

The Precautionary Principle

Precaution and the Biosafety Protocol

1. The Precautionary Principle

- The precautionary principle does not have a single definition. However, its essence is that: Lack of scientific certainty shall not be a justification for failing to act if there is the prospect of serious or irreversible environmental damage.
- In simple terms, the principle requires that if the risks to the environment are serious, and understanding of those risks is inadequate, then steps should immediately be taken to prevent harm. This may involve simply tightening controls on an activity or its complete prohibition.
- The principle first featured in an international legal agreement in 1987 and has since been incorporated into a wide range of environmental treaties.
- It was devised as a response to analysis of the long-run effects of certain substances and organisms that had demonstrated alarming adverse effects which were unforeseen when first approved.¹
- A good example is the damage to the ozone layer resulting from CFC emissions. By the time scientific consensus was reached on the causal relationship, the ozone hole was already a reality. If the precautionary principle had been implemented at an early stage, CFCs could have been phased out much earlier and there would have been less damage to the ozone layer.
- The precautionary principle was included in the 1992 Rio Declaration on Environment and Development (the Rio Declaration). This is the document that followed the Earth Summit and New Zealand committed to the Rio Declaration. Principle 15 states:

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If the risks to the environment are serious, and understanding of those risks is inadequate, then steps should immediately be taken to prevent harm

“Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

2. The Cartagena Protocol

- A Convention on Biological Diversity (the CBD) was also signed at Rio de Janeiro in 1992. It addresses concerns about reduction of biodiversity through the import of GMOs to a nation's environment.²

¹ See: *Key Lessons from the Long History of Science and Technology: Knowns and Unknowns, Breakthroughs and Cautions*, Parliamentary Commissioner for the Environment, March 2001, and *Our Stolen Future*, Theo Colborn, Dianne Dumanoski, and John Peterson Myers, Penguin Books, 1996.

- Cartagena is a protocol under the Convention on Biological Diversity. It regulates the transfer between countries of living modified organism (LMOs)³ resulting from genetic modification. (LMOs are a “living” subgroup of genetically modified organisms (GMOs).)
- The Cartagena Protocol was concluded in January 2000 and will come into force when a sufficient number of countries have ratified. New Zealand is a signatory to the Protocol and has announced its intention to ratify it, though the timeframe has not been set.
- This Protocol is strongly founded on the precautionary principle. It obliges member nations to assess requests for the import of LMOs under a precautionary approach.⁴

² Article 8 (g) requires states to: “Establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risks to human health.

³ "Living modified organism" means any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology. (Cartagena Protocol (Article 3g).

⁴ Article 11.8 states: “Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects ... shall not prevent that Party from taking a decision ... in order to avoid or minimize such potential adverse effects.”