



Journey

2050TM

Land Use

LESSON 5

How much of the
Earth's surface is
ideal for
**GROWING
CROPS?**

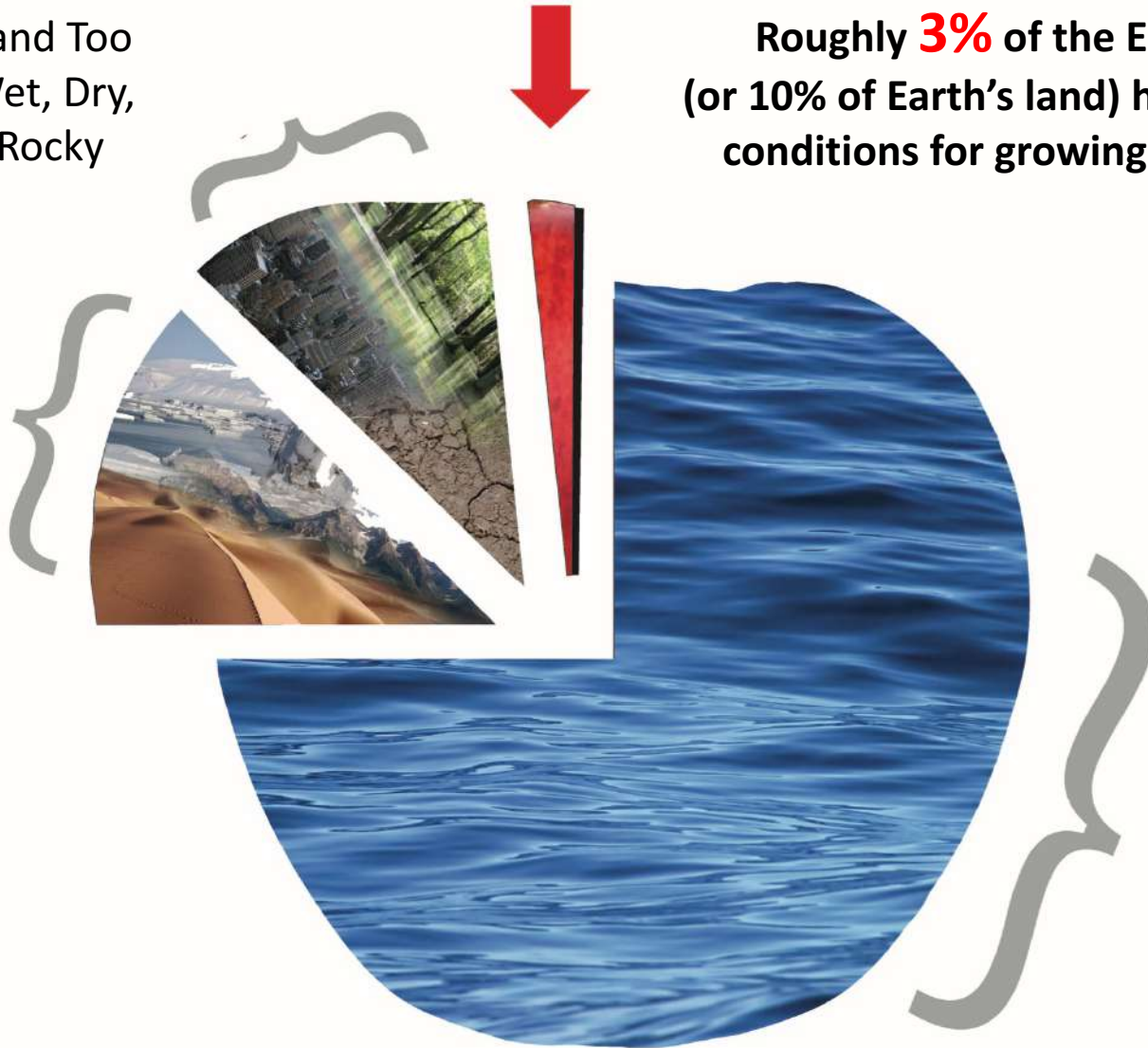


Journey
2050™

Cities and
Land Too
Wet, Dry,
Rocky

Roughly **3%** of the Earth
(or 10% of Earth's land) has ideal
conditions for growing crops

Mountains,
Arctic,
Antarctic,
Desert



Oceans,
Ice,
Lakes,
Rivers



Journey
2050™

Watch the Journey 2050 Land Use Video



As you watch, discover:

- Why is land a precious resource?
- How are best management practices applied to land use choices?



WHY IS LAND A PRECIOUS RESOURCE?



Journey
2050™

WHY IS LAND A PRECIOUS RESOURCE?

What is our land used for?



Business, Residential, and Industrial



Journey
2050™

WHY IS LAND A PRECIOUS RESOURCE?

Population Statistics by Country:

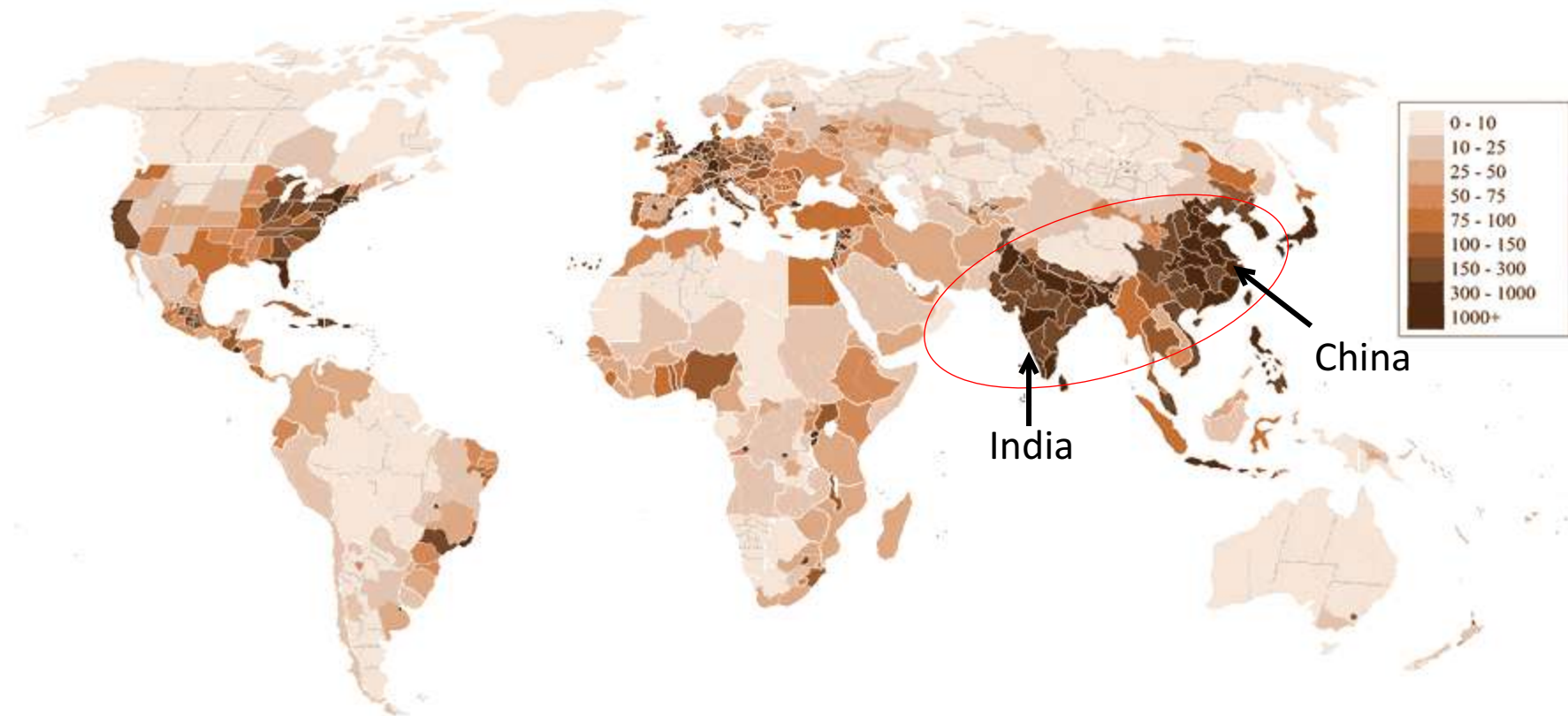
Worldometers



Journey
2050™

WHY IS LAND A PRECIOUS RESOURCE?

Population Statistics by Country:

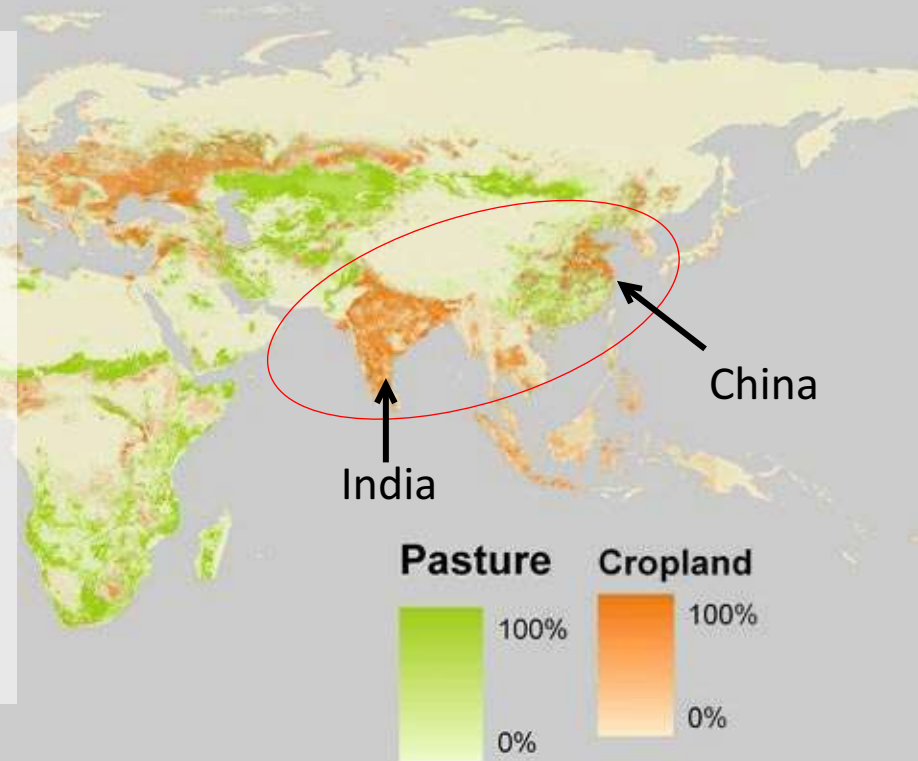


WHY IS LAND A PRECIOUS RESOURCE?

Agricultural Land:

3% of Earth (10% of the Earth's land) has ideal crop growing conditions (arable land = cropland).

With best management practices, innovation and technology we can use nearly **40%** of the total land to grow food or provide grazing for livestock.



HOW ARE BEST MANAGEMENT PRACTICES APPLIED TO LAND USE?



Journey
2050™

How do we **improve** our land-use choices so
we can **feed** a growing world and
still have a high **quality life**
and **environment**?

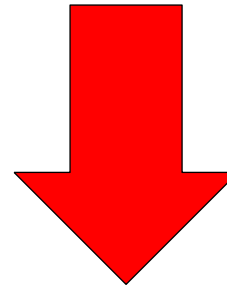


Journey
2050™

LAND USE GAME

LEVEL 5A

Play the game!



Level 1

Introduction



Level 2

Nutrients



Level 3

Water



Level 4

Economy



Level 5a

Land Use



Level 5b

World
(Optional)



Level 6

Careers



Level 7

Technology



Journey
2050™

FOLLOW-UP DISCUSSION



Journey
2050™

RE-CAP: HOW ARE *BEST MANAGEMENT PRACTICES* APPLIED TO LAND USE?

Improve natural habitats



Replace what you use and clean up the environment.



Plant native species and remove invasive species.



Don't just talk about stewardship, take action.

What other ideas do you have?



Journey
2050™

RE-CAP: HOW ARE *BEST MANAGEMENT PRACTICES* APPLIED TO LAND USE?

Agricultural Best Management Practices



Improve soil health to grow more on the same land.



Use technology to make more efficient use of inputs (e.g., fertilizer, water).



Sustainably use land already in production.

What other ideas do you have?



Journey
2050™

RE-CAP: HOW ARE *BEST MANAGEMENT PRACTICES* APPLIED TO LAND USE?

Manage Urban Growth



Retain urban wetlands and riparian areas.



Reduce food waste. Only buy what you need to eat.



Build businesses and homes up. Not out.

What other ideas do you have?



Journey
2050™

WRAP-UP

- Three percent of the Earth (ten percent of the Earth's land) is ideal for growing crops.
- Most of our urban areas were built on ideal crop land. Our ancestors settled where they could grow food and cities grew from there.
- The quality of the soil under our homes and businesses is the real challenge in the journey. The challenge also spreads to our natural areas. Protecting the Earth's biodiversity and natural resources is vital to our survival.
- Every land use decision we make has a consequence. Best management practices are essential in our journey to sustainably feed the world while balancing social, economic and environmental needs.





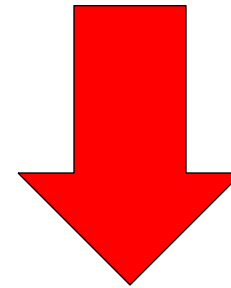
Journey
2050™

Questions?

PROGRAMS@NAITCO.ORG

ENRICHING ACTIVITIES

Play the game!



Level 1

Introduction



Level 2

Nutrients



Level 3

Water



Level 4

Economy



Level 5a

Land Use



Level 5b

World
(Optional)



Level 6

Careers



Level 7

Technology



Journey
2050™

ENRICHING ACTIVITIES

- Distribute the [Country Comparison Map](#) Find similarities and differences in climate, topography, culture, and food production across the globe.
- Watch – TedTalk by Allan Savory on desertification and cattle:
<https://youtu.be/vpTHi7O66pl>
- Students will understand the importance of taking action through service-learning using the WE Service Learning in Action: [Land Use](#) lesson plan



BROUGHT TO YOU IN COLLABORATION

