



Waste not want not – improving global productivity

CABI

Philippa David
5 March 2013
www.cabi.org

KNOWLEDGE FOR LIFE

The global background - increased demand and resource scarcity

- Population growth: 9.2 bn by 2050 (UN Population Division)
- Energy supplies need to double by 2050 (World Energy Council)
- Decreasing resources = water, land
- Climate change
- Movement from rural to urban areas
- Economic growth – changing diets
- Need to increase food production by 50% by 2030 (FAO)
- Potential to improve production in emerging markets to meet demand

The challenges for industry

- Cost – raw materials, energy, logistics, inputs
- Food safety – longer supply chains; potentially increased risks
- Sustainability – long term supply of safe, quality assured, regulatory compliant, price competitive materials
- Preservation of natural capital
- Consumer demands – quality, price + ethics:
 - labour, animal welfare, environment
- BUT.... unacceptable levels of waste in the supply chain

CABI: focus on primary production

- Not for profit, intergovernmental organisation, 1910
- Owned by 48 member countries
- 400 staff worldwide
- **Mission: to improve people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment**
- Members asking for increased support to develop trade
- Trade requires efficient, safe and profitable systems
- CABI works with governments, extension services and partners at primary production level globally

Waste – who is responsible? What is waste at primary level?

- Customer? Demands for ‘perfect veg’
- Retailers? For promoting perfection?
- Producers in Kenya give ‘reject’ veg to charity – is this waste?
- Define waste – commercial loss or real waste?
- What is the balance?
- What are the measures of ‘waste’ in emerging markets?
- How much is ‘lost’ at primary production level?

Waste reduction – increased productivity and sustainability

- Define waste at primary level: include also
 - Inputs
 - Water
 - Labour
- Eliminate waste – can lean thinking principles be applied to primary production?
- How will this lead to increased productivity, improved livelihoods and robust, sustainable supply chains?

Potential solutions

- Requires public private support and commitment
- Loss analysis required:
 - REAL potential output
 - Seeds planted v. actual production
 - dairy cow potential output v. actual
- Application of the '5 whys' as a minimum
- Total involvement of stakeholders:
 - Governments
 - Private sector
 - Industry bodies
 - Input and associated suppliers

CABI – combatting global losses: Plantwise (www.plantwise.org)

- A global initiative to improve food security and livelihoods by reducing crop losses
- Centred on a network of plant clinics staffed by trained plant doctors
- Improved information flow – extension, research, input suppliers, regulators
- Plantwise Knowledge Bank – database of locally relevant, comprehensive plant health information
- To date: 280,000 farmers supported, 413 clinics in 24 countries
- Target: 5 million farmers in 40 countries by end 2016

http://www.youtube.com/watch?feature=player_embedded&v=Xv5hidzZe6k

Waste is an issue that needs to be addressed at primary production level

- Making excuses for degree of farmer understanding, nature's intervention, current sufficiency to meet demand is no longer acceptable
- Waste at primary production level is a collective responsibility
- Addressing this issue will reap economic benefits from the primary producer through to the customer

Conclusion:

- Future demand will need to be met under increasingly difficult production conditions
- Need to do more and more with less and less = addressing issue of waste
- ‘Producer empowerment’ – provision of the right information and development of skills to improve supply chain performance
- Needs the guidance and input of industry
- CABI working with Campden BRI – to improve global production at primary level

Thank You