

FACT

WORLD'S CURRENT POPULATION IS ABOUT 7 BILLION.

7bn
2013

9bn+
2050

ACCORDING TO THE UNITED NATIONS, THE GLOBAL POPULATION WILL INCREASE BY MORE THAN 2 BILLION PEOPLE BY 2050.

[FAST FORWARD ►►]

THE PLANET HAS A LIMITED AMOUNT OF LAND AVAILABLE FOR FOOD PRODUCTION. THE NATURAL RESOURCES AND NUTRIENTS ON WHICH AGRICULTURE RELIES TO PRODUCE ABUNDANT CROPS ARE BECOMING CONSTRAINED.

FERTILIZER INPUTS MUST BE OPTIMIZED TO MAXIMIZE CROP YIELDS AND MINIMIZE ENVIRONMENTAL IMPACTS.

INDUSTRY EXPERTS AGREE THAT INCREASED FOOD PRODUCTION WILL BE ACHIEVED BY INTENSIFIED CROP PRODUCTION.

CLIMATE CHANGE ADDS FURTHER PRESSURE ON AGRICULTURAL RESOURCES AND PRESSURE TO LIMIT THE USE OF FERTILIZERS IS INCREASING.

GLOBAL WARMING

Source: Agriculture and Agri-food Canada

ABOUT 8% OF CANADA'S GREENHOUSE GAS EMISSIONS ARE FROM AGRICULTURAL PRODUCTION.

NITROUS OXIDE OR N₂O (A GREENHOUSE GAS) ACCOUNTS FOR ABOUT HALF OF THE GLOBAL WARMING EFFECT OF AGRICULTURAL EMISSIONS IN CANADA.

WE MUST TAKE SUSTAINABLE ACTIONS TO:

PROTECT OUR SOIL, WATER AND AIR FOR SOCIETY.

ENHANCE THE PRODUCTIVITY AND PROFITABILITY OF OUR FARMERS.

ENSURE THE FUTURE OF THE AGRICULTURAL INDUSTRY.

FEED THE PLANET SUSTAINABLY.

SUSTAINABILITY GOALS

- ✓ ENVIRONMENTAL
- ✓ SOCIAL
- ✓ ECONOMIC

ENVIRONMENTAL

- SUSTAIN OR IMPROVE SOIL QUALITY
- MAINTAIN NUTRIENT LEVELS WITHIN NATURAL ECOSYSTEMS
- PRESERVE WILDLIFE HABITAT

SOCIAL

- PRODUCE NUTRITIOUS, ABUNDANT, AND AFFORDABLE FOOD
- HELP MEET GLOBAL FOOD NEEDS
- PROVIDE ONGOING EMPLOYMENT OPPORTUNITIES IN AGRICULTURE

ECONOMIC

- PRODUCE REVENUE TO SUSTAIN FARM OPERATIONS
- PRESERVE QUALITY OF LIFE
- MAKE THE MOST OF DOLLARS SPENT ON FERTILIZERS

AGRICULTURAL SUSTAINABILITY IS DEPENDENT ON THE 4Rs.

RIGHT



SOURCE

RIGHT



RATE

RIGHT



TIME

RIGHT



PLACE

BEST MANAGEMENT PRACTICES ENSURE FARM OPERATIONS ARE ENVIRONMENTALLY SUSTAINABLE.

NUTRIENT STEWARDSHIP CONTRIBUTES TO THE PRESERVATION OF NATURAL ECOSYSTEMS BY GROWING MORE FOOD ON LESS LAND

RETAINING NUTRIENTS WITHIN A FIELD'S BOUNDARIES AND IN THE CROP ROOTING ZONE GREATLY REDUCES THE AMOUNT THAT IS NOT UTILIZED BY PLANTS AND THEREBY ESCAPES INTO THE ENVIRONMENT AS POLLUTION.

BEST MANAGEMENT PRACTICES ALLOW FARMERS TO MAXIMIZE ECONOMIC YIELDS AND ACHIEVE PROFITABLE PRODUCTION YEAR AFTER YEAR.

USING THE RIGHT FERTILIZER INCREASES CROP YIELDS, NUTRIENT UPTAKE, AND RECOVERY OF APPLIED NUTRIENTS AND MINIMIZES OR LIMITS THE POTENTIAL FOR UNDESIRABLE NUTRIENT LOSSES TO WATER AND AIR RESOURCES.

HIGHER CROP YIELDS ARE WELL-DOCUMENTED WITH BETTER CROP AND SOIL MANAGEMENT.

IMPROVED FERTILIZER EFFICIENCY INCREASES THE QUANTITY PRODUCED PER ACRE FOR EACH UNIT OF NUTRIENT APPLIED, WITHOUT SACRIFICING YIELD POTENTIAL.

MAKES THE MOST OF DOLLARS SPENT ON FERTILIZERS.