

# Sustainable development

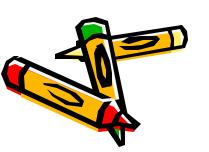
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M Ed Environmental Education Thesis



## What is sustainable development?

- ➤ Development that meets the needs of the present without compromising the ability of future generations to meet their own needs
- ➤ Take responsibility for their natural resources, to use them in a sustainable way, and to combine development with conserving the environment



## **Biodiversity**

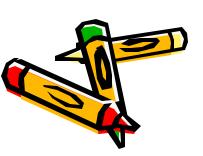
- "Bio" means life and "diversity" means variety or differences
- > Variety of life found on Earth and the overall health of the Earth
- Ecosystem/Environment diversity; Difference between species; Genetic diversity within species
- Living beyond the capabilities of the resources

## Food, security and agriculture

- > Access at all times to the food needed for a healthy and active life
- > 800 million hungry people
- ➤ Agricultural production cannot produce enough food to feed growing population
- ➤ Increase the amount of food produced per area of land new tools and technologies

### **Technology**

- ➤ Use of science and knowledge to create and share technology tools
- World population increase, amount of land is not
- Biotechnology may be a solution
- > Can increase food production, improve health, and protect the environment

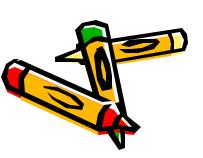


## Climate change

- ➤ Climate is controlled by balancing the Earth's and the atmosphere's energy levels
- > Greenhouse effect keep Earth warm
- Energy back into space changed unbalanced
- > Deforestation, burning fossil fuels
- ➤ Increase in Earth's temperature affect water, energy, air, food production

#### Water

- Source of life on Earth
- ➤ Less than 1% of water is available for life on Earth
- > Quality and quantity decreasing
- Unevenly distributed; polluted
- ➤ Average rainfall in SA 492 mm
- Conservation and solving water problems



## **Energy**

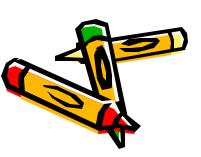
- Fossil fuel; electricity; nuclear; water; solar and wind power
- Use renewable and non-polluting
- > More efficient
- Slow global warming, reduce air pollution and acid rain
- Affect food production; health problems; water pollution

#### Health

- ➤ Not just the absence of disease but a state of complete physical, mental and social well-being and prevention of disease
- > Not all have access to basic healthcare
- Not have enough food, poor quality water, affect health
- Create sustainable health services, resources and care (priority)

#### **Pollution**

- ➤ Change of the natural environment, either by natural or artificial means, so that it becomes harmful to living things
- > Air and water major problems
- > Health being affected
- > Reduce, prevent, clean up



#### DO!

- Use resources such as water and food sparingly - precious resources
- ➤ Use biodegradable products that don't take long to break down
- Recycle glass, paper, and tins reduce production
- Learn more about diversity and how you can conserve it
- Save electricity by using energy efficient light bulbs and appliances

#### DON'T!!

- > Don't waste food
- Don't use oil, gas or coal if you have access to electricity - pollute the air
- > Don't waste water every drop counts
- > Don't litter
- Don't take chances with HIV/AIDS learn about it and avoid infection
- Don't ignore the need for sustainable development