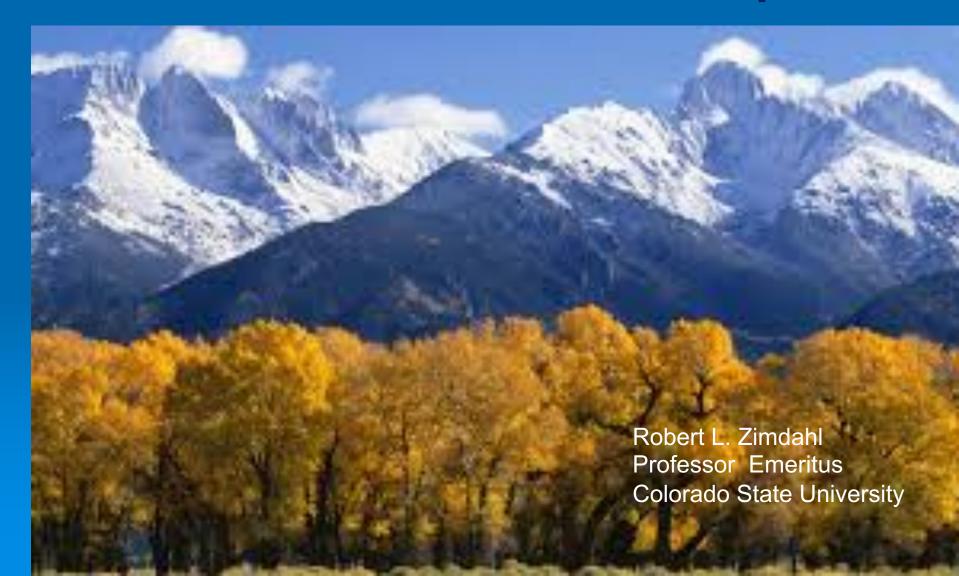
## Sustainable Agriculture and Environment – An Ethical Perspective



#### Philosophy

Attempts to achieve a wide perspective on life.

We study history and philosophy to try to find out what man is.

#### Philosophers study ethics

## They don't tell is what is right and wrong

They show us how to think about what is right and wrong

# Our Basic Nature Challenges Civilization every Day

Today The family has been weakened
Religion has been weakened
Our educational system is discouraged by
class and race war

Public opinion loses force through division, fear, apathy, and universal worship of wealth

Even sex seems to be in chaos

#### Achievements

Cell phone
Computer

Medical advances
Immunization
Travel

Abundant food

### The problems

Global climate change

**Pollution** 

Social inequality

**Environmental degradation** 

#### Agricultural problems

Production

Pesticide resistance

Loss of biodiversity

Invasive species

Biotech/GMOs

Sustainability

#### Progress and Growth

#### The good things of life

The future will be

Bigger, Better, Easier, Faster

We can't keep up

We humans, Earth's dominant species, are not just figures in the landscape we are shapers of the landscape.

We need to think carefully about what we are shaping. We need to think about what we do and undo.

# How do you know what to do in agriculture and in life?

How do you know what you choose to do is the right thing to do?

#### How do we decide what to do?

Norman Borlaug

Green Revolution

**Moral Challenges** 

Why? Cost

#### Quality of Science

Based on regular delivery of technological innovations

Which have increased food production and kept food cost low

BUT

**Externalities** 

What could (what has) go wrong?

#### Agriculture...



the largest and most important interaction between humans and the environment.

#### The Dominant Species

Greenland ice sheet



Amazon rain forest

Great barrier reef and Koalas





**Macaws** 



**Rhinos** 



Orangutan



Sustainability Land

> Re-thinking Water

> > Limits?

**Pesticides** 

80% used in agriculture – 40% are herbicides

Dangerous, overused, pollute

Herbicides dominate research

**Antibiotics** 

**Biodiversity** 

Losing 0.01 to 0.1%/ year

Biotechnology and GMOs

Technological progress

**Nature** 

#### Davidson - University of Florida

With publication of R. Carson's Silent Spring the agricultural community loudly and in unison said pesticides do not contaminate the environment. Now we admit they do. We said that nitrates from fertilizer could not reach groundwater in excess of 10 ppm. We now admit they do. We claimed that if pesticides were used in accordance with label directions, agricultural products would be free of pesticides. We now admit they are not.

#### Public illiteracy

The environment

Are these just fringe concerns?

If they are societal concerns

Agriculture has an ethical dilemma

### Is production a sufficient criterion?

Does it justify everything?

#### What is the problem?

Is it food production?





Distribution/infrastructure

Waste

Poverty



Risks

Listening and understanding

#### Ethics for agriculture

Agriculture – the essential human activity.

Must have a firm ethical foundation

It's not just about results

#### Responsibilities

Sustainability



Agricultural labor



Harm



**Diversity** 

**Farms** 

Nutrition

Agri-Business

Animals

GMOs

#### Ethical Questions

Research and teaching

A view of the future we expect, desire, or fear

What is the right thing to do?

#### What Can Universities Do

Few classes

Only 9 US university Colleges of Agriculture offer a class on the ethics of agriculture

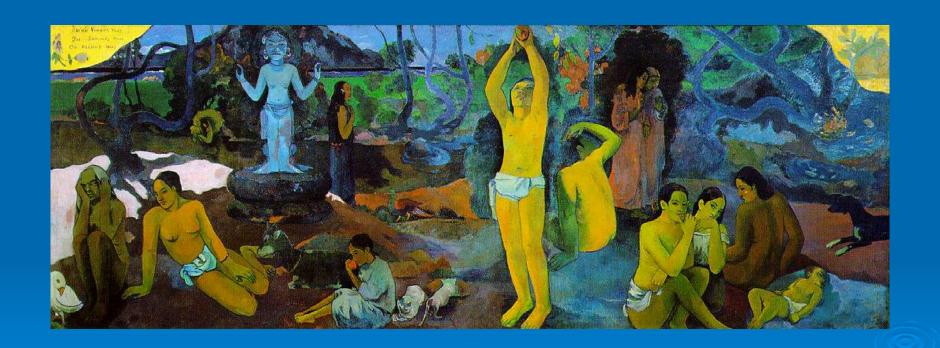
In 1999 there were 15

Why?

# How do you know what to do in agriculture and in life?

How do you know what you choose to do is the right thing to do?

### Paul Gauguin



#### Questions

D'où Venons Nous?

Que Sommes Nous?

Où Allons Nous?

Where do we come from?

What are we?

Where are we going?