

Corn Sustainability Assurance Protocol- Appendix

February 13, 2023

Version 1.0



U.S. Grains Council
www.grains.org

COMPARISON OF UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs) TO U.S. CORN SUSTAINABILITY ASSURANCE PROTOCOL (CSAP) IMPACT CATEGORY COMPLIANCE CRITERIA

The United Nations 17 Sustainability Development Goals (SDGs)¹, developed in 2015, represent “a blueprint to achieve a better and more sustainable future for all by 2030.” The SDGs were developed as a call to action for all countries of the world as strategies to “improve health and education, reduce inequality, and spur economic growth” while addressing climate change and preserving oceans and forests. Although the SDGs were written to influence governmental action, there is potential to link voluntary sustainability standards like the CSAP to the SDG targets.

In 2020, the International Trade Centre in cooperation with the United Nations issued a report entitled “Linking Voluntary Standards to Sustainable Development Goals.”² The report compared the 17 SDGs to 232 private sustainability standards and documented the overlap between existing voluntary standards and the SDG targets, identifying potential ways to better align them. The report found that 16 of the SDGs could be linked to voluntary standards, but of the 169 target actions only 55 were found in the private standards.

While not all of the 17 SDGs are relevant to grain production and some targets are simply not within the scope of voluntary standards, many are directly or indirectly appropriate. Table 1 shows which CSAP Impact Categories and Compliance Criteria address the SDG targets. Each SDG is listed below, with the targets that are addressed by CSAP Impact Categories and Compliance Criteria in boldface type, followed by the applicable criteria.

Table 1: Alignment of the United Nations 17 Sustainability Development Goals (SDGs) with CSAP Impact Categories.

SDG	CSAP Impact Category Compliance Criteria
1: No Poverty	<ul style="list-style-type: none"> Working Conditions & Labor Relations Worker & Public Safety Community Relations
2: Zero Hunger	<ul style="list-style-type: none"> Soil Health & Productivity Crop Health & Agricultural Best Management Practices Land Use, Sensitive Habitats & Biodiversity Continuous Improvement
3: Good Health and Well-being	<ul style="list-style-type: none"> Greenhouse Gas Emissions, Fossil Fuel Use & Air Quality Water Quality & Quantity Agrochemical & Nutrient Management Worker & Public Safety
4: Quality Education	<ul style="list-style-type: none"> Working Conditions & Labor Relations Community Relations
5: Gender Equality	<ul style="list-style-type: none"> Working Conditions & Labor Relations
6: Clean Water and Sanitation	<ul style="list-style-type: none"> Water Quality & Quantity Land Use, Sensitive Habitats & Biodiversity Agrochemical & Nutrient Management Waste & Pollution Community Relations
7: Affordable and Clean Energy	<ul style="list-style-type: none"> Greenhouse Gas Emissions, Fossil Fuel Use & Air Quality
8: Decent Work and Economic Growth	<ul style="list-style-type: none"> Working Conditions & Labor Relations Worker & Public Safety Community Relations
9: Industry, Innovation, and Infrastructure	<ul style="list-style-type: none"> Continuous Improvement
10: Reduced Inequality	<ul style="list-style-type: none"> Working Conditions & Labor Relations
11: Sustainable Cities and Communities	<ul style="list-style-type: none"> Community Relations
12: Responsible Consumption and Production	<ul style="list-style-type: none"> Water Quality & Quantity Soil Health & Productivity Agrochemical & Nutrient Management Waste and Pollution
13: Climate Action	<ul style="list-style-type: none"> Greenhouse Gas Emissions, Fossil Fuel Use & Air Quality
14: Life Below Water	<ul style="list-style-type: none"> Water Quality & Quantity Soil Health & Productivity Agrochemical & Nutrient Management Waste & Pollution

15: Life on Land	<ul style="list-style-type: none"> • Soil Health & Productivity • Land Use, Sensitive Habitats & Biodiversity • Crop Health & Agricultural Best Management Practices • Continuous Improvement
16: Peace and Justice Strong Institutions	<ul style="list-style-type: none"> • Working Conditions & Labor Relations
17: Partnerships to Achieve the Goal	<ul style="list-style-type: none"> • Community Relations

SUSTAINABLE DEVELOPMENT GOALS

GOAL 1: No Poverty

Targets:

- By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.
- By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.
- Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.
- By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of 13 property, inheritance, natural resources, appropriate new technology and financial services, including micro-finance.
- By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
- Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programs and policies to end poverty in all its dimensions.
- Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions.

CSAP RESPONSE:

WORKING CONDITIONS & LABOR RELATIONS:

1. Producers are required to follow the Fair Labor Standards Act which prescribes standards for basic minimum wage and prohibits the employment of children under age 16 during school hours and in certain jobs deemed dangerous.
2. Producers are required to comply with Migrant and Seasonal Agricultural Worker Protection Act which provides safeguards to migrant and seasonal agricultural workers.
3. Producers are required to comply with the Abolition of Forced Labor Act in that they shall not make use of any type of forced or compulsory labor including:
 - a. As a means of political coercion or education or as a punishment for holding or expressing political view or views opposed to the established political, social or economic system.
 - b. As a method of mobilizing and using labor for purposes of economic development.
 - c. As a means of labor discipline.
 - d. As a punishment for having participated in strikes.
 - e. As a means of racial, social, national or religious discrimination.
4. Producers are required to comply with Victims of Trafficking and Violence Protection Act providing protection and assistance for victims of trafficking regardless of immigration status.
5. Producers will recognize the Right of Association for workers, including the right to unionize or engage in collective bargaining in accordance with applicable federal and state laws.

WORKER & PUBLIC SAFETY

1. Producers are required to comply with Occupational Health and Safety Act (OSHA) to ensure safe and healthful working conditions including workplace violence guidelines. OSHA provides the following protections:

- a. Employees may request an OSHA inspection of the workplace.
- b. Employees may use their rights under law without retaliation and discrimination.
- c. Employees receive training, in a language they understand, about hazards, methods to prevent harm and the OSHA standards that apply to their workplace.
- d. Employees can be terminated for noncompliance with OSHA safety regulations.

COMMUNITY RELATIONS

1. Producers are encouraged to have documentation of land ownership, leases or other legal agreements to utilize land for purpose of corn production.
 - a. The Federal Land Policy Management Act protects public lands from exploitation without authorization or rental agreement.
 - b. Land use contracts are governed by state statutory and U.S. common law. The U.S. court system is the mechanism for mediating land use disputes.

GOAL 2: Zero Hunger

Targets

- By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.
- By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.
- By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.
- Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries. Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.
- Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

CSAP RESPONSE:

SOIL HEALTH & PRODUCTIVITY

1. Producers are expected to utilize best management practices to maintain or improve soil quality and soil carbon and avoid erosion.
 - a. Producers shall adopt conservation practices like crop rotation, cover crops, and nutrient management to improve soil health.
 - b. Producers shall adopt conservation and no till methods suited for their land in order to increase soil health and organic matter, increase moisture retention and reduce soil compaction and soil erosion.
 - c. Producers will implement a wide variety of conservation practices such as terraces, riparian buffers, strip cropping, contour farming, filter strips, waterways and other strategies to minimize soil erosion.
 - d. Producers shall monitor and maintain or improve soil health.

CROP HEALTH & AGRICULTURAL BEST MANAGEMENT PRACTICES

1. Producers are encouraged to use best management practices to protect and improve the quality of plant stocks and crops.
2. USDA's National Seed Storage Laboratory maintains the genetic diversity of crop seed stock important to agricultural production and works to develop and maintain unique germplasm.
3. Germplasm Enhancement Maize (GEM) program works to increase the genetic diversity and reduce the genetic vulnerability of commercial hybrids.
4. U.S. Corn seed commerce complies with the Federal Seed Act regarding fair trade and proper labeling.
5. Producers are required to comply with Plant Protection Act regulations regarding the import of plants and plant products.
 - a. Producers support use of naturally occurring processes in developing plant/crop improvements for agricultural purposes within appropriate guidelines (e.g., enhanced ploidy, gene editing, RNA interference [RNAi], biologicals, etc.).
6. Producers' crops will be grown under the federal government's Coordinated Framework for Regulation of Biotechnology, which is a coordinated, risk-based system to ensure that new biotechnology products are safe for the environment and human and animal health.
 - a. The USDA's Animal and Plant Health Inspection Service (APHIS) is responsible for protecting agriculture from pests and diseases including regulatory oversight over products of modern biotechnology that could pose such a risk.
 - b. The Environmental Protection Agency through a registration process regulates the sale, distribution and use of pesticides in order to protect health and the environment, regardless of how the pesticide was made or its mode of action. This includes regulation of those pesticides that are produced by an organism through techniques of modern biotechnology.
 - c. The Food and Drug Administration is responsible for ensuring the safety and proper labeling of all plant-derived food and feed, including those developed through genetic engineering.

LAND USE, SENSITIVE HABITATS & BIODIVERSITY

1. Producers are expected to adopt conservation practices like crop rotation, cover crops, nutrient management, vegetated buffer strips and no-till to improve wildlife habitat.
2. On-farm biodiversity should be maintained and protected through the preservation of native vegetation, where possible. Producers are encouraged to participate in conservation programs that provide incentive for the preservation of native vegetation.
 - a. U.S. Corn is not produced on highly biodiverse grassland.
 - b. U.S. Corn is not produced on wetlands or on peatland.

CONTINUOUS IMPROVEMENT

1. Producers are encouraged and incentivized to utilize best management practices as appropriate to optimize yield, water use, agrochemical use, soil health and water quality and improve wildlife habitat.
 - a. NRCS assesses conservation practice outcomes and administers several programs to incentivize improvements in soil erosion, soil health, carbon sequestration, wildlife habitat, wetland restoration, nutrient efficiency, water quality, irrigation efficiency, groundwater protection and reforestation.
2. Producers are expected to continue to adopt and support the development of innovations that improve crop production.
 - a. Genetics and Biotechnology: Advances have allowed producers to reduce tillage, pesticide usage, fuel consumption and GHG emissions per bushel while maintaining or improving yields.
 - b. Equipment: Innovations like improved no-till drills, draper heads for combining soybeans, air seeders and Y Drops for applying fertilizer in-season have improved efficiency by increasing the speed and accuracy of planting and harvesting.
 - c. Technology and Data: Precision agriculture technology, Global Positioning System (GPS), yield monitors and other technological improvements have improved management data and helped producers optimize costs and yields.
 - d. Weather Forecasting: More accurate weather forecasting and improved technology that provides access to forecast data in the field or remotely enables producers to improve decision making, reduce risk and more accurately provide what their crops need.
3. Producers are encouraged to continue to adopt and support the development of innovations that improve crop management, such as:
 - a. Satellite imagery allows producers to remotely monitor crops and make management decisions in near real-time.

- b. Improvements in Hyperspectral Imaging Spectroscopy (HIS) and the development of a Global Hyperspectral Imaging Spectral-library of Agricultural-Crops (GHISA) will improve modeling, mapping and monitoring of agricultural crops globally.
 - c. Smart drainage systems, infield sensors, subsurface irrigation and on-farm irrigation storage and re-use allow for improved water management and irrigation.
4. Producers are expected to continue to adopt and support the development of innovations that improve the sustainable production of corn.
 - a. Clean energy technologies, energy storage, energy efficiency and carbon dioxide capture measures should be adopted as possible to reduce energy use and GHG emissions.
 5. Continuous improvement is supported by a variety of regulated conservation programs and technology transfer systems, including:
 - a. The Conservation Reserve Program to protect the most sensitive areas by providing financial assistance to set aside on a long-term basis for cropland vulnerable to soil erosion or critical to wildlife habitat (8.4 million hectares enrolled as of 2019)
 - b. The Conservation Stewardship Program to reward producers for overall conservation performance across entire operations (28.3 million hectares enrolled as of 2019)
 - c. The Environmental Quality Incentive Program to provide financial and technical assistance to increase environmental quality of farmland still in production (21 million hectares enrolled in 2017, 2018 and 2019).
 - d. The Regional Conservation Partnership Program provides financial and technical assistance for locally identified projects funded by both Federal and partnering entities (10 million hectares benefited through 375 local projects with over 3,000 partners at the end of 2019).
 - e. The Conservation Effects Assessment Project quantifies the environmental effects of conservation practices and programs on the environment and develop the science base for managing the agricultural landscape for environmental quality.
 - f. Landscape initiatives are used to accelerate the benefits of voluntary conservation programs, such as cleaner water and air, healthier soil and enhanced wildlife habitat. Currently, NRCS operates eleven Landscape Initiatives across the U.S. for wildlife, water, ecosystems, pollinators and forestry.

GOAL 3: Good Health and Well-being

Targets

- By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
- By 2030, end preventable deaths of newborns and children under five years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under- mortality to at least as low as 25 per 1,000 live births.
- By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.
- By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.
- Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.
- By 2020, halve the number of global deaths and injuries from road traffic accidents.
- By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education and the integration of reproductive health into national strategies and programs.
- Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
- By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
- Support the research and development of vaccines and medicines for the communicable and noncommunicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.
- Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing states.
- Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of

national and global health risks.

CSAP RESPONSE:

GREENHOUSE GAS EMISSIONS, FOSSIL FUEL USE & AIR QUALITY

1. Producers are required to comply with the Clean Air Act and its amendments to protect and enhance air resources to promote public health and welfare.

WATER QUALITY & QUANTITY

1. Producers are required to comply with Safe Drinking Water Act to protect public health by preventing contamination of surface and ground sources of drinking water.

AGROCHEMICAL & NUTRIENT MANAGEMENT

1. Producers are required to follow Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) maintaining compliance with agricultural chemical handling, storage and application regulations.
 - a. All pesticides are registered with EPA with proper labels and used in accordance with specifications including how and under what conditions chemicals can be applied.
 - b. Certification and training are required for pesticide applicators using restricted use pesticides.
 - c. Producers adhere to EPA regulations concerning rotation of chemical active ingredients.
 - d. Pesticides are classified for general or restricted use. Restricted category pesticides may be used only under the direct supervision of certified applicators, or under such other regulatory restrictions as the EPA administrator may require.
 - e. U.S. regulations provide penalties for violations of FIFRA regulations and violation of these instructions is equivalent to violating the law; consequences can include criminal prosecution, civil remedies for damages and loss of license.
 - f. FIFRA provides states the authority to regulate the sale or use of any federally registered pesticides in that state.
 - g. Producers adhere to all federal regulations and guidelines on farm chemical application and producers observe best management practices. Additionally, producers who apply WHO Class Ia, Ib and II pesticides shall not apply them within 500 meters of populated areas or water bodies.
2. The U.S. is signatory to Rotterdam Convention of the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticide in International Trade enforcing a banned list of chemicals for producer use.
3. Producers are required to comply with the Toxic Substances Control Act to regulate chemicals that pose an unreasonable risk to health or to the environment and to regulate these chemicals' distribution and use.
4. Producers are required to follow the Resource Conservation and Recovery Act which controls hazardous waste, non-hazardous solid waste and underground storage tanks.
5. Producers are required to follow Safe Drinking Water Act regulations to protect public health by preventing contamination of surface and ground sources of drinking water.

WORKER & PUBLIC SAFETY

1. Producers are required to comply with the U.S. Environmental Protection Agency (EPA) Worker Protection Standard for Agriculture Pesticides meeting regulations for: pesticide safety training, notification of pesticide application, use of personal protective equipment, restricted- entry intervals after pesticide application, decontamination supplies and emergency medical assistance.
 - a. An application exclusion zone of 100 feet horizontally from application equipment is required whether the pesticide is applied by air blast application, as a spray or fumigant, mist or fog. Applicators must suspend application if they are aware of any person in the application exclusion zone per regulation in Worker Protection Standard by EPA.
2. Producers are required to comply with Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) maintaining compliance with agricultural chemical handling, storage and application regulations.
3. Producers are required to comply with the Clean Air Act and its amendments to protect and enhance air resources to promote public health and welfare.
4. Producers are required to comply with the Resource Conservation and Recovery Act which controls hazardous waste, non-hazardous solid waste and underground storage tanks.

5. Producers are required to comply with the Safe Drinking Water Act to protect public health by preventing contamination of surface and ground sources of drinking water.

GOAL 4: Quality Education

Targets

- By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes.
- By 2030, ensure that all girls and boys have access to quality early childhood development, care and preprimary education so that they are ready for primary education.
- By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
- By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
- By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.
- By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.
- By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.
- Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all.
- By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing states and African countries, for enrollment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programs, in developed countries and other developing countries.
- By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states.

CSAP RESPONSE

WORKING CONDITIONS & LABOR RELATIONS

1. Producers are required to follow the Fair Labor Standards Act which prescribes standards for basic minimum wage and prohibits the employment of children under age 16 during school hours and in certain jobs deemed dangerous.

COMMUNITY RELATIONS

1. Producers support via tax dollars free public education for all children grades K-12.
2. Producers support agricultural related education programs through the USDA cooperative extension system, a nationwide educational network that provides research-based information regarding agricultural practices.
3. At the local level, producers support the 4-H youth education program whose mission is to give ALL youth equal access to opportunity. 4-H provides kids with community, mentors and learning opportunities to develop the skills they need to create positive change in their lives and communities, including focus STEM programs (Science, Technology, Engineering and Math), Healthy Living and Civic Engagement. 4-H membership now exceeds 6 million with some 50,000 volunteers.
4. Producers also support the FFA. FFA is the premier youth organization preparing members for leadership and careers in the science, business and technology of agriculture. Currently, there are 760,000 members in 8,739 local chapters in all 50 states and Puerto Rico.
5. The USDA Foreign Agriculture Service (FAS) administers programs that help developing countries advance their agricultural systems and trade capacity. In partnership with the U.S. Agency for International Development, FAS administers U.S. food aid programs and education programs designed to reduce hunger and improve literacy, especially for girls. Programs include the Food for Progress Program, Local and Regional Food Aid Procurement Program, McGovern-Dole Food for Education Program and the Bill Emerson Humanitarian Trust.

GOAL 5: Gender Equality

Targets

- End all forms of discrimination against all women and girls everywhere.
- Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.
- Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.
- Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.
- Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life.
- Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.
- Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.
- Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.
- Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

CSAP RESPONSE

WORKING CONDITIONS & LABOR RELATIONS

1. Producers are required to comply with Federal Equal Employment Opportunity Law, which provides the following protections:
 - a. Prohibits employment discrimination based on race, color, religion, sex or national origin.
 - b. Protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination
 - c. Protects individuals who are 40 years of age or older.
 - d. Prohibits employment discrimination against qualified individuals with disabilities.
 - e. Prohibits employment discrimination based on genetic information.
 - f. Provides guidelines on employee selection procedures.
2. Producers are expected to actively support ongoing efforts to seek, recruit and promote women in leadership positions throughout state and national organizations. Numerous women currently hold leadership positions in producer associations as well as in staff leadership.

GOAL 6: Clean Water and Sanitation

Targets

- By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
- By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.
- By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.
- By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse

technologies.

- Support and strengthen the participation of local communities in improving water and sanitation management.

CSAP RESPONSE

WATER QUALITY & QUANTITY

1. Producers are expected to protect the quality and supply of surface and ground water by utilizing best management practices and following local, state and federal regulations.
 - a. Optimize irrigation and comply with all applicable water conservation efforts in their irrigation districts to ensure effective and equitable allocation of water resources.
 - b. Adopt conservation tillage methods as appropriate to reduce water runoff.
 - c. Implement best management practices to reduce phosphorus (P) and nitrogen (N) loss and transport.
 - i. Balance P and N inputs with outputs.
 - ii. Use proper application rates, methods and timing for P and N application.
 - iii. Use cover crops, terracing, strip cropping, contour farming, filter strips, conservation buffers, or other strategies to minimize erosion, runoff and P and N transport.
 - d. Producers are required to comply with Clean Water Act Law 40 parts 116–117 which regulate discharges of designated hazardous substances. Facilities must immediately notify the National Response Center and state agencies of any unauthorized discharge of reportable quantity of designated hazardous substance into navigable waters, the shorelines of navigable waters and contiguous zones. Discharge of harmful quantities of oil must also be reported immediately.
 - i. Watersheds with stream reaches with demonstrated water quality concerns are listed by each state government on the U.S. EPA Clean Water Act 303(d) list.
 - ii. State governments may require monitoring under Clean Water Act section 319 to ensure the implementation of best management practices and to determine how conservation measures affect water quality.
 - iii. Producers will comply with National Pollutant Discharge Elimination System (NPDES) requirements on discharges of biological pesticides, and chemical pesticides that leave a residue, into waters of the U.S.
2. Producers are required to comply with Section 404 of the Clean Water Act regarding agricultural impacts on wetlands.
3. Producers are required to comply with Safe Drinking Water Act to protect public health by preventing contamination of surface and ground sources of drinking water.

LAND USE, SENSITIVE HABITATS & BIODIVERSITY

1. On-farm biodiversity should be maintained and protected through the preservation of native vegetation where possible. Producers are encouraged to participate in conservation programs that provide incentive for the preservation of native vegetation.
 - a. U.S. Corn is not produced on wetlands or on peatland.
2. Primary forest or continuously forested land will not be converted to land for future corn production.
3. U.S. Corn is not produced on designated protected areas.

AGROCHEMICAL & NUTRIENT MANAGEMENT

1. Producers are encouraged and incentivized to adopt conservation tillage methods and other practices like crop rotation, cover crops and nutrient management as appropriate to reduce nutrient and pesticide/herbicide loss and runoff.
2. Producers are required to follow Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) maintaining compliance with agricultural chemical handling, storage and application regulations.
3. The U.S. is signatory to Rotterdam Convention of the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticide in International Trade enforcing a banned list of chemicals for producer use.
4. Producers are required to comply with the Toxic Substances Control Act to regulate chemicals that pose an unreasonable risk to health or to the environment and to regulate these chemicals' distribution and use.
5. Producers are required to follow the Resource Conservation and Recovery Act which controls hazardous waste, non-hazardous solid waste and underground storage tanks.
6. Producers are required to follow Safe Drinking Water Act regulations to protect public health by preventing contamination of surface and ground sources of drinking water.

WASTE & POLLUTION

1. Producers take measures to reduce and recycle waste and meet all local regulations as related to waste recycling.
2. Producers are required to follow all local regulations pertaining to burning crop residue.
3. Producers are required to comply with Clean Water Act Law 40 parts 116–117 which regulate discharges of designated hazardous substances. Facilities must immediately notify the National Response Center and state agencies of any unauthorized discharge of reportable quantity of designated hazardous substance into navigable waters, the shorelines of navigable waters and contiguous zones. Discharge of harmful quantities of oil must also be reported immediately.
 - a. Watersheds with stream reaches with demonstrated water quality concerns are listed by each state government on the U.S. EPA Clean Water Act 303(d) list.
 - b. State governments may require monitoring under Clean Water Act section 319 to ensure the implementation of best management practices and to determine how conservation measures affect water quality.
 - c. Producers will comply with National Pollutant Discharge Elimination System (NPDES) requirements on discharges of biological pesticides, and chemical pesticides that leave a residue, into waters of the U.S.

COMMUNITY RELATIONS

1. Producers are encouraged to engage with local communities to ensure that communications of concerns, complaints or other grievances between community members and producers are understood and addressed in a collaborative manner.
 - a. The Emergency Planning and Community Right-to Know Act supports community awareness and response to hazardous substances used in society.
 - b. The Environmental Protection Agency Water Data Tool How's My Waterway provides information about potential watershed contamination.
 - c. Producers support the development of local resource planning groups composed of agricultural landowners and producers, such as Soil and Water Conservation Districts, to address local conservation and environmental issues.

GOAL 7: Affordable and Clean Energy

Targets

- By 2030, ensure universal access to affordable, reliable and modern energy services.
- By 2030, substantially increase the share of renewable energy in the global energy mix.
- By 2030, double the global rate of improvement in energy efficiency.
- By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil fuel technology, and promote investment in energy infrastructure and clean energy technology.
- By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states, and land-locked developing countries, in accordance with their respective programmes of support.

CSAP RESPONSE

GREENHOUSE GAS EMISSIONS, FOSSIL FUEL USE & AIR QUALITY

1. Producers adopt Precision Farming Techniques as appropriate utilizing Global Positioning System (GPS) and other advanced technologies to optimize fossil fuel use and fertilizer application.
2. Producers support the development of non-fossil fuel ethanol. Each year, roughly 30 percent of U.S. field corn goes into fuel ethanol.
3. Producers support ethanol production, creating jobs and economic vitality across the U.S. In 2019, the U.S. ethanol industry helped support nearly 349,000 direct and indirect jobs.

GOAL 8: Decent Work and Economic Growth

Targets

- Sustain per capita economic growth in accordance with national circumstances and, in particular, at least seven percent gross domestic product growth per annum in the least developed countries.
- Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors.
- Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.
- Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead.
- By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
- By 2020, substantially reduce the proportion of youth not in employment, education or training.
- Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms.
- Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.
- By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.
- Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.
- Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries.
- By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization.

CSAP RESPONSE

WORKING CONDITIONS & LABOR RELATIONS

1. Producers are required to follow the Fair Labor Standards Act which prescribes standards for basic minimum wage and prohibits the employment of children under age 16 during school hours and in certain jobs deemed dangerous.
2. Producers are required to comply with the Federal Equal Employment Opportunity Law which provides the following protections:
 - a. Prohibits employment discrimination based on race, color, religion, sex or national origin.
 - b. Protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination.
 - c. Protects individuals who are 40 years of age or older.
 - d. Prohibits employment discrimination against qualified individuals with disabilities.
 - e. Prohibits employment discrimination based on genetic information.
 - f. Provides guidelines on employee selection procedures.
3. Producers are required to comply with the Migrant and Seasonal Agricultural Worker Protection Act which provides safeguards to migrant and seasonal agricultural workers.
4. Producers are required to comply with the Abolition of Forced Labor Act in that they shall not make use of any type of forced or compulsory labor including:
 - a. As a means of political coercion or education or as a punishment for holding or expressing political view or views opposed to the established political, social or economic system.
 - b. As a method of mobilizing and using labor for purposes of economic development.
 - c. As a means of labor discipline.

- d. As a punishment for having participated in strikes.
 - e. As a means of racial, social, national or religious discrimination.
5. Producers are required to comply with Victims of Trafficking and Violence Protection Act providing protection and assistance for victims of trafficking regardless of immigration status.
 6. Producers will recognize the Right of Association for workers, including the right to unionize or engage in collective bargaining in accordance with applicable federal and state laws.

WORKER & PUBLIC SAFETY

1. Producers are required to comply with Occupational Health and Safety Act (OSHA) to ensure safe and healthful working conditions including workplace violence guidelines.

COMMUNITY RELATIONS

1. The USDA Foreign Agriculture Service (FAS) administers programs that help developing countries advance their agricultural systems and trade capacity. In partnership with the U.S. Agency for International Development, FAS administers U.S. food aid programs and education programs designed to reduce hunger and improve literacy, especially for girls. Programs include the Food for Progress Program, Local and Regional Food Aid Procurement Program, McGovern-Dole Food for Education Program and the Bill Emerson Humanitarian Trust.

GOAL 9: Industry, Innovation and Infrastructure

Targets

- Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.
- Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.
- By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
- Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030 encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
- Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States 18.
- Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.
- Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

CSAP RESPONSE

CONTINUOUS IMPROVEMENT

1. Producers are expected to continue to adopt and support the development of innovations that improve crop production.
 - a. Genetics and Biotechnology: Advances have allowed producers to reduce tillage, pesticide usage, fuel consumption and GHG emissions per bushel while maintaining or improving yields.
 - b. Equipment: Innovations like improved no-till drills, draper heads for combining soybeans, air seeders and Y Drops for applying fertilizer in-season have improved efficiency by increasing the speed and accuracy of planting and harvesting.
 - c. Technology and Data: Precision agriculture technology, Global Positioning System (GPS), yield monitors and other technological improvements have improved management data and helped producers optimize costs and yields.
 - d. Weather Forecasting: More accurate weather forecasting and improved technology that provides access to forecast data in the

- field or remotely enables producers to improve decision making, reduce risk and more accurately provide what their crops need.
2. Producers are encouraged to continue to adopt and support the development of innovations that improve crop management.
 - a. The cloud allows increased data storage, management and remote access to improve crop management decisions.
 - b. Scalable sustainability software allows producers to model and compare different management options for their fields.
 - c. Blockchain technology enables precise tracking of where and how crops were managed.
 - d. Robotics systems can assist with labor management, post-harvest processing, supply chain logistics and equipment operation.
 - e. Satellite imagery allows producers to remotely monitor crops and make management decisions in near real-time.
 - f. Improvements in Hyperspectral Imaging Spectroscopy (HIS) and the development of a Global Hyperspectral Imaging Spectral-library of Agricultural-Crops (GHISA) will improve modeling, mapping and monitoring of agricultural crops globally.
 - g. Smart drainage systems, infield sensors, subsurface irrigation and on-farm irrigation storage and re-use allow for improved water management and irrigation.
 3. Producers are expected to continue to adopt and support the development of innovations that improve the sustainable production of corn.
 - a. Clean energy technologies, energy storage, energy efficiency and carbon dioxide capture measures should be adopted as possible to reduce energy use and GHG emissions.

GOAL 10: Reduced Inequality

Targets

- By 2030, progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average.
- By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
- Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.
- Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.
- Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations.
- Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions.
- Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.
- Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements.
- Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing states and landlocked developing countries, in accordance with their national plans and programmes.
- By 2030, reduce transaction costs of migrant remittances to less than 3% and eliminate remittance corridors with costs higher than 5%.

CSAP RESPONSE

WORKING CONDITIONS & LABOR RELATIONS

1. Producers are required to comply with Federal Equal Employment Opportunity Law which provides the following protections:
 - a. Prohibits employment discrimination based on race, color, religion, sex or national origin.
 - b. Protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination.
 - c. Protects individuals who are 40 years of age or older.
 - d. Prohibits employment discrimination against qualified individuals with disabilities.
 - e. Prohibits employment discrimination based on genetic information.
 - f. Provides guidelines on employee selection procedures.

2. Producers are required to comply with the Migrant and Seasonal Agricultural Worker Protection Act which provides safeguards to migrant and seasonal agricultural workers.
3. Producers are required to comply with the Abolition of Forced Labor Act in that they shall not make use of any type of forced or compulsory labor including:
 - a. As a means of political coercion or education or as a punishment for holding or expressing political view or views opposed to the established political, social or economic system.
 - b. As a method of mobilizing and using labor for purposes of economic development.
 - c. As a means of labor discipline.
 - d. As a punishment for having participated in strikes.
 - e. As a means of racial, social, national or religious discrimination.

GOAL 11: Sustainable Cities and Communities

Targets

- By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
- By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.
- Strengthen efforts to protect and safeguard the world's cultural and natural heritage.
- By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.
- By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
- By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.
- Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.
- By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.
- Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

CSAP RESPONSE

COMMUNITY RELATIONS

1. Producers are encouraged to engage with local communities to ensure that communications of concerns, complaints or other grievances between community members and producers are understood and addressed in a collaborative manner.
 - a. Producers support the development of local resource planning groups composed of agricultural landowners and producers, such as Soil and Water Conservation Districts, to address local conservation and environmental issues.

GOAL 12: Responsible Consumption and Production

Targets

- Implement the 10-year framework of programs on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.
- By 2030, achieve the sustainable management and efficient use of natural resources.
- By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

- By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
- By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
- Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.
- Promote public procurement practices that are sustainable, in accordance with national policies and priorities.
- By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.
- Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.
- Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.
- Rationalize inefficient fossil fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

CSAP RESPONSE

WATER QUALITY & QUANTITY

1. Producers are expected to protect the quality and supply of surface and ground water by utilizing best management practices and following local, state, and federal regulations.
 - a. Optimize irrigation and comply with all applicable water conservation efforts in their irrigation districts to ensure effective and equitable allocation of water resources.

SOIL HEALTH & PRODUCTIVITY

1. Producers are expected to utilize best management practices to maintain or improve soil quality and soil carbon and avoid erosion.

AGROCHEMICAL & NUTRIENT MANAGEMENT

1. Producers are required to follow Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) maintaining compliance with agricultural chemical handling, storage and application regulations.
 - a. All pesticides are registered with EPA with proper labels and used in accordance with specifications including how and under what conditions chemicals can be applied.
 - b. Certification and training are required for pesticide applicators using restricted use pesticides.
 - c. Producers adhere to EPA regulations concerning rotation of chemical active ingredients.
 - d. Pesticides are classified for general or restricted use. Restricted category pesticides may be used only under the direct supervision of certified applicators, or under such other regulatory restrictions as the EPA administrator may require.
 - e. U.S. regulations provide penalties for violations of FIFRA regulations and violation of these instructions is equivalent to violating the law; consequences can include criminal prosecution, civil remedies for damages and loss of license.
 - f. FIFRA provides states the authority to regulate the sale or use of any federally registered pesticides in that state.
 - g. Producers adhere to all federal regulations and guidelines on farm chemical application and producers observe best management practices. Additionally, producers who apply WHO Class Ia, Ib and II pesticides shall not apply them within 500 meters of populated areas or water bodies.
2. The U.S. is signatory to Rotterdam Convention of the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticide in International Trade enforcing a banned list of chemicals for producer use.
3. Producers are required to comply with the Toxic Substances Control Act to regulate chemicals that pose an unreasonable risk to health or to the environment and to regulate these chemicals' distribution and use.
4. Producers are required to follow the Resource Conservation and Recovery Act which controls hazardous waste, non-hazardous solid waste and underground storage tanks.
5. Producers are required to follow Safe Drinking Water Act regulations to protect public health by preventing contamination of surface

and ground sources of drinking water.

WASTE & POLLUTION

1. Producers take measures to reduce and recycle waste and meet all local regulations as related to waste recycling.

GOAL 13: Climate Action

Targets

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- Integrate climate change measures into national policies, strategies and planning.
- Improve education, awareness and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
- Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.
- Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focusing on women, youth and local and marginalized communities.

CSAP RESPONSE

GREENHOUSE GAS EMISSIONS, FOSSIL FUEL USE & AIR QUALITY

1. Producers strive to adopt best management practices to reduce Greenhouse Gas Emissions.
 - a. Reducing energy usage by adopting conservation tillage methods as appropriate.
 - b. Optimizing nitrogen (N) and phosphorus (P) fertilizer application.
 - c. Monitoring and reducing fossil fuel use for management records and to increase enterprise viability.
 - i. The NRCS maintains four energy tools to increase awareness and help farmers identify energy reduction potential in their operations. The estimators can be used to estimate potential energy savings for irrigation, nitrogen fertilizer use, grain drying, and tillage systems. The NRCS also maintains energy conservation tools to help farmers estimate current energy usage and calculate energy and cost savings that could be achieved through the use of high efficiency equipment and energy conserving practices and renewable energy tools to help farmers estimate energy production potential from solar panels, wind turbines and biogas.
 - d. Utilizing renewable energy resources, when possible, to reduce fossil fuel use.
 - e. Prioritizing transportation methods such as barge and rail, when possible, to reduce greenhouse gas emissions and fossil fuel use.

GOAL 14: Life Below Water

Targets

- By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
- By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
- Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.
- By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.
- By 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.
- By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate

and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation

- By 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
- Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing states and least developed countries
- Provide small-scale artisanal fishers with access to marine resources and markets
- Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want

CSAP RESPONSE

WATER QUALITY & QUANTITY

1. Producers are expected to protect the quality and supply of surface and ground water by utilizing best management practices and following local, state and federal regulations.
 - a. Optimize irrigation and comply with all applicable water conservation efforts in their irrigation districts to ensure effective and equitable allocation of water resources.
 - b. Adopt conservation tillage methods as appropriate to reduce water runoff.
 - c. Implement best management practices to reduce phosphorus (P) and nitrogen (N) loss and transport.
 - i. Balance P and N inputs with outputs.
 - ii. Use proper application rates, methods, and timing for P and N application.
 - iii. Use cover crops, terracing, strip cropping, contour farming, filter strips, conservation buffers or other strategies to minimize erosion, runoff and P and N transport.
 - d. Producers are required to comply with Clean Water Act Law 40 parts 116–117 which regulate discharges of designated hazardous substances. Facilities must immediately notify the National Response Center and state agencies of any unauthorized discharge of reportable quantity of designated hazardous substance into navigable waters, the shorelines of navigable waters and contiguous zones. Discharge of harmful quantities of oil must also be reported immediately.
 - i. Watersheds with stream reaches with demonstrated water quality concerns are listed by each state government on the U.S. EPA Clean Water Act 303(d) list.
 - ii. State governments may require monitoring under Clean Water Act section 319 to ensure the implementation of best management practices and to determine how conservation measures affect water quality.
 - iii. Producers will comply with National Pollutant Discharge Elimination System (NPDES) requirements on discharges of biological pesticides, and chemical pesticides that leave a residue, into waters of the U.S.
2. Producers are required to comply with Section 404 of the Clean Water Act regarding agricultural impacts on wetlands.
3. Producers are required to comply with Safe Drinking Water Act to protect public health by preventing contamination of surface and ground sources of drinking water.

SOIL HEALTH & PRODUCTIVITY

1. Producers are expected to utilize best management practices to maintain or improve soil quality and soil carbon and avoid erosion.
 - a. Producers shall adopt conservation practices like crop rotation, cover crops, nutrient management and no-till to improve soil health.
 - b. Producers shall adopt conservation tillage methods as appropriate in order to increase soil health and organic matter, increase moisture retention, reduce soil compaction and soil erosion
 - c. Producers shall implement best management practices like cover crops, terracing, strip cropping, contour farming, filter strips, conservation buffers or other strategies to minimize soil erosion.

AGROCHEMICAL & NUTRIENT MANAGEMENT

1. Producers are encouraged and incentivized to adopt conservation tillage methods and other practices like crop rotation, cover crops and nutrient management as appropriate to reduce nutrient and pesticide/herbicide loss and runoff.

WASTE & POLLUTION

1. Producers take measures to reduce and recycle waste and meet all local regulations as related to waste recycling.
2. Producers are required to follow all local regulations pertaining to burning crop residue.
3. Producers are required to comply with Clean Water Act Law 40 parts 116–117 which regulate discharges of designated hazardous substances. Facilities must immediately notify the National Response Center and state agencies of any unauthorized discharge of reportable quantity of designated hazardous substance into navigable waters, the shorelines of navigable waters and contiguous zones. Discharge of harmful quantities of oil must also be reported immediately.
 - a. Watersheds with stream reaches with demonstrated water quality concerns are listed by each state government on the U.S. EPA Clean Water Act 303(d) list.
 - b. State governments may require monitoring under Clean Water Act section 319 to ensure the implementation of best management practices and to determine how conservation measures affect water quality.
 - c. Producers will comply with National Pollutant Discharge Elimination System (NPDES) requirements on discharges of biological pesticides, and chemical pesticides that leave a residue, into waters of the U.S.

GOAL 15: Life on Land

Targets

- By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.
- By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.
- By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.
- By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.
- Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.
- Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.
- Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.
- By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.
- By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.
- Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.
- Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.
- Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

CSAP RESPONSE

SOIL HEALTH & PRODUCTIVITY

1. Producers are expected to utilize best management practices to maintain or improve soil quality and soil carbon and avoid erosion.
 - a. Producers are required to comply with the USDA Highly Erodible Land Conservation program.
 - i. Highly erodible land is defined as soils that have an erodibility index of eight or more. The USDA will keep record of highly

erodible land. Producers may obtain aerial imagery of their farms and a printout of their farm and tract records from the local USDA office administering their farm.

- ii. Producers will maintain compliance with highly erodible land regulations by creating and implementing a required conservation system plan.
 - iii. Producers file Form AD-1026 with USDA Farm Service Agency certifying adherence to Highly Erodible Lands Conservation provisions.
 - iv. Producers planning to make changes which could impact highly erodible land must notify USDA for appropriate technical determination.
- b. Producers are required to comply with USDA Sodsaver provisions which help protect native sod in Minnesota, Iowa, North Dakota, South Dakota, Montana and Nebraska.

LAND USE, SENSITIVE HABITATS AND BIODIVERSITY

1. On-farm biodiversity should be maintained and protected through the preservation of native vegetation, where possible. Producers are encouraged to participate in conservation programs that provide incentive for the preservation of native vegetation.
 - a. Producers are required to comply with U.S. Endangered Species Act to protect listed animal and plant species from extinction by preserving the ecosystems in which they survive.
 - b. Producers are required to comply with Federal Migratory Bird Treaty for protection of shared migratory bird resources.
 - c. Producers are required to comply with U.S. laws that prohibit altering the habitat of endangered or threatened species in such a way that disrupts essential behavioral patterns including but not limited to breeding, feeding and sheltering.
 - d. A Habitat Conservation Plan is required as part of an application for private entities undertaking projects that might result in the destruction of an endangered or threatened species.
 - e. U.S. Corn is not produced on highly biodiverse grassland.
 - f. U.S. Corn is not produced on wetlands or on peatland.
2. Primary forest or continuously forested land will not be converted to land for future corn production.
3. U.S. Corn is not produced on designated protected areas.
 - a. Producers follow U.S. laws that prohibit the production of corn on land under federal protected status, land designated wilderness or research natural areas, protected land in national forests and grasslands and land in the national landscape Conservation System.
 - b. Producers follow U.S. laws that prohibit production of corn on land protected by National Park Service.

CROP HEALTH & AGRICULTURAL BEST MANAGEMENT PRACTICES

1. Producers are required to comply with Plant Protection Act regulations regarding the import of plants and plant products.

CONTINUOUS IMPROVEMENT

1. Continuous Improvement is supported by a variety of regulated conservation programs and technology transfer systems, including:
 - a. The Conservation Reserve Program to protect the most sensitive areas by providing financial assistance to set aside on a long-term basis for cropland vulnerable to soil erosion or critical to wildlife habitat (8.4 million hectares enrolled as of 2019).
 - b. The Conservation Stewardship Program to reward producers for overall conservation performance across entire operations (28.3 million hectares enrolled as of 2019).
 - c. The Environmental Quality Incentive Program to provide financial and technical assistance to increase environmental quality of farmland still in production (21 million hectares enrolled in 2017, 2018 and 2019).
 - d. The Regional Conservation Partnership Program provides financial and technical assistance for locally identified projects funded by both Federal and partnering entities (10 million hectares benefited through 375 local projects with over 3,000 partners at the end of 2019).
 - e. The Conservation Effects Assessment Project quantifies the environmental effects of conservation practices and programs on the environment and develop the science base for managing the agricultural landscape for environmental quality.
 - f. Landscape initiatives are used to accelerate the benefits of voluntary conservation programs, such as cleaner water and air, healthier soil, and enhanced wildlife habitat. Currently, NRCS operates 11 Landscape Initiatives across the U.S. for wildlife, water, ecosystems, pollinators and forestry.

GOAL 16: Peace and Justice Strong Institutions

Targets

- Significantly reduce all forms of violence and related death rates everywhere.
- End abuse, exploitation, trafficking and all forms of violence against and torture of children.
- Promote the rule of law at the national and international levels and ensure equal access to justice for all.
- By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organised crime.
- Substantially reduce corruption and bribery in all their forms.
- Develop effective, accountable and transparent institutions at all levels.
- Ensure responsive, inclusive, participatory and representative decision-making at all levels.
- Broaden and strengthen the participation of developing countries in the institutions of global governance.
- By 2030, provide legal identity for all, including birth registration.
- Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.
- Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.
- Promote and enforce non-discriminatory laws and policies for sustainable development.

CSAP RESPONSE

WORKING CONDITIONS & LABOR RELATIONS

1. Producers are required to comply with Victims of Trafficking and Violence Protection Act providing protection and assistance for victims of trafficking regardless of immigration status.

GOAL 17: Partnerships to achieve the Goal

Targets

Finance

- Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.
- Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 percent of ODA/GNI to developing countries and 0.15 to 0.20 percent of ODA/GNI to least developed countries ODA providers are encouraged to consider setting a target to provide at least 0.20 percent of ODA/GNI to least developed countries.
- Mobilize additional financial resources for developing countries from multiple sources.
- Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress.
- Adopt and implement investment promotion regimes for least developed countries.

Technology

- Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.
- Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.
- Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology.

Capacity building

- Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation.

Trade

- Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda.
- Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020.
- Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access.

Systemic issues

Policy and institutional coherence

- Enhance global macroeconomic stability, including through policy coordination and policy coherence.
- Enhance policy coherence for sustainable development.
- Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development.

Multi-stakeholder partnerships

- Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.
- Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Data, monitoring and accountability

- By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing states, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.
- By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries.

CSAP RESPONSE

COMMUNITY RELATIONS

1. The USDA Foreign Agriculture Service (FAS) administers programs that help developing countries advance their agricultural systems and trade capacity. In partnership with the U.S. Agency for International Development, FAS administers U.S. food aid programs and education programs designed to reduce hunger and improve literacy, especially for girls. Programs include the Food for Progress Program, Local and Regional Food Aid Procurement Program, McGovern-Dole Food for Education Program and the Bill Emerson Humanitarian Trust.
2. The USDA Food and Nutrition Service administers 15 Federal nutrition assistance programs to reduce hunger in the U.S. by providing food and healthful diet and nutrition education to children and low-income people. Programs include WIC, Supplemental Nutrition Assistance Program, school meals, and summer food service.
3. Producers generally support continued U.S. membership in the World Trade Organization (WTO) and support the authority of the WTO to arbitrate trade disputes and implement enforcement actions.

END NOTES

¹ United Nations, Department of economic and Social affairs: Sustainable Development, Linking Voluntary Standards to Sustainable Development Goals <https://intracen.org/resources/publications/linking-voluntary-standards-to-sustainable-development-goals>

² <https://www.intracen.org/publication/Sustainable-Development/>