Edition #1

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GREEN AGRIPRENEURS OF FUTURE

GREEN AGRIPRENEURS OF FUTURE

The beauty of nature

GREEN LEADERS OF SUSTAINABLE AGRICULTURE FUTURE

READ MORE

The Green Agripreneurs of the Future project is an international Erasmus+ educational initiative that supports students and teachers in developing knowledge about sustainable agriculture and green entrepreneurship. Young participants learn how to combine innovation with care for the environment.

READ MORE

STEM classes within the Erasmus+ project are not only about learning, but also about real actions for the environment. Thanks to such initiatives, young people not only gain knowledge, but also learn how to change the world for the better – starting from their own backyard!

STEM LEARNING BY CHANGING THE WORLD

GREEN LEADERS OF SUSTAINABLE AGRICULTURE FUTURE

INTERNATIONAL EDUCATION FOR GREEN ENTREPRENEURSHIP

Green Agripreneurs of the Future is an innovative educational initiative available under Erasmus+ (KA220-SCH) that aims to equip students aged 9-14 and teachers in green entrepreneurship and organic farming solutions and risks. Coordinated by Bursa İl Milli Eğitim Müdürlüğü in Turkey, the project involves partners from Spain, Poland, North Macedonia and Bulgaria.

GREEN AGRIPRENEURS OF THE FUTURE

is a European educational project that promotes green entrepreneurship and organic farming among students and teachers.

GOALS AND OBJECTIVES OF THE PROJECT

- Education in the field of sustainable agriculture, especially in urban environments.
- Development of entrepreneurial competences based on the principles of sustainable development.
- Creation of open educational resources (OER) supporting digital education.
- Increasing interest in natural sciences (STEM).
- Promoting civic attitudes through activities related to green innovation.
- Strengthening international cooperation and exchange of good practices.

BURSA
İL MİLLÎ EĞİTİM MÜDÜRLÜĞÜ

>>> PROJECT PARTNERS

- **Bursa İl Milli Eğitim Müdürlüğü** (Turkey) – project coordinator
- **Bursa Uludağ Üniversitesi Ziraat Fakültesi** (Turkey) – academic partner
- **European Centre of Entrepreneurship Competence and Excellence** (Bulgaria) – entrepreneurship competence center
- **Universidad de Salamanca** (Spain) – educational institution
- **Climate and Environment Association Europe** (Bulgaria) – environmental protection organization
- **Nilüfer Kara Mehmet Ortaokulu** (Turkey) – primary school
- **International Primary School of Innovative Training in Łódź** (Poland) – primary school
- **Oou Joakım Krchovskı Kriva Palanka** (North Macedonia) – primary school

>>> THE FUTURE OF THE PROJECT

The Green Agripreneurs of the Future project will last until December 31, 2025. During this time, further events, workshops and the development of an e-learning platform are planned, which will allow students and teachers to access educational materials and tools supporting learning about sustainable agriculture and entrepreneurship.

This initiative is an important step towards educating the young generation about sustainable development, innovation and active participation in solving the challenges related to agriculture and climate change.

GREEN INNOVATION

This initiative is a key step in teaching youth about sustainability, innovation, and tackling agriculture and climate challenges.

Międzynarodowa Szkoła Podstawowa
Edukacji Innowacyjnej w Łodzi

SUSTAINABLE AGRICULTURE - KEY TO THE FUTURE OF THE PLANET

SUSTAINABLE AGRICULTURE CHALLENGE

In the face of growing population, climate change and environmental degradation, agriculture faces a huge challenge. How can we feed the world without destroying it? The answer may lie in sustainable agriculture – a farming system that reconciles the needs of people, the environment and the economy. It promotes practices that preserve natural resources, support biodiversity, and reduce harmful emissions. By focusing on long-term resilience rather than short-term gains, sustainable agriculture offers a path toward a more secure and equitable food future.

WHAT IS SUSTAINABLE AGRICULTURE?

Sustainable agriculture is a way of conducting agricultural activities that strives to maintain a balance between three main pillars:

- **Ecological** – protection of soil, water and biodiversity,
- **Social** – ensuring decent living conditions for farmers and local communities,
- **Economic** – profitability of production and resistance to economic crises.

Unlike intensive, industrial agriculture, the sustainable model minimizes the use of chemicals, avoids monocultures, focuses on local resources and a circular approach to production.

>>> SUSTAINABLE AGRICULTURE PRACTICES

There is no universal recipe for sustainable agriculture, but several proven practices are widely recognized for their effectiveness. Crop rotation and crop diversity help maintain soil fertility and reduce the risk of plant diseases by disrupting pest and pathogen cycles. Organic farming, which avoids synthetic fertilizers and pesticides, promotes biodiversity and enhances soil health. Agroforestry integrates trees and crops, creating a balanced ecosystem that protects the soil and regulates the microclimate. Efficient water management techniques, such as drip irrigation, minimize water waste and ensure that crops receive adequate moisture. Lastly, closed nutrient cycles—achieved through composting, the use of natural fertilizers, and recycling agricultural waste—reduce dependency on external inputs and contribute to a more self-sustaining farming system.

WHY IS IT IMPORTANT?

Sustainable agriculture:

- **Protects natural resources for future generations.**
- **Helps combat global warming by sequestering carbon in the soil.**
- **Increases food security – healthy soil means healthy food.**
- **Reduces dependence on external inputs such as oil, synthetic fertilizers, and pesticides.**

>>> CHALLENGES AND THE FUTURE

Although sustainable agriculture brings many benefits, its implementation is associated with challenges. Support from governments, education of farmers and development of local markets are crucial. Adjustment of agricultural policy is also necessary. More and more farms reach for pro-ecological solutions, and consumers, by choosing responsible products, support this positive trend.

SUSTAINABLE AGRICULTURE

WHAT IS SUSTAINABLE AGRICULTURE?

Farming practices that meet farmet food needs without compromising future generations, Focuses on environmental health, economic profitability, and social oquity

KEY PRINCIPLES

SOIL HEALTH

Cover crops, compost, crop rotation

WATER CONSERVATION

Drip irrigation, rainwater harvesting

BIODI-VERSITY

Polyculture, integrated pest manag-ement

ENVIRON-STEWARD

Reduce chemical inputs, protect habitats

SUPPORT for FARMERS

Fair wages-communi-based farming

BENEFITS

- ✓ Reduces poliution and greenhouse gas emissions
- ✓ Improved soil fertility and biodiversity
- ✓ Enhances food security and resilience to climate change
- ✓ Promotes ethical treatment of workers and animals

EXAMPLES OF SUSTAINABLE PRACTICES

Agroforestry

Organic Farming

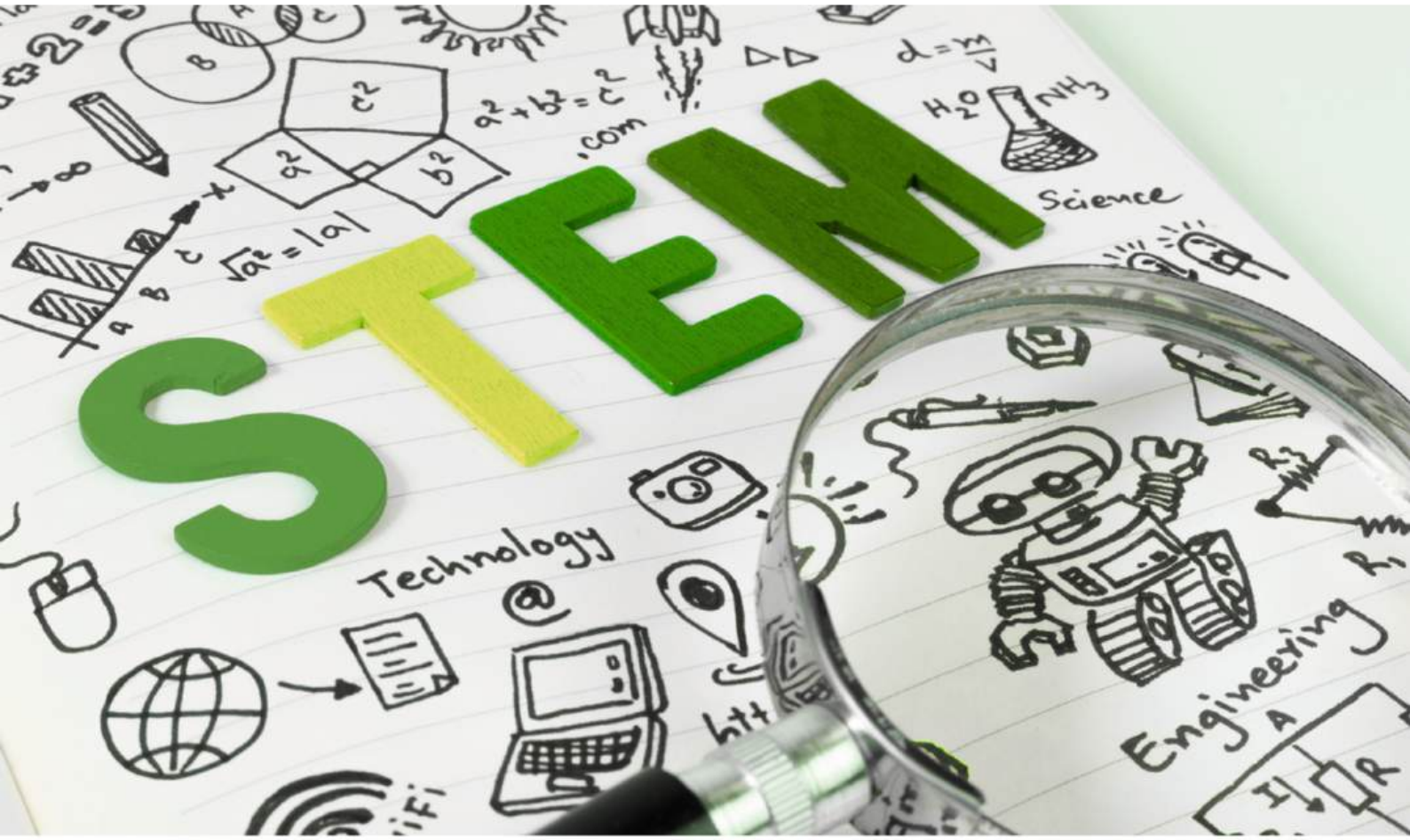
Permaculture

Conservation Tillage

HOW YOU CAN HELP

- Buy local and organic
- Reduce food waste
- Support sustainable brands
- Advocate for green farming policies

WHAT IS A STEM LESSON AND WHY IS IT WORTH ATTENDING?



SCIENCE, TECHNOLOGY AND FUN IN ONE - OR HOW WE LEARN BY DOING

STEM lessons are a modern form of classes that combine four important fields: Science, Technology, Engineering, and Mathematics. Instead of just listening and learning theory, in STEM lessons students work in teams, solve practical problems, build models such as robots or simple machines, and use modern tools such as programming or using 3D printers. This approach helps to better understand how the world works and how science can be used in everyday life.

Why is it worth taking part in such lessons? STEM develops creativity, logical thinking and the ability to work in a group, and also prepares for future professions that often require knowledge of technology and mathematics. Importantly, these lessons show that learning does not have to be boring - on the contrary, it can be great fun and an adventure, thanks to which you discover how much you can create and change with your own ideas.

THE GREEN POWER OF LEARNING
AN ECO ADVENTURE WITH ERASMUS+

A GREEN LESSON WITH ERASMUS+

Our school hosted a special class as part of the Erasmus+ Green Agripreneurs project. The topic was environmental protection and sustainable farming. The lesson started with a presentation about smog and the role of plants in cleaning the air. Students learned what photosynthesis is and how it works. They were surprised to find out that even small houseplants can improve air quality. Everyone realized that plants aren't just decoration — they act as natural air filters. This new knowledge helped students understand how important greenery is and how daily habits can impact the environment.

LEARNING THROUGH FUN – QR CODE CHALLENGE

After the theory part, it was time for something creative. Students received special QR codes to color in and complete. When scanned, the codes revealed fun nature-related tasks. Each challenge required thinking skills and some science knowledge. Learning became more fun, and it was easier to remember new facts. Coloring allowed everyone to be creative and involved. Students helped each other and shared their ideas. This activity showed that learning can be both enjoyable and engaging, especially when it connects science with art and teamwork.

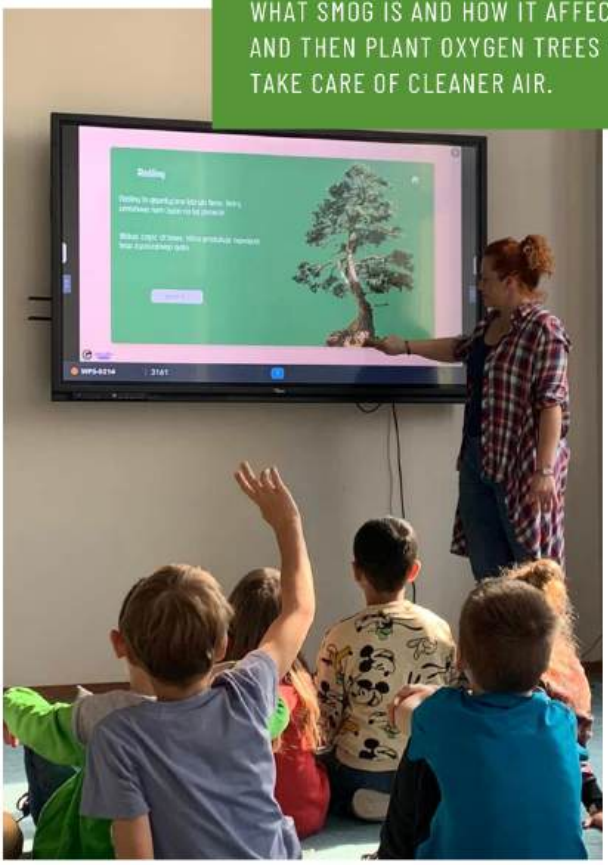
DID YOU KNOW?

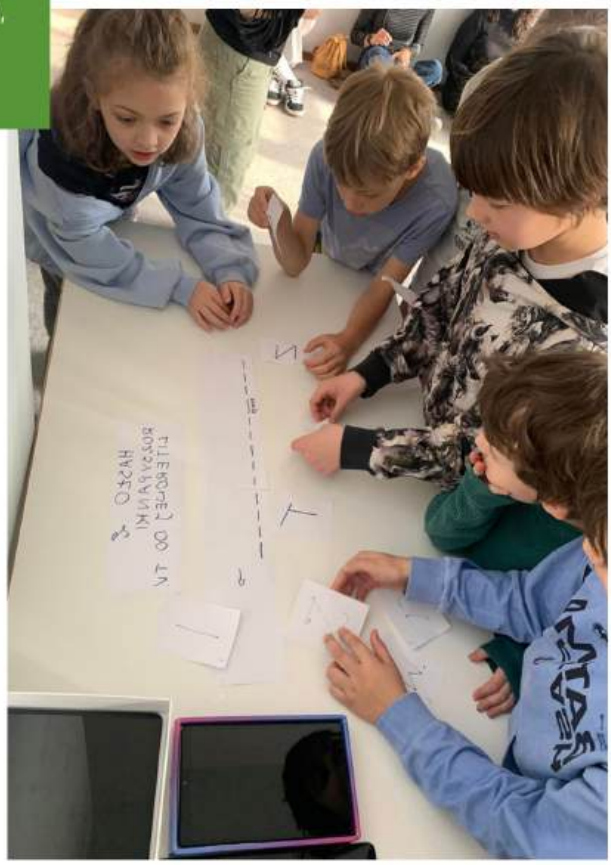
That oxygen trees can produce up to several times more oxygen than ordinary trees, and at the same time absorb carbon dioxide exceptionally efficiently?

OXYGEN TREES – PLANET'S GREEN HELPERS

One of the main highlights was planting oxygen trees like paulownias. These special trees grow very fast and absorb a lot of carbon dioxide. In return, they produce huge amounts of oxygen — even several times more than regular trees. Students learned that planting such trees is a real way to help the planet. Working together in the garden was a great opportunity to talk about climate change and how we can help stop it. The tree planting activity brought the class together and made everyone feel like they were doing something truly important.

KNOWLEDGE IN ACTION! STUDENTS LEARN WHAT SMOG IS AND HOW IT AFFECTS HEALTH, AND THEN PLANT OXYGEN TREES TO REALLY TAKE CARE OF CLEANER AIR.





LEARNING THROUGH PLAY AND ACTION! STUDENTS COMPLETE QUIZZES ABOUT CLEAN AIR USING QR CODES, THEN CONSTRUCT SIMPLE AQUEDUCTS TO PROVIDE WATER TO PLANTED PLANTS.

WATER CHALLENGE – LET'S BUILD AQUEDUCTS!

At the end of the class, students faced a fun and tricky water challenge. Their goal was to build an aqueduct to carry "water" (blue balls) to young plants. The structure had to be well-designed and stable. This task required teamwork, creativity, and technical thinking. Students worked in groups, planning and testing their ideas step by step. Some teams surprised everyone with their clever and detailed designs. It was a perfect mix of science and fun. The challenge proved that learning by doing is not only effective, but also exciting and unforgettable.

HYDROPONICS IN CLASS 7A

MODERN PLANT CULTIVATION WITHOUT SOIL

DID YOU KNOW?

Hydroponically grown plants grow up to 50% faster than those in traditional soil – all thanks to perfectly matched nutrients and constant access to water!

WHAT IS HYDROPONICS?

Students from class 7a had a unique opportunity to explore a modern method of growing plants – hydroponics – during a STEM project lesson. They learned that in this method, plants grow without soil, and all the necessary nutrients are delivered through water. The students discovered various hydroponic systems, their advantages (such as faster growth and water savings), as well as disadvantages (like higher costs and the need to monitor pH and temperature). They also found out that many vegetables can be grown this way – from lettuce and basil to tomatoes.

FROM THEORY TO PRACTICE

The most exciting part of the lesson was moving from theory to practice – students built their own model of a hydroponic lettuce farm using PVC pipes. They took care of every detail themselves: monitoring the temperature and pH levels, aerating the water, and adding the proper nutrients. Thanks to this, they were able to see with their own eyes how such a system works and how important it is to maintain every element correctly.

PROJECT RESULTS AND NEW EXPERIENCES

The entire class 7a showed great engagement and creativity. This project not only enriched their knowledge but also proved that science can be an exciting adventure. The students developed practical teamwork skills, enhanced their ability to observe and analyze data, and discovered that innovation is within reach. We look forward to seeing the results of their cultivation and the next eco-friendly experiments, which are sure to be just as inspiring!

STARTING WORK ON BUILDING YOUR OWN HYDROPONIC SYSTEM. EACH GROUP PLANS A STRUCTURE THAT WILL ALLOW YOU TO GROW LETTUCE - CREATIVITY AND COMMITMENT ARE EVIDENT AT EVERY STEP!

PRACTICAL ECOLOGY LEARNING - STUDENTS PROUDLY SHOW OFF THEIR PROGRESS IN BUILDING A HYDROPONIC GARDEN. GREEN EDUCATION IS THE FUTURE!

FIRST EFFECTS OF WORK - READY MODELS OF HYDROPONIC SYSTEMS WITH SPACE FOR LETTUCE AND HERBS. WE ARE WAITING FOR GREEN CROPS!

WATER AND ECOLOGY EXPERIMENTS

5B STEM LESSON

WATER – THE SOURCE OF LIFE AND KNOWLEDGE

Students from class 5b took part in extremely interesting STEM classes organized as part of the Erasmus+ project "Green Agripreneurs of Future". During the workshops, they learned about the properties of water and how the water cycle works in nature. The classes made participants aware of the important role water plays in the everyday life of people and plants. Students also performed simple experiments that helped them better understand the principles of nature. Thanks to this, learning became not only interesting, but also very practical.

HOW MUCH WATER DO WE USE?

During the classes, students calculated water consumption in their homes and learned about the concept of a "water footprint," which shows how much water we use directly and indirectly every day. Young explorers also had the opportunity to construct water purification filters themselves and design special cards for observing plants. They learned that everyone can have an impact on environmental protection, even by taking small actions. Discussions about ecology made them aware of how important it is to be responsible for our planet.

GREEN FUTURE IN OUR HANDS

At the end of the workshops, the students planted mini crops - tomatoes, peppers, and radishes. This hands-on experience helped them understand the importance of caring for plants and managing natural resources responsibly. They learned how much effort and patience it takes to grow vegetables, but also how rewarding it is to watch them thrive. Now, the children take pride in tending to their plants and eagerly await their first harvest.

Through this activity, the students gained a deeper understanding of where food comes from and the value of sustainable farming. It also fostered a greater respect for nature and inspired them to care for the environment beyond the school setting.

DID YOU KNOW?

Did you know that it takes about 1,700 liters of water to produce one bar of chocolate, which is as much as a 20-minute shower?

STUDENTS OF CLASS 5B ARE ACTIVELY CONDUCTING EXPERIMENTS WITH WATER, LEARNING ABOUT ITS PROPERTIES AND ROLE IN NATURE.

WE PLANT MINI-CROPS! STUDENTS FROM CLASS 5B LEARN THE SECRETS OF GROWING TOMATOES, PEPPERS AND RADISHES – LEARNING BY DOING.

EAT WISELY - DON'T WASTE!

SAVE THE PLANET, YOUR WALLET AND YOUR FUTURE

>>> WE WASTE TOO MUCH

Every day, huge amounts of food are wasted around the world – hundreds of thousands of tons end up in the trash. Shockingly, many of these products are still edible. We waste food at home, in restaurants, shops and canteens. This is a problem that affects not only adults, but also children and young people.

Yes, you too can influence how much food ends up in the trash. Just make a few simple changes to your daily habits to take care of the planet, your wallet and your own health.

SMALL CHANGES, BIG IMPACT

Every day we waste huge amounts of food, which is often still edible – a loss for the planet, our wallet and our health. However, just a few simple changes in our daily habits can reduce food waste and help protect the environment.

>>> WHY DOES FOOD END UP IN THE TRASH?

Food waste has many causes, most of which can be easily eliminated. Common causes include:

- Buying too much food that we can't eat in time.
- Ignoring expiration dates – we often throw away products just because the date on the packaging has passed, even though they're still good.
- Choosing only "perfect looking" products and discarding those that are a little crooked or slightly discoloured.
- Cooking too much and then throwing away the leftovers instead of saving and reusing them.

>>> WHAT CAN YOU DO EVERY DAY?

1. Plan your meals wisely
Before you go shopping, check what you have in your fridge and cupboards. Make a list of the things you really need. Try to avoid spontaneous purchases just because something is "on sale". By planning, you will not only buy less and healthier, but also reduce the risk of throwing away excess food.

2. Pay attention to expiration dates
It is worth knowing the difference between:

- **"Best before"** - after this date the product may still be good. Just check its smell, appearance and taste.
- **"Use by"** - after this date the product may be unsafe to eat.

Don't throw away hastily - first assess whether the food has really gone bad.

3. Use leftovers - be creative
You can make something new and delicious from yesterday's dinner!

- Pasta? Make a casserole.
- Stale bread? It's great for French toast, croutons for soup, or breadcrumbs.
- Vegetables? Make a vegetable soup or sauce.

Cooking with leftovers isn't just about saving money - it's a form of culinary creativity!

4. Share food
Have too much? Don't throw it away!

- Share with siblings, friends, or neighbors.
- Take the excess food to school as lunch for the next day.
- Check if there are food sharing points in your area, so-called food joints.

5. Don't judge food by its appearance
Not every vegetable has to be perfect.

- A crooked carrot, a slightly soft tomato, or a banana with brown spots are still full-value and tasty.
- By choosing them, you give a chance to products that are often rejected by others - and after all, it's the taste that counts, not the appearance!

WHY DOES THIS MATTER?

Food waste is more than just a full bin. It's a loss on many levels:

- **Money** – every product you throw away cost you or your parents.
- **Natural resources** – food requires water, energy, fertilizers, and transportation to produce.
- **Time and work** – someone had to grow, package and deliver the food.

While millions worldwide go hungry, wasting edible food drives new production that accelerates deforestation and environmental harm. As discarded food decomposes in landfills, it releases methane, a potent greenhouse gas. Cutting waste conserves resources for future generations and turns every saved meal into a chance to help people and the planet.

REMEMBER

less waste = more respect for the planet, people and yourself

REFUSE
what you don't need

REDUCE
what you really need

REUSE
repair or give things to someone who will make use of it

RECYCLE
If you can't refuse, reduce, reuse

ROT
compost the rest

YOUR CHOICES MATTER

You don't have to be an expert in ecology to make a difference—start with yourself and your kitchen.

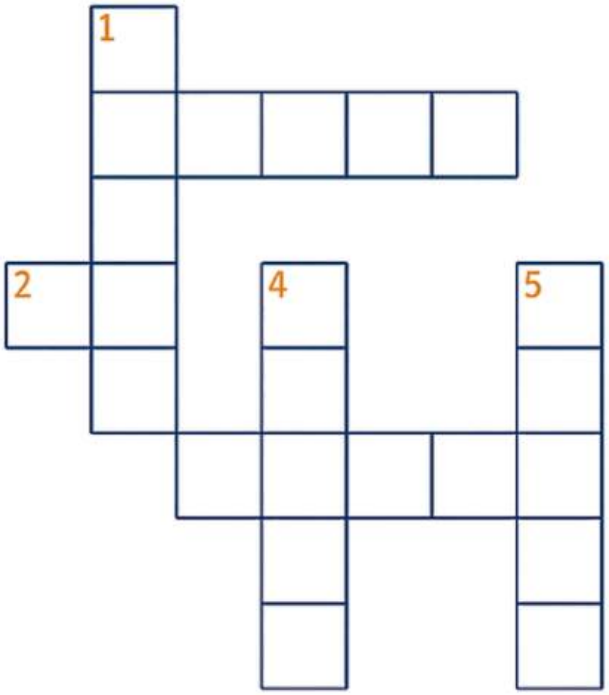
Every food item you save is a step toward a more responsible lifestyle. Even small changes, multiplied by millions, can have a big impact. By choosing to waste less, you inspire others and help build a more sustainable, fair food system—starting with simple steps at home.

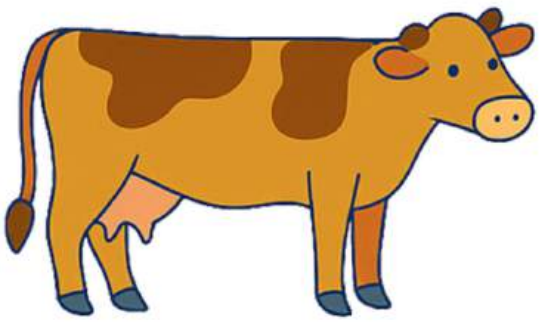
SUSTAINABLE AGRICULTURE

FUN AND EDUCATIONAL ACTIVITIES

>>> "LEARN, PLAY, AND GROW GREEN"

Discover the world of sustainable agriculture through fun and interactive puzzles! These activities will help you learn how farming can protect the planet and support healthy ecosystems.





Across

1. Framework of plants and wildlife in an area
3. Renewable energy source with large blades
5. Environmentally responsible farming

Down

2. Natural pest control
4. Substance added to soil as fertilizer
6. Maintaining natural resources

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