

# BUILDING CAPACITY FOR DELIVERY OF COMMERCIAL IRRIGATION SERVICES: a case study in the irrigated cotton & grains industries

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# Knowledge

- ... is fundamental to competitiveness, responsiveness and innovation
- .... is not an abstract, tangible thing that be exchanged between people without any mediation, transformation or interpretation
- **Information alone is not knowledge** – knowledge is *“information combined with experience, context, interpretation, and reflection”*
- Information maybe easy to codify and transfer – knowledge is NOT

# Knowledge Management in Irrigated Cotton & Grains project

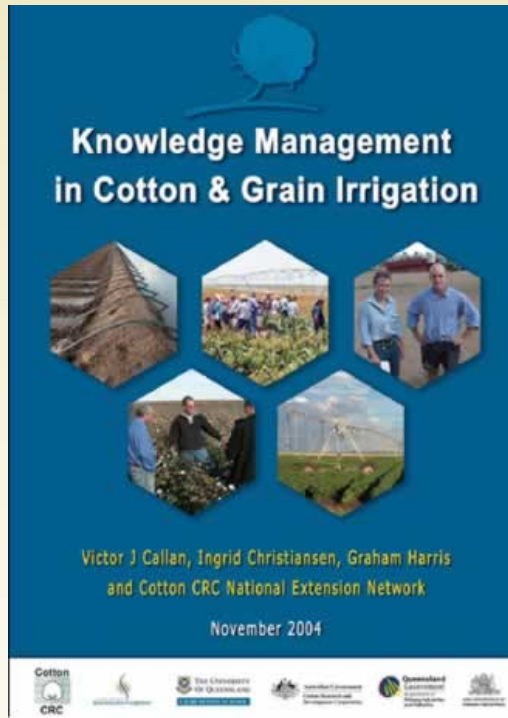
- ..... to investigate and improve the existing irrigation knowledge system
- 1<sup>st</sup> phase 2003-04 → determine how stakeholders accessed information and shared knowledge, current and future

# Observations – Phase 1

- Cotton industry uses network of private consultants
- Usually one-on-one, weekly
- long-term relationships with individual growers
- Bring experiences of other growers – knowledge transfer
  - **Opportunity to use as advisory network** – especially with declining resources in agencies
- Consultants thought water was a new focus for them – GM cotton reduced demand for insect monitoring
  - **BUT** agronomic consultants not confident in irrigation

# Recommendations – Phase 1

- Personal contact (one-on-one)
- Detailed, practical irrigation training for consultants
- Better target consultants in extension activities
- Potential for cross-industry co-operation
- Explore processes for delivery of public sector RD&E through private sector
- a key priority: **develop a business model for delivering commercial irrigation services**



# Issues to be addressed

- The Product:

- Skills, knowledge, confidence for those delivering services
- Tools and equipment needed
- A range of services, matched to on-going demand
- standardised procedures and processes

- The Business:

- how irrigation services fits into the business
- networks for expertise, support, identifying clients
- Demand for services – client value for money, ability to pay, on-going need
- Financial viability – capital costs, labour, RoI

# DEVELOPING THE MODEL

- Initial efforts unsuccessful:
  - unable to engage providers as a collective
  - lack of interest from most consultants – despite Phase 1
- revised approach: Expressions of Interest in July 2007 for a Consultant Support Program
  - provide training, advice, economic analysis
  - Support from local extension staff and Irrigation Knowledge Broker

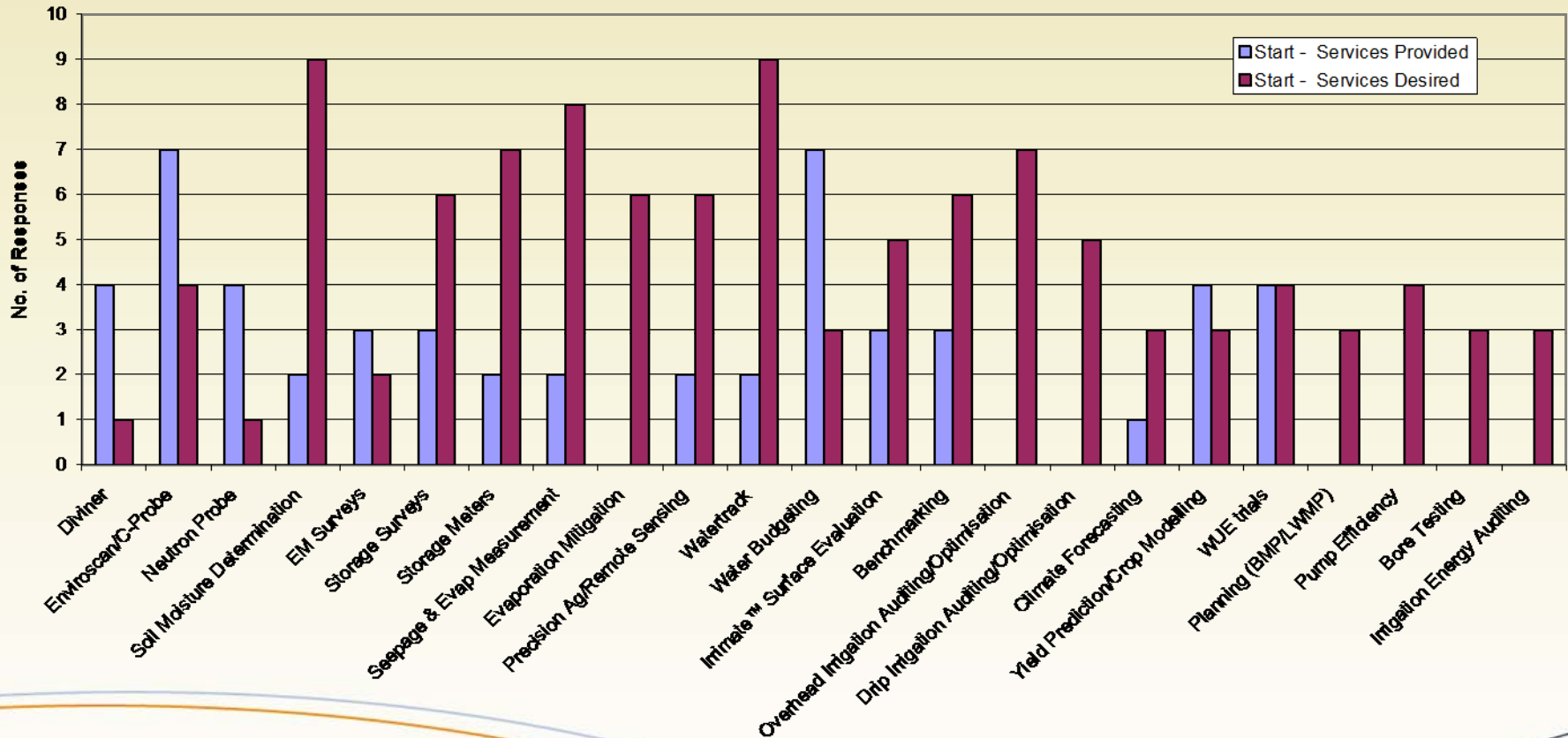
# DEVELOPING THE MODEL

- 14 applied and accepted ~12% of industry
- 3 Namoi Valley, 3 Gwydir valley, 3 Border Rivers/St George, 6 Darling Downs
  - Darling Downs consultants also in complementary local project



# Services provided and desired

Evaluation of Consultant Services



# RESULTS

- some regions: all consultants supported regularly
- other regions: insufficient contact
  
- enthusiasm and time commitments of consultants varied
- some reluctance to share – fear existing advantage would be eroded
  
- Drought conditions created shortage of opportunity
- Late rain created much work on late crops

# RESULTS

- Many received some training
- Most increased knowledge in services of interest
- ongoing support established for some
- No substantive economics done
- Some did not deliver any irrigation services
- 5 on Darling Downs delivered a commercial service:
  - All did surface irrigation performance evaluations
  - One arranged to audit an overhead system
  - Several planning to do benchmarking with their clients



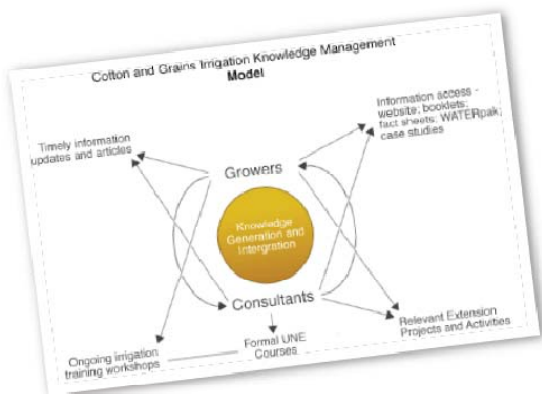
# Discussion

- delay between Phase 1 end (Nov 2004) and Phase 2 start (Dec 2005) lost momentum
- allow for change of industry conditions:
  - Drought
  - Reduced grower income
  - Consultants down-sized
  - Many increased work on secondary pests
  - Uncertainty of water supply
- Darling Downs project: incentive program only spent on services delivered by consultants
  - provided cash flow allowing businesses to develop

# Discussion



External evaluation  
April 2008



- Evaluation survey:
  - Strong support across industry as a mechanism for improved irrigation management
  - Too soon to conclude impact on consultant businesses but early indications show potential
  - Monitor for another season

# Conclusions

- ✓ Eol successful method for engagement
- ✓ Range of services have been trialled – with varying success
- ✓ Irrigation incentives greatly helped delivery, established commercial culture
- ✓ Consultants keen to understand principles of various services
  
- ❖ One-on-one contact preferred by growers – agencies less able but consultants can
- ❖ Extension staff supportive of the program
  - activities align with extension projects
  - extension resources leveraged
- ❖ Continuation planned through Cotton CRC Water Team

# Acknowledgments



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