

# BIOMASS ENERGY

# TRAINING CURRICULUM

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This curriculum was developed through a Southern SARE grant and collaboration between Tennessee State University, the University of Tennessee, eXtension.org, and USDA-Rural Development. The objective of this curriculum is to provide training on biomass energy to extension agents and local officials so that they may deliver this information to their stakeholders.



TENNESSEE  
STATE UNIVERSITY

Cooperative Extension



## **Biomass Energy Training Curriculum**

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## Part II: On-farm Biodiesel Production

### *How to start a cooperative*

#### Learning objectives:

- Participants will be able to identify the steps involved in creating a cooperative
- Participants will be able to explain the potential pitfalls involved in creating a cooperative

#### Materials:

- PowerPoint® slides “How to start a cooperative”
- Lesson guide: Use the notes in this lesson guide to present information for each presentation slide.
- Questions found at the end of this lesson guide can be used to test participants’ knowledge at the end of the presentation. This can be combined with clickers to improve audience engagement and create discussion.
- An evaluation of the presentation can be found in this lesson guide following the lesson questions.

#### Topics:

Timeline

Phase 1

Phase 2

Phase 3

Phase 4

Potential pitfalls



Slide 1

This section comes from the USDA Rural Development office and focuses on the steps required for creating a cooperative.



Slide 1

Slide 2

Follow material on presentation slide.



Slide 2

Slide 3

Go over the three reasons for starting a cooperative and point out that a cooperative is a good way to be able to share costs in a renewable energy project such as producing biodiesel for personal consumption.



Slide 3



Slide 4

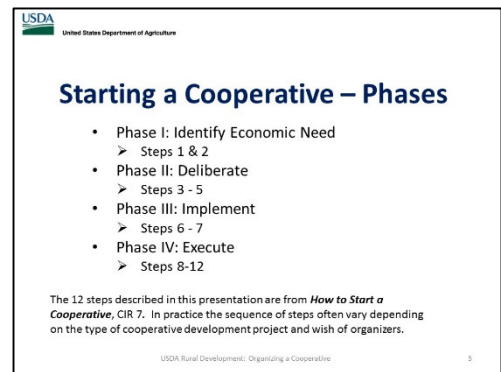
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Slide 4

Slide 5

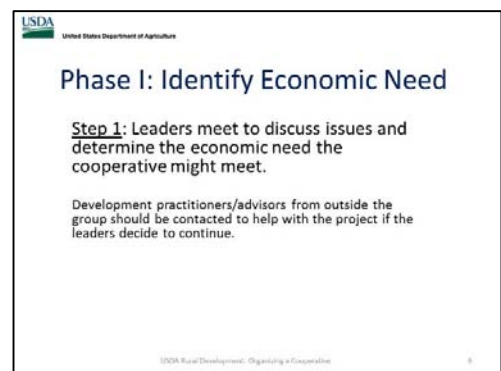
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Slide 5

Slide 6

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Slide 6



Slide 7

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### Use of Outside Advisors

- Outside advisors can greatly aid a group throughout the development process.
- Cooperative specialists or practitioners, consultants, technical advisors/industry analysts can help facilitate the process, help with market analysis, technical aspects (facilities, equipment), conduct feasibility studies, develop business plans, etc.
- Financial counsel can help with capital needs assessment and accumulation of capital.
- Legal counsel can assist with drawing up the legal documents and filing incorporation papers with State.

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Follow material on presentation slide.

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### Phase I: Identify Economic Need

**Step 2: Invite potential member-users to a meeting to decide if interest is sufficient to support a cooperative.**

- A steering committee should be selected if group votes or decides to continue the process.\*

\*Decisions whether to proceed with the development project will be made often throughout the process and various steps taken (this is further explained in the How to Start a Cooperative report). If the group decides NOT to proceed during any step, the process ends.

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### Phase II: Deliberate

**Step 3: Survey potential members. Conduct a member-use analysis and initial market analysis.**

Collects information on prospective members' needs, anticipated business volume, location and business or service characteristics of prospective members, opinions of prospective members, variety of products or services needed, etc.

Present results to potential members; vote on whether to proceed.

(Use of an outside advisor is especially useful in this step)

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## Phase II: Deliberate

**Step 4: Conduct a Feasibility Study.**

A feasibility study is an important analytical tool to show how a business will operate within the proposed cooperative's industry.

Based on well-determined assumptions, researched information, and the member use and market analysis.

**Key actions:**

- Decide who will conduct the study
- Develop sound and realistic project assumptions
- Determine components for a comprehensive study
- Assess the study
- Accept or reject the study
- Vote on whether to proceed

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## Phase II: Deliberate

**Step 5: Prepare a Business Plan.**

Feasibility study acts as the foundation of this plan. The Business Plan provides a plan of action and specifics on how the cooperative business will operate.

Go over plan in detail, adjust, and finalize.

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Slide 12

Follow material on presentation slide.

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## Phase III: Implement

**Step 6: Employ Legal Council for Legal Papers.**

Articles of incorporation state the purpose of the cooperative business and give distinct legal standing. Bylaws state how the cooperative will conduct business and are consistent with both State statutes and the articles of incorporation.

Other legal documents include the membership application, membership or stock certificate, marketing/purchasing agreements, revolving fund certificate, and meeting notices and waivers of notice.

Review all legal documents and the final business plan and decide whether to file articles of incorporation.

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### Phase III: Implement

**Step 7: Hold First Meeting of the Cooperative.**

The goal of this meeting is to approve the finalized bylaws, discuss the implementation of the business plan, and elect the first Board of Directors (members of the first board of directors are sometimes named in the articles of incorporation; if not, elect).

It is important to have a good turnout of members at this meeting.

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### Phase IV: Execute

**Step 8: Convene First Meeting of Board of Directors.**

New directors elect officers per the bylaws, appoint committees, and with a well defined agenda, discuss other important action items.

Board action items:

- Membership drive
- Membership application or stock subscription.
- Acquisition of capital
- Bank selection
- Initiate hiring of management (necessary qualifications)
- Authorize officers/employees to handle funds
- Provide for bookkeeping and accounting services
- Printing of articles, bylaws and member documents for distribution
- Choose a business location (if not already selected) and seek bids for equipment and facilities

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### Phase IV: Execute

**Step 9: Hold a Membership Drive.**

Necessary when the new cooperative needs more members than those who had shown commitment and taken part in early meetings.

Arrange informal meetings and communicate the vision and goals of the new cooperative and how it will benefit members.

*While many members may already be committed, the cooperative may seek other potential members to ensure there is enough for a successful business.*

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### Phase IV: Execute

**Step 10: Acquire Capital.**

The board of directors needs to arrange for adequate capital to finance the new cooperative's start-up operations.

Most often raised from members purchasing stock (equity) and borrowing funds (debt) from a lending institution.

The projected cash-flow analysis and financial statements from the feasibility study & business plan clarify the capital needs.

Members need to have "skin in the game" (an equity investment) for the cooperative to prosper.

*Sources of capital for the new cooperative is often: membership stock shares, member and outside equity contributions, loans, grants, etc.*

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Follow material on presentation slide.

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### Phase IV: Execute

**Step 11: Hire Manager.**

This person will be responsible for the day-to-day operations of the cooperative.

The manager will then execute the business plan.

This person should have business acumen and experience and fully understand what a cooperative is and how they are governed and function.

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Follow material on presentation slide.

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### Phase IV: Execute

**Step 12: Acquire Equipment and Facilities, Open Doors.**

The manager and board together determine what location, facilities and equipment are needed and then acquires (or rents) them.

The business plan often provides the blueprint for this step so it serves as the guide.

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Follow material on presentation slide.

**Q:** There are five general rules provided that will help with the success of a cooperative. Which rule do you think is the most important to remember?

**A:** Answers vary



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Slide 20

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**Q:** Which potential pitfall do you see as greatest threat to a successful cooperative?

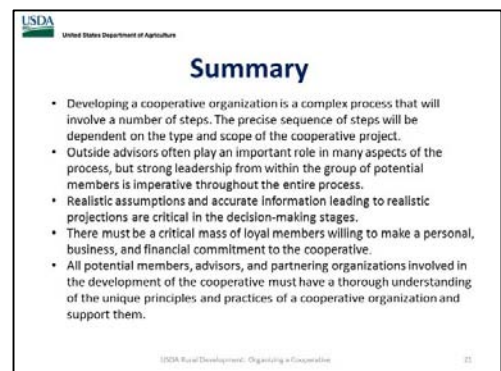
**A:** Answers vary



Slide 20

Slide 21

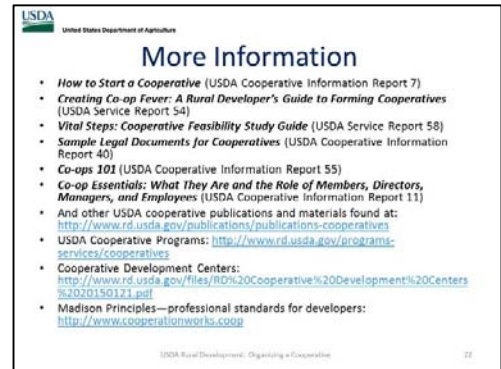
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Follow material on presentation slide.



Slide 22

Test their Knowledge - Questions for the audience

A cooperative can take from 3 months to up to 2 years from the first meeting of the cooperative to open doors.

Phase I for starting a cooperative is to identify economic need.

Q: What are the two steps involved in Phase I?

A: Leaders meet to discuss issues and determine economic need.  
Potential member-users are invited to a meeting to decide if interest is sufficient to support a cooperative.

Q: What are the three steps covered in Phase II “Deliberate”?

A: Surveying potential member-users, conducting a member-use analysis and initial market analysis.  
Conducting a feasibility study.  
Preparing a business plan.

Q: What are the two steps involved in Phase III “Implement”?

A: Employ legal\_council for legal papers.  
Hold the first meeting of the cooperative.

Q: What are the five steps for Phase IV “Execute”?

A: Convening the first meeting of the Board of Directors.  
Hold a membership drive.  
Acquire capital.  
Hire a manager.  
Acquire equipment and facilities and open doors.

# Evaluation

Please give us your feedback regarding this activity. Your feedback will help us improve the activities you attend in the future.

Name of Activity: How to start a cooperative	Date of Activity:
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A. Instruction	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. The specialist was well prepared.	①	②	③	④	⑤	⑥
2. The specialist presented the subject matter clearly.	①	②	③	④	⑤	⑥

B. General Learning and Change	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. I have a deeper understanding of the subject matter as a result of this session.	①	②	③	④	⑤	⑥
2. I have situations in which I can use what I have learned in this session.	①	②	③	④	⑤	⑥
3. I will change my practices based on what I learned from this session.	①	②	③	④	⑤	⑥

C. Specific Learning How much <i>did you / do you</i> know about these subjects?	Before this program I knew...					Now I know....				
	Very little	Little	Some	Much	Very Much	Very little	Little	Some	Much	Very Much
1. <i>The steps involved in establishing a cooperative</i>	①	②	③	④	⑤	①	②	③	④	⑤
2. <i>The potential pitfalls involved in establishing a cooperative</i>	①	②	③	④	⑤	①	②	③	④	⑤

D. Specific Practices To what degree <i>did you / will you</i> do the following?	Before this program I did...					In the future I will realistically do....				
	Very little	Little	Some	Much	Very Much	Very little	Little	Some	Much	Very Much
1. <i>Consider establishing a cooperative</i>	①	②	③	④	⑤	①	②	③	④	⑤
2. <i>Talk to other farmers about how cooperatives are established</i>	①	②	③	④	⑤	①	②	③	④	⑤

E. Satisfaction with Activity	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. <i>I would recommend this program to others.</i>	①	②	③	④	⑤	⑥

<b>F. Other comments?</b>

Thank you for completing this survey!