

A woman in a brown sari is working in a golden rice field. She is bent over, tending to the plants. The field is filled with tall, golden rice stalks. In the background, there are green trees and a utility pole. The sky is overcast.

Seeds of Hope--- Visions of Growth

John Schubert
ECHO Asia

Seeds of Hope--Visions of Growth

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Who am I?

John Schubert, Age 17

Rural Montana farm boy from
The United States of America

Dual enrollment/High School and College

Presently living in Chiang Mai, Thailand

Volunteer with ECHO Asia in North India



My Background--Training on our Montana farm



Raising goats, sheep,
cattle, poultry;
Vermiculture,
Organic dairying;
Gardening,
Food storage;
Sustainable farming;
Alternative energy

Training with ECHO Asia October 2015



ECHO Asia

NGO (Non-government Organization)

Their theme--Improving Lives

Actively partner with those whom they can train and equip

They are growing a network to impact the lives/livelihoods of Asian farmers connecting the people and ideas that can make a real and sustainable difference.

Educational opportunities offering:

Practical solutions to agricultural challenges

Strategies for improving the lives of those facing the threat of starvation

Open seed bank accepts and distributes donated seeds freely to help those who wish to improve their nutritional needs and economic stability.

Abram Bicksler, Director of Echo Asia

video





Plans A

- 1) **Gather research about the degree of interest** in new seed and plant *varieties* suited to the selected areas.
- 2) **Plant a set of seeds** in two locations and *assign caretakers* to record and report growth of the plants to provide ECHO Asia with needed information about the area in which I stayed in India.

Plans B

Travel to India to conduct research

May through July 2016

Assign and train volunteers

Record growth

Check up on plants in May 2017

Follow up with further education for volunteers



Methods and Materials A

I took a variety of seeds, tree cuttings, and literature from ECHO Asia to India



Methods and Materials B

I recruited assistants to help in research and development

Our team **educated people** in in this area about our project



Methods and Materials C

- ❖ We **enlisted volunteers** who would sow seeds and maintain plants
- ❖ **Arranged** seed and cutting plantings with team and volunteers and **provided** needed **materials**
- ❖ **Planted** seeds and cuttings
- ❖ **Arranged** methods for **follow-up** on seed and cutting growth



Results A: Level of Interest

Interest in planting seeds and plants far exceeded the expectations of this researcher.

There were **so many requests for seeds!** People entreated us to return with more seeds.

Preliminary plans were made with the heads of three organizations to continue this type of work.

CEO, Mr. Alex Mathew, requested a **demonstration garden** be planted by company guesthouse where workers can see plants, take cuttings/seeds with them to their remote work in poor tribal areas



Results B: Seeds and Cuttings

❖ Preliminary results are mixed.

- Some of the seeds sown in June-July 2016 died or were flooded out because of inadequate materials, poor management, or or lack of education.
- Some seeds were not sown by the volunteers.

❖ Full report of **plant growth is due this May** upon my return to India.



Results C: Seeds and Cuttings

Some of the results are shown in these pictures taken February 13, 2017 in Dehradun, UK, India by Sunil Mathew.



Conclusions A

My research into the **degree of interest** in new seed and plant *varieties* produced more data than I expected:

- I found that growing their own food from seed is a felt need of this population
- They have a strong desire to share knowledge and materials with poor tribal people both in this and other parts of India and thus provide them with better seeds and agricultural practices
- In this population, educational opportunities exist to teach about agriculture, new plants, and unique ways to use/cook new, nutritious, home-grown foods

Conclusions B

My research on **growth rate of various seeds** remains unfinished--more data on this in May.

I need to

- Provide better training about care for the seeds and plants,

- How to record growth rate,

- Keep in closer communication with my volunteers.

Conclusion C

Further research should be conducted:

To determine which seed varieties are

- Best for the test areas
- Most desired by the population

And what type of training is most needed

How Conclusions Relate to the Big Picture

Innovative agricultural training and seed saving and sharing to assist in sustainable farming methods is welcomed in the Dehradun area.

The population with which I worked is interested in improving their own lives by using sustainable agricultural methods.

They are eager to share their knowledge and resources with impoverished people throughout India.

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Questions?



SEEDS OF HOPE—VISIONS OF GROWTH

John Schubert

ECHO Asia volunteer/Boy Scouts of America, North India

ABSTRACT

In these times of weather pattern changes and economic uncertainty, it is important for farmers to be aware of modifications which may be needed to continue to function adequately in an unpredictable world. My goal, in working with ECHO and the Boy Scouts of America is to provide information which will assist the people of South Asia to use seeds, plants and methods which are sustainable and helpful in these unsettled times.

My goal was to test various seed varieties and their hardiness and production in the area in which I lived and to see how much interest there was among the people with whom I worked in better plant varieties.

I collected data from various sources to 1) determine which seed varieties best fit the locations and 2) see if interest in such improvements existed among my contacts. I oversaw the planting of several test seed varieties to see if the plants would flourish in the test environments. I also collected data on the interest in agricultural innovations among my contacts.

All results have not yet been collected. However, some conclusions were very clear. People in this part of North India are very interested in gaining access to the best species which will provide safe and health-giving properties to their families.

Much more interest in productive and healthful seed varieties exists than was expected by the researcher. Much can be done in the area of education and provision of healthful and productive seed varieties. More research needs to be done to see which varieties thrive best in the various environments. The people are very open to innovation and are willing to try new foods, methods, and seed varieties if these can be shown to be advantageous to providing health to their families.