

Presentation by
Steven Newman
2010 Nuffield Scholar

**The use of labour and machines
in vegetable production**



Know-how for Horticulture™



Sponsored By:



Horticulture Australia



Know-how for Horticulture™



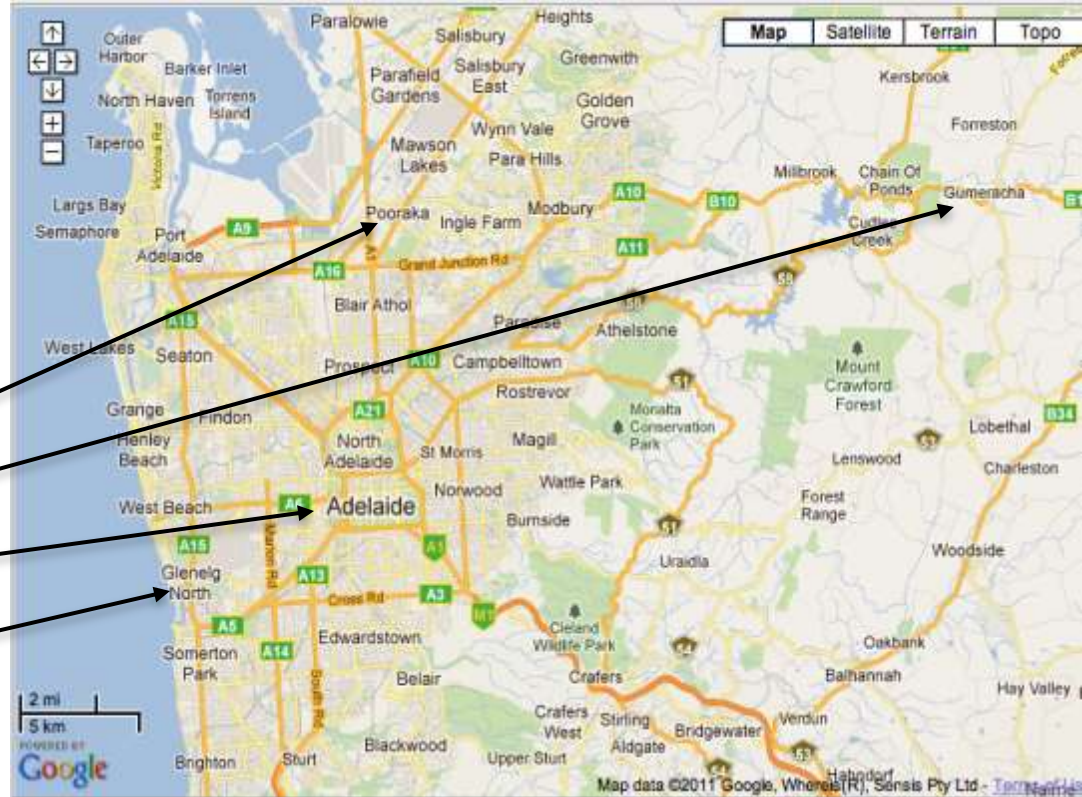
Our Farm – Gumeracha, SA



Know-how for Horticulture™



Where is Gumeracha?



•Adelaide

•Pooraka Markets

•Our Farm

•Adelaide CBD

•Glenelg



Know-how for Horticulture™



The use of labour and machines in vegetable production

- On farm ways of saving labour
- What is being used at farm level
- Harvesting equipment



Know-how for Horticulture™



Where I travelled

- USA
- New Zealand
- UK
- Holland
- Italy
- Belgium
- France
- Ukraine
- Bahrain
- India



Know-how for Horticulture™



Looking for the silver bullet ?



Know-how for Horticulture™



What are they doing in Salinas Valley – California ?



Know-how for Horticulture™



Salinas Valley - California



Know-how for Horticulture™



Salinas Valley - California



Know-how for Horticulture™



The lettuce was thinned by hand



Know-how for Horticulture™



How are they doing it in New Zealand ?



Know-how for Horticulture™



Some still harvest without mechanical aides



Know-how for Horticulture™



LeaderBrand was harvesting with harvest aides



Know-how for Horticulture™



What is happening in the UK?



Know-how for Horticulture™

Harvesting cauliflower in
Cornwell UK



Cornwall UK



Know-how for Horticulture™



Planting cauliflowers - Boston UK



Know-how for Horticulture™



Harvesting leek - Boston UK



Know-how for Horticulture™



How was it different in Holland?



Know-how for Horticulture™



The doors open automatically



But they still cut cauliflower
by hand



Know-how for Horticulture™



Cauliflower leaf sewing – Holland



Know-how for Horticulture™



Would I find it in Bologna?



Know-how for Horticulture™

Bologna Trade Show - Italy



Belgium



Know-how for Horticulture™



Harvesting leek – Belgium



Know-how for Horticulture™



Making better use of the labour

- Make labour more productive
- Use the most efficient number of people
- Make changes to machinery so that it makes the job faster



Know-how for Horticulture™



Labour Costs

Minimum base full time manual labour rate comparison – 38 hr week

<u>Country</u>	<u>Minimum weekly wage</u>	<u>Minimum hourly wage</u>
	<u>38 hrs</u> <u>Australian AU\$</u>	<u>38 hrs</u> <u>Australian AU\$</u>
<u>Australia</u>	<u>589.30</u>	<u>15.51</u>
<u>Belgium</u>	<u>463.51</u>	<u>12.20</u>
<u>Holland (NL)</u>	<u>440.50</u>	<u>11.59</u>
<u>New Zealand</u>	<u>380.00</u>	<u>10.00</u>
<u>UK</u>	<u>357.20</u>	<u>9.40</u>
<u>USA</u>	<u>315.40</u>	<u>8.30</u>

(x-rates.com) conversion rates as at 15.9.11



Know-how for Horticulture™



Where will our labour come from in the future?

- All countries I visited asked this question (even in India – with 1 billion people)



Know-how for Horticulture™



What have I learned?



- Understand the culture of your labour
- It will help them work together



Know-how for Horticulture™



My Recommendations

- Embrace Change
- Manage labour more efficiently
- Do your sums
- Network and share information
- Lobby governments for level playing field
- Go out and see for yourself



Know-how for Horticulture™



The global focus group



Know-how for Horticulture™



Thanks

- To my sponsor



- To Nuffield Australia



and my family



Know-how for Horticulture™

