Local Economy

Objectives:

- Understanding and facilitate discussion of our food systems' choices
 - Why we pick conventional produce and products over organic or over local and vice versa
 - Applying theoretical situations that may affect this decision
- Identifying how our food system choices affect our local economy

Spaghetti Dinner

- You need to make a spaghetti dinner for your family this evening
 - Pasta
 - Sauce
 - Pre-made
 - Tomatoes, Onions, Peppers
 - 3 stores to choose from
 - Supermarket (Kroger, Meijer, etc.)
 - Local Co-Op
 - CUE Farm Stand

Supermarket (Kroger, Meijer, etc.)

Items	Pricing	Source
Sauce	\$4.00	Made in Italy
Pasta	\$2.00	Made in Tacoma, WA
Tomatoes	\$2.00	Grown in FL
Onions	\$1.00	Grown in FL
Peppers	\$1.50	Grown in Holland

- Get all your products from one convenient location!
- Low prices all day, everyday!

Local Co-Op

Items	Price	Source
Sauce	\$8.00	Made in Indianapolis, from CA-grown organic ingredients
Pasta	\$5.50	Made in Indianapolis
Tomatoes	\$3.50	Grown in Indianapolis, organic
Onions	\$2.50	Grown in Indianapolis, organic
Peppers	\$3.50	Grown in CA, organic

- Come get your time convenient products here!
- Promote your local economy!

CUE Farm Stand

Items	Price	Source
Tomatoes	\$2.00	Grown in Indianapolis, organic
Onions	\$2.00	Grown in Indianapolis, organic
Peppers	\$2.00	Grown in Indianapolis, organic

- Support your local food economy!
- Buy fresh, organic produce grown here in Indianapolis
 - no extra chemicals used for transportation purposes!

Reflection 1: Ideal Grocery List

Reflection piece:

- Having heard what the stores' items, prices, and sources are write down which store(s) you intend to visit.
- Which products will you purchase to make dinner?
- Why?
 - Price, Convenience, Health, Economic and/or Environmental Impact?
- Total up what your ideal grocery list cost would be

Supermarket (Kroger, Meijer, etc.)

CUE Farm Stand

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Sauce	\$4.00	Made in Italy	Tomatoes	\$2.00	Grown in Indianapolis, organic	
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Tomatoes	\$2.00	Grown in FL	Onions	\$2.00	Grown in Indianapolis, organic	
Onions	\$1.00	Grown in FL	Peppers	\$2.00	Grown in Indianapolis, organic	
Peppers	\$1.50	Grown in Holland	Геррего	γ2.00	C. C	

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Reflection piece:

- Which store(s) do you intend to visit?
- Which products will you purchase to make dinner?
- Why?
 Price, Convenience, Health,
 Economic and/or
 Environmental Impact?

Tally up your grocery list cost!

Reflection 2: C'est la vie! Grocery List

- Everyone has a baseline of \$10 to spend
- Situation cards:
 - Receive money due to your situation
 - Pay out money due to your situation
 - Have more of a time crunch
- Please see Banker if applicable!!!

Reflection 2: C'est la vie! Grocery List

- Now, working with what you had currently planned upon doing how has your situation changed your plan?
 - How, if at all, has your situation changed your purchasing power?
 - Will you visit different stores and/or buy different products?
 - Write down where you will go and what you will buy given your current situation
 - What factors are driving your decisions now?
 - Price, Convenience, Health, Economic and/or Environmental Impact?

Supermarket (Kroger, Meijer, etc.)

CUE Farm Stand

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Reflection piece II:

- Has your situation changed your purchasing power?
- Will you visit different stores and/or buy different products?
- What factors are driving your decisions now?

Grocery Shopping Time!

As a class...

Discuss your first list and reasoning

 Discuss your situation and second list's potential changes along with reasoning

Gross Sales & Local Economy Pay Back

Supermarket	Pay Back	Local Co-Op	Pay Back	CUE Farm Stand	Pay Back
Bought produce from FL	-25%	Pasta made locally	+25%	Produce organically grown locally	+75%
Spaghetti sauce made in Italy	-25%	Sauce made locally	+25%	Hired employees locally	+25%
Pasta made in Tacoma, WA	-25%	Ingredients organically grown in CA	-25%		
Hired employees locally	+25%	Hired employees locally	+25%		
Totals:	25%		75%		100%

Realistic Application on Local Economy

LITTLE CHANGES = BIG PAYOFFS

By redirecting just 10 percent of spending in San Francisco from chains to local businesses, residents would generate \$192 million in additional economic activity and almost 1,300 new jobs.



WHERE YOU SPEND YOUR MONEY MATTERS

Spending locally keeps more money and jobs in your area and has a positive economic impact that can outweigh the lower cost and convenience of chain stores. Shop the way small business owners do—support your local businesses.

Sources:

http://bealocalist.org/sites/default/files/file/GR Local Works Complete.pdf http://www.ilsr.org/wp-content/uploads/2013/02/2013-Survey.pdf

http://civiceconomics.com/app/download/5841704804/SFRDS May07.pdf

https://c401345.ssl.cfl.rackcdn.com/wp-content/uploads/2013/04/Spring-2013-Monitor-News-Release-FINAL-OF-Format.pdf



Davis, K. (2013). The Case for Shopping Local (Infographic). Retrieved from https://www.entrepreneur.com/article/227551

Why care about purchasing food produced locally?

- Locally grown food tastes and looks better
 - Crops are picked at their peak
 - Livestock farmers typically have direct relationships with processors overseeing quality
- Local food may be better for you
 - Shorter the time between farm to table, less likely nutrients will be lost
 - You can see it where it's produced
- Local food preserves genetic diversity
 - In conventional ag systems, plant varieties are chosen based on abilities to ripen uniformly and survive harvesting, packaging, and shelf-life (limited genetic diversity in large-scale production)
 - Smaller local farms typically choose a variety of crops and do not monoculture

Importance of buying local cont'd

- Local food supports local families
- Local food builds communities
 - Depending on market location, can help address food deserts
- Local food preserves open space
 - When farmers get paid for their products, they are less likely to sell their farmland to developers
- Local food keeps taxes down
 - American Farmland Trust has produced studies that show farms contribute more in taxes than they require in services

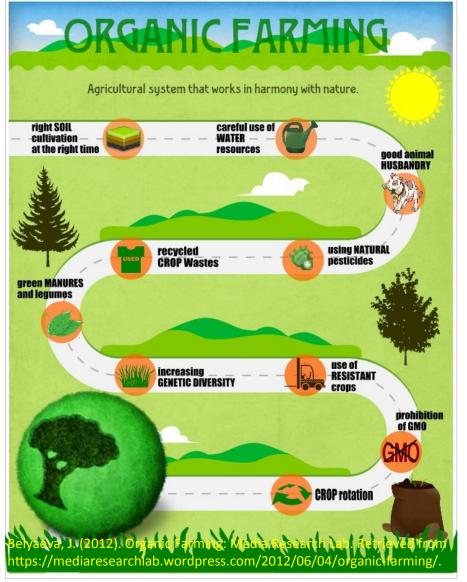
Importance of buying local cont'd

- Local and sustainable food benefits the environment and wildlife
 - Conserve fertile soil, protect water resources, and sequester carbon from atmosphere
- Local food is an investment in the future
 - Supporting local farmers today, ensuring farms in your community tomorrow

Grubinger, V. (2010). Ten Reasons to Buy Local Food. *Cultivating Healthy Communities Extension*. Retrieved from www.uvm.edu/vtvegandberry/factsheets/buylocal.html

Ecological Factors for Local, Sustainable Food

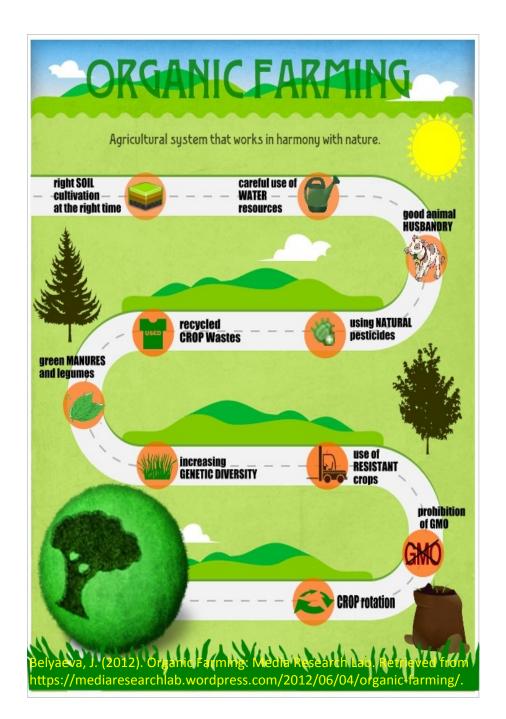
Cultivation System



- CUE Farm as an example of local, sustainable, and organic cultivation system
- Techniques used in one area can affect another area

Soil Cultivation

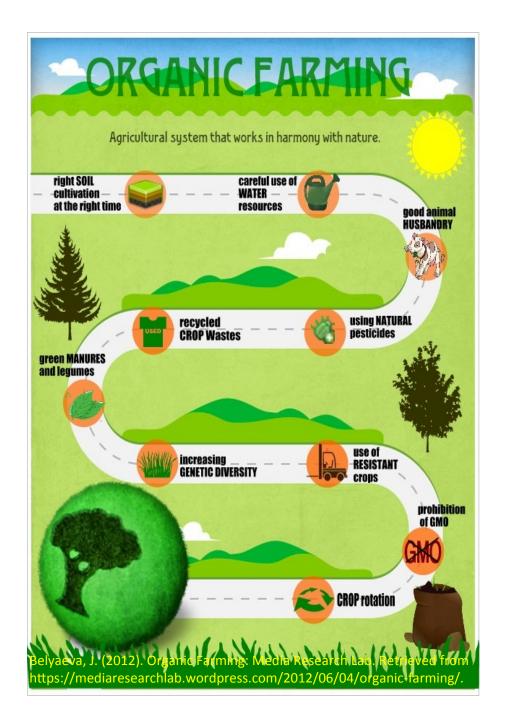
- Cover crops
 - Sometimes use nitrogen fixing cover crops
- Low to no till



Water Resources

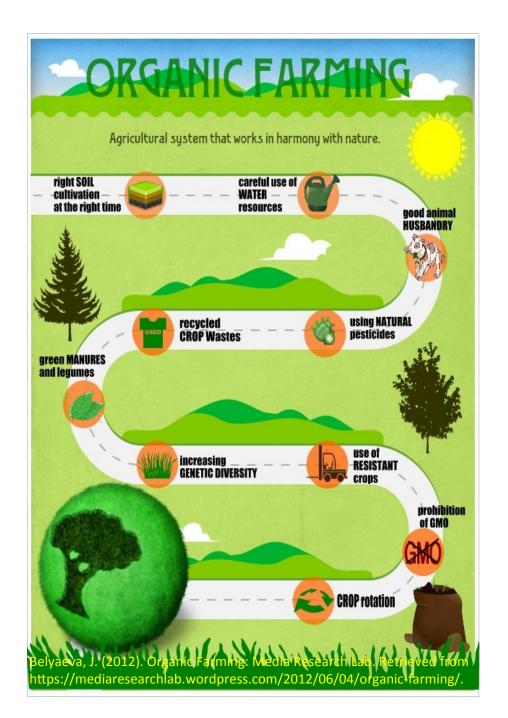
- Timed irrigation
 - Programming capacity
 - Rains day before, will not go off
 - Timed for specific time of day
- Drip Irrigation
 - Will not flush the soil quickly
 - Minimal if any amount of runoff

No animal husbandry on CUE Farm



Natural Pesticides

- Some organic famers use natural pesticides
- Sustainable farming methods (CUE) use:
 - Crop rotation
 - Beneficial/Predatory insects to minimize pests
 - Planting with appropriate spacing
 - Affects airflow
 - Guards against fungal issues

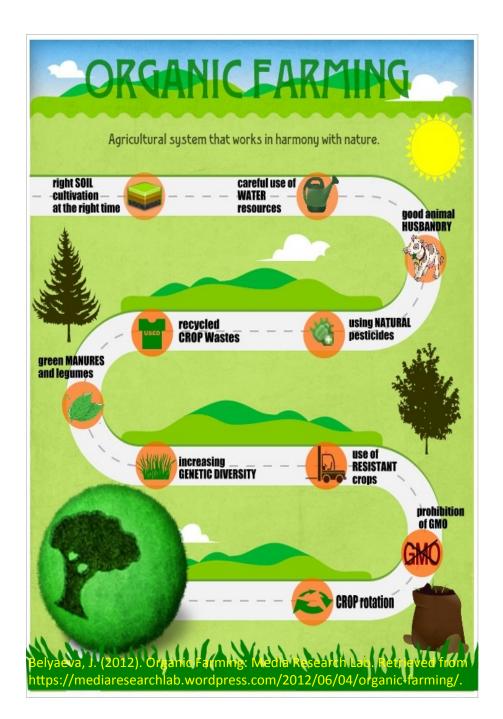


Recycled Crop Wastes

Composting

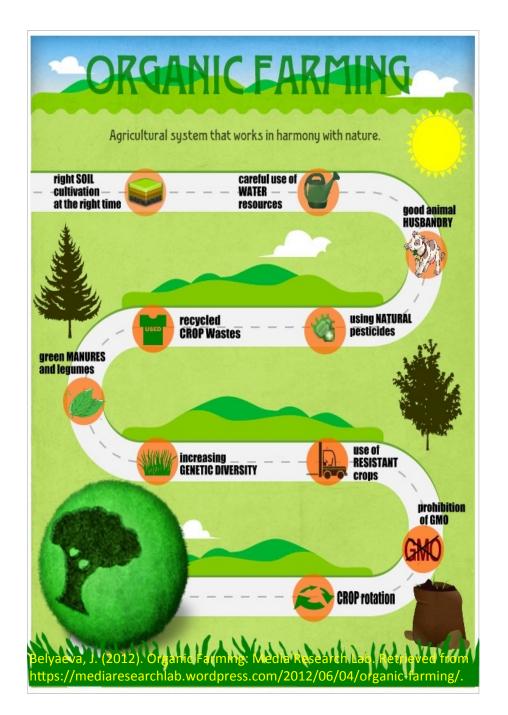
Green Manures & Legumes

- CUE Farm uses legumes
- Manure works, but there are issues:
 - Needs to sit for months to ensure pathogens are gone
 - High in phosphorus
 - Rain events = runoff = high phosphorus in water
 eutrophication
 - FDA requirements regarding manure makes harvesting difficult



Biodiversity

- CUE Farmer uses 75 types/varieties of plants
 - Genetic diversity
 - Better resiliency
 - Drought resistant
 - Pest resistant

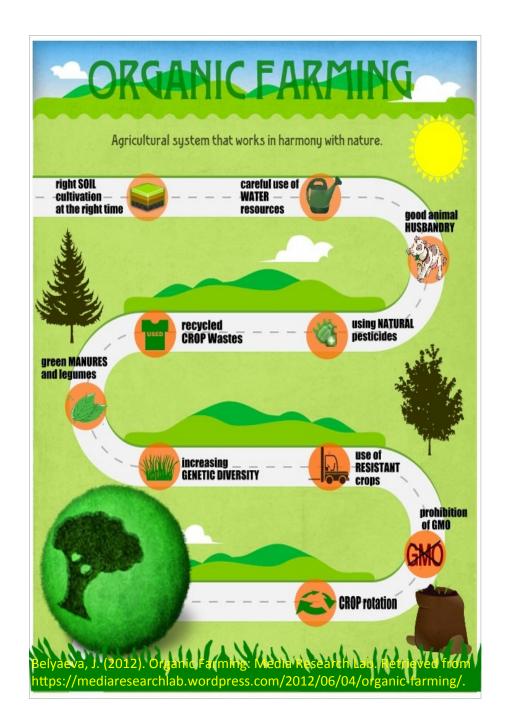


Resistant Crops

- CUE Farmer chooses resistant varieties of crops
 - Crops that grow well in the environment
 - Have resistant DNA

No GMOs

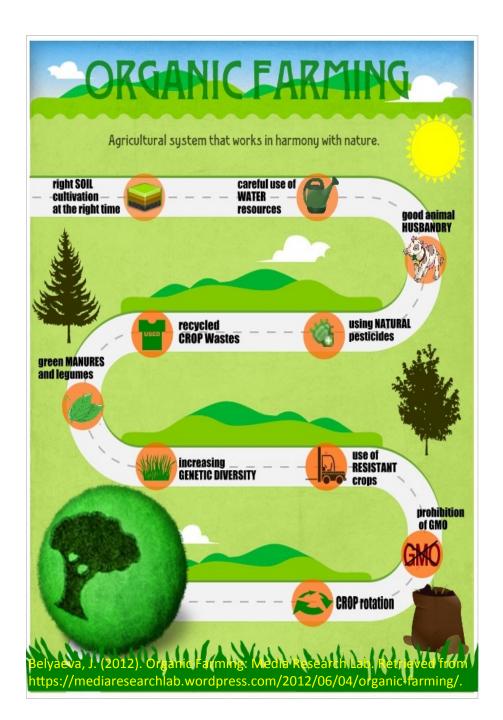
- These are not GMOs, rather selective breeding has occurred
 - GMO: Genetically modified organism
 - Crop that contains multiple species' genes/ DNA



Crop Rotation

- Use nitrogen fixers (legumes) one year followed by a crop that takes up a lot of nitrogen following year
 - Can help with pest control

 Crop that does not grow densely followed by a crop that does grow densely



Big Picture

- Cue Farm is trying to mimic natural ecosystem
- Everything that is done on the CUE Farm is meant to enhance the SOIL, not always the plant

Part II: Dollars & Sense

 You have just bought a can of tomato sauce from the supermarket for \$1.00

 This \$1.00 paid for the costs of growing and selling the tomatoes for the sauce

 Name a few places or people who you think received a portion of this \$1.00

Where did your \$1.00 go?

- Farm
- Agribusiness establishments producing farm inputs (seeds, fertilizer, etc.)
- Food Processing manufacturing industries
- Packaging
- Transportation
- Wholesale trade non-retail establishments that resell products to other establishments for the purpose of contributing to the U.S. food supply (SYSCO Corp.)
- Retail trade all food retailing and related establishments
- Energy
- Finance & Insurance
- Other (Foodservices, Advertising, Legal & Accounting)

Where did your \$1.00 go?

 Using your worksheet, work as a group to guesstimate how much of your \$1.00 goes into each according category

Cannot exceed \$1.00

Put according amount of coins into jars

Speak as a class to how much you delegated where and why

Food at Home Food Dollar



The industry group dollar demonstrates that the cost of food equals the sum of value added by all supply chain establishments.

Supply chain establishments are categorized into 12 industry groups.

Other includes:

Foodservices

Advertising

Legal & accounting

Canning, P. (2017). Industry Group Dollar. *Food Dollar Series*. Retrieved from https://data.ers.usda.gov/reports.aspx?ID=9468

- Food that comes from grocery stores more at home assembly
- Vast majority goes into non-food components

Food Away From Home Food Dollar





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Transportation

Retail trade

Legal & accounting

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- This is a comparison to when you eat out versus when you eat at home
- Look at the Farm Production and Foodservices difference!

How can you help?

 As you can see, non-food components are what constitute the vast majority of where your \$1.00 goes

• If you were to buy local food, you cut out quite a few of these 'middlemen' and more money goes to those who grew the tomatoes

 Power of each person's choice and how you spend your dollar as a consumer has large consequences!

Reflect on ways you could help to support local businesses