

Improving harvest management and transport systems – lessons from the NSW sugar industry



"I'M SORRY, I JUST GOT DATA & someone whose car has been fixed to be bigger than mine."



- Improve logistics by:
 - Better planning before and during harvest
 - Better communications throughout the supply chain (harvest and transport)
 - Better Visualisation of the supply chain
 - A Buddhist approach to transport scheduling



How Much? Where?

- Planning is critical–
 - HOW MUCH is there to be processed?
 - WHAT are its properties?
 - WHERE is it?
- Entire crop is mapped and estimated using customised GIS
- Start of season estimate used to plan mill start-up etc

In-Season Re-Estimation

In-Harvester Comms

Other Applications



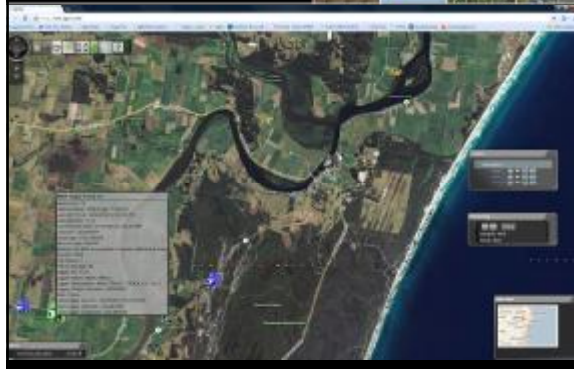
Transport

- Have to Balance:
 - supply of empty bins to harvesters
 - supply of full bins to mill
 - product quality
 - pad capacity, road conditions
 - queue at mill
 - mill breakdowns
 - fatigue breaks for drivers
- All done by FREDD

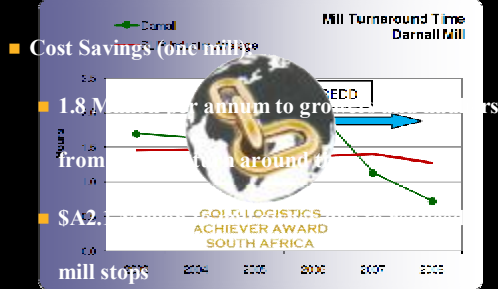
FREDD



ETA and Visualisation



Performance



Stock Supply Monitor

Conclusion

- Agricultural supply chains are dynamic
- Large savings in costs by better planning, better communications, better visualisation and real time supply chain management
- Savings translates (in-part) to reduced CO₂ emissions

