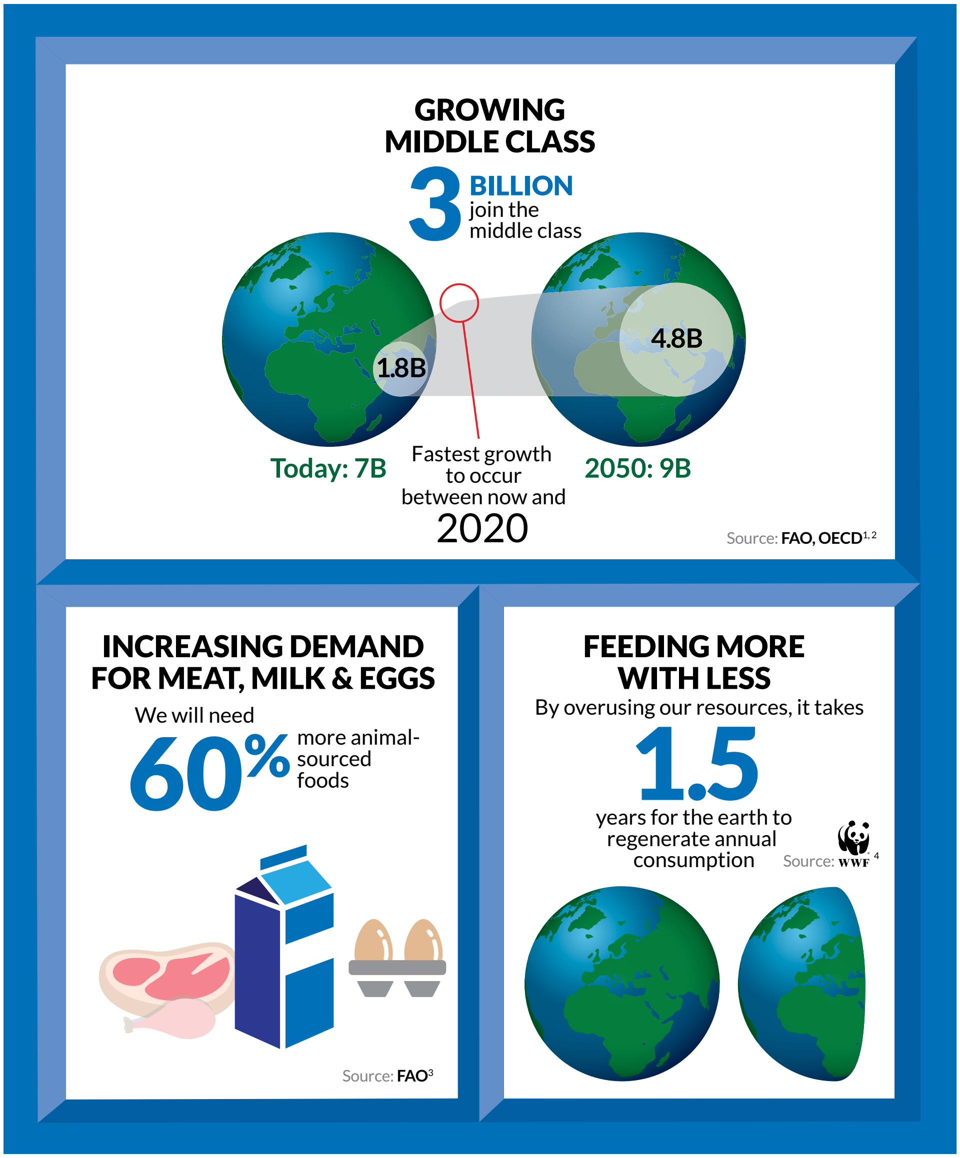
3 Food Security Realities



An Urgent Window of Time

Food Security is Solvable

Population growth will plateau between 9–10 billion people.[1] Unlike many of our world's challenges – Alzheimer's disease, auto-immune diseases like lupus, and energy issues – there are clear solutions for a food secure world. ***There is a window of opportunity to meet the challenge.*** *We have enough time – just enough – if we act now. The next few years will determine if we have enough to meet demand, or if we deter middle class growth and disrupt global and environmental stability for decades to come.*

Food Security – Solving the Greatest Issue of Our Time

We have *enough* solutions to create a food secure world. Do we have *enough* courage, leadership and urgency to deliver?

Explosive Growth

A food secure world is one in which everyone can afford and access an adequate quantity and quality of food. On Oct. 31, 2011, the world's population shot past the 7-billion mark on its way to reaching 9 billion or more by the year 2050.[5]

The End in Sight

We will live our lives between the 7 and the 9. But the steepest part of the growth curve is happening between now and 2020. Beyond 2030, growth rates taper.[2] Population growth is not infinite. In fact, population is already declining in countries like Japan, Germany and Russia. Populations in Europe and China will begin declining within the next decade.[6] Thus, with the right solutions, food security is solvable for the long term.

"Middle Class" Around the World

(annual income)

$20,600 – $102,000[8]

$3,650 – $18,250[9]

Global average: $730 – $3,650[2]

Demanding Better Food

Beyond population growth, 3 billion people will enter the middle class during these years.[2] In fact, more people will join the middle class between now and 2020 than at any other time in history.[2] While "middle class" means different things in different places, to put it simply, billions of people will live a better life. And that's all starting now.

Regardless of the specific income figure, one thing is consistent: as income grows, one of the first things most people do with more income is improve their diets by eating more meat, milk and eggs.[1] In fact, the United Nations Food and Agriculture Organization (FAO) predicts a 60% increase in demand for meat, milk and eggs by 2050.[3] Increasing demand will also mean increasing prices. FAO and the Organisation for Economic Co-operation and Development (OECD) expect in the next decade beef, pork and lamb prices to climb 11%, 17% and 4%, respectively.[7]

Decreasing Resource Use

According to the World Wildlife Fund, the Earth takes 1.5 years to regenerate the renewable resources we use in a single year.[4] On Aug. 20, 2013, we crossed the line where annual resource consumption exceeded the planet's ability to replenish. In eight months we exhausted the natural resources that should last all year – and every year that date is moving up by a few days. On this course, by 2030 we'll require double the planet's resources to meet our needs.[1] We have to produce more, and do it with less.

Food Security:

When food is a non-issue.

Food Security Makes Headlines Around the World

The significant volume of media coverage suggests we have reached a tipping point. **Food security is an issue *now*.**

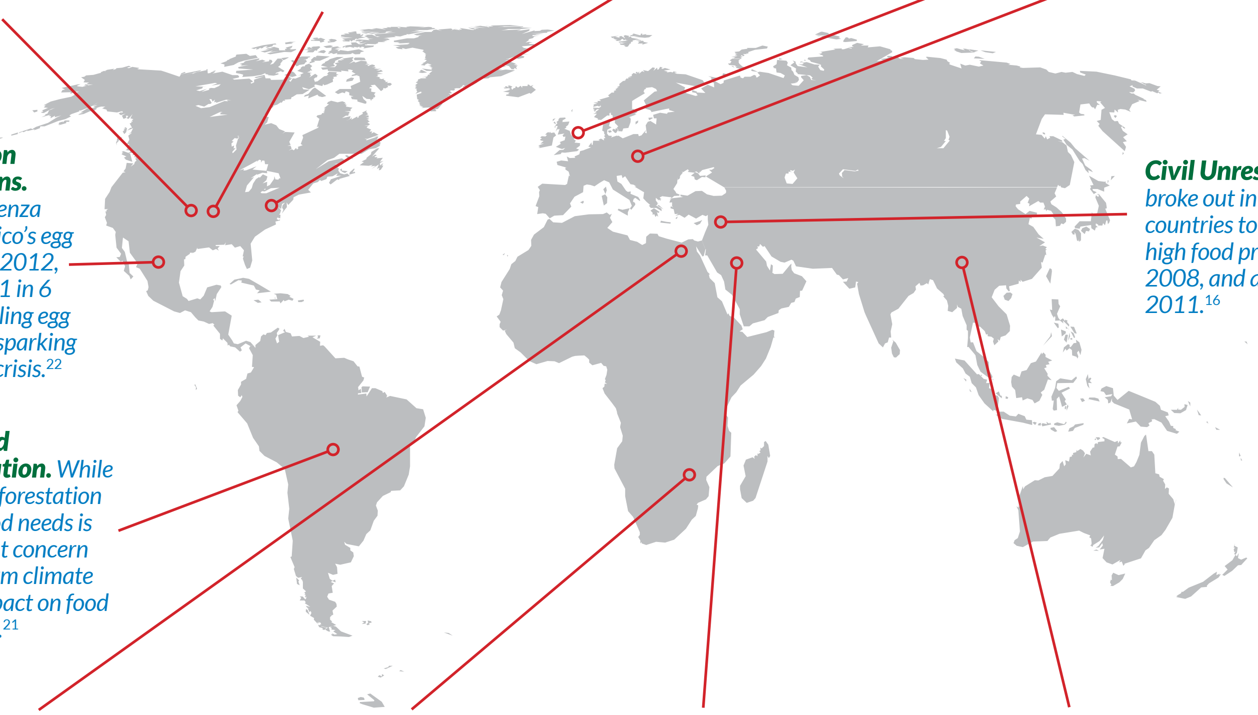
Undernutrition. *The obesity epidemic in the U.S. highlights the challenge of "food deserts" in many major cities as well as rural areas. In a food desert, wholesome, nutritious food isn't available as readily as cheap, unhealthy calories.*[10] *Making better calories more affordable is essential to shifting the obesity trend.*

Changing Practices. *Fewer farmers are switching to organic production, with some even reverting to more innovative production.*[11] *"You have seen a slowdown in the transition of acres," said George Siemon, chief executive of Organic Valley, the largest U.S. organic cooperative.*

Power of Protein. *The school lunch program guidelines limiting protein in meals at U.S. schools were reversed in December 2013 after participation dropped because kids weren't getting enough protein to fuel their bodies.*[12]

Skyrocketing Prices. *Egg prices in the EU skyrocketed in January 2012, when a ban on conventional chicken cages pushed many egg producers out of business – egg prices in the U.K. quadrupled almost overnight.*[13, 14]

Food Shortages. *In 2013, Dutch consumers protested a baby formula shortage sparked by local hoarding and illegal trade to meet exploding Chinese demand.*[15]



Production Disruptions. *Avian influenza swept Mexico's egg industry in 2012, wiping out 1 in 6 birds, doubling egg prices and sparking a national crisis.*[22]

Civil Unrest. *Riots broke out in 30 countries to protest high food prices in 2008, and again in 2011.*[16]

Continued Deforestation. *While slowing, deforestation to meet food needs is a significant concern for long-term climate change impact on food production.*[21]

Toppling Governments. *The lack of affordable bread in Egypt has driven enough discontent to topple multiple regimes in the country.*[20]

Food Crisis Looms. *According to the World Food Programme, 1 in 4 people living in rural areas in Zimbabwe are expected to need food assistance in early 2014, the highest since 2009.*[19]

Food Security = Global Stability. *High food prices are an ongoing threat to civil order, warn analysts at the New England Complex Systems Institute, who studied the link between food riots and the Arab Spring.*[2] *As demand climbs, so will prices and volatility.*

Reverse Trade. *Instead of simply exporting food from an area of production to an area of need, growing global economies in Asia and Latin America are buying in to markets to protect their long-term food security, from land purchases in Africa to the purchase of the largest U.S. pork producer by a Chinese company.*[17, 18]