Competition for Land
Fuel v Food
TS 1E

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Objective

To develop a project that will consider the implications of competition for ground between food crops and energy crops

FIG Objective
“….how surveyors should be developing a response to Social, Economic, Technological, and Environmental change..”
Background

- In December 2007 FAO reported that world food prices had risen by approx 40% in the previous 12 months
- In July 2008, World Bank Policy Research Working paper concluded “...large increase in biofuels production in the US and Europe main reason behind steep rise in food prices”
- Egypt banned rice exports
- China price fixing on grain, meat, milk, eggs to maintain stability in the market
- Indonesia soya bean shortages
- Pakistan wheat shortages
Factors to Consider

1. Energy Balance
2. Technology
3. Cost Effectiveness
4. Policy
5. Need
6. Water Resource
7. Sustainability

Energy Balance
Technology

Cost Effectiveness

- Cost of producing the crop/making the fuel
- Cost at which sell the fuel/crop
- Cost of carbon saving
Need

• Poorer countries suffer disproportionately when price of oil goes up
• Balance food demand versus higher value market
• Agriculture is entering a new phase where there is unlimited demand for produce
• Europe exporting environmental problem by creating demand for liquid biofuels

Sustainability

• Feedstock Production
• Land Use Land Diversification
• Biodiversity
• Balanced Eco systems
• Whole Life Costing (not just fuel)
• Environmental Pollution
• Social Aspects
• Economic Aspects