INTRO TO ORGANIC FARMING

NEW ROOTS FOR REFUGEES, CATHOLIC CHARITIES OF NE KS

Summary

This guide is an introduction to organic vs. conventional farming. PowerPoints and visuals are meant to reinforce learning as you facilitate discussion and activities. While this is written as one two-hour session, slides and activities can be used independently to suit programmatic needs.

The need: Without knowledge of USDA-certified growing practices, it is easy for refugee farmers who intend to grow organically to mistakenly order non-organic seeds and other inputs. Additionally, it is important for farmers to understand the value of organic crops compared to conventional crops when pricing their produce. Many refugee farmers come from communities where organic is default, so it is helpful to explain this context for farming in the US.

ISED SOLUTIONS
INSTITUTE FOR SOCIAL AND ECONOMIC DEVELOPMENT

New Roots for Refugees

USDA NIFA
United States Department of Agriculture
National Institute of Food and Agriculture

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Who made this guide?

Collaboration and Testing

ACKNOWLEDGMENTS: This teaching resource was developed by Meredith Walrafen from New Roots for Refugees of Catholic Charities of NE KS, in partnership with the Institute for Social and Economic Development (ISED Solutions). Refugee farmer training programs across the country provided feedback on this lesson, which is now integrated throughout the guide. From 2015 to 2017, ISED partnered with twelve refugee farmer training programs through a USDA BFRDP educational enhancement grant, to support the design and testing of new and shareable teaching resources for culturally and linguistically diverse farmers. To learn more about this project, or to access the whole list of newly developed teaching resources for refugee farmer training programs,see the New American Resource Library at this address. For more in-depth explanations of the teaching approaches and activities used in these materials, please see the 'Refugee Farmer Teaching Handbook'. While these resources were designed with refugee audiences in mind, they can be adapted and used in any farmer training or incubator setting.

VARIATION: Throughout this guide, boxes (like this one) contain variations and adaptations that serve varying programs and farmers. They are suggestions and reflections from other programs based on how they made this workshop work for them.

TEACHING TIP: Throughout this guide, boxes (like this one) contain teaching tips to help you better facilitate farmer learning. Most come from other programs who have tested and reflected on using this lesson.

DEVELOPER'S NOTE: Throughout this guide, boxes (like this one) contain notes from this guide's developer that provide insight into how a lesson is typically taught at the developer's program.

ICONS: You will find the icons below throughout this guidebook. They are there so you are prepared for the activity and can get an idea of what it will bring at a glance.

SIGNS/CARDS

VOCABULARY

TALKING POINTS

DISCUSSION

Reviews and Core Skills

WHAT TESTERS SAY:

"I really like how the PowerPoint is set up to talk about how people farmed in their home countries, and thinking about categories of things (seeds, dealing with pests, fertilizer) that would determine if it is organic or not. This seems like it would be a fun conversation with the class." - *Elizabeth, International Rescue Committee in Charlottesville, VA*

"This training highlights the philosophy of organic vs. conventional agriculture. We had a discussion in group about these and had more advanced farmers share what practices they've used within their growing systems." - *Global Greens, Lutheran Services in Iowa*

OBJECTIVES:

At the end of this module, growers will be able to:

• Name at least 3 practices of organic farming (i.e. crop rotation, integrated pest management, no chemicals, natural amendments, organic seeds, etc.)
• Differentiate between organic and non-organic inputs (seeds, fertilizers, pest sprays, etc.) by identifying the certified organic and/or OMRI logos.
• Tell the difference between conventional and organic, and state any actions they may take based on this info.

CORE SKILLS:

- Organic practices vs. inorganic practices
- Talking to customers
- Organic v. non-organic fertilizer
- What is involved in certification
- Organic, non-organic labeling identification
- Using OMRI list of approved products
- Organics in the US context

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Adaptable except where noted.

VARIATION:

This lesson could be adapted to be more market focused or more soil and pest management focused, depending on your program needs. For example, you could pair this with a class on cover cropping, soil fertility and integrated pest management, or you could pair this with a lesson on talking to customers at market.

DEVELOPER'S NOTE:

All farmers in our program were farmers in their home country, so none are completely new to the practice of growing food. We taught this class to our first, second, third, and fourth year farmers all together.

Audience

Adaptable except where noted.

WHO: **Refugee farmers and growers**

LANGUAGE / LITERACY: **Beginning to developing language / pre-literate to literate**

FARMING EXPERIENCE: **Beginner to advanced**

Participants should have some experience or knowledge of farming or gardening, but this doesn't have to be experience in the US.

PREREQUISITES: **Skills, experience and knowledge**

- Basic knowledge of farming, ideally having completed one growing season with the program.
- Requirements of growing something from seed (water, light, nutrients, etc.)
- Identifying and reading a label

REGION / CLIMATE: **Midwest, Zone 5b**

PROGRAM STRUCTURE: **4-year training program**

- All farmers are required to attend all trainings every year, meaning there is a mix of beginners and advanced farmers in workshops.
- Could be taught in smaller or larger session - as discussion is important, it may be easier with fewer people or with fewer language groups present.

SEASON: **Early spring**

Ideally, this workshop is done early in the season when farmers are just beginning to plant and purchase inputs for their fields; however, it could be taught at any point in the year.

Resources needed

Adaptable except where noted.

TIME: **2 hours**

Some activities can be done independently. PowerPoint can be shortened without discussion, though allowing time for discussion is recommended.

STAFF / INTERPRETERS: **1-2 staff (adaptable) / interpreter required (not adaptable)**

- Lessons could be taught by one or more people. More staff often promote better discussion, and the final activity benefits from having a few staff to facilitate each group.
- These concepts are challenging and likely need interpreters present for beginning-developing English speakers.

LOCATION: **Classroom with projector and computer set up**

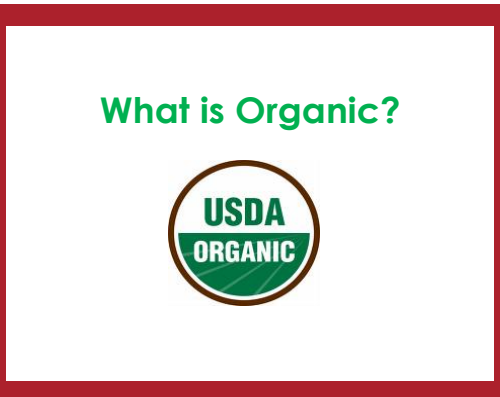
This is adaptable with considerable work: photos and slides could be printed instead of projected.

SUPPLIES: **Each farmer should recieve**

- A copy each of the USDA and OMRI logos, to be taken home and used when shopping

Additional materials and resources include

- Computer, projector and other equipment necessary for slide presentation
- Phones with camera capabilities (Activities 2 and 3)
- Photos of seed packets, fertilizers, and pest sprays that are organic and non-organic (at least 10 all together)
    - Alternatively, use real objects if available



Organic 101 PowerPoint

USDA Organic Logo

OMRI Logo

Organic 101

1

TIME: 1 Hour, 15 Minutes

OVERVIEW:
This activity uses PowerPoint to provide visuals and prompt classroom discussion. Allow time for difficult concepts to be interpreted; it is important to get farmers' input during discussion sections.

MATERIALS NEEDED:
- PowerPoint presentation

OBJECTIVES / LEARNING:
By the end of this activity, participants can:
- List 3 example practices of organic farming: examples are crop rotation, integrated pest management, no chemicals, natural amendments, organic seeds.

VOCABULARY

Organic	Crops	Cover crop
Crop rotation	Amendments	Fertilizer
Pesticide	Herbicide	Conventional

INTRODUCTION: Give brief overview of topic, primary learning objectives, the timeframe and the activities.

SLIDES 1-2: INTRODUCTION TO ORGANIC FARMING

a. If working with a MIXED GROUP (in terms of experience growing/selling in the US), assess knowledge: "Why do we need to talk about organic farming?"
- Encourage more advanced farmers to explain why they think it's important to learn about organic. Answers may be:
  - "Because customers ask about it and we need to be able to tell them how we grow"
  - "Because not everyone farms the same way in the US"
  - "Because it can affect prices"
  - "Because our farm rules say that we follow organic practices"
  - Etc.

DEVELOPER'S NOTE:

We teach this class to a mix of first through fourth year farmers, so this step is valuable because it encourages learning from other participants rather than just staff. Direct this question about why organic farming is important at more advanced farmers and let them answer first, if possible.

b. If working with NEW FARMERS: "It's important to learn about what organic means for several reasons."
- In the US, there are lots of different ways that people grow food.

- Some customers only want to buy food that is grown organically, so we need to understand how we grow organically and how it is different from other farmers that might be selling in our market, so that we can explain it to customers.
- Organic farming can be harder and take more work and time than other ways of farming, so sometimes we can also ask more money for our produce.

TEACHING TIP:

One reviewer suggested talking about people's home practices and getting a sense of "who has heard the word organic" BEFORE you start the discussion in slides 1 and 2. Consider skipping to slides 4-7 first, and then going back to the beginning slides.

SLIDE 3: ASSESS KNOWLEDGE

Ask: Who here has heard the word organic before? Can anyone explain what it means?

- The objective here is for the facilitator(s) to get an idea of whether participants have prior knowledge, not to teach. If folks are unfamiliar, just move on, as you'll be explaining more later.

SLIDES 4-7: DISCUSSION PROMPTS ON FARMING IN OTHER COUNTRIES

a. **Ask**: How did you get seeds in your home countries? Save them? Buy them from friends or family? Buy them from a company? How did you know they were good seeds?

b. **Ask**: Did you add things to the soil to help the plants grow? What kinds of things did you add? Where did you get those things? Did you have something planted all the time or leave the soil bare?

c. **Ask**: Did you move your crops every year? How did you decide when to move crops? How did you decide where to move crops?

d. **Ask**: How did you get rid of bugs? What did you use? Were there things you did to stop the bugs from coming early on?

SLIDES 8-10: EXPLAIN ORGANIC PRINCIPLES - "ORGANIC MEANS..."

a. **Work with nature**: When we farm, we want to think about how things happen in nature when we aren't there, and try to follow those same patterns.
   - Example: If you have problems with aphids, plant things that attract ladybugs to eat the aphids.

b. **Do what is simple and logical**: There are lots of complicated chemicals we could spray to get rid of bugs and weeds, but they can lead to other problems. When we have pests or other problems in our gardens, we want to think about

how this problem is handled in nature, and then come up with simple solutions rather than use a complicated spray that may lead to other problems.
- Example: We can plant extra plants of the varieties that attract bugs so that they will only eat some, and we can kill them before they spread to the rest.

c. **Care for the soil and the earth**: The soil has lots of nutrients in it that feed plants and make them grow strong so we can feed our community. We want to make sure that we give back nutrients to the soil so that it can continue to feed us. TEACH VOCABULARY:
- **Crops** - plants that are grown as food.
- **Crop rotation** - planting crops in different spots each year or every few years. There are a few reasons to do this. One reason is that different crops take different nutrients out of the soil, so we want to move them every few years so the soil stays healthy. Another reason is for bugs: if we plant the same crops in the same spot every year, it's much easier for bugs to find those crops and eat them. If we move crops, they may get confused and have to work harder to find the crops they like to eat.
- **Cover crop** - what we plant in the winter to feed the soil and keep it healthy.
- **Soil amendments** - things that we add to the soil to make it healthier or more productive. Can anyone give an example of a soil amendment we use at our farm?

TEACHING TIP:

Go through this slide slowly and ask the farmers to repeat the vocabulary words back to you as you explain them.

d. **Only use natural amendments**: Organic farmers only use natural products when they farm. We want to use seeds and soil amendments that are natural and don't have harmful chemicals in them.

SLIDES 11-17: FARMING IN THE US

a. **(11)** Many people farm organically in the US, yourselves included. Can you name any other farms that are organic? (You can point out any well-known farms or farmers that may have been visited or that people may know from market).

b. **(12)** We're going to talk now about the history of farming in the United States. It will help explain why it's important to know the difference between organic and not organic.
- In the 1950s, more and more people started moving from the country, where lots of people farmed, into the city.
- Although fewer people were farming, the population was increasing, so we had to find ways to feed more people.
- Because people lived farther away from farms, we had to find ways to make food that could travel far distances without going bad.

c. **(13)** At the same time, new machines made it easier to plant and harvest with fewer people. But for those machines to work, you had to have the same crops

planted in big sections.

- Farmers began growing huge fields of the same crops, and food companies started creating foods that were processed and could sit in trucks or shelves for long periods of time.
- But like we already discussed, when you plant the same crops in the same place over and over, the soil loses nutrients and crops won't grow as well.
- There were also big problems with bugs, with so many crops in one spot. So, big chemical companies created fertilizers, pesticides, and herbicides that would make the crops grow, and kill bugs and weeds.

d. **(14)** These three words are important for you to know, because lots of customers use them to ask whether you are organic or not. TEACH VOCABULARY:

- **Fertilizer** - something added to the soil to help plants grow stronger.
- **Pesticide** - a spray used to kill animals or insects that damage crops.
- **Herbicide** - a spray used to stop plants from growing (used on weeds).

TEACHING TIP:

Depending on how experienced the class is, it might be useful to explain that there are organic versions of these vocab. words, but most often people associate these words with man-made chemical inputs.

e. **(15/16)** The big companies realized they could sell their chemicals to small farmers and gardeners too, because they convinced people that nothing would grow or the bugs and weeds would destroy everything if they didn't use their products. Growers got scared and bought these chemicals.

f. After years of research, we are learning that these chemicals are bad for our health and the earth's health. When chemicals get put on the soil or crops, they end up in our bodies when we eat them. They also end up in the water that runs off of big farms, which can kill animals or good bugs that drink the water.

g. **(17)** Growing things organically takes more time. We can't just spray chemicals and fertlizers and then walk away until the tomatoes turn red. We when grow organically, we have to be more thoughtful. We have to:

- Think ahead about where to plant differently from the year before.
- Plan ahead and use row cover, or plant extra to try to get the bugs away from the main crops.
- Spend time weeding instead of spraying herbicides.
- When we see bugs on our crops we have to figure out what they are, and get rid of them in a way that will only hurt that specific bug, and not everything else that might come across it.
- Paying more attention means dedicating more of our time. So when we price things, we need to take into account how much more time it takes us to grow tomatoes than it does a non-organic farmer. We will talk about the details of pricing later.

SLIDES 18-19: SEE ACTIVITIES 2 AND 3

Organic vs. Conventional Inputs

2

TIME: 20 Minutes

OVERVIEW:
Farmers will learn and demonstrate their understanding of differences between organic and conventional inputs. Briefly discuss USDA certification, explain the use of logos.

MATERIALS NEEDED:
- Set of flashcards / photos
- Alternatively, use real organic and conventional seed packs, fertilizers, sprays, etc. if available.

OBJECTIVES / LEARNING:
By the end of this activity, participants can:
- Identify certified organic and/or OMRI logos from a set of photos of organic and nonorganic inputs.
- Reflect on the differences between conventional and organic, and state any actions they may take based on this info.

VOCABULARY
OMRI (Organic Material Review Institute)
USDA (US Department of Agriculture)
Conventional

STEP 1: BRIEFLY EXPLAIN ORGANIC CERTIFICATION

Farmers who grow organically can choose to become certified organic by the United States Department of Agriculture (USDA). Certification means you can use the USDA logo that tells customers your vegetables are organic. When you get certified, you keep records of all activities that happen at your farm, and then someone comes to see your farm and make sure that you are following all of the organic rules. We will talk more about this in a different training if people are interested.

STEP 2: TEACH VOCABULARY

Conventional - what is accepted, and what most people think is normal. In the US, this word is often used to describe farmers who do not grow organically.

STEP 3: READING A LABEL

a. Mark one side of a white board and/or tables with 'Organic' and 'Conventional' (re-explain words, sounding out and spelling if necessary).

b. Spell out key words that will help farmers distinguish between organic and conventional.

TEACHING TIP:

For the label reading activity, one review suggested adding an introduction, such as: "for this activity, we are going to practice reading a label to determine whether something is organic or not."

c. Model reading a label on a bottle (or looking closely at a flashcard picture of a bottle): pick it up, pretend to look for a key word or label, then put it on the organic side of the table. As you do this with one item/flashcard, narrate your thinking process:
   - "Okay, I am looking for the organic label. I don't see it... maybe this is not organic? Oh, this looks like an insect killer - okay, I'm going to put it on the conventional side!"

TEACHING TIP:

One reviewer said: "For fun, I used a bag of compost marketed as 'organic' on the label but it was not actually OMRI/USDA organic. Then I showed them a bag that was OMRI certified but didn't label it. They said the first one was organic and the second, not organic, when in fact the opposite was true. During this part of the presentation, farmers were laughing and very engaged when they realized what they had assumed was wrong. This also helped drive home the need to be more discerning and educated when buying supplies.

STEP 4: SMALL GROUPS

Organize into small groups and give each group a set of items or flashcards. Tell the groups to pick up each item/flashcard and look for indicators of the item being conventional or organic.

STEP 5: LARGE GROUP

Reconvene as a large group or have groups switch places. Let everyone share whether their items were organic or conventional. Allow participants to correct each other's answers if needed!

TEACHING TIP:

One reviewer suggested reviewing the "sorting, categorizing and matching" activity write up and pair it with "realia" strategy (see participatory teaching activity in the handbook). Additionally, if you want to be able to see individual farmer progress, you can have them complete this activity alone as opposed to in groups.

Review & Conclusion 3

TIME: 25 Minutes

OVERVIEW:
Farmers will be asked to reflect on their learning and show what they understand. They will also be asked to share some thoughts on the effectiveness of the lesson. Follow-up ideas may be generated as well.

MATERIALS NEEDED:
No materials needed

VOCABULARY
Review vocabulary from previous lessons.

DEVELOPER'S NOTE:

Since we teach to five language groups, farmers generally sit together at tables or in sections with the same group. So, we would ask each group to come up with a few examples.

STEP 1: REVIEW ORGANIC PRACTICES

Divide up the groups (see Developer's Note) and ask each to come up with three examples of organic practices, then present these to the bigger group.

STEP 2: EXPLAIN OPTIONAL HOMEWORK

Ask farmers to find an example of the organics label in a store somewhere. Offer farmers free seeds if they bring a picture to the next class and show it to the farm manager.

VARIATION:

One tester added a role play (See participatory teaching activity handbook) here to allow farmers to practice answering customer questions about being organic or not. This could be included as an additional activity if that is important to your program.

STEP 3: FEEDBACK

Ask: Do you feel like you understand more about organic? What will you do differently at farmer's markets? How will this affect your pricing?

TEACHING TIP:

During this discussion, talk about being certified organic as well as being non-certified organic, and ask farmers what the benefits are of these two things.

VARIATION:

One program added a slide to show the difference between organic and conventional pricing of certain crops for market and wholesale.