

# *Sustainability and Paradigms*

- **Sustainability** - finding a way to meet our present needs without compromising the ability of future generations to meet their needs; the wise use of our renewable resources today so that both the resources and the environment will be there for use by future generations.



- **Video: Sustainability**

<http://www.youtube.com/watch?v=dghuWWw7fnw&feature=related>

# *What would a sustainable society look like?*

- Satisfies the basic needs of its people (ex. Food, Water, Shelter)
- Doesn't deplete natural resources to a point where they cannot recover
- Environmentally conscious

# *Personally Sacrifice*

- *Would you personally sacrifice something to ensure sustainability? Examples?*
- Drive a hybrid car
- Vote for environmentally conscious politicians
- Take things to the recycling depot
- Use reusable bags

# Paradigm

- **Paradigm** - a belief held by society, based on general beliefs, such as morals, values and evidence.
- **Paradigm shift** - rare and significant changes in the way humans view the world. They are major changes which are very controversial when first proposed but which eventually become accepted as major advances in scientific knowledge and understanding. Ex: Earth is round, earth revolves around the sun, and the invention of the wheel

# Who is usually affected by a paradigm shift?

- Initially, only the world of science is affected (short term) but over the long term, ideas permeate into society and change everyone's belief

*Has the old world view that Earth is here solely for the benefits of human changed? How and why? Agree or disagree?*

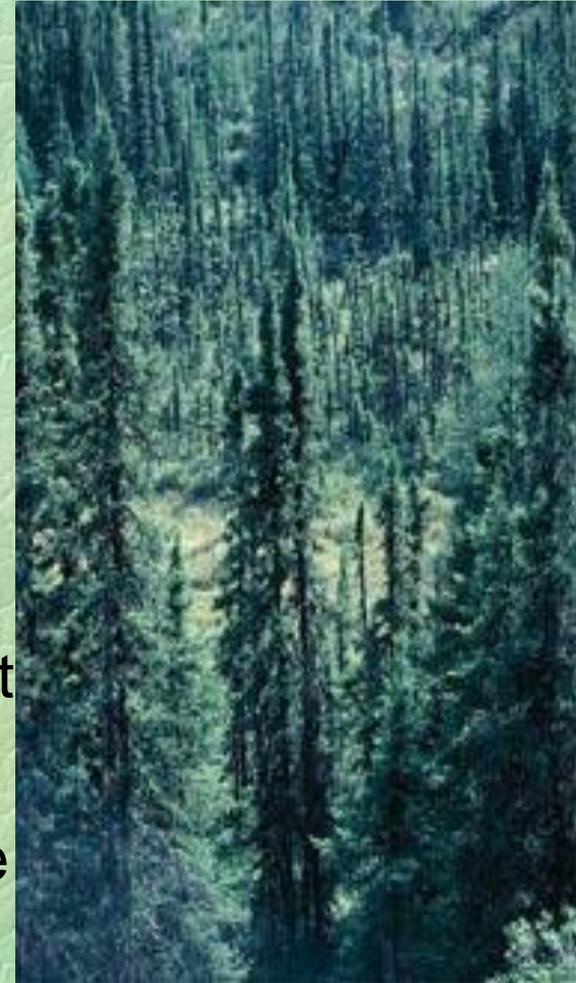
**Evidence Against:**

- Pollution of the world
- Ozone destruction
- Global warming
- Rapid deforestation
- **Evidence For:** Our paradigms about natural resources are changing and we are part of a paradigm shift

**Summary:** It has mostly, but some are still reluctant. A shift towards the idea of sustainability is happening; as a global community, nations are coming together to help save this planet.

# Example: Changes in our paradigms about our forests

- The early foresters used simple tools including an axe and a saw
- Today, technology has changed and the equipment is available which can cut 2 cords of wood in just a few minutes rather than a day (a cord is defined as a pile of wood 4 feet high x 4 feet wide x 8 feet long)
- With this change in technology, can our forests now be considered limitless? What will happen to our forests if we cut them down at a rate faster than they can grow back? What effect does clear-cutting have on the forest ecosystem?



# **Sustainable Yield**

# Example: Changes in our paradigms about our fishery

- The technology used by the inshore fisherman included the use of an open boat known as a dory and a single jigger
- This cycle was repeated until the boat was full
- Modern technology has changed to include the use of factory ships which make use of drift nets more than 5 km long, and electronic equipment designed to detect the location of the fish



Sustainability is in itself a paradigm and has been part of a paradigm shift. People today consider the use of resources differently that they did in the past.