











 Man has dominion over the earth, but that dominion cannot exceed the boundaries of God's laws, meaning that we are stewards of God's creation.



#### Responsible stewardship includes the following:

- 1. Responsible environmental management that includes consideration for the preservation of the ecosystem and provides for basic human needs.
- 2. Not engaging in reproductive technologies that intentionally destroy human life or create human life for experimentation.





# Climate change

- It is a long-term shift in global or regional climate patterns. Often climate change refers specifically to the rise in global temperatures from the mid-20th century to present.
- It describes a change in the average conditions such as temperature and rainfall — in a region over a long period of time.
- It is the long-term alteration of temperature and typical weather patterns in a place.
- It could refer to a particular location or the planet as a whole.

# **Mining**

 It is the extraction of valuable minerals or other geological materials from the earth, usually from an orebody, lode, vein, seam, reef or placer deposit.
 These deposits form a mineralized package that is of economic interest to the miner.





## **Deforestation**

 It refers to the decrease in forest areas across the world that are lost for other uses such as agricultural croplands, urbanization, or mining activities.



## The Causes of Deforestation

#### 1. Agriculture (~80%)

Why is deforestation happening? According to the FAO, agriculture causes around 80% of deforestation. And how does agriculture cause so much deforestation? According to the same report, 33% of agriculture-caused deforestation is a consequence of subsistence agriculture – such as local peasant agriculture in developing countries.

Commercial or industrial agriculture (field crops and livestock) cause around 40% of forest loss — in the search for space to grow food, fibers or biofuel (such as soybeans, palm oil, beef, rice, maize, cotton and sugar cane). It is also particularly interesting to note livestock is believed to be responsible for about 14% of global deforestation. The main reasons why have to do with the large areas require both to raise livestock but also to grow its (soy-based) food.

## The Causes of Deforestation

#### 2. New Constructions (~15%)

The construction of human infrastructures has also been driving deforestation. More specifically, 10% of deforestation can be attributed to new infrastructures that serve the current human lifestyle in four main ways: transportation, transformation and energy generation.

On one hand, roads, rails, ports or airports have been built to move all sorts of goods – from cereals and fruits to spices, minerals or fossil fuels – either directly to trade centers or to transformation sites. So while at first there were only fruit trees, roads soon arrived to allow transporting fruit to other regions. And while some goods were and are collected manually, others such as coal, oil, natural gas, biomass, but also meat, dairy or spirits, required the construction of large extraction, transportation and/or transformation infrastructures.

## The Causes of Deforestation

#### 3. Urbanization (~5%)

The populational shift that is leading people to move from rural areas to urban areas is also contributing to deforestation (5%, according to FAO). This urban growth – in which 68% of the world's population is expected to live in cities by 2050 – is leading to an exponential growth of housing and consumption sites. And as cities become larger so they can host more people, they challenge the natural boundaries surrounding them, often leading deforestation. This is one of the reasons why deforestation is happening.

## **Water Pollution**

 It is the pollution of bodies of water, such as lakes, rivers, seas, the oceans, as well as groundwater. It occurs when pollutants reach these bodies of water, without treatment. Waste from homes, factories and other buildings get into the water bodies and as a result water gets contaminated.





## **Proper Waste Management**

#### Waste

 It is any unnecessary material after the possessor has used the material or that the possessor cannot sell to others at cost. Whether a material is waste or not should be comprehensively judged considering the possessor intention, its property, etc., and cannot be objectively regarded as waste at the time when it is discharged.

-Ministry of the Environment

• It is defined as "garbage, bulky waste, cinders, sludge, excreta, waste oil, waste acid, waste alkali, animal corpses and other filth or useless things all of which are liquid or solid.

-Law Concerning Waste Disposal and Scavenging

## PROPER WASTE MANAGEMENT

It emphasizes the need for people to recycle their waste. Why is recycling important? Improper waste disposal and the increasing amount of trash/garbage produced are one of the major problems faced by people not only in our community but also in the whole world. Problems on improper waste disposal have caused other problems such as clogged drainage or canals, flooding and diseases. Hence, there is a need for people to find ways on how to address these problems because it is our responsibility to protect our environment. One of these ways is to apply the 3R – Reduce, Reuse and Recycle

# 3R: REDUCE, REUSE AND RECYCLE

#### REDUCE

lessening the amount of trash/garbage produced



# 3R: REDUCE, REUSE AND RECYCLE

- REUSE
- using materials repeatedly



# 3R: REDUCE, REUSE AND RECYCLE

- RECYCLE
- using materials to make new products





#### **Problems of Proper Waste Management**

#### Shortage of final disposal sites

As the amount of discharged waste increases, the final disposal sites (landfill sites) are insufficient, and securement of land is a big issue. It is said that the remaining capacity of final disposal sites (the number of remaining sustainable years) will last only about 10 years on a national average.

#### Illegal dumping

Despite disposal technologies improving, the disposal cost has been increasing. As a result, there is a considerable amount of illegal dumping of waste that has not been treated or disposed of according to law. It is said that there are over 1,000 illegal dumping cases a year. At illegal dumping sites, environmental pollution such as water contamination and soil pollution occurs.



#### WOODEENE KOENIG-BRICKER

# TEN COMMANDMENTS FOR THE ENVIRONMENT

POPE BENEDICT XVI Speaks Out for CREATION and JUSTICE

# I. USE, DON'T ABUSE

 The human being, created in God's image, is placed above all other earthly creatures, which must be used and cared for in a responsible way in cooperation with the divine plan of redemption.

## II. LITTLE LESS THAN A GOD

•Nature must not be reduced to a utilitarian object of manipulation, nor absolutized or placed above human dignity.

# III. ONE FOR ALL, ALL FOR ONE

responsibility Ecological involves the entire planet in a common duty to respect the environment as a collective good, for present and future generations.

## IV. IT'S NOT A BRAVE NEW WORLD

•In dealing with environmental problems, ethics and human dignity should come before technology.

## V. GAIA (MOTHER EARTH) ISN'T GOD

 Nature is not a sacred or divine reality, removed from human intervention. Thus, human intervention that modifies some characteristics of living things is not wrong, as long as it respects their place in their particular ecosystem.

## VI. WHAT PRICE PROGRESS?

 The politics of development must be coordinated with the politics of ecology, and every environmental cost in development projects must be weighed carefully.

## VII. FLOWING LIKE A RIVER

•Ending global poverty is related to the environmental question, remembering that the goods of the earth must be shared equitably.

## VIII. WE'RE ALL IN THE SAME BOAT

 The right to a safe and clean environment needs to be protected through international cooperation and accords.

# IX. DISCIPLINE IS NOT A FOUR-LETTER WORD

Environmental protection requires a change in lifestyles than reflect moderation and self control on a personal and social level. That means moving away the mindset from consumerism.

## X. IT'S ALL A GIFT

 Environmental issues call for a spiritual response, inspired by the belief that creation is a gift that God has placed into our responsible hands, so that we can use it with loving care. The human person's attitude toward nature should be one of gratitude and gratefulness to God who has created and supports it.







