

**Farming First's #SDG2countdown  
Infographic Sources**

<b>Infographic 1: SDG 2.5 – Protecting Genetic Diversity</b>	<b>Read More</b>
More than <b>half</b> of our plant-origin calories come from just three crops: <b>rice, wheat &amp; maize</b> .	<a href="https://farmingfirst.org/Tutwiler-2014">https://farmingfirst.org/Tutwiler-2014</a>
But <b>940</b> out of 7,000 plant species whose genes are key for future food security are at risk of disappearing.	<a href="http://www.biodiversityinternational.org/why-agricultural-biodiversity-matters-foundation-of-agriculture/">http://www.biodiversityinternational.org/why-agricultural-biodiversity-matters-foundation-of-agriculture/</a>
The “wild relatives” of food crops that contain hardy traits like disease and drought resistance add <b>\$100 billion</b> to their value annually.	<a href="https://farmingfirst.org/2010/12/new-global-project-seeks-wild-crop-diversity/">https://farmingfirst.org/2010/12/new-global-project-seeks-wild-crop-diversity/</a>
The Svalbard seed vault in Norway protects more than <b>880,000</b> seed samples from future disasters.	<a href="https://farmingfirst.org/2016/10/food-security-in-crisis-tops-agenda-at-borlaug-dialogue/">https://farmingfirst.org/2016/10/food-security-in-crisis-tops-agenda-at-borlaug-dialogue/</a>
In the 1970s, breeders used the <b>wild rice species <i>Oryza nivara</i></b> to develop rice that was resistant to <b>grassy stunt virus</b> , saving Asian farmers from ruin.	<a href="http://www.cwrdiversity.org/wp-content/uploads/2016/03/Gap-Analysis_Policy-Brief_Updated_Print-1.pdf">http://www.cwrdiversity.org/wp-content/uploads/2016/03/Gap-Analysis_Policy-Brief_Updated_Print-1.pdf</a>
Growing a higher number of banana varieties on farms in Uganda reduced the presence of pests by <b>75%</b> .	<a href="http://visual.ly/agricultural-biodiversity-key-resilient-family-farms">http://visual.ly/agricultural-biodiversity-key-resilient-family-farms</a>
Planting varieties of legumes like <b>soybean, peanut and cowpea</b> can diversify a farmer’s income and restore nitrogen to the soil, making it healthier.	<a href="https://farmingfirst.org/2011/02/farmers-fostering-crop-rotation/">https://farmingfirst.org/2011/02/farmers-fostering-crop-rotation/</a>
As of 2011, <b>US\$38.1 billion</b> was spent worldwide on agricultural research and development.	<a href="http://www.nature.com/news/agricultural-rd-is-on-the-move-1.20571">http://www.nature.com/news/agricultural-rd-is-on-the-move-1.20571</a>

Infographic 2: SDG 2.4 - Building Resilience	Read More
Average temperatures in the Horn of Africa have increased <b>1.3°C</b> between 1960 and 2006.	<a href="https://farmingfirst.org/2013/11/climate-smart-agriculture-stories-of-success/">https://farmingfirst.org/2013/11/climate-smart-agriculture-stories-of-success/</a>
Climate-smart agriculture aims to <b>increase farm productivity, lower greenhouse gas emissions</b> and <b>build greater resilience</b> .	<a href="https://farmingfirst.org/climate-smart-agriculture">https://farmingfirst.org/climate-smart-agriculture</a>
For example, intercropping coffee with banana has reduced risk for farmers and increased their income by <b>50%</b> .	<a href="https://farmingfirst.org/climate-smart-agriculture">https://farmingfirst.org/climate-smart-agriculture</a>
“ <b>Agriculture is the only sector that can not only mitigate climate change, but also take carbon out of the atmosphere.</b> ” – Rachel Kyte, World Bank	<a href="https://farmingfirst.org/rachel-kyte-2013">https://farmingfirst.org/rachel-kyte-2013</a>
<b>75%</b> of deforestation takes place to clear land for agriculture, releasing <b>potent greenhouse gases</b> .	<a href="#">Link</a>
But increased productivity through fertilizer use has spared <b>1 billion hectares</b> of virgin land from cultivation since 1960.	<a href="https://farmingfirst.org/2016/12/deborah-hellums-can-fertilizers-help-us-mitigate-climate-change/">https://farmingfirst.org/2016/12/deborah-hellums-can-fertilizers-help-us-mitigate-climate-change/</a>
By 2100, the average global temperature is estimated to have risen by <b>2.6°C</b> affecting <b>sub-Saharan Africa</b> most severely, yet the region receives only <b>5%</b> of climate funding.	<a href="https://farmingfirst.org/tag/agriculture-day/">https://farmingfirst.org/tag/agriculture-day/</a>
If all farmers adopted <b>no-till techniques</b> wheat and maize yields could increase by <b>2/3</b> whilst protecting soil health.	<a href="https://farmingfirst.org/2014/12/talking-dirt-15-ways-soil-is-getting-healthier/">https://farmingfirst.org/2014/12/talking-dirt-15-ways-soil-is-getting-healthier/</a>

<b>Infographic 3: SDG 2.3 – Doubling Productivity &amp; Smallholder Incomes</b>	<b>Read More</b>
If farmers could access extension services, crop yields could double.	<a href="https://farmingfirst.org/wordpress/wp-content/uploads/2012/06/Global-Forum-for-Rural-Advisory-Services_Fact-Sheet-on-Extension-Services.pdf">https://farmingfirst.org/wordpress/wp-content/uploads/2012/06/Global-Forum-for-Rural-Advisory-Services_Fact-Sheet-on-Extension-Services.pdf</a>
In Kenya the financing available to smallholder farmers is estimated to be \$1 billion short of what is required.	<a href="https://farmingfirst.org/2015/01/start-ups-transforming-smallholder-farmers-lives-in-kenya/">https://farmingfirst.org/2015/01/start-ups-transforming-smallholder-farmers-lives-in-kenya/</a>
Storms and drought cause around 50% of all disruption to agricultural supply chains, but index-based insurance could protect farmers from this risk.	<a href="https://farmingfirst.org/2016/08/erik-chavez-a-new-approach-to-building-climate-resilient-supply-chains/#more-14838">https://farmingfirst.org/2016/08/erik-chavez-a-new-approach-to-building-climate-resilient-supply-chains/#more-14838</a>
Giving women farmers access to the same resources as men would reduce the number of hungry people by 150 million.	<a href="https://farmingfirst.org/women_infographic/">https://farmingfirst.org/women_infographic/</a>
But only 10% of aid money for agriculture, forestry and fishing reaches women.	<a href="https://farmingfirst.org/unfccc-issues-facts9a">https://farmingfirst.org/unfccc-issues-facts9a</a>
Fertilizer use in Africa accounts for just 3% of global use but could triple yields in the region.	<a href="https://farmingfirst.org/richard-mkandawire">https://farmingfirst.org/richard-mkandawire</a>
“If you care about the poorest, you care about agriculture” – Bill Gates	<a href="https://farmingfirst.org/2012/02/sustainable-smallholder-agriculture-feeding-the-world-protecting-the-planet/">https://farmingfirst.org/2012/02/sustainable-smallholder-agriculture-feeding-the-world-protecting-the-planet/</a>
Agriculture uses 70% of freshwater, but micro-irrigation systems can cut water use by 70% compared to conventional techniques.	<a href="https://farmingfirst.org/2016/11/julian-wolfson-the-ideal-way-to-expand-drip-irrigation/">https://farmingfirst.org/2016/11/julian-wolfson-the-ideal-way-to-expand-drip-irrigation/</a>

<b>Infographic 4: SDG 2.2 – Ending Malnutrition</b>	<b>Read More:</b>
Malnutrition can be caused by a lack of <b>protein</b> and <b>micronutrients</b> .	<a href="https://farmingfirst.org/nutrition/">https://farmingfirst.org/nutrition/</a>
<b>Breeding nutrient-rich crops, improving soil health &amp; reducing post-harvest losses</b> can all combat malnutrition.	<a href="https://farmingfirst.org/2016/02/marc-van-amerigen-adopting-a-fully-integrated-food-system-approach-to-improve-nutrition/">https://farmingfirst.org/2016/02/marc-van-amerigen-adopting-a-fully-integrated-food-system-approach-to-improve-nutrition/</a>
<b>165 million</b> children under the age of five are stunted because of malnutrition.	<a href="https://farmingfirst.org/sdg-toolkit#section_1">https://farmingfirst.org/sdg-toolkit#section_1</a>
The <b>first 1,000 days</b> between pregnancy and two years old is the most critical period for nutrition in children.	<a href="https://farmingfirst.org/tag/1000-days-initiative/">https://farmingfirst.org/tag/1000-days-initiative/</a>
<b>48,000</b> children’s lives could be saved through enriching rice and wheat with zinc.	<a href="https://farmingfirst.org/tag/health/">https://farmingfirst.org/tag/health/</a>
Orange-fleshed sweet potatoes are <b>drought tolerant, yield 3x better</b> than traditional varieties and have higher levels of <b>beta-carotene</b> for vitamin A.	<a href="https://farmingfirst.org/nutrition/">https://farmingfirst.org/nutrition/</a>
<b>“Neglect of remote rural areas is the root cause of much of the world’s poverty and hunger”</b> – Kanayo Nwanze	<a href="https://farmingfirst.org/2015/07/kanayo-f-nwanze-let-financing-for-development-start-on-the-farm/">https://farmingfirst.org/2015/07/kanayo-f-nwanze-let-financing-for-development-start-on-the-farm/</a>

<p><b>800 million</b> people around the world are chronically hungry.</p>	<p><a href="https://farmingfirst.org/2017/03/catherine-bertini-ending-hunger-is-within-our-grasp/">https://farmingfirst.org/2017/03/catherine-bertini-ending-hunger-is-within-our-grasp/</a></p>
<p>Chronic hunger affects the highest number of people in <b>Asia and the Pacific</b>.</p>	<p><a href="https://farmingfirst.org/sdg-toolkit#section_1">https://farmingfirst.org/sdg-toolkit#section_1</a></p>
<p><b>50%</b> root crops, fruit and vegetables are estimated to be lost or wasted every year.</p>	<p><a href="https://farmingfirst.org/2012/06/fao-at-rio20-a-sustainable-future-must-be-hunger-free/">https://farmingfirst.org/2012/06/fao-at-rio20-a-sustainable-future-must-be-hunger-free/</a></p>
<p>As the population grows, we need to feed <b>2 billion</b> extra people by 2050.</p>	<p><a href="https://farmingfirst.org/sdg-toolkit#section_1">https://farmingfirst.org/sdg-toolkit#section_1</a></p>
<p>Between <b>26 and 40 percent</b> of the world's potential crop production is lost annually because of weeds, pests and diseases, and these losses could double without the use of crop protection practices</p>	<p><a href="http://www.oecd-ilibrary.org/agriculture-and-food/oecd-fao-agricultural-outlook-2012_agr_outlook-2012-en">http://www.oecd-ilibrary.org/agriculture-and-food/oecd-fao-agricultural-outlook-2012_agr_outlook-2012-en</a></p>
<p>Around <b>10%</b> of Asia's and Africa's total GDP is estimated to be lost because of poor nutrition.</p>	<p><a href="https://farmingfirst.org/2013/06/reflections-on-the-g8-taking-the-initiative-on-commitments-to-tackle-nutrition-2/">https://farmingfirst.org/2013/06/reflections-on-the-g8-taking-the-initiative-on-commitments-to-tackle-nutrition-2/</a></p>
<p>The use of nitrogen fertilizers is estimated to be responsible for producing <b>50%</b> of the world's food supply.</p>	<p><a href="https://farmingfirst.org/2012/05/global-fertilizer-industry-launches-roots-for-growth-campaign/">https://farmingfirst.org/2012/05/global-fertilizer-industry-launches-roots-for-growth-campaign/</a></p>
<p>Investing US\$239 billion in transport &amp; infrastructure over the next 15 years could drastically reduce food waste reaping benefits worth <b>US\$3.1 trillion</b>.</p>	<p><a href="https://farmingfirst.org/2015/04/fethi-thabet-how-the-worlds-engineers-can-make-hunger-history/">https://farmingfirst.org/2015/04/fethi-thabet-how-the-worlds-engineers-can-make-hunger-history/</a></p>