

FUTURES OF FOOD



INFINITE FUTURES
FORESIGHT RESEARCH AND TRAINING

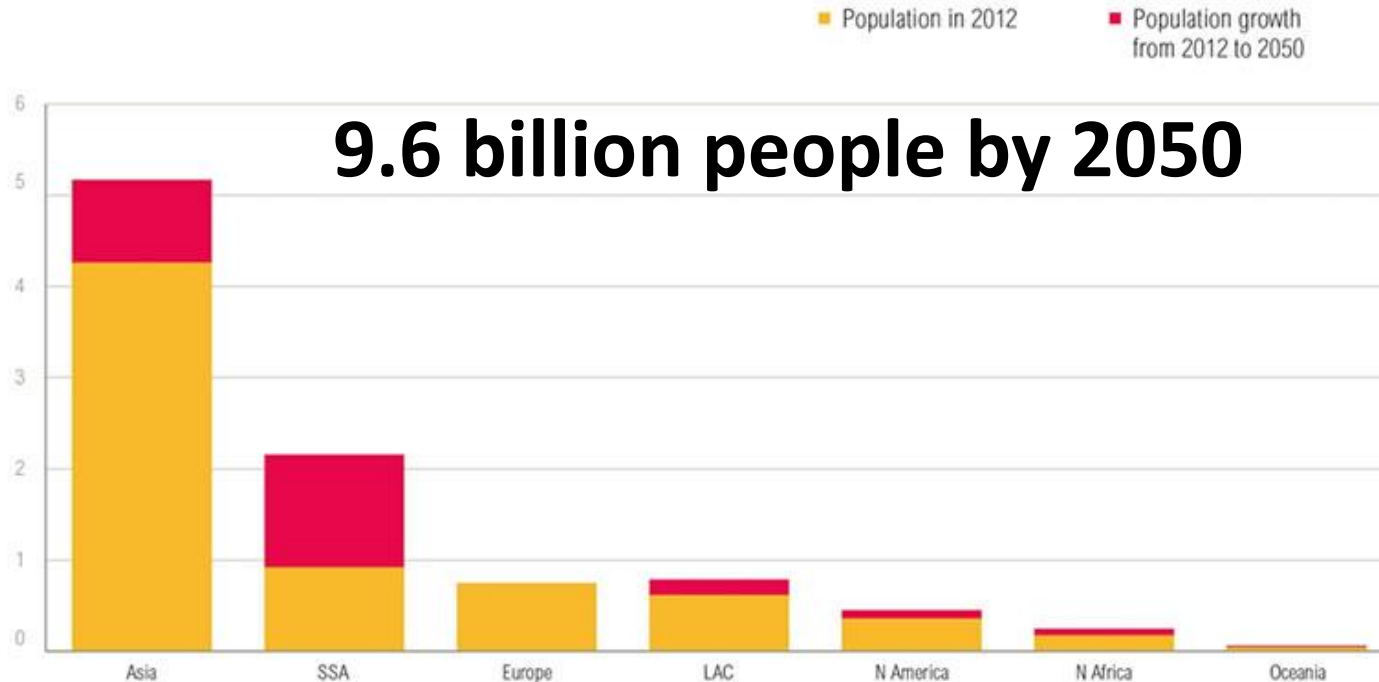


WHAT WE IMAGINE



WHAT WE REALLY WANT

Projected Population Growth (in billions)



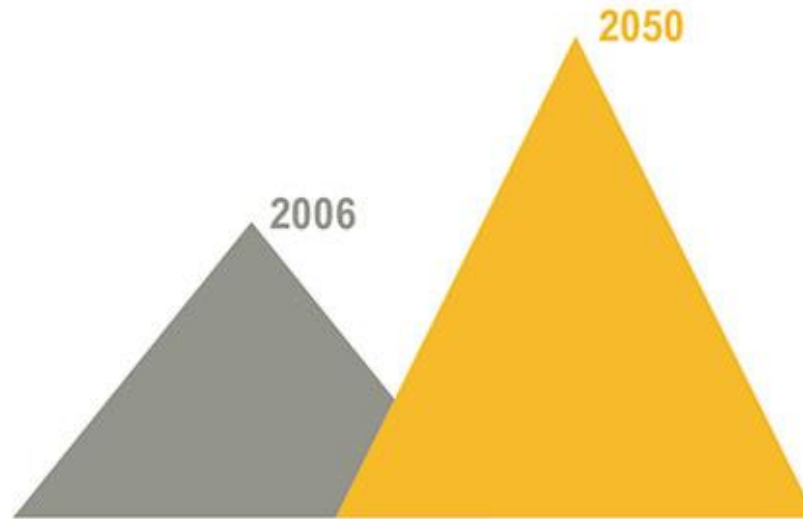
Note: "SSA" = Sub-Saharan Africa, including Sudan. "LAC" = Latin America and Caribbean. "N America" = North America. "N Africa" = Rest of Africa.

 WORLD RESOURCES INSTITUTE

Sources: <http://ow.ly/rpfMN>

WHAT'S FORECAST

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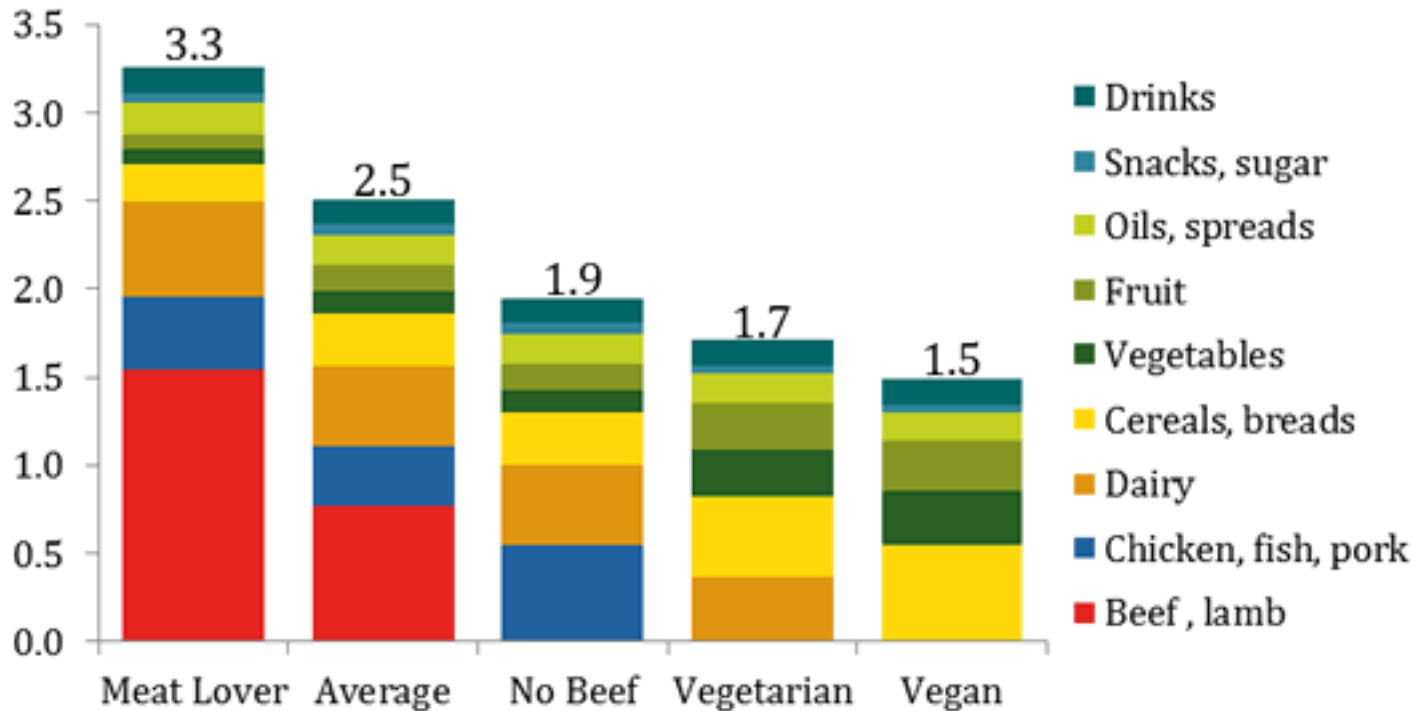


69%

Required increase
in food calories
to feed 9.6 billion
people by 2050

WHAT'S FORECAST

Foodprints by Diet Type: t CO₂e/person



Note: All estimates based on average food production emissions for the US. Footprints include emissions from supply chain losses, consumer waste and consumption.. Each of the four example diets is based on 2,600 kcal of food consumed per day, which in the US equates to around 3,900 kcal of supplied food.

Sources: ERS/USDA, various LCA and EIO-LCA data



CHALLENGES



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URBANIZATION

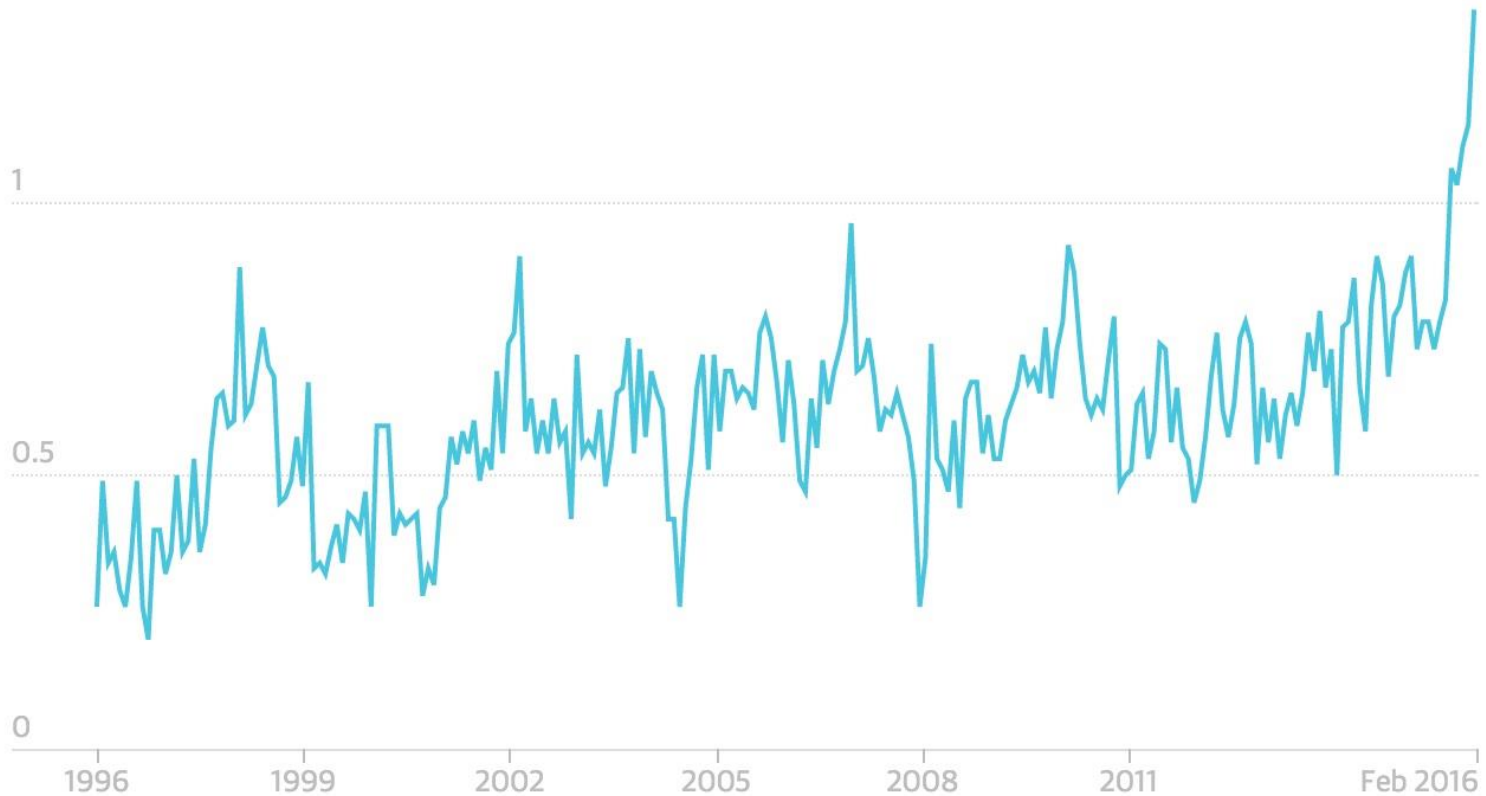


**SOIL, WATER, OCEANS:
CONTAMINATED, STRESSED
ERODED
CORAL DESTRUCTION**

Global land-ocean temperature index

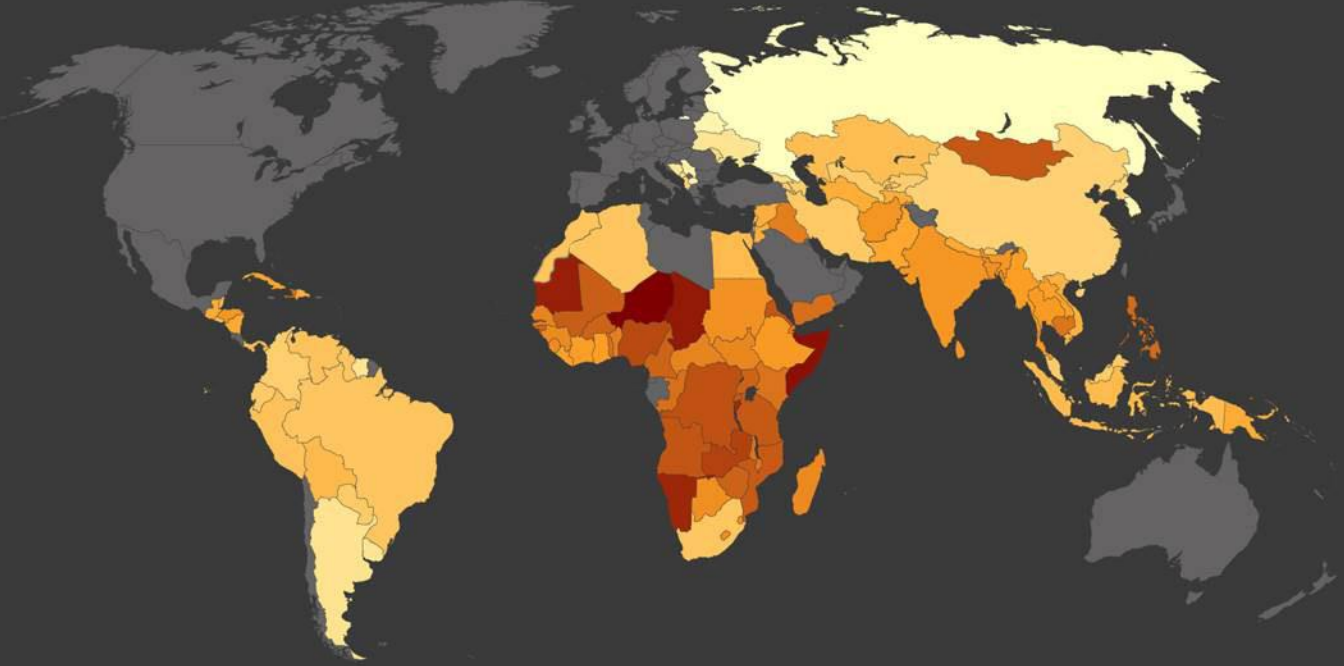
Change in degrees celsius, base period 1951-1980

GLOBAL CLIMATE CHANGE



Guardian graphic | Source: NASA

Food Insecurity & Climate Change



Key

Vulnerability to food insecurity



LOW

HIGH

PRESENT DAY

Future Scenarios

Emissions

 HIGH

Adaptation

 NONE

Key

Vulnerability to food insecurity



2050s

Food Insecurity & Climate Change

Future Scenarios

Emissions

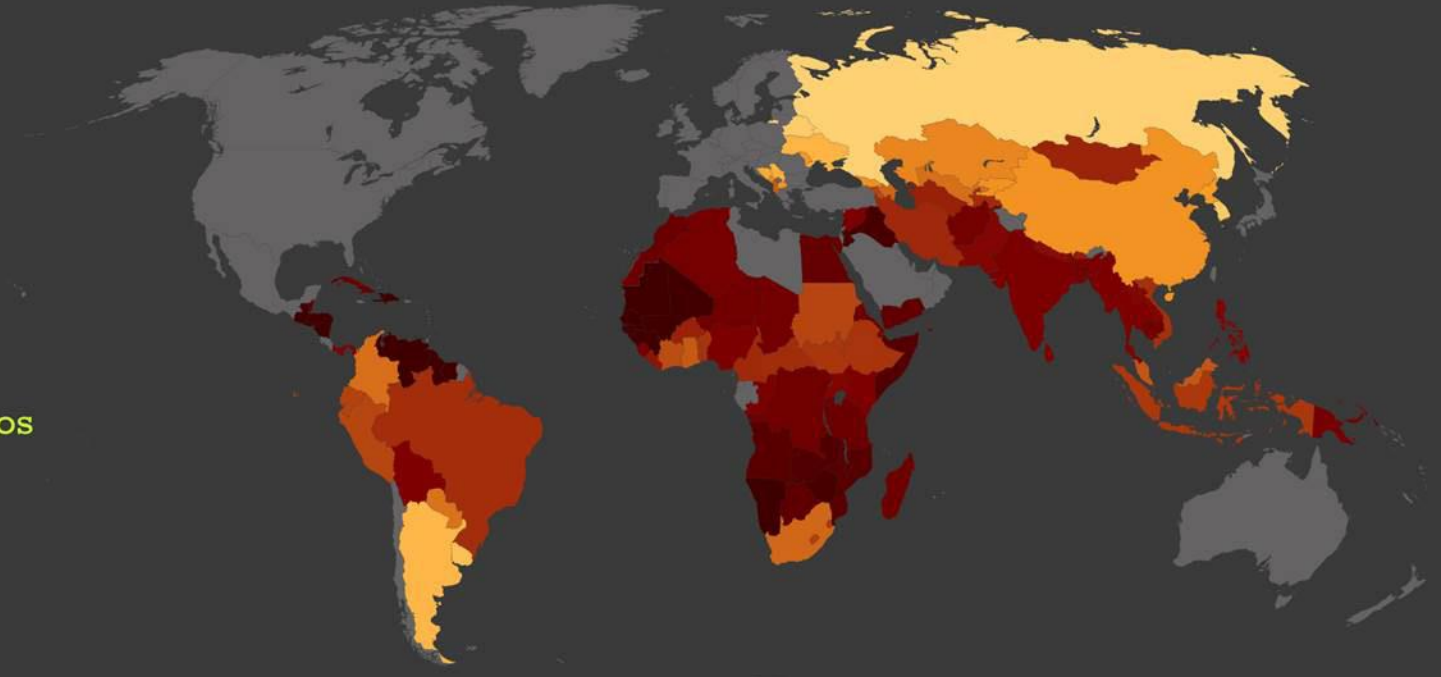
● HIGH

Adaptation

● NONE

Key

Vulnerability to food insecurity



2080s

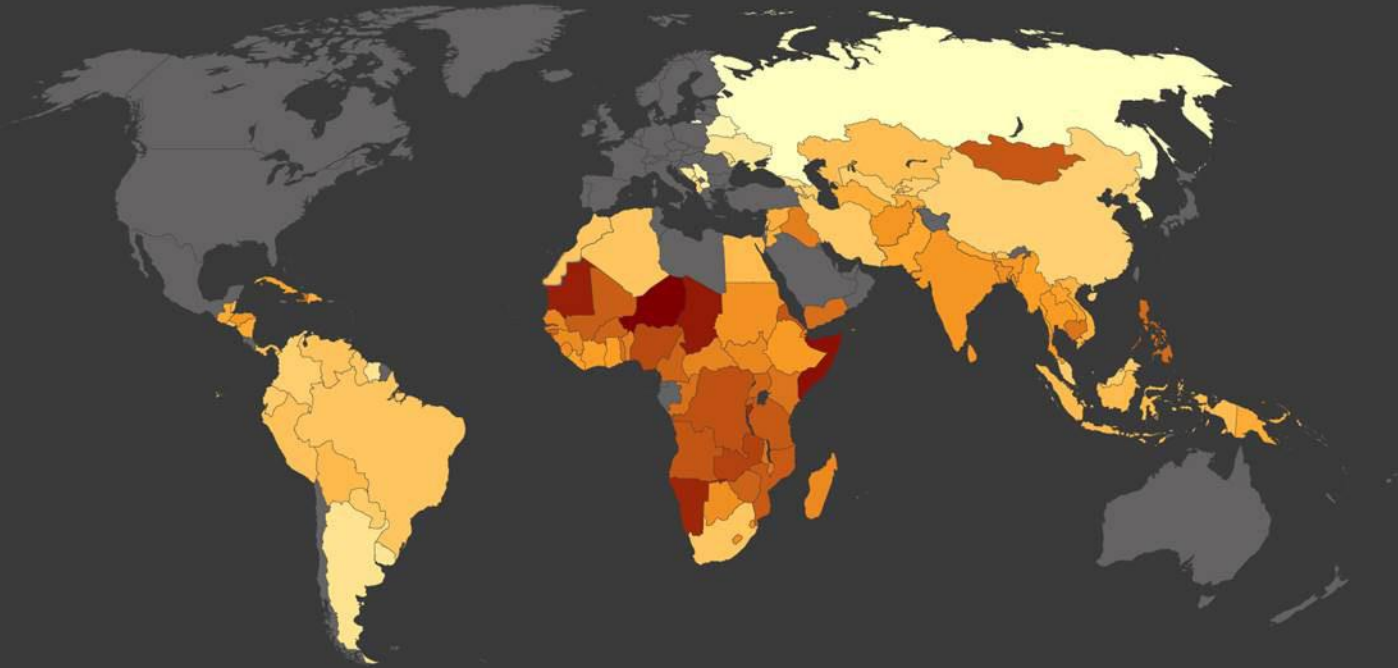
STRESSES TO FOOD SECURITY =

A “dangerous geopolitics of food scarcity” is emerging in which individual countries, acting in their narrowly defined self-interest, reinforce the trends causing global food security to deteriorate. Wheat-exporting countries like Russia and Argentina, for example, attempted to counter domestic food price rises by limiting or banning exports in 2007. Lester Brown, Worldwatch Institute

China Post reports that China's government has bought soybeans, rapeseed, corn, wheat and rice from farmers, to be stored in silos across the country for emergency use and to prevent excessive price fluctuations.

FOOD PROTECTIONISM

Food Insecurity & Climate Change



Key

Vulnerability to food insecurity



LOW

HIGH

PRESENT DAY

Food Insecurity & Climate Change

Future Scenarios

Emissions

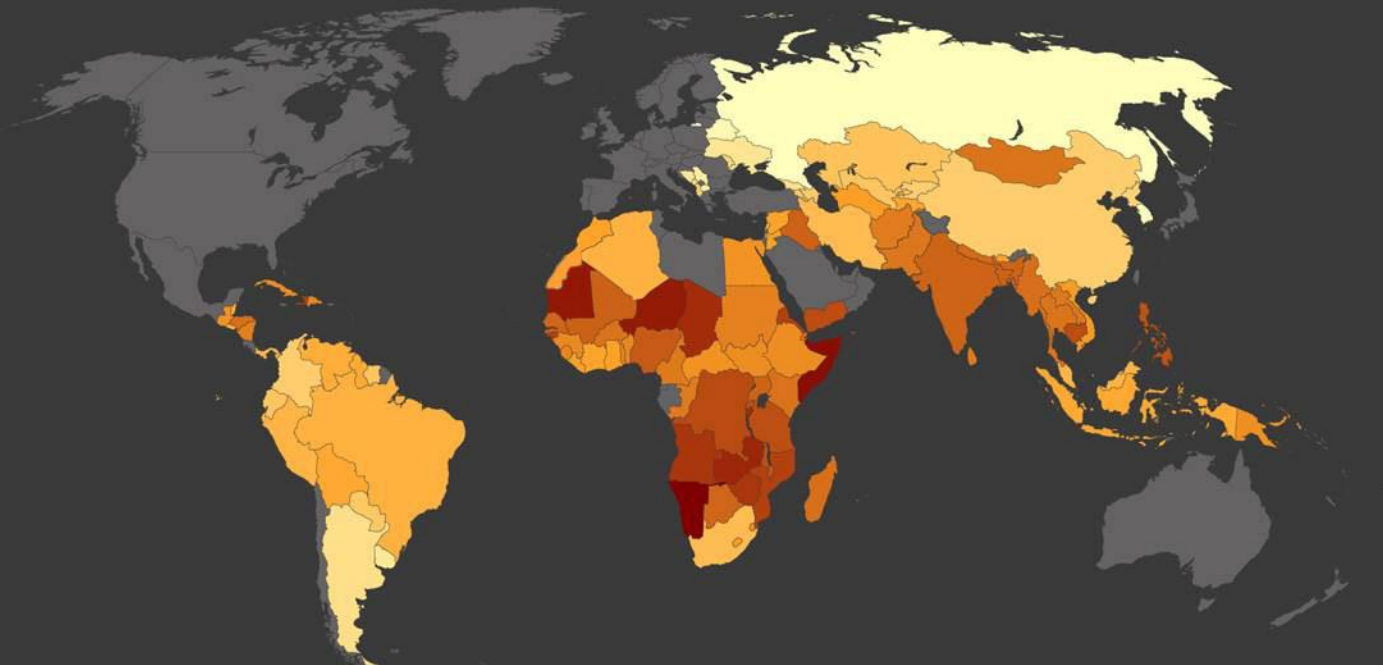
● LOW

Adaptation

● HIGH

Key

Vulnerability to food insecurity



2050s

Food Insecurity & Climate Change

Future Scenarios

Emissions

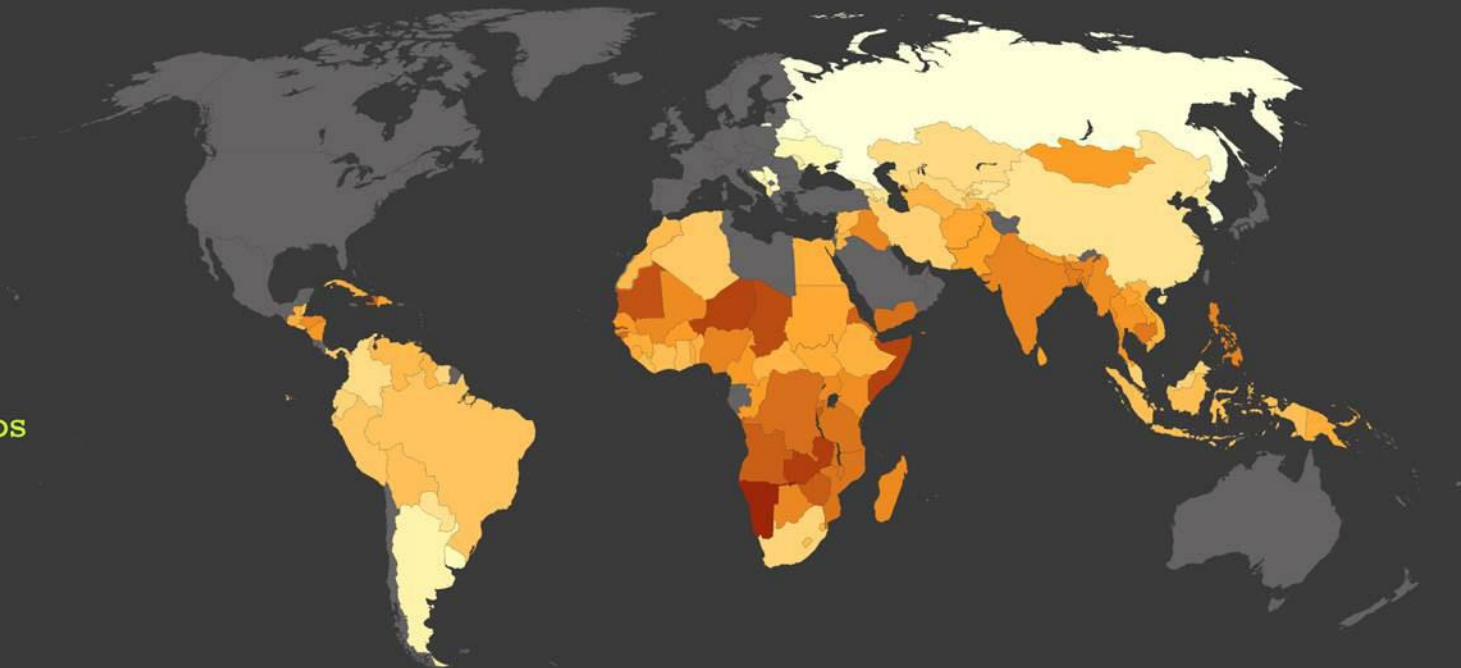
● LOW

Adaptation

● HIGH

Key

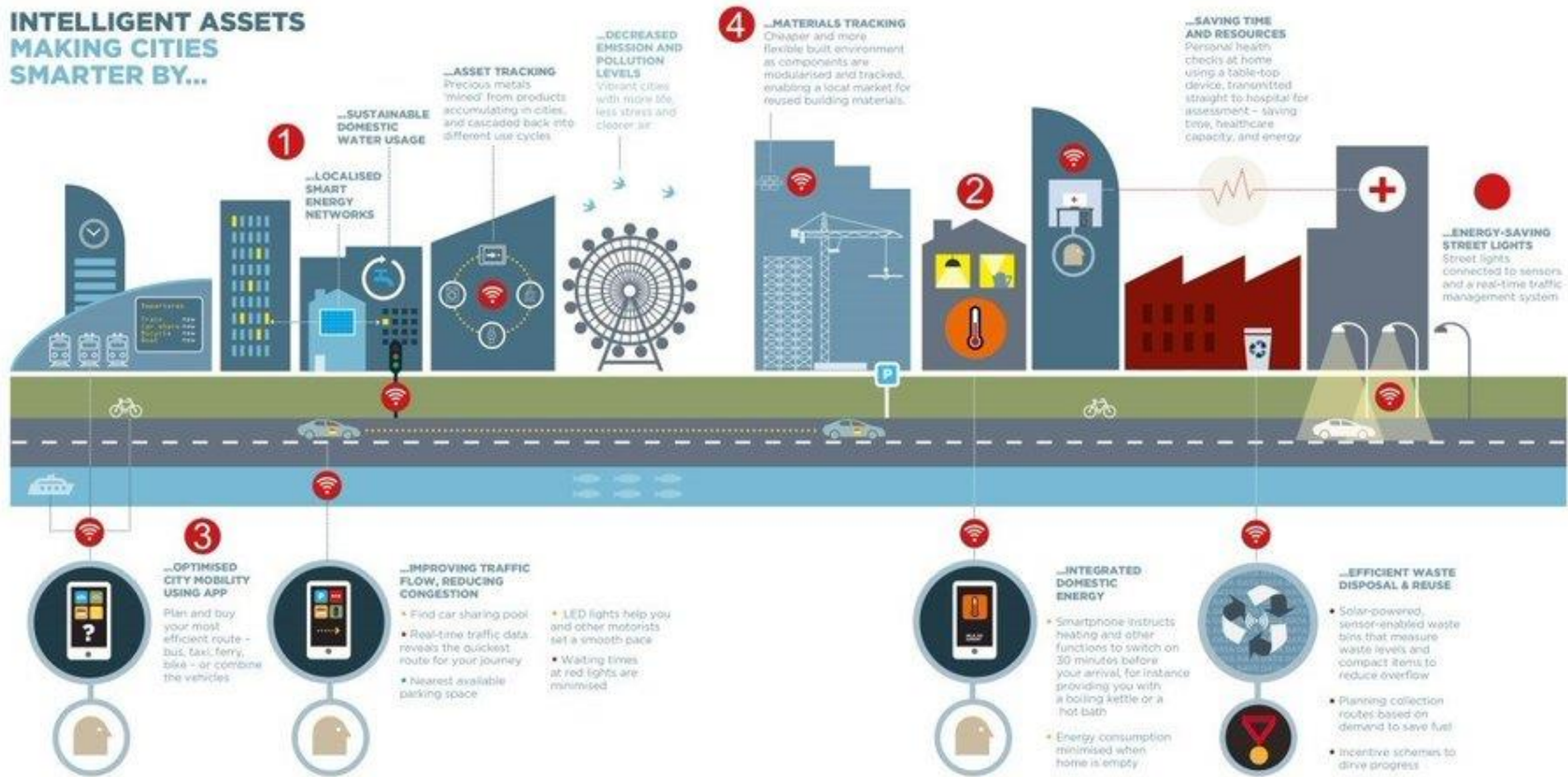
Vulnerability to food insecurity



2080s

HIGH-TECH FOOD FUTURES

INTELLIGENT ASSETS MAKING CITIES SMARTER BY...



SOURCE: World Economic Forum and Ellen MacArthur Foundation, Intelligent Assets - Unlocking the circular economy potential (2016)
www.weforum.org/reports

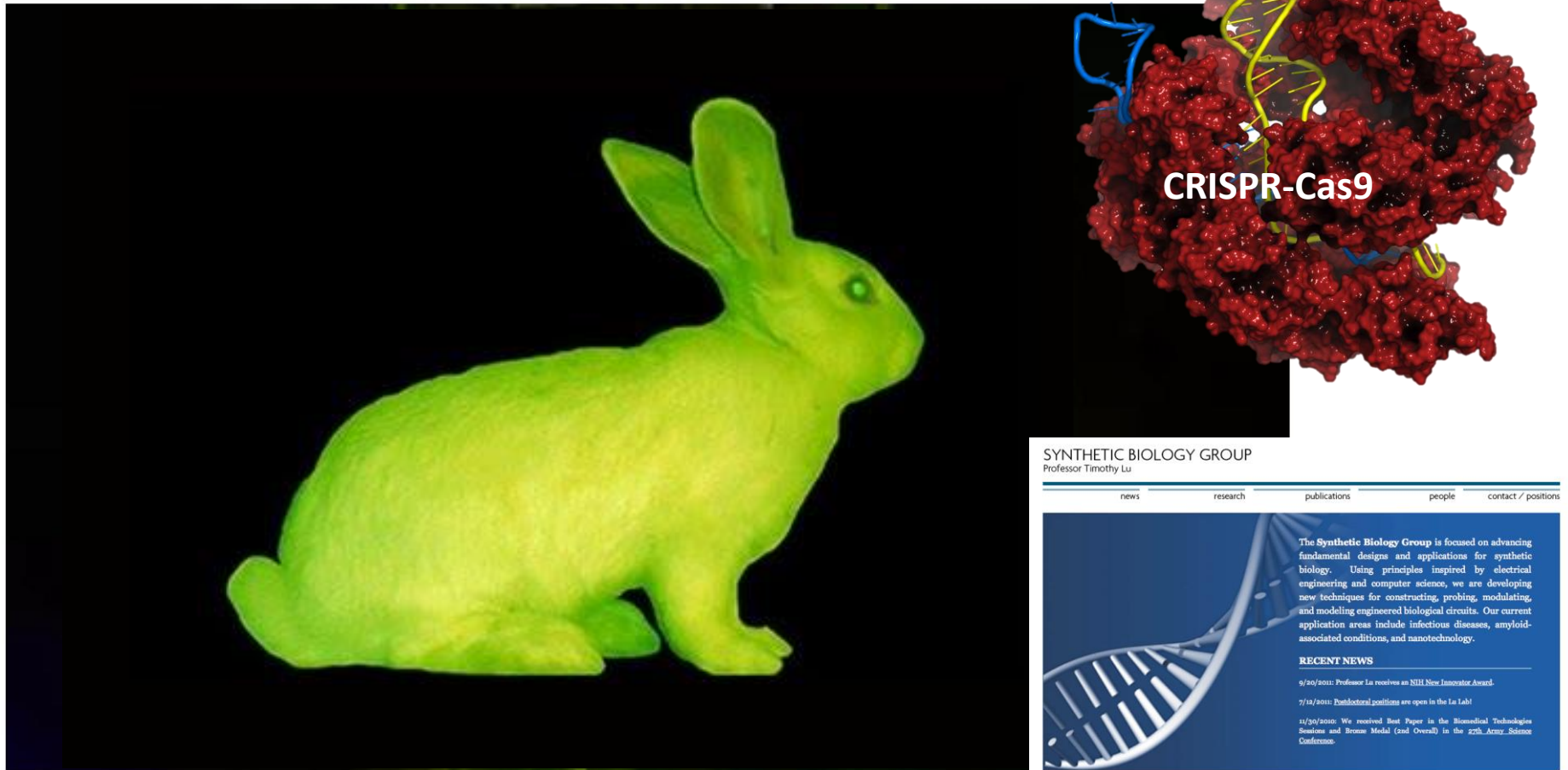
SMART CITIES



SMART COUNTRYSIDE

Scientists breed glow-in-the-dark rabbits

Researchers from the universities of Istanbul and Hawaii hope the technique can lead to new ways to produce medicines



📷 The glowing effect was created by injecting jellyfish DNA into the mother rabbit's embryos and reinserting these into the mother's womb. Photograph: University of Hawaii



IN VITRO MEAT & SYNTHETIC SEEDS



CITIES GROW FOOD

HI-TOUCH FOOD* FUTURES



RECLAIMING ROOFTOPS

 INFINITE FUTURES
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RECLAIMING SUBURBS



FARMS AS BIO-FACTORIES

**RURAL =
AGRICULTURAL**

**SUBURBAN = MIDDLE
CLASS SPRAWL**

**URBAN = BUSINESS +
INDUSTRIAL**

**RURAL =
BIO-MANUFACTURING**

**SUBURBAN =
PERSONAL AGRICULTURE**

**URBAN = GROWN
INFRASTRUCTURE**



BLURRED BOUNDARIES

Future Scenarios

Emissions

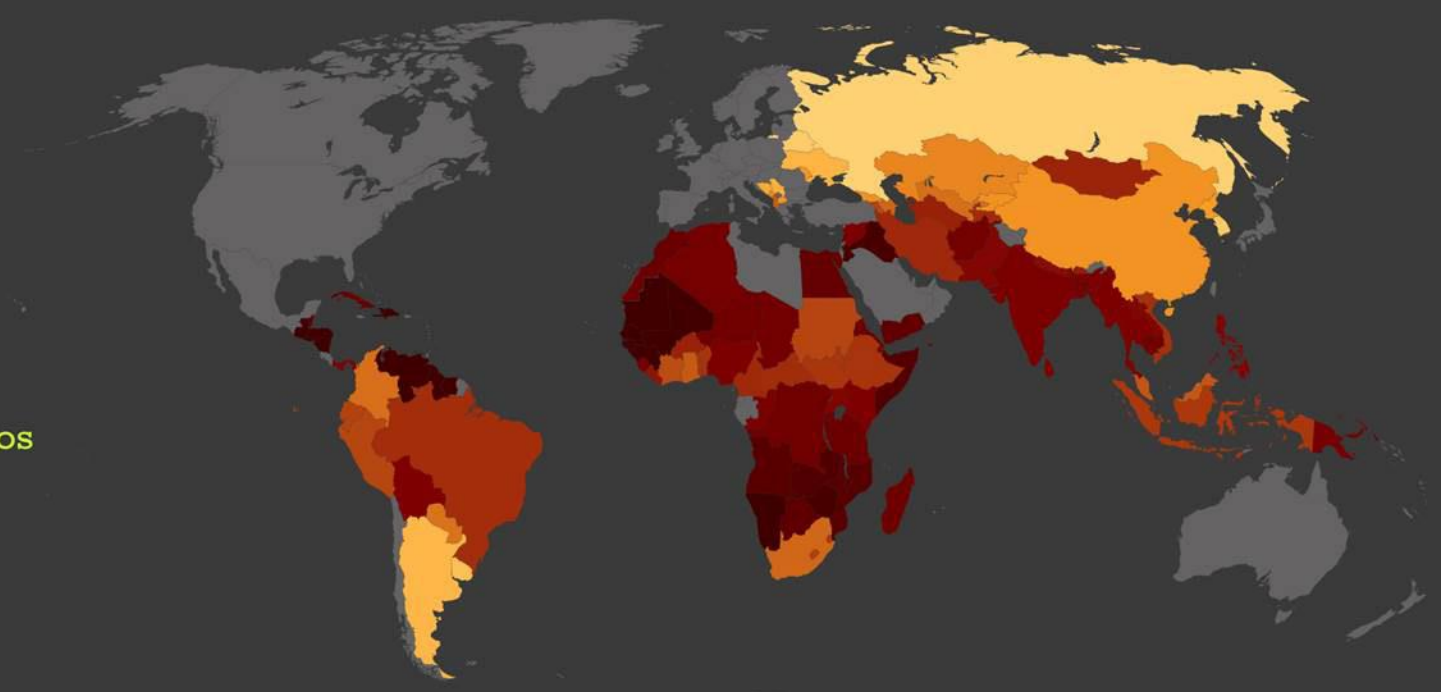
● HIGH

Adaptation

● NONE

Key

Vulnerability to food insecurity



2080s

OR, WE DO NOTHING



**... BUT
WE ARE
ALL MORE
CREATIVE
THAN THAT**

...may you see the future
you desire.

Thank you!



The Future(s) of Food

NATIONAL LIBRARY, RABAT, MOROCCO

Wednesday, 13 July 2016

Dr. Wendy L Schultz



INFINITE FUTURES
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