



Agroforestry Notes

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Guide to a Successful Agroforestry Demonstration Project

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Purpose

An agroforestry demonstration project is an excellent teaching tool that can benefit a variety of cooperators, stakeholders, and customers. It is a cost-effective way to increase public awareness of agroforestry, promote adoption by landowners, and obtain support from stakeholders. Demonstration plantings establish a working example of an agroforestry technology under local conditions and show *what* it is, *why* it is used, and *how* it functions.

If you are considering a demonstration project, this technical note provides ideas and suggestions to help you succeed. Or, if you have already established a demonstration site, you may find some useful ideas that will strengthen your effort.

Getting Started

Once you have identified the problem, need, or opportunity and have decided to approach it by establishing an agroforestry demonstration site, the next step is to begin the planning process. Remember, a successful demonstration project requires financial resources, a planning team, and a commitment to monitor it and perform periodic maintenance. Ask the following questions to start the planning process:

- What are the objectives for this demonstration site? (awareness, increase adoption, conservation education, etc.)
- Which agroforestry technology is best suited? (windbreaks, alley cropping, forest farming, silvopasture, riparian buffer strips)
- Who will provide the technical expertise? (design, installation, monitoring, maintenance)
- Who should be involved (directly or indirectly)? (local representatives of federal/state agencies, associations, local residents)

Partnerships

The success of the demonstration, and ultimately the adoption of the technology, depends on gaining local interest and support for the project. As budgets tighten and work loads increase, agencies and organizations are more likely to participate in a demonstration project that involves multiple partners. Well-defined and orchestrated partnerships spread the cost and outreach responsibility among various individuals, groups, and agencies. When developing a list of potential partners (see Table 1), ask these questions:

- Are all potential project partners (local, state, and federal) identified?
- Who is the key contact person for each identified partner?



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- What skills or resources are needed, and what can each partner bring to the project?
- What financial resources are available?
- How will each partner participate (funding, labor, equipment)?

Hold a preliminary meeting of key partners and solicit input from the group regarding the above questions. They will most likely recommend other groups to be involved. While it is important to develop a diverse group of partners, it is also important to identify how each will participate and benefit, and to keep the project to a manageable size.

Table 1: Potential partners to include in an agroforestry demonstration project
Local — Citizens, schools; politicians; city/urban forester; businesses/utilities; city/county engineer office; Soil and Water Conservation Districts; civic and conservation groups; Resource Conservation & Development Councils.
State — Forestry, wildlife, or natural resource agencies; Department of Environmental Quality; Department of Agriculture; Department of Transportation; public works; Cooperative Extension Service; college or university.
Federal — USDA Forest Service; USDA Natural Resources Conservation Service.

To facilitate advancement of the project, it is wise to keep the planning committee to less than 10 people. Members of the committee should be committed and have the drive and desire to finish the project. If the partners are committed to the project, then they “own” it. The project should have a leader who is willing to commit the time necessary to coordinate the project. Communication is vital to any successful project. Sharing information among all partners is essential to avoid conflicting goals and to coordinate tasks and responsibilities. Therefore, communication must be efficient (timely, clear, and detailed), and specific (particular person or group). Effective communication will build trust and confidence among all partners, increase productivity and efficiency, and increase your credibility.

Open communication increases the opportunity to involve individuals and groups who have skills that can add value to your project. Interested people are more likely to become involved, and their interest equates to potential assistance to implement the project.

Finally, an important point to remember in a partnership project — the payoff is not just getting the demonstration established, its also the teamwork, relationships, and buy-in you have established among the partners.

Planning Tasks

There are five phases to an agroforestry demonstration project:

- Site assessment
- Design and logistics
- Establishment
- Monitoring and maintenance
- Technology transfer

Phase 1: Site Assessment

Know what you are working with! Thorough knowledge of the project site is fundamental to assure project quality and success. Perform a comprehensive site assessment to attain baseline information. This will eliminate potential costly mistakes. When performing a site assessment for a demonstration project, ask yourself these questions:

- What are the soil and drainage characteristics of the project site and surrounding area?
- What is the existing vegetation?
- What is the current land-use?

- What are potential land-use conflicts?
- Is the site appropriate to demonstrate the technology?
- Is the location convenient and visible?
- Is future public access to the site assured?

Phase 2: Design and Logistics

The next step is to develop a work plan for the project. A qualified local professional should be involved with the project from the beginning and have full knowledge of the project goals, budget, partners, and constraints. Initial design concepts should include input from all partners. Available funding is often the limiting factor that dictates what can be included in the project. Expect compromise before coming to agreement on the final design. The plan should address the following:

- Purpose of the demonstration
- A sketch showing dimensions and orientation of the planting
- Species and source of planting stock
- Site preparations
- Planting method
- Monitoring needed
- Maintenance needed
- Time schedule
- Budget

The plan should identify specific tasks and responsibilities. Important logistics are:

- Who will coordinate the planting operation?
- Who is responsible for site preparation and when will it be done?
- Who is responsible for providing the tools needed for planting?
- Who is responsible for the plant material?
- Who will do the planting?
- Who is responsible for monitoring tree survival and health?
- Who is responsible for maintenance (weed control, watering, replanting, etc)?

Phase 3: Establishment

Planting day (usually in early spring) is the big event, when a lot of planning and effort finally comes to fruition. If the tasks and logistics have been carefully thought out in the work plan, all of the materials are ready, and the planting design is laid out on the ground — the planting operation should go like clockwork. The fewer problems the better.

Partners will usually want to be present and involved in the actual planting. The amount of involvement is up to you. Again, remember that a successful partnership project is not just getting the trees planted, it's building relationships and support for what you believe in.

Phase 4: Monitoring and Maintenance

Monitoring and maintenance activities include checking for tree survival, replacing trees that die, watering, checking for pest problems, and controlling weeds.

The importance of proper maintenance cannot be over-emphasized. If a project is not properly maintained it will be demonstrating what not to do. Maintenance is essential, and you must determine who will do it and how it will be done. If budgets limit what can be spent on maintenance activities, you may want to involve

local volunteer groups such as members of the original planting team. To make the day more rewarding for the volunteers, we suggest you incorporate some type of educational program into the maintenance activities.

Phase 5: Technology Transfer

Technology transfer is putting into practice information and technology that is needed to improve land stewardship and environmental quality. A technology transfer plan is the cornerstone of any demonstration project. When developing the plan, ask yourself:

- Who will coordinate the TT effort?
- What is the target audience?
- What are the best delivery methods?

The following are effective methods for delivering agroforestry technical information:

- Field trips: on-site experiences with interactive learning activities.
- Workshops: information presented by resource professionals, works best in conjunction with a field trip to a demonstration site.
- Interpretive signs: provides passersby with information about the demonstration.
- Handouts and brochures: more detailed information about the demonstration. Be sure to cover what, who, when, where, how, and why.

Publicity

Spreading the word about the demonstration through the media can pay dividends. Media can include local, state, and national newsletters and newspapers, local and regional radio and TV stations, and farm magazines. Give the media advance notice so they can schedule their coverage of the field event.

If you want publicity, you can greatly enhance it by involving youth groups, environmental education programs, community dignitaries, business owners, etc. to participate in the project. This accomplishes several objectives, but the primary one is development of a sense of community and ownership for the project.

Finally, don't overlook the importance of recognizing the partners and people involved in the project. People want to be involved and make a difference, but they also want, and deserve, to be recognized for their dedication and hard work. Their success is your success!

Additional Information

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The National Agroforestry Center is a partnership of the USDA Forest Service and the USDA Natural Resources Conservation Service. The Center's purpose is to accelerate the development and application of agroforestry technologies to attain more economically, environmentally, and socially sustainable land-use systems. To accomplish its mission, the Center interacts with a national network of cooperators to conduct research, develop technologies and tools, establish demonstrations, and provide useful information to natural resource professionals.

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