



# 4-H SUSTAINABLE AGRICULTURE PROJECT



## 4-H THRIVE

### Help Youth:

#### Light Their Spark

A spark is something youth are passionate about; it really fires them up and gives them joy and energy. Help youth find how this project excites them.

#### Flex Their Brain

The brain grows stronger when we try new things and master new skills. Encourage youth effort and persistence to help them reach higher levels of success.

#### Reach Their Goals

Help youth use the GPS system to achieve their goals.

- Goal Selection:** Choose one meaningful, realistic and demanding goal.
- Pursue Strategies:** Create a step-by-step plan to make daily choices that support your goal.
- Shift Gears:** Change strategies if you're having difficulties reaching your goal. Seek help from others. What are youth going to do when things get in their way?

#### Reflect

Ask project members how they can use their passion for this project to be more confident, competent and caring. Discuss ways they can use their skills to make a contribution in the community, improve their character or establish connections.

Sustainable agriculture projects emphasize the need to feed a growing world population while still caring for the scarce resources necessary in agriculture. Sustainability has aspects of environmental sustainability, food safety, economics, and ethical or philosophical concerns. In this project, members may:

- Explore different perspectives in sustainable agriculture.
- Discover major challenges in the future of agriculture.
- Form their own opinions of agricultural methods.
- Learn how their decisions can affect the future of agriculture.

#### Starting Out *Beginner*

- Learn about the water cycle.
- Know the different types of soils.
- Explore concepts of ecosystems and how different species of animals and plants work together.
- Study the causes behind global climate change and effects on agriculture.
- Identify the collection and uses of renewable energy sources in agriculture.

#### Learning More *Intermediate*

- Learn how to improve soil quality by adding organic matter and its potential effects on the environment.
- Design a crop or grazing rotation plan.
- Research intercropping/cooperative enterprises and its application in both livestock and produce
- Be able to discuss biotechnology in sustainable agriculture.
- Research the "2050 Problem".

#### Exploring Depth *Advanced*

- Formulate a drought preparedness plan.
- Design a business plan for an agriculture business including costs and benefits of sustainable practices.
- Know the major niche types of agriculture, focusing on each of their perspectives to sustainability
- Research the causes of malnutrition and under nutrition and know the difference between them.

The activities above are ideas to inspire further project development. This is not a complete list.



# Expand Your Experiences!

## Science, Technology, Engineering, and Mathematics

- Create a map of the major agricultural environments on Earth (grasslands for forage, Mediterranean climates for produce, fisheries, etc.).
- Design an ecosystem web for a small family farm showing how all the different components can work together to reduce waste.

## Healthy Living

- Explore the health concerns associated with climate change.
- Find out if there are any differences between conventional style food and organically grown food for human health and environmental health, and if so, what they are.

## Citizenship

- Share with your community what they can do to be more sustainable in their day to day life.
- Arrange to clean up a local natural area to preserve its ecosystem integrity.

## Leadership

- Become a Jr. or Teen Leader.
- Encourage others to join the sustainable agriculture project.
- Make a presentation on one current event or topic in sustainability.

## Resources

- UC ANR SAREP  
<http://www.sarep.ucdavis.edu/about-sarep/def>
- National Sustainable Agriculture Coalition  
[sustainableagriculture.net/](http://sustainableagriculture.net/)
- USDA  
<http://www.nal.usda.gov/afsic/pubs/agnic/susag.shtml>
- Sustainable Agriculture Research and Education  
<http://www.sare.org/>
- University of California Cooperative Extension *Food for Thought*  
[http://ucanr.edu/sites/Grown\\_in\\_Marin/All\\_Resources/Resources\\_for\\_Educators/Curriculum/Resources/Photos\\_of\\_Marin\\_Agriculture/Food\\_for\\_Thought](http://ucanr.edu/sites/Grown_in_Marin/All_Resources/Resources_for_Educators/Curriculum/Resources/Photos_of_Marin_Agriculture/Food_for_Thought)

Connections & Events	Curriculum	4-H Record Book
<p><b>Presentation Days</b> – Share what you’ve learned with others through a sustainable agriculture related presentation.</p> <p><b>Field Days</b> – At these events, 4-H members may participate in a variety of contests related to their project area.</p> <p>Contact your county 4-H office to determine additional opportunities available, such as a field day.</p>	<ul style="list-style-type: none"> <li>• LiFE: Growing Food <a href="http://www.tc.columbia.edu/tisch/resources-overview/curricula/life-pages/growing-food/">http://www.tc.columbia.edu/tisch/resources-overview/curricula/life-pages/growing-food/</a></li> <li>• Junior Master gardener Teacher/Leader Guide: <a href="http://imgkids.us/curriculum/img-teacher-guide-youth-handbook/">http://imgkids.us/curriculum/img-teacher-guide-youth-handbook/</a></li> <li>• National 4-H <i>There’s No New Water</i>: <a href="http://www.4hmall.org/Product/water-conservation/theres-no-new-water/08420.aspx">http://www.4hmall.org/Product/water-conservation/theres-no-new-water/08420.aspx</a></li> </ul>	<p>4-H Record Books give members an opportunity to record events and reflect on their experiences. For each project, members document their experiences, learning and development.</p> <p>4-H Record Books also teach members record management skills and encourage them to set goals and develop a plan to meet those goals.</p> <p>To access the 4-H Record Book online, visit <a href="http://ucanr.edu/orb/">http://ucanr.edu/orb/</a></p>

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## University of California Agriculture and Natural Resources

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