

10 Steps for Conducting Research on Your Farm or Ranch



Lesson 5 Worksheet Take a Closer Look at Your Plan

The full workbook is available online or to order in print at www.sare.org/research-workbook.

ASSIGNMENT

Sample forms are provided at www.sare.org/research-workbook-forms to help you complete assignments 3, 4, and 5.

1. Describe the specific locations and plots you'll use to carry out your research. For an animal-related project, describe where the animals will be throughout the entire year, ensuring they have access to water and shelter at all times, and if or how you'll keep the treatment animals separate from the controls. It's often useful to create maps and drawings of research areas.

2. Make a complete list of what you'll need to purchase, lease or create to complete the project, and what resources you already have.

3. List each person involved in the project, along with their duties. Remember to address these tasks:

- Setting up the project that you planned (starting the experiment, developing an observational plan, or construction of an engineering project)
- Crop and animal care
- Data collection
- Data analysis and statistics
- Writing and reporting
- Outreach events, such as a field day, if you plan to host one to share results

4. Prepare a detailed budget. Research prices for any purchases and leases that you'll require. Estimate labor costs using a reasonable hourly rate for each person involved. Include unit costs for any outside services, such as lab analysis, subscriptions, or printing. Also consider providing stipends to other project participants who are providing expertise and support to the project. If you're applying for grant funding, be aware of any restrictions on allowable expenses for the funding request.

5. Create a timeline of the project workflow. Include target dates as well as any deadlines for all activities.

ASSIGNMENT SELF-EVALUATION

1. Do you have access to enough space, fencing, animal watering infrastructure, and so on, to conduct the project as described? Can you spare the necessary facilities for the entire duration of the project? Do you need to seek out someone with additional expertise?

2. Look over your locations, livestock, and crops. Are there any differences between the treatment and control groups or plots that could influence your results (for example, soil types, landscape setting, site history, or animal characteristics)? For an engineering project, does the testing environment mirror the original problem? If you see differences, is there a way to minimize their effects?

3. Examine your project timeline.

- If you're seeking a grant for the project, can you complete the project within the grant's specified timeline?
☐ Yes ☐ No
- Will the people involved be available during the times of year when the work will take place?
☐ Yes ☐ No

4. Examine your budget.

- Will funds be available to cover all expenses?
☐ Yes ☐ No
- Is every budgeted item necessary for the plan you laid out in Lessons 4 and 5?
☐ Yes ☐ No
- If you're using your budget for a funding proposal, does each expense comply with the grant's guidelines?
☐ Yes ☐ No

5. Look over all of the lists you've just created. Do they make sense together? Does each item support the overall goals as you've stated them?

☐ Yes ☐ No

6. How do the answers to the above questions change if conditions change? Think about the weather, markets, health, life events, and so on.