Feeding the World:
The Role of Agricultural Technology and Innovation in Advancing Food Security

John Atkin
Areas of physical and economic water scarcity

Source: IWM report, Insights from the Comprehensive Assessment of Water Management in Agriculture, 2006 / p8
Soybean Efficiency Indicators (Per Unit of Output, Index 2000 = 1)

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Use</td>
<td>0.044</td>
<td>Million Btu/bushel</td>
</tr>
<tr>
<td>Soil Loss</td>
<td>101.0</td>
<td>Pounds soil/bushel</td>
</tr>
<tr>
<td>Irrigation Water Use</td>
<td>19.4</td>
<td>Thousand gallons/Incremental bushel due to irrigation</td>
</tr>
<tr>
<td>Net Carbon Emissions</td>
<td>2.2</td>
<td>Pounds Carbon/bushel</td>
</tr>
<tr>
<td>Land</td>
<td>0.026</td>
<td>Acres/bushel</td>
</tr>
</tbody>
</table>

(Values are expressed as 5-year centered averages.)
G-8 nations call for more technology

Le G8 veut garantir la sécurité alimentaire
La Tribune 18.04.2009

G 8 befürchtet Ernährungskrise
Agrarminister der Industriestaaten suchen eine Lösung
Frankfurter Allgemeine Zeitung 18.4.2009

World faces lasting food crisis and instability, warns G8 report
Financial Times Europe 07.04.2009

Document calls on farm output to be doubled

Les ministres de l’Agriculture du G8 veulent étudier un système de réserves alimentaires

G-8 officials cite lack of progress in hunger fight
International Herald Tribune 20.04.2009
“If our new varieties had been subjected to the kinds of regulatory strictures and requirements that are being inflicted upon the new biotechnology, they never would have become available.”

Norman Borlaug