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Forest Gardening: Redesigning Modern Agriculture

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A Solution

Forest gardening is an international movement that creates forest gardens in local communities. They provide local jobs and many important products.

1. They are more productive per acre than current farming methods and do not require artificial inputs that are harmful to the environment.
2. They transform damaged land and build soil.
3. Forest gardens ensure the concept of local sustainability.
4. They incorporate beneficial symbiotic relationships between plants, animals and microorganisms that outweigh negative relationships such as plant competition.
5. Forest gardens will stop growing dependent on single crops due to their diversity of species.
6. They produce food year-round, and use nature to provide functions such as oxygenation, fertilization, pest control, and pollination.
7. Forest gardens force farmers to think both horizontally and vertically because a forest garden creates a structure of twelve different kinds of growth.
8. They require little self-maintenance. Therefore, expensive farming equipment, chemicals, and supplies required for present farming are no longer needed.
9. My creating forest gardens in local communities, they provide local jobs and naturally grow food to the local community. In addition, transportation of this grown food decreases, which leads to the conservation of time, money, and oil.

Implementation

Research needs to be done in two key areas:
1. We need to develop more agricultural systems that include a diverse amount of species that contribute to biodiversity and mimic natural ecosystems.
2. We need to make other farming related practices such as transportation more sustainable.

There needs to be more research documented in three key areas:
1. Production results
2. Affect on local livelihoods
3. Impact on biodiversity

Forest Gardening: Redesigning Modern Agriculture
Jacquelyn Tupper, Christine Tang, Patrick Sheppard, Jonathan Rodgers
Advisor: Professor Svetlana Nikitina

The Issues

The harmful effects of modern agriculture include:
1. Use of significant amount of space as modern agriculture, limit CO₂ emissions, and make the world less dependent on oil.
2. To raise awareness on the problems of modern agriculture as well as to introduce a possible solution in forest gardening.

A Solution

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The Next Step

During our team’s field trip to Jono’s forest gardens, we had the opportunity to interview Justin Treuza, a forest gardener in Leverett, MA, who worked to educate the local residents in sustainable living. In the interview, Justin reflected on the importance of forest gardening as a solution to modern agriculture's flaws.

Justin Treuza is a lead designer at Sustainable Harvest International, which serves the war as a Peace Corps volunteer in the jungle of Madagascar where he works to educate the local community on sustainable agriculture and forest gardening. Our team along with the help of our advisor scheduled a five-hour interview with Justin. He graciously made time in his busy schedule to teach us about the forest gardens he had implemented. Many farmers want the immediate results while forest gardening builds it. Forest gardens are less dependent on chemicals, Justin explained that forest gardens are a better solution to solving our current agricultural problems.

Goals and Objectives

The overall goal of this project is to see if forest gardens are a plausible alternative to current agricultural practices. The project will expose the harmful effects of modern agriculture as well as its unsustainable practices. Then, it will include research on the topic of forest gardening to find out whether or not the concept solves modern agriculture’s flaws.

To determine whether or not forest gardens can replace modern farming practices and are economically viable to make.

To determine whether or not forest gardens can be implemented in developing countries such as the nations of Africa, or in developed countries such as the United States.

To determine whether or not forest gardens will be a solution to feeding the world’s growing population using the same amount of space as modern agriculture, limit CO₂ emissions, and make the world less dependent on oil.

To raise awareness on the problems of modern agriculture as well as to introduce a possible solution in forest gardening.

Selected References


Lorax Team – Advisor: Professor Svetlana Nikitina

Sustainable Harvest International.

Treuza, Justin. Personal interview. 8 Nov. 2009.


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