UF/IFAS Extension

The Journey to Sustainability Begins with Education





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URBAN AGRICULTURE

A Participatory, Primer Course

Part 5: Financial Management & Resources;
Record Keeping



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Extension

Outline

- Short Review of Course Syllabus
- Whole Farm Financial Management and Resources
 - Holistic Management Approach
 - Conventional Sources
 - Alternative Sources
- Whole Farm Production Management
 - Record Keeping
 - Online Resources/Apps

Urban Agriculture Certificate Course Class Topics Sequence

- #1: Introduction and Production Systems
- #2: Business and Marketing Plans
- #3: Regulations and Direct Markets
- #4: Equipment and Tools; Post Harvest Handling
- #5: Financial Resources & Management; Record Keeping



Urban Agriculture Certificate Course Workshop Topics Sequence

- #1: Container and Hydroponic Growing
- #2: Frost Protection and IPM
- #3: Farmscaping w/ Cut Flowers
- #4: Farm Food Safety Plan
- #5 Composting and Renewable Energy Technologies

Introductory Activity (10 min.)

World Café Format

- Collaborative
- Respectful

* Answer the following:

- What are financial resources?
- How would you access financial resources for your Urban Ag plans?



Form groups of 4 persons. Appoint 1 spokesperson to take notes and report out to the class on your group's responses, using bulleted descriptors.

Financial Resources For Urban Ag



✓ Watch this short video "Farming In The Hood III" – see

https://www.youtube.com/watch?v=DloHq8p8Kso

Financial Resources For Urban Ag

➤ Watch the video "Real Wealth - The Eight Forms of Capital" at

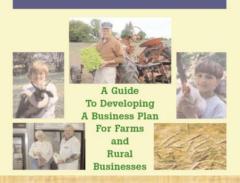
https://www.youtube.com/watch?v=mJX9a7quWQg



"Building a Sustainable Business" and Holistic Management Concepts

- Financial Resources = Capital
- Types of "Capital" for Success
 - ✓ Monetary
 - √ Human
 - √ Nature
- Goal is to optimize all forms of capital utilized in urban farming

Building A Sustainable Business



- Growing Urban Ag profits by managing for profits first...
- Working smarter and not harder . . .
- Use a whole farm approach . . .



- Conventional Approach
 - ❖Profit \$ = Farm Income \$ Total Costs \$
 - Costs categories
 - Fixed = paid annually whether you grow or not
 - ❖ insurance

 - ❖ mortgage
 - rental payments
 - ❖ Variable = paid in a given year to grow a given crop
 - *seed
 - fuel for tillage, cultivation and harvesting
 - hours of labor

HM Approach

- Plan the estimated gross farm income for the coming year
- Plan the profits you need to achieve the quality of life you described in your holistic goal
- 3) Make the expenses including both fixed and variable production costs fit

HM Approach (continued)

- 4) Separate expenses into 2 categories
 - a) Cost of production = fixed and variable costs for annual crops production
 - b) Cost of reproduction = what it takes to keep the farm going into the future
 - (i) investments for maintenance
 - (ii) funds for improvements
 - (iii) training
 - (iv) succession planning
 - (v) retirement

HM Approach (continued)

- 5) Analyze your farming system for 'weak links' as the first places to spend time or money
 - Weak link repair examples
 - Limited sales of produce
 - Short term = diversify into another direct market
 - Long term = produce value-added foods
 - Lack of water for crop production
 - Short term = install irrigation system
 - Long term = increases soil organic matter
 - 6) Conduct monthly review of expenses & income

Table 1. Distinctions between holistic financial planning and cash flow planning.

Holistic	Cash-flow (Conventional)
profit is the goal	production is the goal
profit is planned first	profit is what's left over
expenses put into WIM categories	expenses put in overhead and variable costs
monthly monitoring to stay on track	annual monitoring?

>W I M categories:

Wealth generating expenses
Inescapable expenses
Maintenance expenses

"Holistic Management" Financial Planning Contrast Example

Cash-flow Budget (Conventional)		
Income150,000		
Operating Expenses		
Administrative Expenses		
Capital Expenditures		
Cash flow<26,000>		
Holistic Budget		
450.000		
Income150,000		
Debt Service		
\$ Available for Operations 114,000		
Less 25% profit28,500		
\$ Available for Expenses 85,500		
Wealth generating expenses9,100		
Inescapable expenses		
\$ Available for Maintenance73,000		
Maintenance expenses99,000		
Excess maintenance expenses to be cut26,000		
Figure 1. Comparison of budgeting process in holistic & conventional management		

Financial Resources Introduction

When seeking resources one way to identify if a resource is worth pursuing is to think in terms of what you are seeking funding for. Understanding the business stage and type of business you are in will help to identify appropriate resources.

Financial Resources Introduction (Cont.)

For example:

<u>Business stage</u> <u>Type of business resource need</u>

Early

Broad business opportunity; specific

business opportunity; technology;

research & development; feasibility study

Start-up Venture capital; business planning

Operations/

Expansion Plant & equipment/working capital

Capacity Building Management expertise; technical/operational; marketing & sales

http://smallfarms.ifas.ufl.edu/planning_and_management/loans_and_grants.html

Financial Needs And Resources

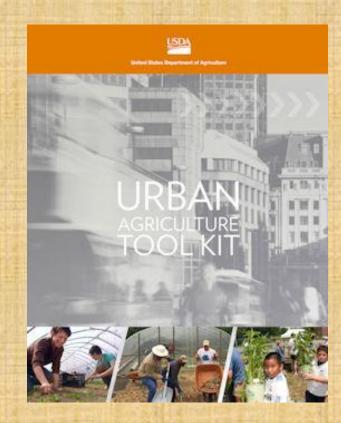
Watch the video "A New Family Farmer" at

http://cookingupastory.com/a-new-family-farmer



Financial Needs and Resources

- Manual includes USDA financial resources for Urban Ag, as well as nationwide non-USDA information centers
- Describes requirements and guidelines for loan and grant applications
- Provides example budgets for startup urban farms



Financial Needs And Resources USDA Urban Ag Tool Kit

- Start-up expenses for an urban farm will vary widely by location because many of the components (such as land or utilities) are site-specific.
- Start-up expenses can be broken down into a few categories:
 - Location land acquisition and assessment
 - Site preparation
 - Structures
 - Equipment
 - Administrative expenses and operating expenses
 - Costs for indoor growing systems, if applicable

Financial Needs And Resources USDA Urban Ag Tool Kit

Urban Farm Startup Cost Estimate Table Example: Location: Chicago; One acre in-ground operation

URBAN FARM SITE PREPARATION		Estimate
PERSONNEL		
Project Manager		\$7,500
	Subtotal	\$7,500
LOCATION		
Environmental assessment		\$1,000
Land acquisition		\$9,600
Site plan		n/a
Rezoning costs		n/a
Permitting		\$275
Liability insurance		\$1,000
	Subtotal	\$11,875
PREPARATION		
Signage		\$620
Fencing		\$12,353
Contamination remediation		variable
Water connection		\$6,178
Soil		\$6,786
Wood chips		
Tractor labor to spread soil and wood chips		\$6,178
	Subtotal	\$87,115

https://www.usda.gov/sites/default/files

Financial Needs And Resources USDA Urban Ag Tool Kit

Urban Farm Startup Cost Estimate Table Example (cont.): Location: Chicago; One acre in-ground operation

URBAN FARM SITE PREPARATION CHICAGO continued	Estimate		
STRUCTURES			
Wash-Pack Station	\$2,000		
Greenhouse structures and High Tunnels	\$18,000		
Cooler (2 Cool Bot Rooms)	\$4,000		
Outdoor storage	\$5,500		
Community shade structure	\$2,500		
Subtota	al \$32,000		
URBAN FARM SITE PREPARATION ESTIMATE + remediation costs	\$138,490		
GROWING & SELLING DURING YEAR 1	Estimate		
Tools and growing supplies	\$12,500		
Vehicle	\$5,000		
Utility costs (water & electricity)	\$3,000		
Accounting service	\$500		
Website - hosting, upke ep, design	\$1,800		
Marketing & advertising	\$500		
Farmer's labor	\$45,000		
Computer	\$1,000		
GROWING & SELLING			
Tota	l \$69,300		
URBAN FARM YEAR 1 ESTIMATE + remediation costs	\$207,790		
Note: this estimate does not include contamination remediation costs. Zoning costs are also not			
included, as Chicago zones for urban agriculture at this time. These costs are a compiled estimate			

of the average cost of an urban farm in Chicago, based on data from actual farms.

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Financial Needs And Resources USDA Urban Ag Tool Kit (Cont.)

Examples of Key USDA Resources:

- > Farm Service Agency (FSA)
 - farm loan programs for land acquisition
 - farm storage facility loan program for cold storage
 - program.
 - delivers commodity, credit, conservation, disaster, and emergency assistance programs that help improve the stability and strength of the agricultural economy, including urban Ag
- > Natural Resources and Conservation Service (NRCS)
 - grants for high tunnels & efficient irrigation
- Rural Energy for America Program (REAP)
 - grant program for on-farm sustainable energy projects

Financial Needs And Resources USDA Urban Ag Tool Kit (Cont.)

- Examples of Key USDA Resources (Cont.):
 - > Sustainable Ag & Research Education (SARE) Program.
 - provides technical assistance as well as grant funding, for research and education projects in sustainable agriculture, including urban agriculture.
 - Farmers Market Promotion Program & Local Food
 Promotion Program. (FMPP) and Agricultural Marketing
 Service (AMS)
 - grants for planning stages of establishing or expanding local food business enterprises, including in urban areas. Activities can include but are not limited to equipment purchase (except brick-andmortor), market research, feasibility studies, and business planning.

Financial Needs And Resources USDA Urban Ag Tool Kit (Cont.)

- Examples of Key USDA Resources (Cont.):
 - > Whole-Farm Revenue Protection (WFRP) Program
 - provides an insurance policy for all commodities on the farm and is tailored for any farm with up to \$8.5 million in insured revenue, including farms with specialty or organic commodities or those marketing to local, regional, farm-identity preserved, specialty, or direct markets.
 - Beginning Farmer & Rancher Development Program
 - grant program that funds projects that provide education, mentoring, and technical assistance to people entering farming and those in the first 10 years of managing a farming operation (requires a 25 % match)

Financial Resources

➤ USDA 'Local Food' Compass Guide — a dynamic Esri-based map interface provides case studies of different local food enterprises and their use of federal funding sources — see

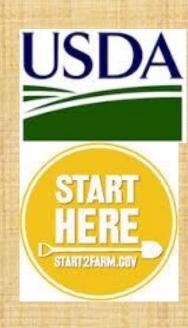
https://www.ams.usda.gov/local-food-sector/compass-map



Financial Resources

USDA New Farmers Program

- New Farmers is a database of programs and resources for beginning farmers and ranchers in the United States.
- The New Farmers website and program are a project of the National Agricultural Library in partnership with the American Farm Bureau Federation and was developed to assist people new to farming or ranching and those who have less than 10 years experience.



https://newfarmers.usda.gov/

Financial Resources

Farm Credit

- ➤ The Farm Credit System is a nationwide network and a cooperative credit structure of borrower-owned lending institutions and specialized service organizations typically for rural agriculture communities.
- Congress established the Farm Credit System in 1916 to provide a reliable source of credit for the Nation's farmers and ranchers.
- Assistance for urban Ag is possible as demonstrated in 2012 project in Cleveland to establish a thriving, sustainable urban farm economy – see

https://www.cobank.com/~/media/Files/Searchable%20PDF%20Files/Newsroom%20Financials/News%20Releases/News%20Releases%202012/GFG%20Final%20Release.pdf

What Is Needed to Process a Loan?

- The more information available at application, the better the chances of a speedy loan process. Items currently needed to determine credibility:
 - > 3 years tax returns. (Income verification)
 - Current balance sheet.
 - Detailed financial information.
 - Detailed production information.
 - Business plan describing in depth what will be farmed, how it will be marketed, who it will be marketed to and references.



Urban Agroecology: Financial Resources

- Alternative financial resources are available due to organizations focused on community food system and loca economy development
- Potential new "capital" include multiple sources
 - Social
 - Environmental
 - Economic



Alternative Financial Resources Examples

Organization Examples

Watch the short video "Transition Network Intro" at https://www.youtube.com/watch?v=6yGDkmVLFcl



Watch the short video "Break the Chains, Build Local Power" at https://ilsr.org/

BankLocal website – "Find a community bank and credit union that invests in local economy, including local Ag, using an ILSR rating system" – see https://banklocal.info/





Alternative Financial Resources Examples

Microloans

- Historically, microloans broadly defined as loans under \$35,000 made to individuals who couldn't usually borrow from a traditional bank – have been an emerging market phenomenon, with the work of Nobel prize winner Muhammad Yunus of Grameen Bank seen as leading the way.
- Kiva Zip is a pilot program, through which farmers can raise interest free loans
- In 2014 there are 14 US farmers that raised \$10,000 loans through the site, ranging from a second generation apple farmer in Rochester, NY to a seed bank in Hudson Valley, NY.



Alternative Financial Resources Examples

- Community Supported Business (CSB)
 - You have heard of CSA (Community Supported Agriculture). A CSA is a way for the food buying public to create a relationship with a farm and to receive a weekly basket of produce in season.
 - The concept of CSB is based on the CSA concept and is now becoming a much more widely applied way of getting smaller businesses off the ground, including urban Ag food enterprises.



Financial Resources Alternative Sources



- INUAg provides recognition and philanthropic support to urban farming innovators and leaders through an annual awards program.
- Each year, they award monetary prizes to urban farmers building better food systems.
- 2016 Example Winners



Michigan Urban Farming Initiative, Detroit



Cagayan de Oro City Inter-agency Committee-Urban

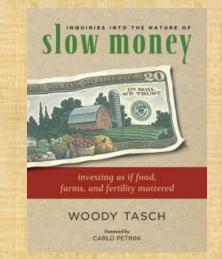
Urban Container Gardening, Philippines



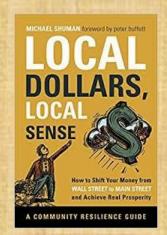
Why Farm, Trinidad & Tobago

Financial Resources Alternative Source Examples

- Community Foodshed Investments
 - Slow Money movement see video "Woody Tasch of Slow Money Unveils the Beetcoin." at https://www.youtube.com/watch?v=a0jZB pauVEk
 - Local/Regional Food Economic
 Development Financing Strategies see Michael Shuman video at
 https://www.youtube.com/watch?v=L-hxJXnBhK8



http://www.slowmoney.org/



https://www.chelseagreen.com/michael-shuman

Financial Resources Alternative Sources Examples

Farm Aid

https://www.farmaid.org/press-release/farm-aid-invests-family-farm-organizations-building-resilience/



National Good Food Network:

Field Guide to New American

Foodshed <a href="http://ngfn.org/resources/ngfn-cluster-calls/two-revolutionary-tools-for-cluster-calls/two-revolutionary-tools-for-calls/two-revolutionary-two-revol

beginning-farmers



National Sustainable Agriculture

Coalition: Farm Bill Grants

National Sustainable Agriculture Coalition

http://sustainableagriculture.net/publications/grassrootsguide/farm-bill-programs-and-grants/

Financial Resources Alternative Source Example



- Loan Programs from Wholesale Markets
 - Whole Foods Markets Local Producer Loan Program – see

http://www.wholefoodsmarket.com/mission-values/caring-communities/local-producer-loan-program

• see the short video of Chicago's first vertical organic aquaponic farm, FarmedHere®, a recipient of Whole Foods Market's Local Producer Loan Program -

http://www.bing.com/videos/search?q=farmedhere+youtube+video&view=detail&mid=365C1F88B74147150381365C1F88B741471503814FORM=VIRE

Financial Resources Alternative Source Example

Crowdfunding

funded with KICK STARTER

- Kickstarter (https://www.kickstarter.com/)
 - it's one of a number of crowdfunding platforms for gathering money from the public, which circumvents traditional avenues of investment.
 - project creators choose a deadline and a minimum funding goal. If the goal is not met by the deadline, no funds are collected, a kind of assurance contract.
 - watch video example for an urban farm project at <u>https://www.kickstarter.com/projects/43522468/urban-farm-collective</u>
- ➤ Also see an independent crowdfunding video for a Community Farm https://www.youtube.com/watch?v=5XuY4g5P3yU

Financial Resources Alternative Source Example

Crowd-Resourcing

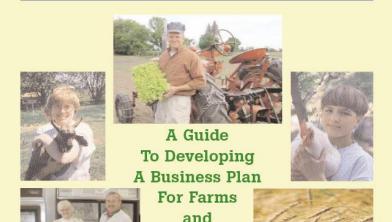
- ➤ IOBY (https://www.ioby.org/)
 - a non-profit platform that connects leaders with funding and provides campaign management support to make urban neighborhoods safer, greener, more livable and more fun, including Urban Ag projects
 - for an example an urban teaching community garden farmers market project - see https://www.ioby.org/project/chenchita%E2%80%99s-market



Review: One Of Our Textbooks

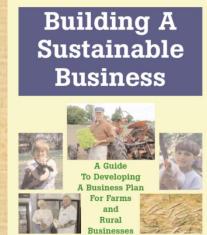
- ✓ Excellent resource
 - Allows you to explore the topics
 - Comprehensive in scope and applicability
 - -Step by step approach
 - -Provides case studies

Building A Sustainable Business

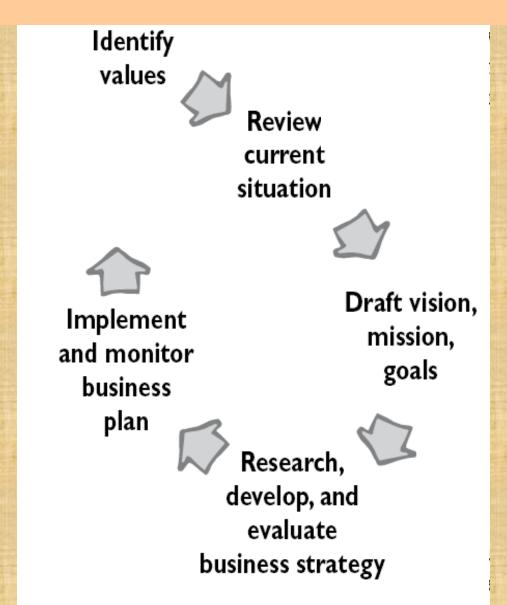


✓ Based on "Holistic Management" Principles

- Keeping careful records is essential for a successful Urban Ag enterprise. It will allow you to achieve the following:
 - compare actual yields, costs and sales to those projected figures in your business plan
 - crop planning
 - compare actual monitoring data to monitoring checkpoints established by your planning team
 - provide documentation for financing purposes
- Today there is a growing resource base of online & software tools to assist you in this task



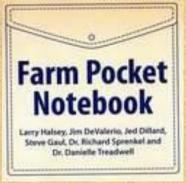
Review: "Building A Sustainable Business" - Full Circle of Tasks & Process -





Record
keeping
helps in
these
critical
steps!

- Online Resources for Production Field Notes
 - IFAS Farm Pocket Notebook see
 http://smallfarms.ifas.ufl.edu/pocketnotebo
 ok/PocketNotebook.shtml
 - 'AgSquared' see video at
 http://help.agsquared.com/customer/portal/articles/1101187-quickly-get-started-with-agsquared-video-





- Online Resources for Production Field Notes
 - Crop Planning Software seehttp://code.google.com/p/cropplanning/



– 'Market Farm Forms'

see

http://www.beginningfarmers.org/marketfarm-forms-information-softwarespreadsheets-for-local-marketing-and-csa/

- Online Resources for Production Field Calculations
 - Interactive Tools(http://www.johnnyseeds.com/interactiveTools.aspx)
 - NRCS Tools see
 http://www.nrcs.usda.gov/wps/portal/nrcs/main/nati
 onal/technical/econ/tools

- Online Resources for Direct Marketing
 - LocallyGrown.net (online Farmers
 Market) see http://locallygrown.net/
 - CSAware (CSA management) see http://www.csaware.com/
 - Member Assembler (CSA management) see
 http://www.smallfarmcentral.com/me
 mber-assembler





a service of localharvest.org

- Online Resources for Monitoring Agroecosystem Impacts from Management & Climate Change

 - Environmental Monitoring Tools see
 http://agriculture.vic.gov.au/agriculture/farm-
 http://agriculture/farm-
 management/business-management/ems-in-victorian-agriculture/environmental-monitoring-tools
 - USDA Climate Change Program see
 http://www.climatehubs.oce.usda.gov/southeast

Watch the video at https://www.youtube.com/watch?v=vAtzuglmNa4

Production Management Record Keeping/Planning

- Online Resources for Certified Organic Growers
 - CogPro (Record Keeping for Organic Certification) - see https://cogpro.com/
 - Organic Market Farm Documentation
 Forms see
 https://attra.ncat.org/attra-pub/summaries/summary.php?pub=23



Production Management Record Keeping/Planning

Smart Phone Apps

- Cornell Univ. Small Farms Program: Cell Phone Apps see http://smallfarms.cornell.edu/resources/tools-and-technology/
- Gardening Apps see (http://mashable.com/2010/04/12/iphone-apps-gardening/)



Watch the video at https://www.youtube.com/watch?v=lg5eDzovFS8

- Online Resources for Financial Analysis
 - Veggie Compass see the videos at http://www.ssawg.org/gfp-veggie-compass/



- Online Resources for Financial Analysis
 - Local Marketer's Calculator (Cost analysis of using multiple local markets) – see video at

http://agecon.unl.edu/localmarketcalc



THANK YOU...



- ATTRA Publications
 - ✓ Business Planning and Marketing https://attra.ncat.org/oasdfr/
 - ✓ Documentation Forms for Organic Crop and Livestock Producers https://attra.ncat.org/attra-pub/summaries/summary.php?pub=358
 - ✓ Holistic Management: A Whole-Farm Decision Making Framework https://attra.ncat.org/attra-pub/summaries/summary.php?pub=296
 - ✓ Successful Record Keeping for Sustainable Agriculture https://attra.ncat.org/newsletter/attranews 1105.html
- Beginning Farmers: Funding Sources -<u>http://www.beginningfarmers.org/funding-resources/</u>
- Carolina Farm Stewardship Association: Record Keeping -<u>https://www.carolinafarmstewards.org/record-keeping/</u>
- Farmers' Legal Action Group
 - Recordkeeping Instructions and Templates for Small-Scale Fruit and Vegetable Growers -http://www.flaginc.org/publication/recordkeeping-instructions-and-templates-for-small-scale-fruit-and-vegetable-growers-2/

- Growing for Market: Record Keeping Key to Successful Farming http://www.growingformarket.com/articles/Record-Keeping-Key-to-Successful-Farming
- Growing Small Farms: Record Keeping -https://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-farmrecords/
- Henderson, E. and K. North. 2011. Whole-Farm Planning: Ecological Imperatives, Personal Values, and Economics. Chelsea Green Publishing, VT
- Kerr Center for Sustainable Agriculture http://www.kerrcenter.com/
- Leopold Center for Sustainable Agriculture -http://www.leopold.iastate.edu/
- Minnesota Institute for Sustainable Agriculture. Introduction to Whole Farm Planning: Combining Family, Profit and Environment -http://www.misa.umn.edu/prod/groups/cfans/@pub/@cfans/@misa/documents/asset/cfans_asset_354163.pdf
- National Affordable Housing Association. Urban Farming Information and Resources – see https://www.nahma.org/members/resources/urban-farming-information-resources/

- New England Small Farm Institute http://www.smallfarm.org/
- RUAF. Financing Urban Agriculture see
 https://www.ruaf.org/sites/default/files/FINANCING%20URBAN%20AGRICULTURE.pdf
- Seedstock. 2014. Six Innovative Ways to Fund Your Ag Startup or Farm – see http://seedstock.com/2014/08/07/six-innovative-ways-to-fund-your-ag-startup-or-farm/
- Southern Sustainable Agriculture Working Group: Record Keeping Samples & Templates - http://www.ssawg.org/gfp-recordkeeping/
- St. Claire, M. 2014. How To Make A Crowdfunding Video That Works see https://www.forbes.com/sites/neilstclair/2014/11/27/how-to-make-a-crowdfunding-video-that-works/2/#
- UF/IFAS Small Farm and Alternative Enterprise Program Publications
 - Agriculture Loans and Grants - http://smallfarms.ifas.ufl.edu/planning and management/loans and grants. http://smallfarms.ifas.ufl.edu/planning and management/loans and grants.

USDA

- Financial Resources for Farmers and Ranchers -<u>https://www.usda.gov/topics/organic/financial-resources-farmers-and-ranchers</u>
- National Agricultural Library: Small Farm Funding Resources http://www.nal.usda.gov/ric/ricpubs/small-farm-funding.htm
- Sustainable Agriculture, Research and Education (SARE): Grants https://www.sare.org/Grants
- Urban Farming Toolkit -<u>https://www.usda.gov/sites/default/files/documents/urban-agriculture-toolkit.pdf</u>

Financial Resources & Production Management Online Video/Webinar Resources

- CAFF Building Sustainable and Resilient Food Systems" at <u>https://www.youtube.com/watch?v=nIHS2un9XXc</u>
- Farm Sage App https://www.youtube.com/watch?v=y0KLgTY9_Bk
- loby. Let's Get Started https://www.ioby.org/about
- Land Stewardship Project http://landstewardshipproject.org/posts/podcast
- Market Gardening on a Dime -https://www.youtube.com/watch?v=lpSnozbl0Ew
- National Good Food Network. The Field Guide to the New American Foodshed - http://ngfn.org/resources/ngfn-cluster-calls/two-revolutionary-tools-for-beginning-farmers
- Record Keeping for Incubator Farms and Farmers -<u>http://www.ssawg.org/gfp-recordkeeping/</u>
- Slow Money.
 - Youtubé Channel Videos https://www.youtube.com/user/woodytasch
 - "Financing Our Foodshed: Growing Local Food With Slow Money" https://www.youtube.com/watch?v=qqKva5KoRjQ
- The Carrot Project. "Financial Management Webinars" http://www.thecarrotproject.org/farmer_resources/past_webinars
- Urban Farmer Guys. "Farming In The Hood: Parts 1, 2 & 3" https://www.youtube.com/watch?v=AyRMvXZIKaw

Financial Resources & Production Management Online Video/Webinar Resources

- Urban Farmer In The City <u>https://www.youtube.com/watch?v=7m2nxfddu3l</u>
- USDA Urban Ag Webinar https://www.youtube.com/watch?v=GZbT-e8V2yo&feature=youtu.be