

Response to a question on notice from The Hon. Mick Veitch

NSW Parliamentary Inquiry 2016

The Hon. Mick Veitch asked me to take on notice his question, "Should we then spend more money on science and research?"

Most scientists would argue for more money for practically all forms of science and research, and indeed Australia does need to increase its expenditure on research, including in science. However, the current issue for research related to marine conservation and fisheries resource management in Australia is not primarily the amount of money spent, but rather the quality of the targeting of that spend and the direction of the management action associated with the outputs from research and science.

Provision of an appropriately comprehensive answer to this question necessitates that this answer be provided in the context of the other two primary questions that were raised by The Hon. Mick Veitch: (1) determination of the real economic value of fishing and (2) the impact of factors other than fishing on fish stocks, the marine environment generally and the subsequent supply of fish.

In commenting on the failure to assess the full economic value of fishing I lamented in my submission and presentation on the lack of determination of the full value of the health and lifestyle benefits of eating seafood, including the heritage value of being able to access adequate supplies of local or regional seafood specialities. Fish from a well-managed fishery, as almost all Australian fisheries are, is the ultimate sustainable and healthy source of food (all fish taken in Australia's capture fisheries are native Australian species and no land clearing or other irreversible environmental damage, use of pesticides, herbicides or hormones are involved in their capture). More than 100 terrestrial species have been driven to extinction in Australia with urban development and agriculture being prominent amongst the causes, and yet not a single marine species has been recorded as extinct, even though we have done much to pollute many out of their native habitats or even destroy at least parts of those habitats. Not a single marine species has been confirmed to have been fished to extinction anywhere in the world; this is a telling statistic, for even if not absolutely correct, it demonstrates that even in those parts of the world's oceans where overfishing continues unabated unlike terrestrial environments the underlying species have survived. In countries like Australia with sovereignty over all its waters, and the economic means and scientific ability to manage its fisheries effectively, overfishing is simply not a major threat to marine systems. The economic evaluation of fishing must be underpinned by the assumption that well-managed fishing is not a significant threat to either fisheries resources or the marine environment generally but it is of great benefit for current and future generations, particularly as we continue to demonstrate an inability to manage the many other impacts of burgeoning human population growth, including the production of food from terrestrial systems.

Population growth and the associated 'development' continue to escalate the negative impacts on coastal and marine habitats. Yet in these marine areas fishing remains the only one of these impacts that has been proven to be able to be efficiently managed and effectively eliminated as an ongoing threat. There are many other major ongoing and worsening threats to marine environments

and the resources they support, such as climate change, ocean acidification, coastal 'development', urban and agricultural runoff, introduced or translocated pests and pathogens and many dangerous forms of pollution, most of which the average Australian is not even aware, such as nanno-particles, pharmaceuticals, polycyclic aromatic hydrocarbons and endocrine disruptors. Unlike overfishing, the impact of none of these threats has yet been reversed throughout Australia. Most are not even the subject of concerted research and targeted management. In spite of the tremendous threat from many of these factors, and of their collective impacts, the Australian public continues to be told, even by many 'scientists', that overfishing is one of the greatest threats to marine systems. Australians are constantly reminded by numerous 'scientists', and the many NGOs that prosper from negative commentary on the impacts of fishing, that Australians must be most cautious about eating fish as only a few of the species offered to consumers are actually sustainable. This is a bizarre comment in the absence of serious overfishing! Unfortunately it does little more than confirm how seriously misdirected are the expressed concerns about marine sustainability. This misdirection of research, science and management continues to distract public attention from addressing the real threats to marine systems.

The real need for more and better directed science and research is on holistic risk analysis and strategic alignment of management policies and actions with addressing the properly identified threats to terrestrial and marine environments and to the future nutrition, health and social well-being of Australians.