RRAT Committee: Inquiry into the identification of leading practices in ensuring evidence-based regulation of farm practices that impact water quality outcomes in the Great Barrier Reef

Written questions on notice, 28 August 2020

Senator Roberts

Dr Walter Starck

1. After your long and highly regarded career in science with diverse practical international experience, please tell us what caused the deterioration in science?

Starck responses in italics-

Several key contributors have been:

- A scrabble for grants leading to an abandonment of basic research in favour of the investigation of "problems" and "threats" which are more likely to receive funding approval. This has evolved into a virtual industry devoted to finding, promoting and investigating such threats. There is now a whole generation of researchers whose entire career has been involved in such activity and they are primed to see every fluctuation of nature as evidence of some human "impact".
- The abandonment of empirical evidence which can be difficult to get, messy, conflicting, and subject to independent examination. Computer modelling has come to be preferred. It can be done comfortably in office hours, presents an aura of highlevel sophistication and mathematical certainty, can be "adjusted" to present a desired result and is generally inaccessible to independent examination. However, without proper verification and validation, it in fact amounts to nothing more than an untested opinion of the modeller.
- There has also been an increasing academic rejection of the classical scientific ideals of objectivity and a search for truth founded on reason and evidence in favour of a much looser notion of a subjective "your truth" and "my truth" with any idea of an objective reality being regarded as only an illusion. Compounding the intellectual corruption has been the replacement of objective truth with an idea of "political correctness" which posits that some understandings are so obvious and irrefutable to all "right thinking" persons as to be unethical to question or even to critically examine. It also seems to be an unstated corollary of this idea that the capacity to determine such "correctness" should be assumed for those who proclaim it and it is unethical to not accept this as well.
- 2. What has been WWF's role in subverting and hijacking science and what is its modus operandi; how has it done it?
 - WWF and various other environmental NGOs have enjoyed considerable credibility and success by offering what they purport to be scientific evidence for their claims. However, their understanding of science tends to be limited with what they present being highly selective and sometimes even fabricated. Although they are encountering increasing opposition and even restrictions on their activities in some nations, they have found a happy hunting ground in Australia. Here, their activities have accorded well with an established academic and bureaucratic eco-salvation industry as well as with the popular beliefs of an affluent highly urbanised population naive to any cost, risk or validity in the claims of the NGOs.

- The current WWF campaign to further restrict commercial fishing on the GBR is a good example. The reef is out there, over the horizon and underwater. Anything can be claimed with little risk of being shown to be untrue or even credibly questionable. The World Resource Institute in their most recent global survey of coral reefs has estimated that well managed reef fisheries can yield an annual harvest rate of 15,000 Kg/Km². This amounts to 150 Kg/Ha, which is similar to that of moderately good grazing land. The GBR fishery is restricted to a total catch which equates to about 9/Kg². A harvest rate of a bit less than 1% of the yield from a well-managed resource is unlikely to be having any significant harm; especially, when fishing has the least environmental impact of any means of food production and there is no known instance of the extinction of any marine species by fishing. It is also worth considering that with by far the largest per capita fishing area in the world Australis and the lowest harvest rate with three-quarters of seafood consumption being imported.
- 3. You have spoken and written previously about governance, food security, loss of jobs, corruption of science, the use of policy driven science instead of science driven policy. What are your concerns for our state of Queensland?
 - The most imminent and important threat we now face is a prolonged and serious global recession stemming from the virus pandemic. This appears increasingly likely to result in extensive business losses, unemployment, bankruptcies and a collapse in government revenue. With a high dependence on imports for most manufactured goods and on export of commodities in a collapsed market demand, the Australian economy is vulnerable.
 - To moderate the damage as much as possible is going to require harsh cuts in government spending and a severe pruning of restraints, costs and demands on productive activity wherever possible. If we cannot find the intelligence, fortitude and political will to do this ourselves, it will still be done to us by the unfolding consequences, but only more harshly.
- 4. What advice and suggestions can you make to guide us in restoring scientific integrity?
 - Two key things are needed. One is a return to the fundamental scientific preeminence of sound empirical evidence over any considerations of authority or consensus of opinion. The other is a sorely needed mechanism for the critical assessment of any scientific claims or evidence which are to be relied upon by government for decision making. And, this should not be just a stamp of acceptance. It should be a diligent examination of any conflicting evidence, explanation or uncertainty.

Walter Starck 11 September 2020