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Doctors for the Environment Australia
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Standing Committee on Procedure Inquiry into the effectiveness of the House Committees

Submission from Doctors for the Environment Australia

Summary

This submission analyses the increasing complexity of information that has to be absorbed and assessed by elected representatives in order to make appropriate decisions. House Committees are sometimes a forum for providing important factual updates to Members and Senators and the expansion of this role will be explored.

This submission therefore relates to terms of reference 2 and 4

Introduction

Elected representatives have an exacting task of assimilating and sifting an increasing volume of information on a wide range of subjects if they are to make effective decisions. These decisions have to be made in a World with decreasing reserves of natural resources and in a world of burgeoning population and of continuing insecurity.

It is a strength of Parliament that the elected representatives come from many walks of life and bring different skills from their varied education and employment. Nevertheless some issues are so complex that a realistic approach requires significant background understanding if representatives are to use their vote in an informed way. In many situations departmental research and resources are not available to assist and even in the case of Ministers, information may be selected or inadequate.

My interest in this issue relates firstly to my experience presenting material on health related matters (I am a practising physician) to Parliamentary Committees and to individual Members and Senators over many years and secondly to my published books and other writings on the functioning of democracy.

Complex systems

An illustrative example is the "Gordian knot" – when each attempt to undo the knot by "loosening" one strand becomes impossible because other strands tighten. To choose one example of a Gordian knot, a complex system, the demands of humanity for say development, food or energy collide with a multitude of natural and artificial components which interact together to produce outcomes that are not predictable from the study of each component. A remedy for a problem is instituted, but the problem gets worse. In history we have destroyed complex systems because of a lack of understanding but have had the *lebensraum* to move to other pastures. Today the interdependence of the World through the links of markets, finance, common environment and need, brings disastrous outcomes because of failures of understanding.

An example which profoundly affects Australia is the demise of the Murray Darling River. There are countless examples of similar river collapses in many regions of the world, collapses which commenced over the last few decades before the grip of climate change began. Concerted action is often difficult when a river flows through several countries. However even in the case of rivers journeying through one country for example in the USA or Australia, there has been a paralysis of effective action. Effective decisions on a river system require a basic knowledge of many disciplines and how the components interact. Scientific evidence of demise has been available for 30 years, yet decision makers have not understood or disregarded it. Thousands of hours of talking by commissions, committees, and State and Federal governments have not produced effective outcomes and the need to protect all rights, perceived or real, have added to the insolubility.

The organisation for which I work on a voluntary basis, Doctors for the Environment Australia www.dea.org.au has taken a particular interest in this failure for it has conferred stress and ill-health on countless communities with depression, social and family disruption and suicide. To understand the gravity of this failure, please would the committee listen to the statement made by an affected farmer Kathryn Rothe from Murray Bridge SA. It is an indictment of governments over 30 years. This statement tells us of the two essentials missing from this debacle, integrated science and personal wisdom.

Examples of complex systems

Science, technology and economics form the basis of the functioning of modern society and it is relevant to examine some of the complex challenges.

1. Economic Theory

Examination of the discipline of economics reveals an amorphous collection of beliefs sometimes amounting to dogma. Facts are not testable or reproducible and at best economic theory appears as a collection of recipes that work under some circumstances and are guided by an invisible hand similar to that of the increasingly discredited hand of the market. Scientists are often in a state of wonderment listening to parliamentary debate on economic management which seems like a mediaeval debate on how many angels can dance on the head of a pin.

It needs to be recognised that modern economics, as understood and practiced by governments and their advisors, is the product of several decades of teaching closed to the forms of revision and reformation undertaken in scientific disciplines. As a result there is a strong case for regarding present day economic practice as incompatible with sustainability for it uses false accounting and unsustainable growth models. It should be a source of concern to all legislators that they make decisions using neoclassical economics, called "mainstream economics" by its proponents (a triumph of ideology over science, as observed by Joseph Stiglitz) when the views of a sizable minority of economists are never heard. This has never been a cultural war for the views of one side are never considered.

In making decisions how many legislators have considered the theories of Post- Autistic Economics? These are relevant to a proper consideration of environmental and population health issues. These offer alternatives to the present system which Alan Greenspan recently tells us so unstable that we can expect a crisis every 15 years! Indeed history tells us this. A Parliamentary Committee might well analyse why we tolerate a system which can condemn thousands to the miseries of unemployment in Western nations and many more to hunger, malnutrition and death in the developing world.

Ecological science

Eco- has become a buzz word used frequently to give comfort to the consumer. To many, ecology remains the domain of green activists and biologists. However the understanding of ecological systems is arguably the most important understanding that humanity could have for it underpins human existence on this planet. These systems manage food, water and natural resource production, the life support systems upon which we depend.

Science works to study each individual component in a system. As a theoretical, let us suppose that a particular insect is necessary for pollination of a crop and this insect is rapidly becoming an endangered species. We can study the insect, its predators and its food and perhaps put in place breeding systems for its preservation. But the heart of the problem is that the insect lives as part of an ecological community of perhaps thousands of species and the behaviour of the whole system is not equal to the sum of the parts—we need to study the internal dynamics of the entire system. The ecological system is a complex system and complex systems maintain balance on the edge of chaos.

Mismanagement of such systems is resulting in the disasters of land and soil loss, neutrification of water sources, demise of rivers and many more human induced disasters. Decision making requires considerable knowledge and precaution.

Climate change science

To those scientists invited to have input into the IPCC reports as economists, biologists, medical doctors, because climate change will impact every aspect of our lives, it is common experience that 3 months of hard work is needed to get an overall view of the scientific papers that form the basis of the IPCC report. The reports outline a probability of 90 per cent for some serious impacts far greater than governance acts upon in most other decisions. The absence of decisions commensurate with the seriousness of the problem testifies to an absence of understanding of science and complex systems. We find that many elected representatives expound a few facts apparently contradictory to the vast bulk of scientific evidence without recognising that science always has a few pieces of the jigsaw puzzle that don't fit. Even worse the discordant facts may be obtained from the contributions of journalists who have not taken time to read the evidence. Scepticism is inherent to science but superficiality is not an adequate response.

The science of climate change is complex and its implications extremely serious. It threatens the health and wellbeing of millions. If this was a new individual disease, every doctor would have to study its cause, symptoms and cure. The doctor in the case of the impacts of climate change is the legislator.

Communications systems

Australia is involved in debate and decisions on the form and distribution of communication (broadband) systems. Decisions need an understanding of the science and technology and also the recognition that the issue has similarities to an ecological system, it is complex and non-linear. Yet the debate we hear as medical scientists has taken the format of a political debate one without the components and their interaction being considered.

The role of Parliamentary Committees

It is apparent that there is a widening gap between the need to understand the complex knowledge base and the ability of governments in Western democracies to make correct decisions. Parliament as an institution is revered. Yet all institutions survive by ongoing reform to encompass changing needs and this submission canvasses reform which in one small way could lead to different and more successful governance.

To explore how reform might be instituted, let us look how another profession undertakes ongoing education. In the lifetime of a medical doctor there are a vast number of complex advances. Because human lives and wellbeing are at stake, society rightly demands on-going lifelong education. The ethos is instilled into the student and the intern and is continued by the practicing doctor in a series of programs that have become a mixture of voluntary and statutory education for continued practice. Doctors wish to deliver to their patients appropriate often the latest effective diagnostic and treatment skills and these needs are widely accepted. Clearly the elected representative is in the same position in relation to the needs, health and wellbeing of the people of Australia.

I am supporting the development of a scheme of on-going factual briefing based on the Committee structure. This should be briefing with expert witnesses, not policy recommendation, for the principle should be to provide the facts for the elected representative for them to make the decision. As with programs for on-going medical education, the public would be reassured by points for attendance record.

With the help of colleagues I would be happy to provide a detailed paper based on educational experience if the Committee so wishes.

David Shearman
Hon Secretary
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