

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 us what is right
and wrong

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

The background of the slide is a solid blue color. In the lower half, there are several faint, concentric circles that resemble ripples in water, scattered across the bottom of the page.

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


The background features several sets of concentric circles in a lighter blue shade, resembling ripples in water, scattered across the bottom half of the slide.

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?

The background of the slide features several faint, concentric circular ripples in a lighter shade of blue, resembling water droplets or raindrops, positioned in the lower right quadrant.

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?

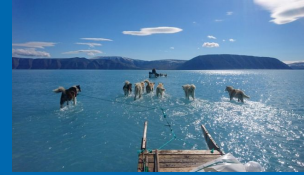
Agriculture. . .



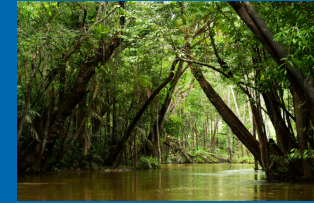
**the largest and most important
interaction between humans and
the environment.**

The Dominant Species

Greenland ice sheet



Amazon rain forest



Great barrier reef and Koalas



Macaws



Rhinos



Orangutan



Concerns About Agriculture

Sustainability

Land

Re-thinking

Water

Limits?



Concerns About Agriculture

Pesticides

80% used in agriculture – 40%
are herbicides

Dangerous, overused, pollute

Herbicides dominate research

Concerns About Agriculture

Antibiotics

Biodiversity

Losing 0.01 to 0.1%/ year

Biotechnology and GMOs

Technological progress

Nature

Concerns About Agriculture

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

Concerns About Agriculture

The environment

Are these just fringe concerns?

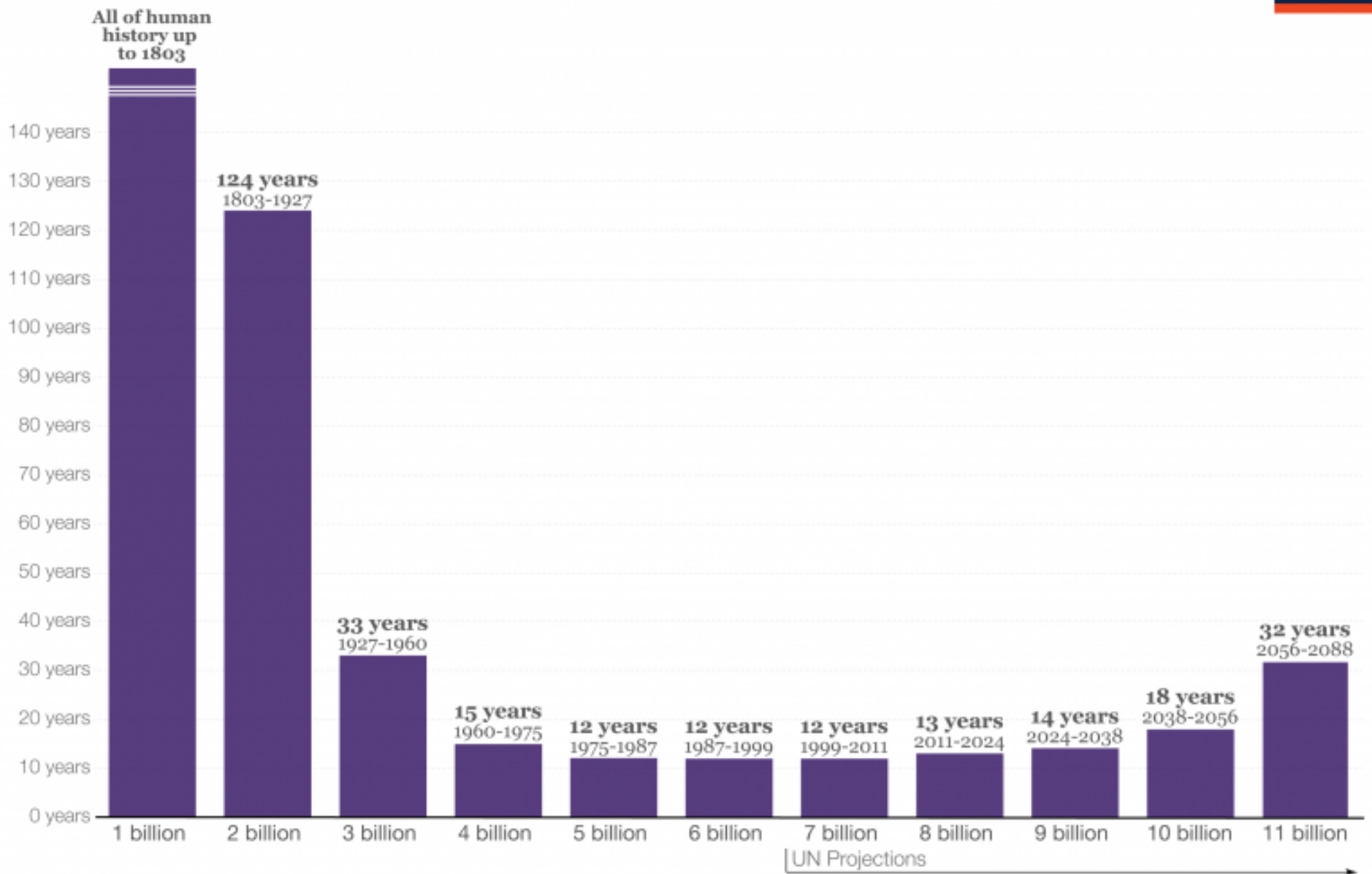
If they are societal
concerns

Agriculture has
an
ethical dilemma

Is production a
sufficient criterion?

Does it justify
everything?

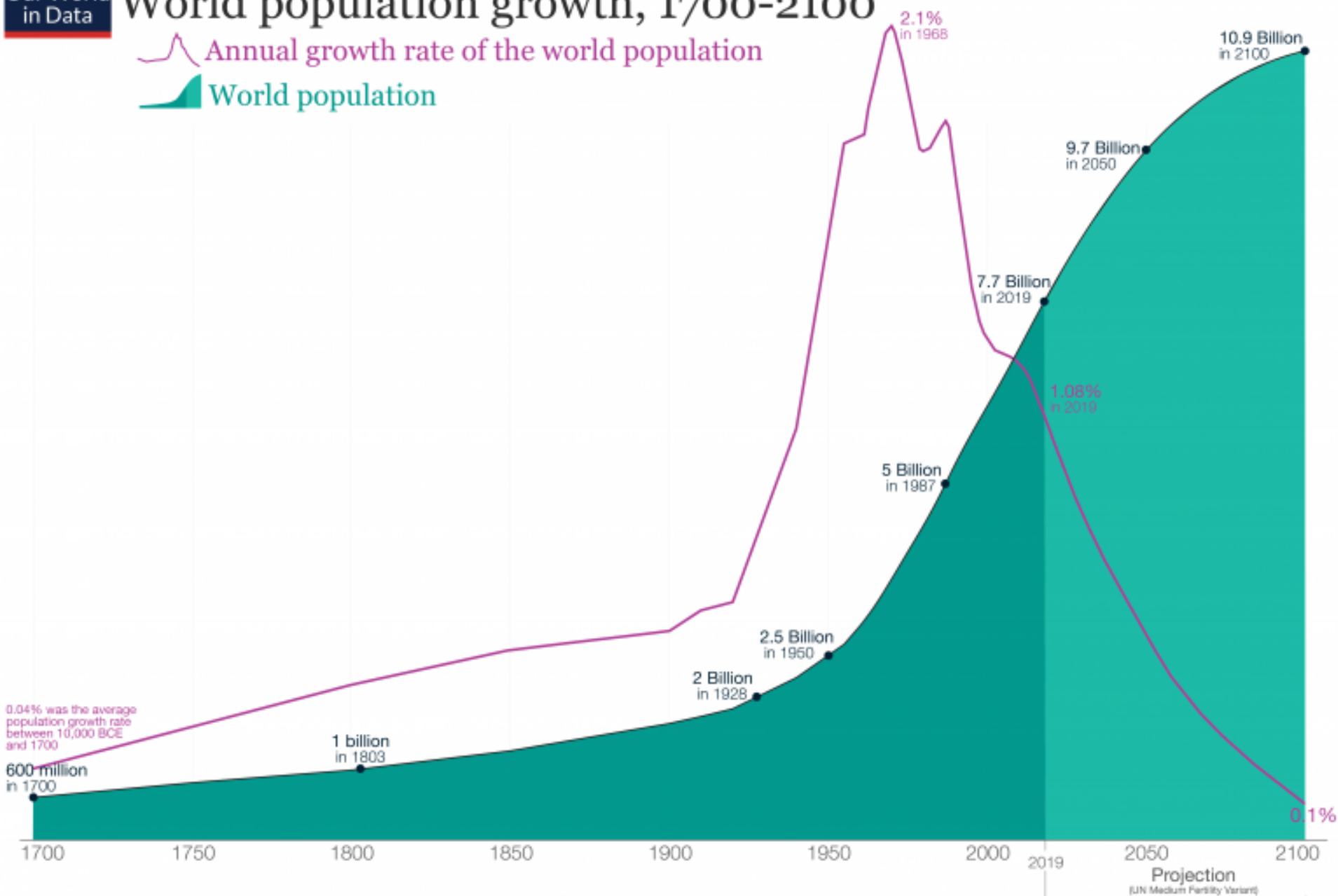
Time it took for the world population to increase by one billion



Data source: History Database of the Global Environment (HYDE); UN World Population Prospects (2015 Revision); UN Medium Projection (2015 Revision)
This is a visualization from [OurWorldinData.org](https://ourworldindata.org), where you find data and research on how the world is changing.
Licensed under [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) by the author Max Roser and Hannah Ritchie.

World population growth, 1700-2100

Annual growth rate of the world population
World population



0.04% was the average population growth rate between 10,000 BCE and 1700

600 million in 1700

1 billion in 1803

2 Billion in 1928

2.5 Billion in 1950

5 Billion in 1987

7.7 Billion in 2019

9.7 Billion in 2050

10.9 Billion in 2100

Projection (UN Medium Fertility Variant)

Growth Per Day

228,000

3,167

What is the problem?

Is it food production?

Of course it is!

But

Distribution/infrastructure

Waste

Poverty

Dialog

Risks

Listening and
understanding

First we listen.
Then we learn.
Then we help.
Only then can
we lead

Ethics for agriculture

Agriculture – the essential human activity.

Must have a firm ethical foundation

It's not just about results

Responsibilities

Sustainability

Pollution

Agricultural
labor

Water

Harm

Habitat

Diversity

Farms

Agri-
Business

Animals

GMOs

Nutrition

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?





Cripple Creek, Colo

