

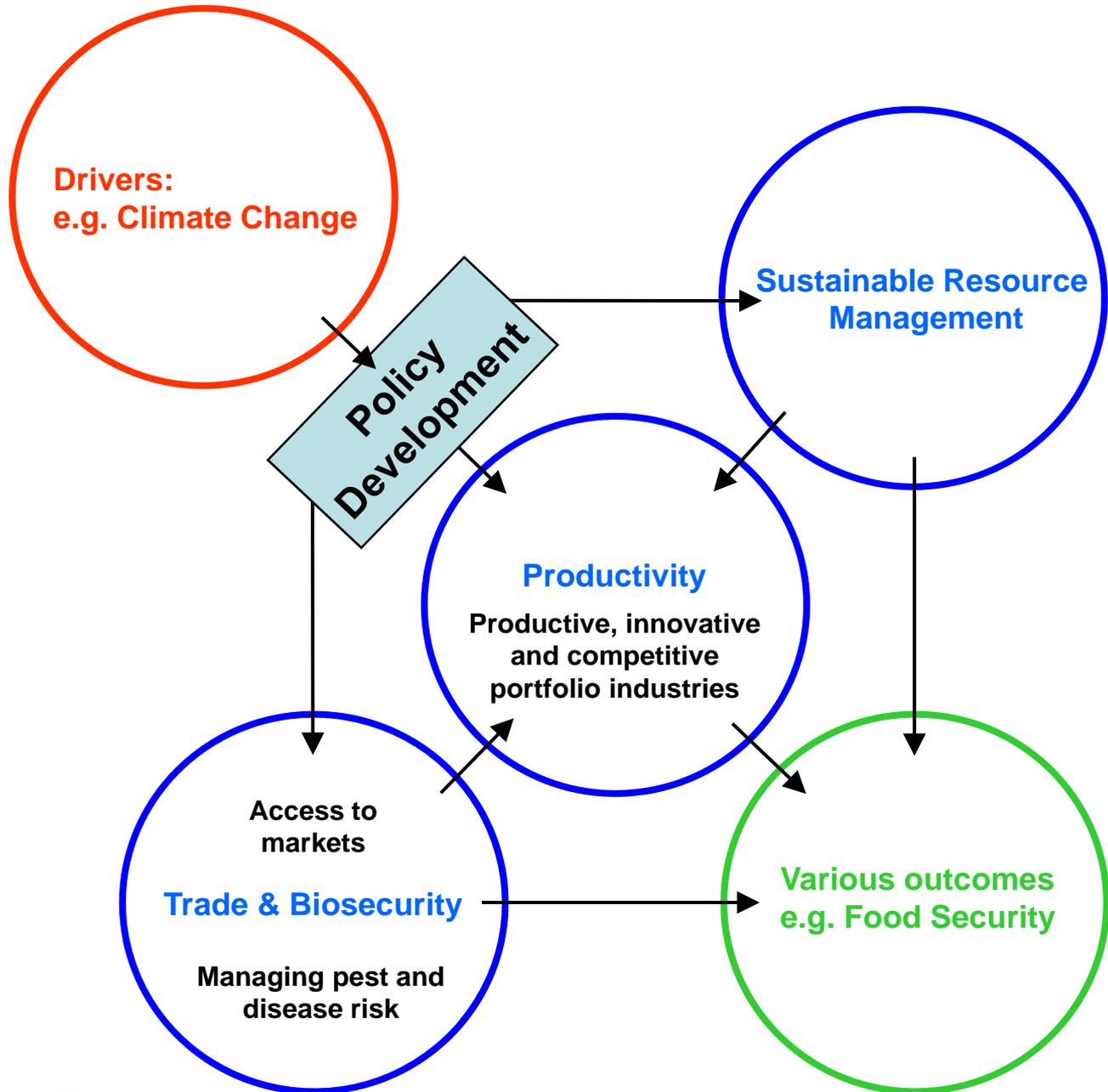
*Climate Change and the Agriculture Sector:
The Role of BRS in Supporting
Evidence-Based Policy*

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Bureau of Rural Sciences

National Forum: Understanding Rural Landholder Responses to Climate Change
17-18 November 2009 Albury-Wodonga

At the Science-Policy Interface

“If politics is the art of the possible, research is surely the art of the soluble.” (Medawar 1964)



Drivers:
e.g. Climate Change

Sustainable Resource Management

Policy Development

Productivity

Productive, innovative and competitive portfolio industries

Access to markets

Trade & Biosecurity

Managing pest and disease risk

Various outcomes
e.g. Food Security

Bureau of Rural Sciences (BRS)

- BRS: science-based support for DAFF policy
- ABARE: economics-based support for DAFF policy
- Policy areas
 - Climate Change Division
 - Agricultural Policy Division

BRS Scope

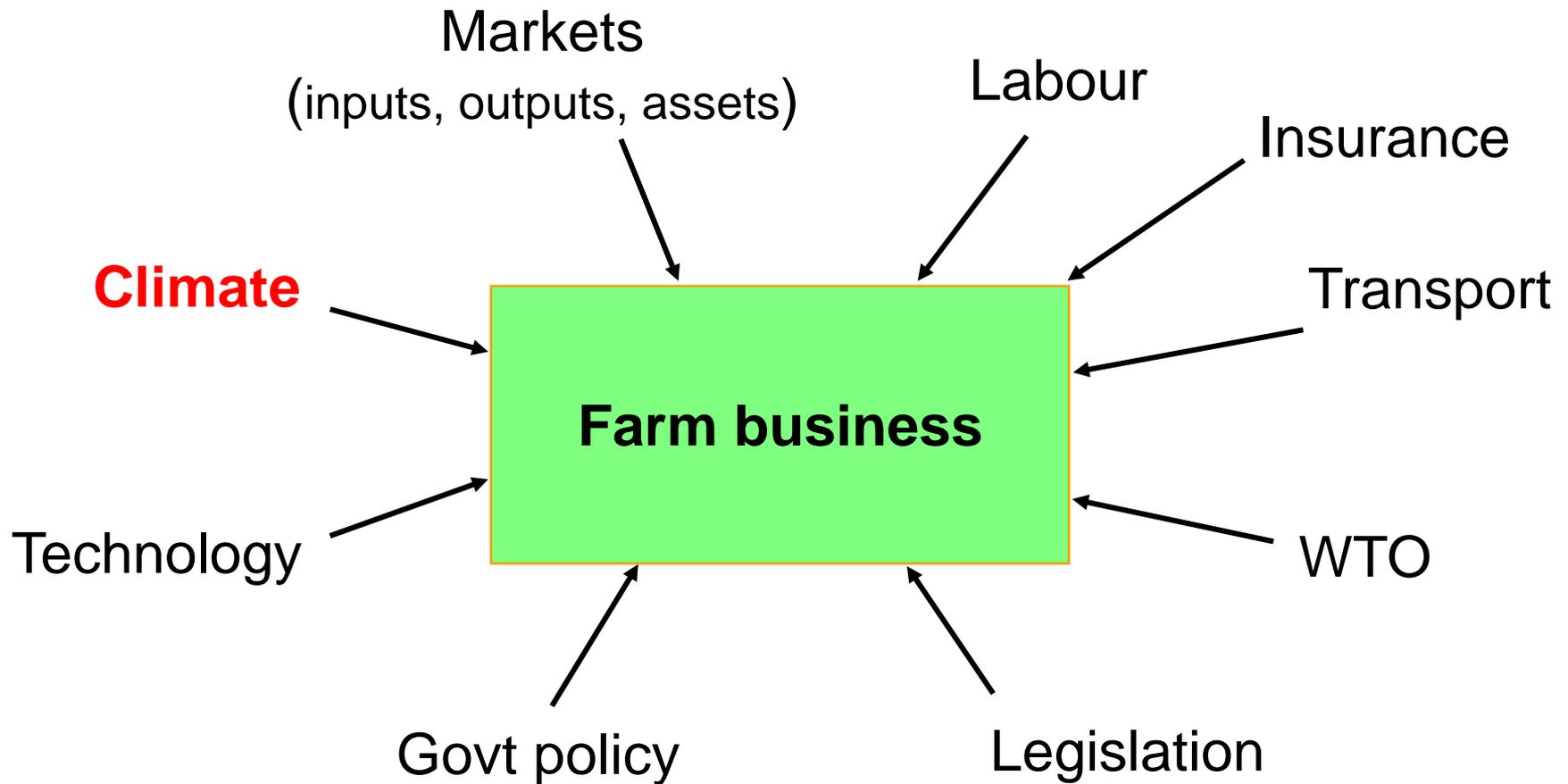
- Fish Status Report
- State of the Forests Report
- Coordinated Landuse Mapping
- Social Atlas
- Feral Animal Information Portal
- Salinity Mapping
- Climate Change Advice

Risk Management Framework

Establish criteria	Climate change
Identify the risk	Publication of GCM outputs by the IPCC
Analyse the risk	Climate change impacts on Australia
Evaluate the risk	Options, benefits and costs
Treat the risk	Implement new policy (e.g. drought policy review)

After AS/NZS 4360: 2004

On-Farm Risk Management



Examples of Policy Support

- Communicating climate change with agricultural industries
- Soil carbon management and carbon trading

Communicating Climate Change with Agricultural Industries

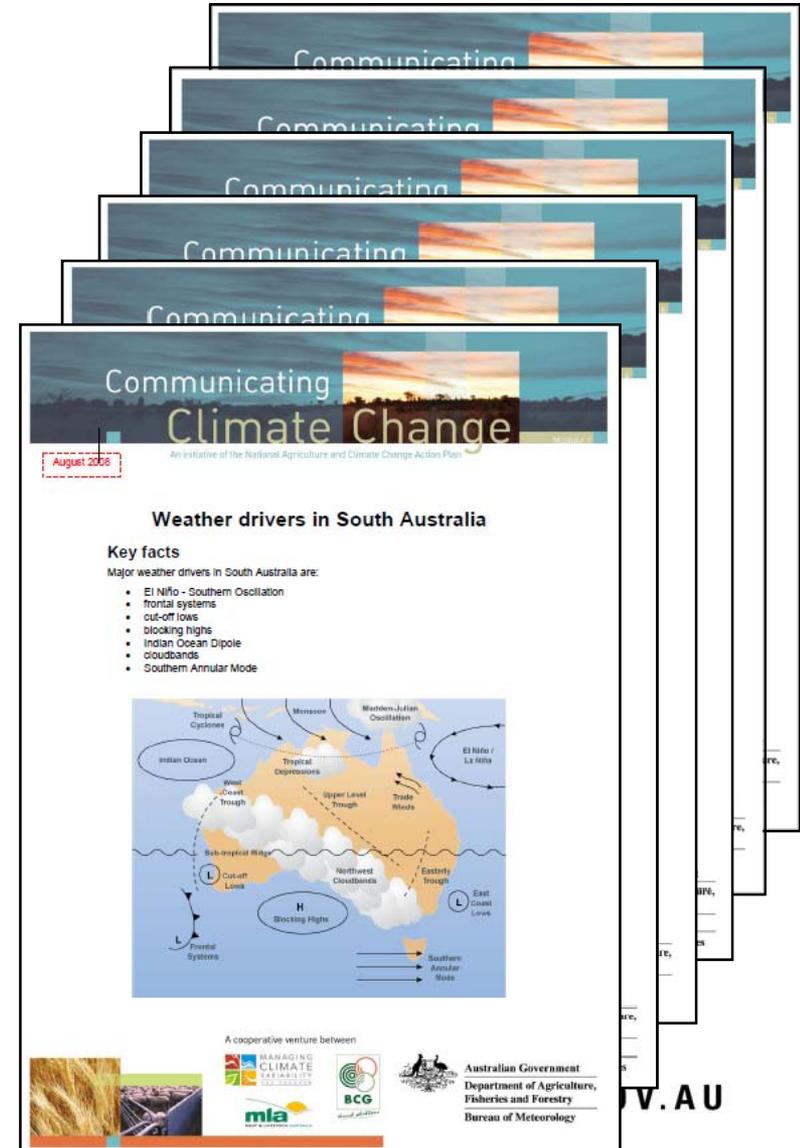
- Objectives
 - improve local knowledge of climate change and climate variability
 - develop local communication networks
- Project partners
 - BRS, BOM, MLA, MCVP, BCG, Econnect Communication
- Policy outcome
 - assisting to target future programs

Key Deliverables

- Information to support local industries
- Masters of Climate Workshops
- Farmers Forums

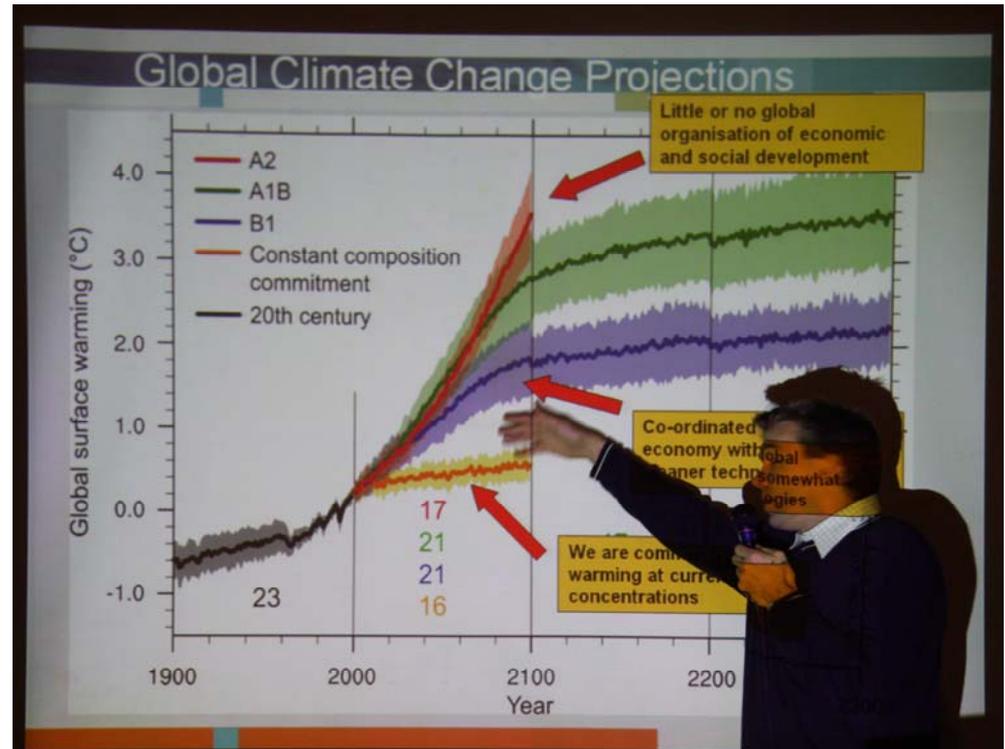
Information

- 30 factsheets prepared
- Tailored to local industries
- Provided at workshops



Masters of Climate Workshops

- Skilling exercise for masters
- Driven by scientists
- 2-day events



Farmer Forums

- Learning exercise for farmers
- Driven by masters
- 1-day events



What Worked?

- Local approach
 - regional information needs and local champions
- Decision-making frameworks
 - long-term strategic planning v. short-term tactical decisions
- Feedback
 - survey forum participants to identify future information and communication needs
 - independent evaluation by external consultants

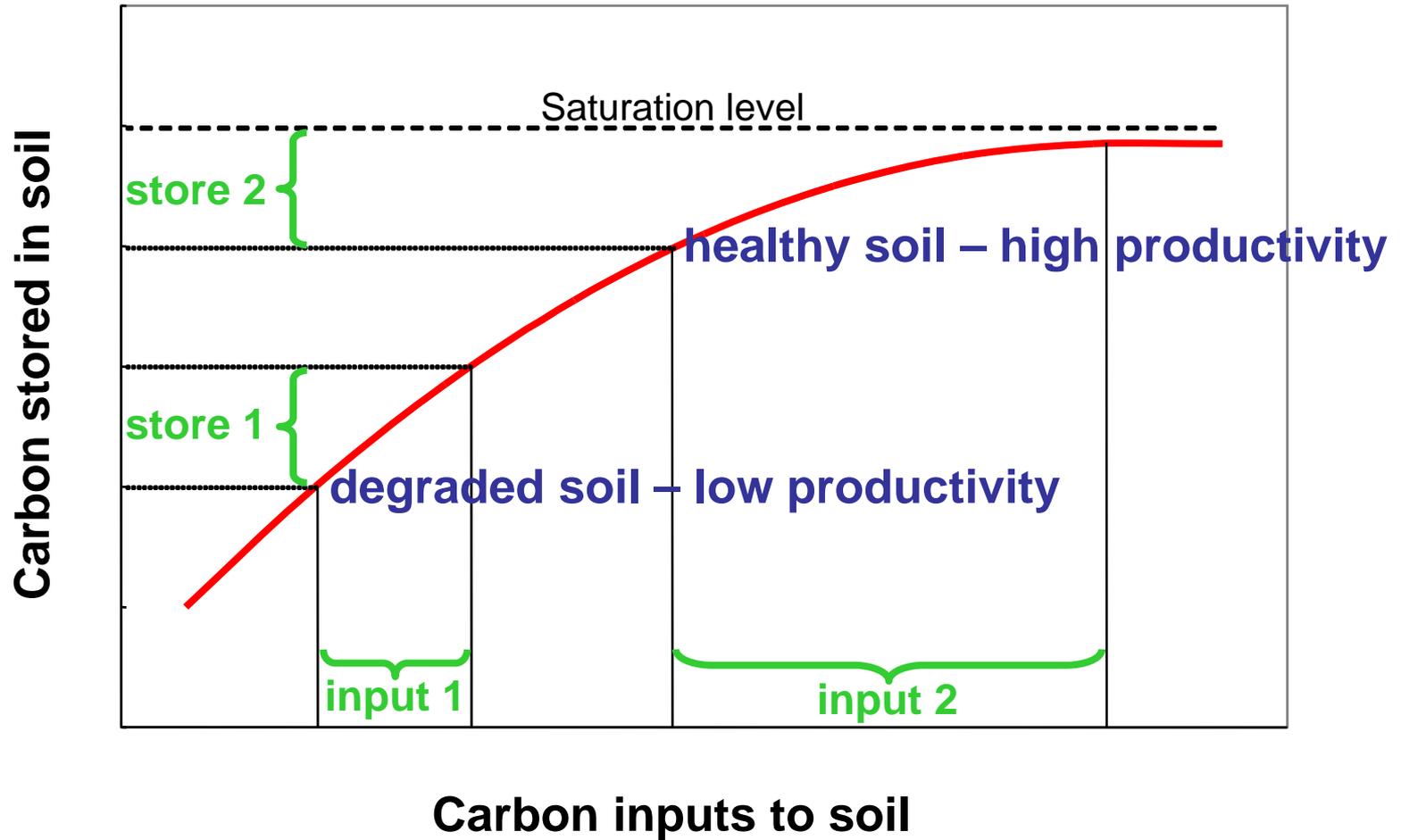
Soil Carbon Management and Carbon Trading

- Objective
 - inform stakeholders about biosequestration of carbon in soil
- Information delivery
 - Science for Decision Makers report, technical report, ABARE Regional Outlook conferences
- Policy Objective
 - inform the policy debate

Key Messages

- Soil carbon levels can be enhanced by
 - changes in land management practices
 - changes in land use
 - addition of external carbon sources
- Storage of soil carbon is all about trade-offs
 - cost / benefit analysis at individual farm level

What Worked?



Climate Change Research Strategies for Primary Industries

- Understanding of future climates
- Access to information
- Preparing industries – adaptation
- Facilitating change
- Linking decision-makers

Summary

- Provide non-biased interpretation of evidence
- Engage with rural landholders
- Provide solutions to “wicked” problems (risk management approach)
- Develop complementary mitigation and adaptation strategies (avoid perverse outcomes)

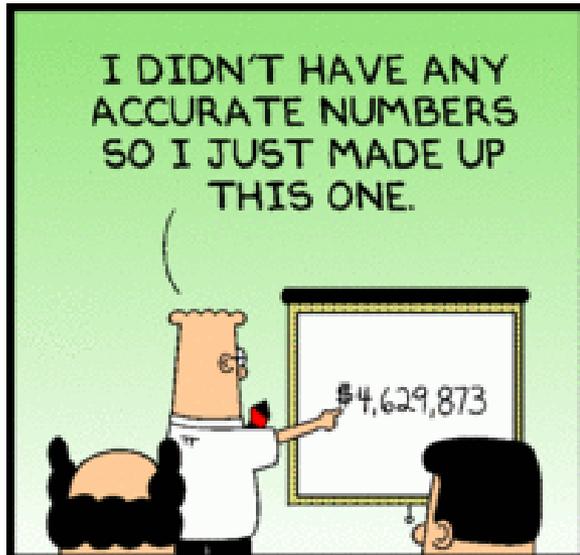
The Big Question for the BRS

- How will climate change impact on agriculture?
 - adaptation and mitigation
 - productivity
 - food security
 - biosecurity
 - natural resource management
- Answer(s) will support evidence-based policy

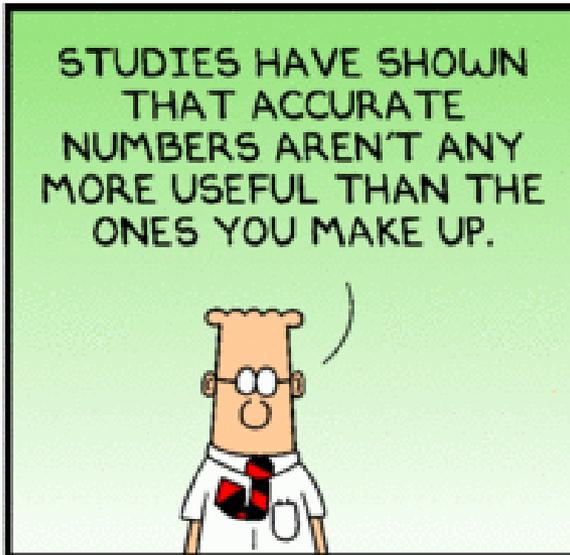
With Evidence...

“Errors using inadequate data are much less than those using no data at all.” (Babbage circa 1850)

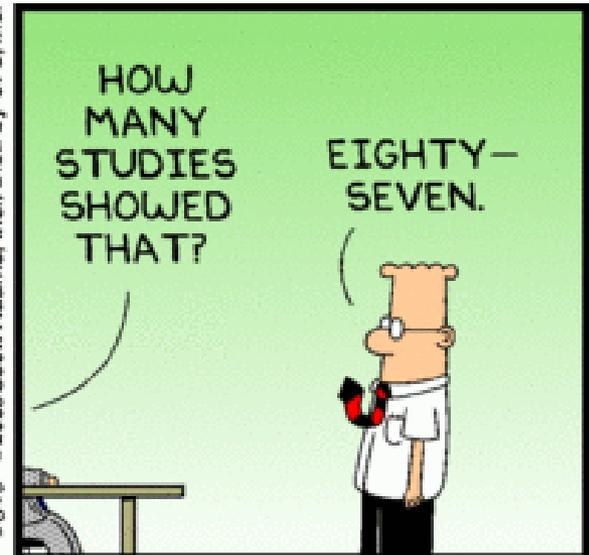
Without Evidence...



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