 - Leaf, Aust Cotton BMPs, EnviroVeg, Lodi Winegrowers, Farm*A*Syst, Ben & Jerry's BMP, Californian Code of Sustainable Wine Growing, LIVE & other standards
- Development is a journey, no defined end point



Role of Sustainable Standards

- 1) Select the Indicator
- 2) Establish Methods to Measure the Indicator
- 3) Measure the Indicator
- 4) Establish a Threshold for the Indicator
- 5) Evaluate Current Operational Practices & Drivers Impacting the Indicator
- 6) Develop or Implement Sustainable Standards & Change
(Revise Thresholds Over Time – Push Targets, Changes in Legislation or Customer Requirements, New Information, R&D)
- 7) Monitor Impact of Change on the Indicator
- 8) Continually Improve Impact on Indicator
(Improving Sustainability - Plan, Do, Measure, Improve - PDMI)






Our Journey to Establish Sustainability Standards

- Initiate LAP's in January 2000
- LAP learning's summarised into Good Agricultural Practice Guidelines 2003
- Sustainability Scorecard (Tomatoes) developed 2004
- Trials & Implementation of Scorecard 2005
- Farmer self assessment & involvement in program
- Supply Chain 2nd & 3rd Party Audits




Sustainability Scorecard (Processing Tomatoes)

- Developed to provide a repository of best practice from LAPS
- In conjunction with Grow Sustainably facilitates requirements of international standards
- Establishes 3 sustainability standard levels
 - Major Must Do ★★★★
 - Minor Must Do ★★★
 - Recommended ★
- Facilitated via website farmer scorecard



The Sustainability Score Card (Tomatoes)

Pest Management
Record Keeping

Rating: ★★★★EU

Sustainability Criteria: Recording Pesticide applications

Best Practice | Minimum Practice | Inadequate Practice | Immediate Action Required | Not Applicable

Description: **BEST PRACTICE**
All pesticide applications are recorded using either the Fertilizer, Soil Amendment & Chemical Use Diary (GS-SIR003h) or equivalent electronic (internet) system within 24 hours of chemical application.
Basic elements of pesticide data use records are kept in a manner consistent with GS-SIR003h.



The Sustainability Score Card (Tomatoes)

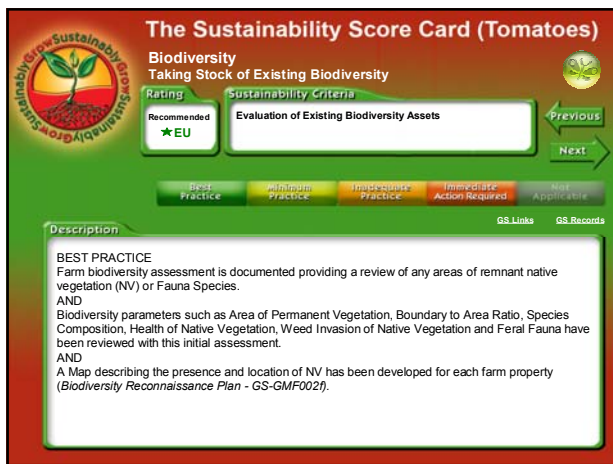
Nutrient Management
Liquid Fertilizer Storages

Rating: ★★★GS

Sustainability Criteria: On Farm Liquid Fertilizer Storage to Protect Environment

Best Practice | Minimum Practice | Inadequate Practice | Immediate Action Required | Not Applicable

Description: **BEST PRACTICE**
Liquid storage tanks are located >50 m from surface water bodies.
AND/OR
Liquid storages have impervious bunds (cement or poly liners) in place to contain potential spills (110% of Storage Volume). Sight glass systems are installed on all tanks to enable the operator/worker to quickly reference tank levels.
AND
A lockable gate or ball valve is placed at the base of the sight gauge on each tank to isolate or close the gauge when not in use (leaks or vandalism).
Tanks are clearly labelled with the product contents stored.
Note: Tank vessels are regarded as unsafe areas (Confined Spaces) AND access inside these tanks is only ever initiated by qualified persons (more than one) experienced in confined space entry, recovery and breathing apparatus systems.



The Sustainability Score Card (Tomatoes)

Biodiversity
Taking Stock of Existing Biodiversity

Rating: Recommended ★EU

Sustainability Criteria: Evaluation of Existing Biodiversity Assets

Best Practice | Minimum Practice | Inadequate Practice | Immediate Action Required | Not Applicable

Description

BEST PRACTICE
Farm biodiversity assessment is documented providing a review of any areas of remnant native vegetation (NV) or Fauna Species.
AND
Biodiversity parameters such as Area of Permanent Vegetation, Boundary to Area Ratio, Species Composition, Health of Native Vegetation, Weed Invasion of Native Vegetation and Feral Fauna have been reviewed with this initial assessment.
AND
A Map describing the presence and location of NV has been developed for each farm property (Biodiversity Reconnaissance Plan - GS-GMF002f).




For more information

- www.unilever.com
- www.horticulture.com.au
- www.growsustainably.com
- www.saipatform.org
- www.growingforthefuture.com