# **Fruits & Nuts Tree Plantation Project**

...... Creating resilient agriculture & economic development after COVID-19 through sustainable farming model

### Presenter Shree Krishna Dhital

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**Director- Sanskriti Farms & Research Centre** 



31 August 2020

Stay Home and Stay Safe from COVID-19

# **Welcome to Nepal - Introduction**



### **Federal Democratic Republic of Nepal**

- Language: Nepali
- Capital: Kathmandu
- Major occupation: Agriculture
- Area: (56,956 sq. mi)
- Population: 28 millions (2018), 466.2/sq. mi) <u>World Bank</u>
- President: Hon. Bidhya Devi Bhandari
- Prime Minister: Hon. K.P Sharma Oli

## About me

# Shree Krishna Dhital

(PHF in 2018) Phoolbari, Nepal

I have a small and beautiful family. Dad- Rajan, Mom-Rajkumari Wife: Rupa Daughter: Sanskriti and Son: Sanskar

I did my Master`s in Mechanical Engineering from Kathmandu University and now studying Law at Tribhuvan University.



## **Agriculture in our context**

- Agriculture makes up 68% of the livelihood of Nepal's population & contributes to 34% of the total GDP.
- More than 50% population in Namobuddha Municipality including Phoolbari directly depend on agriculture while more than 20% people are either abroad or living in another town for work.

## Problem

- More than 70% land is a hilly slope (15°-45°slope)
- Traditional or subsistence farming is currently limited to maize and wheat, they are uneconomical, unprofitable and require high labour to grow and harvest.
- Currently, youth and men are required to leave the village to find work in the city or abroad in order to support and feed their families.
- Pesticide and GMO based farming practices are being heavily promoted throughout Nepal. This contributes to a loss of culture and is detrimental to the health our people.



including those who have been working

and training abroad. What can we do nex to support them?

#### Chart Showing Import of Daily Consumables, Fruits and Nuts from India and **Other Countries**



Source: Department of Customs

# **Objectives**



This project integrates solutions to socio-economic and environmental challenges facing rural Nepali communities.

Fruits and Nuts are easy to grow and require less water.

- Engaging youths in fruit and nut tree farming as well as increasing organic vegetable production for improved food security and income generation after this COVID19 Pandemic;
- Diversifying diets (improving nutrition) in the local community and contributing to public health (especially the health of mothers and children)
- Strengthening the natural environment by planting fruit trees that do not require pesticides and that will prevent soil erosion and desertification;



#### Legend

- B.P Highway
- Phoolbari Homestay (Sanskriti Farms)
- 📍 Phoolbari Manegaun Community Homestay
- Village Boundary

B.P Highway

Phoolbari Homestay (फूलबारी घरबास)

Project Area in the Vicinity of Sanskriti Farms in Namobuddha Municipality and Dhulikhel Municipality. There are more than 1500 households residing in the area.

Phoolbari Manegaun Community Homestay

Google Earth

Kanakot

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900 m

# Why Sanskriti farms?

Over the past 10 years, I myself have been involved in many projects through Rotary which have created solutions for challenges with water, farming, and renewable energies, particularly focusing on "*United Nations Sustainable Development goals 1-No Poverty; 11-Sustainable Cities / Communities and 15-Life on the Land and Rotary*'s 7 areas of focus (Water Sanitation & Hygiene, Community Economic Development and Maternal & Child health)"

We have a group of passionate and enthusiastic young professionals who are leaders in their community and want to create "**Model of Success**" through agricultural interventions and environmental initiatives. **Sanskriti Farm and Educational Resource Centre** is a **bridging institution** created to link up local farming communities with academia, institutions like **Rotary clubs**, Universities, hospitals to achieve their prospective goal to make their farming profitable and sustainable.



# **SANSKRITI FARMS & RESEARCH CENTRE**

Dhulikhel-11, Kavre, Nepal

#### What do we do?

- Academic research activities
- Demonstration of various sustainable technologies
- Nursery for grafted and seed grown trees
- Native herb collection and local seed bank
- Hands on training on several sustainable agricultural practices
- Business incubation and Woman Entrepreneurship
- Nepali Cooking Lessons & Nepali Language Classes
- Cultural Tours, Organic Tours and Hikes
- Community Learning Center

#### **Contact Details:**

☐ +977-9841891265 M sanskriti.farms2073@gmail.com
Find us on: f (1) (0) (0) (0) (0) (0)

#### **Our Supporters :**







#### Our Features:



- Beautiful location with panoramic view of the Himalayan range
- Farm Stay in a pleasant, home-like Environment
- Locally grown Organic Food
- Nepali traditional & cultural living experiences
- On demand Training & volunteering









## Sanskriti Farms & Research Centre – A sustainable farming model



We aim to share our knowledge with people to replicate our project in the community

### WHY this project?

It is our belief that if we can educate our community about organic, sustainable and diversified farming practices including fruits and nuts, our communities will not only be able to survive but will thrive in the future.

Fruits and Nuts are nutrient rich and have high value than the food crops. Easily grows in the mid hills where we are living and requires less water and frequent care. Nuts are storable for longer period which is value addition.

If we don't achieve this, the communities will split apart as more youths leave to earn their livings to abroad or cities, people will be dispersed to earn money to buy pesticide laced food. This can contribute to many illnesses, including depression, as families are split apart based on economic reasons.

# **Our future planting project**







Peach



Plum

**Grape White** 



Walnut

Macadamia

Almond



**Red Grapes** 

**Passion Fruit** 

We are targeting to plant **2000** different varieties of fruit and nut trees in the coming year and will continue this plantation in the future. Our aim is to plant more than **10,000 fruit and nuts trees** in our surrounding community by 2025. *The fruits* being planted are tested varieties for climate adaptation and production and grafted, means they produce fruits faster.

# **Our future planting project**













**Bitter Gourd** 

Capsicum

Tomato

Cucumber

Pumpkin

Carrot



We are promoting more than 12 varieties of seasonal vegetable farming to create a sustainable livelihood through organic kitchen gardening in the local community. For this Plastic green house will be installed.

# **Project Model**

#### **Rotary Clubs in USA/Canada**

- Assistance through funding grants and advice
- Reporting and monitoring

#### Local Farmers (ownership Model)

- Take part in the trainings
- Prepare for plantation on their land
- Provide compost and other materials required for plantation and green house construction
- Take part in the "Farmer's Market" Program in future

#### Rotary club in Nepal/Sanskriti Farms/Local Cooperative

- Project site identification and Farmers selection
- Provide trees, seeds and other materials
- Trainings, technical assistance and expertise
- Monitoring and reporting

## Farmer`s Selection

 Local Women's Co-operative partners/Local Government/ Rotary Kathmandu & Kathmandu Height/Sanskriti Farms

#### **Criteria for selection**

- Survey organized a year ago for the village
- Marginalized and staying in the village
- Have keen interest or engaged in fruit and vegetable farming
- Have enough manpower, sufficient land for the plantation

- Member of the local women cooperative (easy participation in any economic activities and support)
- Have installed rainwater harvesting system will be prioritized
- 2 years later, farmers can eat and sell the surplus fruits in the market
- Willing to take part in the "Farmer's market" program in the future to promote and sell local produce from the community

## **Project Budget**

- Total Trees being planted: More than 2000 in more than 100 households (to be defined and decided later)
- *Each household plants 15-20 trees* of different varieties and additional vegetables seeds of different varieties. Farmer's contribution will be in the preparation for the tree plantation and materials required for the plantation, Plastic Green house construction, etc.

**Total Project Budget: 56,000 US\$** includes kind contribution from farmers

Rotary Global Grant Support: 40,000 US\$ (to be raised)

Community Share: 28.57% (Materials for the tee plantation like compost manure, bone meals, mustard cakes, Labor for digging hole, etc.)

Rotary Club Contribution: 71.43% Fruit and Nuts Trees, Green House Plastics, Trainings, Tools, etc.

Budget breakdown in the next slide

Global Grant Fruit and Nuts tree plantation Project						
Material Cost						
S.N	Items	Unit	Quantity	Rate US \$	Total US \$	Remarks
1	Fruit and Nut Trees (Grafted and tested)	Pieces	2,000	8.00	16,000.00	
2	Vegetable Seeds of different varieties	Households	100	20.00	2,000.00	
3	Plastic Liner for tunnel (90 GSM, 720sq. feet), Nails, GI Wires, etc.	Square feet	100	90.00	9,000.00	
4	Tools and materials for the trees (Sicature, Saw, etc)	Pieces	100	50.00	5,000.00	
5	Transportation of Trees and plastic to sites	Trips	7	100.00	700.00	Different sites on different time
7	Mustard Cake	KG	2,000	0.50	1,000.00	Farmer`s contribution
8	Compost Manure (30 Kg in a Doko, local basket)	Doko	2,000	1.00	2,000.00	Farmer`s contribution
9	Bone Meal	KG	2,000	0.50	1,000.00	Farmer`s contribution
Α	Total Material Cost				32,700.00	
Skill Trainings						
1	Hands on Organic farming and pest making Trainings, includes training materials	Times	5	300.00	1,500.00	5 groups of 20 farmers each
2	Hands on Tree Plantation and pruning Training, includes training materials	Times	5	300.00	1,500.00	5 groups of 20 farmers each
3	Awareness program and material distribution program	Times	5	150.00	750.00	Will be organized in 5 differenet communities
4	Print of banner, forms, Stationeries, etc.	Times	1	300.00	300.00	
	Hole digging for tree plantation, green house tunnel installation (Labor cost and material cost like bamboo, etc)	Nos.	100	120.00	12,000.00	Farmer`s contribution
В	Total Management Cost				4,050.00	
Administration and management Cost						
1	Management cost as a lump sum	Times	1	3,250.00	3,250.00	
С	Total Administrative and Management Cost				3,250.00	8% of total grant support
D	Total (A+B+C)				40,000.00	Rotary Contribution (71.42%)
E	Grant support received by Each Household				400.00	Rotary Support
F	Farmer's Contribution				16,000.00	Farmer's contribution (28.57%)
G	Each Household contributes				160.00	Farmer's contribution
н	Grand Total Budget (D+F)				56,000.00	100%

## **Changes to Global Grant Funding**

- Effective July 1, 2020, the Rotary Foundation will not match Club cash contributions to a Global Grant.
- They match DDF dollar for dollar, as the requirements for GG must still have a budget of USD 30,000 and a request from the World Fund of USD 15,000, this means that every Global Grant project must have at least USD 15,000 DDF in its financing.
- Previously, a project that received USD 10,000 of DDF could meet the USD 15,000 hurdle by adding at least USD 10,000 of Club cash to the project.

## **Collaborating Clubs**

- RC Kathmandu Height/Kathmandu District **3292 Nepal-Bhutan**
- RC Gananoque, Kingston, Eganville, Cornwall Sunrise, Kingston Frontenac, Kingston waterfront and few more in **District 7040** Canada
- RC Cranbrook Sunrise, District 5080, Canada
- RC Tempe Rio Salado, District 5495, USA
- RC Global Passport, **District 6330** (under discussion)
- Clubs in USA, Australia, and UK (under discussion)

#### **Partner Organizations**

Sanskriti Farms & Research Center, Local cooperatives, Local Government

## **Budget Allocation Plan**





## **Conclusion and Expectations**

- Engaging more youths and women in fruit and nuts farming and train the emerging leaders through skill based trainings to create more success stories
- For that, we are looking for an assistance to reach our goals of planting more than 2000 new fruit and nuts trees, install greenhouses for organic vegetable farming in our surrounding community and provide trainings and other technical support on tree plantation/organic farming through Global Grant Project
- This is just a small trial and won't have a massive impact as soon but if you have a patience to wait, in 10 years time we have a very bright future for the local community here. (B/C ratio is 1.03 in the 3<sup>rd</sup>/4<sup>th</sup> year to 2.90 in the 9<sup>th</sup>/10<sup>th</sup> year-govt. report)
- Sharing the "Model of Success" to other villages and I believe this is the best way to "Give Back" to the community creating opportunities.

## Rotary International night D 7040, Aug 4 2020



### Presentation on Zoom D 5080, RC Cranbrook Sunrise, Aug 17 2020



### Meeting with RC Tempe Rio Salado, D 5495, Aug 27 2020



# Thank You and Namaste from Nepal

## "Jay Rotary- Hail Rotary"



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