

Peer training to switch to organic farming in Nepal

May 2019

“Why improve the lives of hundreds when you can better the lives of millions by replicating solutions that work and have a positive impact on the planet?”

The limits of local solutions to global issues

Except if you are a climate change denier, it is pretty clear that our planet is facing a series of intertwined unprecedented crises, from extreme weather episodes, ruinous sea level rises, increased food insecurity and to biodiversity losses... to name a few. Most experts believe that if strong actions are not launched before 2030, our civilization will arrive at a point of no-return.

The international and national actions undertaken in the last 30 years, Kyoto protocol, Paris agreements... are too long term and top-down oriented to reach the targeted impacts in time. Grass-root, bottom-up action from the civil initiatives are therefore needed to accelerate the process.

Human ingenuity is limitless and all around the world individuals and communities have developed and keep developing solutions that are potential game changers for the environment and the climate. But in most of the cases these breakthrough solutions remain local or spread too narrowly to have any significantly beneficial impact.

Now, what if the most successful, high impact solutions were selected, optimised and replicated on a massive scale? This would be a game changer.

A key area where such a disruptive approach can and must be adopted is **agriculture**. Intensive farming in the last 50 years only has degraded the soils in many places through the use of ever increasing quantities of chemicals. This is a reality also in Nepal, where farmers have evidenced the soil health decreasing, which has resulted in smaller yields and loss of income stability, with increasing health problems due to handling of synthetic agro-chemicals. As a result increasing number of farmers, and especially the youth, are leaving their land to the slums of fast growing cities. This leaves the food production on the shoulders of fewer and fewer.



About 66% of Nepalese active population is dependent of farming for its livelihood. Essentially, the farmers still work with the power of their hands and some help of animals. Constraining these farmers to evolve toward an intensive, mechanised agriculture using increasing amounts of chemicals would worsen the environmental destruction and effects of climate change, accelerate their economic woes, reduce food supply, affect their health and push scores of them to become urban refugees.

Other agricultural models exist that alleviate the drawbacks of intensive farming; **organic** farming using various agro-ecological techniques such as permaculture is a key one, enabling the soils to be carbon storing pits. By improving ancestral know-hows – usage of compost, crops rotations and associations, etc. – permaculture for example enhances soil biological activity and thus its fertility, which at the same time allows the farmers to produce better-quality food, improve yields and therefore increase incomes.



During COP21 we met Sudarshan Chaudhary, a Nepalese farmer who, as a laureate of a prize for switching his family farm to organic, was representing indigenous people from Nepal. He had already started training other farmers in his community on his techniques and was in the process of creating a cooperative of organic farmers, but was frustrated by the slow speed of this transformation. We came up with the idea of developing and applying enhanced peer-to-peer learning methodology on his project and on the longer run, harnessing digital technologies to speed up the process.



Today the idea is mature and we are kicking off the full scale experiment of the replication of an impactful, socially responsible environmental solution. We call it the ScaleSchool program. A solution that will change for the better the lives of thousands of farmers and consumers in Nepal, and more importantly, pave the way for scores of such initiatives all around the world through the knowledge documented from the process.

We are offering you the opportunity to participate in this pioneering, life changing adventure.

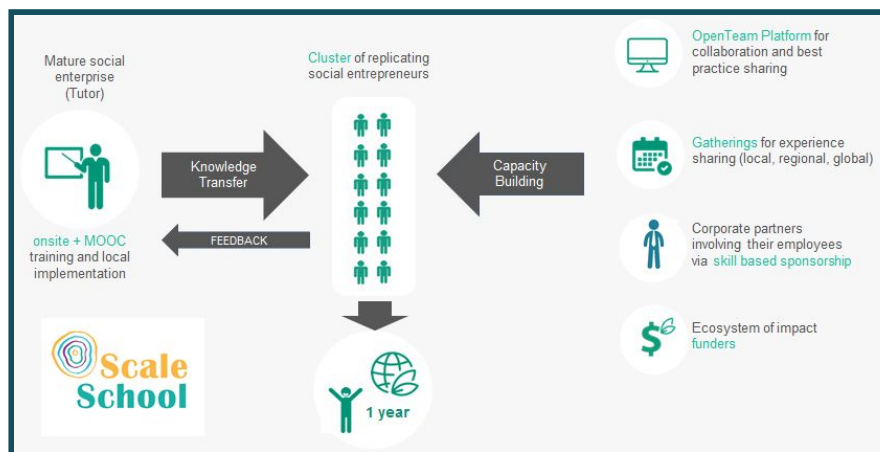
How ?

Thanks to peer learning! We are prototyping an acceleration program, the **Scale School**, to train motivated people to implement sustainable solutions that work, and replicate them at very large scale. Our goal is to **transmit the existing knowledge** and **amplify the impact**.

For this we are first building an onsite training program, starting with Sudarshan's solution to progressively shift to organic farming using various agro-ecological techniques.

The training is built over 1 year including 4 months of weekly courses on both sustainable and productive farming techniques and entrepreneurship. The trainings are accessible for all education levels, including illiterate. We are selecting 8 motivated lead farmers from different villages, who will follow the intensive training period of months and begin to apply the new methods on their farming practice. After completing the courses over the first four months, they will begin to train other farmers in their own villages. As the farmers are likely to need help in the process, we are recruiting a technical referee who will assist the farmers in problem solving in technical and entrepreneurship fields.

The training content will also be shared online, free and accessible to all, for anybody interested to make the switch in similar context. Any other farmer will be invited to add their feedbacks and tips, to reinforce collaboratively the knowledge for all.





Roadmap

Until now we have conducted market studies on organic food consumption and farming practices in Agnisair Krishna Sarwan Rural Municipality -the municipality where the project is emerging from. In the past 8 months, we have developed the training framework and courses to be able to start the program in early July, and have begun with the selection of the 8 first lead farmers. With the Agro Analysts, a long-term farm optimisation plan has been prepared and is being implemented with currently available resources.

Here are the next steps:

- 1) From July to September: Local with Sudarshan's school : 8 leading farmers trained for three months with intensive courses, during which they start the conversion of their practices into organic -followed by nine months of active monitoring and assistance by technical referees.
- 2) During the next six months:
The leading farmers have trained 6 farmers each, in their own villages (48 farmers in total). The cooperative for organic farmers will be established with the trained farmers and a shop opened for trustworthy organic produce. Simultaneously, 8 new lead farmers will be trained.
- 3) Within one year:
Locally in the Saptari district : The program will be extended to the whole Saptari district for the other 8 lead farmers who will each train 6 farmers in their village. The objective is to have 200 farmers practicing organic farming and encourage them to teach their nearby farmers. Organized meetings for organic farmers to share their experiences, problems and solutions with wider network are to be held regularly region-wide.

Global scale: the training will be made available online to be accessible for other farmers who have similar climate conditions.

- 4) Within three years:
Locally in the Saptari district : 1000 trained organic farmers, several organic stores in different locations.
International : a collaborative knowledge platform up and running, with large, international network of organic farmers, who can add their knowledge and share experiences globally.



Why we are crowdfunding today?

The crowdfunding taking place in June 2019 with GlobalGiving is planned to fund the equipment and the activities related to the training prototype onsite in Nepal **for the first 3 months.**

1) We will first fund the farm optimization with 238\$

With this optimization, we will bring more variety in the crops, in form on trees, like avocado, nuts and fruits. These trees can be later used to propagate trees for the 8 lead farmers. Different types of compost will also be built and demonstrated in trainings. Besides, high quality heirloom seeds will be purchased, which can later contribute to local seed exchanges.

2) A starter kit for each 8 lead farmer will cost 312\$ each

A key elements that farmers are generally lacking is irrigation for their farmland. We are providing them an irrigation pump and motor that will enable all-year cultivation. In order to prevent waiting until their compost is done, we will provide Sudarshan's compost at an affordable price to the farmers. Also necessary bookkeeping supplies, and measurement tools are provided in this kit, so that farmers can begin to measure their yields and track their advancements.

3) Materials and supporting staff to develop and improve the trainings 5514\$

We will enrich the courses and teaching methodology by bringing professional teaching ergonomist onsite *and* provide the tools for the technical referee to work effectively.

4) Opening the first organic store of the district 1700\$

We will rent a simple shop in the nearby town of Mahuli to display produce of the trained farmers of the organic cooperative which will be created for this purpose, hire an employee and train him/her, get basic sales equipment, and access to truck to pick up the fresh produce twice a week from the farmers.



Detailed budget for Global Giving crowdfunding

Activity Description	Unit cost	Quantity	Frequency	Total	Notes
Spiral Farm House optimization cost				238.00	Subtotal
Fruit trees	5.00	15.00	1.00	75.00	Avg. Price per plant
Nut trees	5.00	5.00	1.00	25.00	Avg. Price per plant
Timber trees	3.00	15.00	1.00	45.00	Avg. Price per plant
Heirloom seeds + plants	0.80	15.00	1.00	12.00	Price per kg
Worms for the vermicompost	5.00	1.00	1.00	5.00	
Vermicompost pit (cement)	9.00	1.00	1.00	9.00	
Drum for liquid compost	22.00	1.00	1.00	22.00	
Transportation costs	45.00	1.00	1.00	45.00	The worms form Sunshari (5\$), pick up trees from ktm (2x 20\$)
Starting kit for the farmers				2,512.00	Subtotal (per farmer: 314\$)
Irrigation, pump + motor	150.00	8.00	1.00	1,200.00	
Compost for the first 3 months	105.00	8.00	1.00	840.00	Sold by Sudarshan, maximum estimation
Worms for the vermicompost	5.00	8.00	1.00	40.00	maximum estimation
Drum for liquid compost	22.00	8.00	1.00	176.00	
Farm planning sheets (map)	20.00	1.00	1.00	20.00	
Scale 5-10kg	25.00	8.00	1.00	200.00	
Accounting book	3.00	8.00	1.00	24.00	
Notebook	1.50	8.00	1.00	12.00	
Materials & Supplies				2,410.00	Subtotal
Smartphones for Technical referees	200.00	1.00	1.00	200.00	One 200\$ smartphone for the first technical referee to record the advancements
Printed trainee booklet	10.00	200.00	1.00	2,000.00	200 booklets printed (one per trained farmer) at 10\$ per booklet
Printed trainer booklet	10.00	16.00	1.00	160.00	10 booklets printed (one per lead farmer) at 10\$ per booklet
Paper sheets for workshops	10.00	1.00	1.00	10.00	
Set of: pens/pencils/rubbers/rulers	5.00	8.00	1.00	40.00	
Training staff and mobilization				3,104.00	Subtotal
Training designer & coach	500.00	1.00	4.00	2,000.00	4 months at 500\$/month (Nepalese salary)



Agro analysts: visas				496.00	100\$ + extension 98\$
Agro analysts: housing, meals	80.00	3.00	1.00	240.00	room rental at 10\$/month and food at 70\$/month for 12 months for 3 staff
Petrol cost	1.00	1.00	128.00	128.00	Sudarshan's visit to farms: 1 travel is estimated to cost 100 Rs (1\$), 8 villages, 16 weeks, 1 visit per week
Transport cost for technical referees	10.00	2.00	12.00	240.00	
Shop in nearby town				1,699.50	Subtotal
Name sign	25.00	1.00	1.00	25.00	
Rental fee	30.00	1.00	1.00	30.00	3000 NRS per month, 1 month included
Book to keep records	3.00	1.00	1.00	3.00	
Notebook	1.50	1.00	1.00	1.50	
Rack	150.00	1.00	1.00	150.00	
Knife	10.00	1.00	1.00	10.00	
Scale	50.00	1.00	1.00	50.00	
Calculator	10.00	1.00	1.00	10.00	
Employee with 1 month training	200.00	1.00	1.00	200.00	The first month with training (in shop and in farms)
Phone	20.00	1.00	1.00	20.00	
Truck rental for cooperatives	50.00	1.00	24.00	1,200.00	A truck twice a week for 3 months (12w), costing 50\$/day of rental
Communication cost				500.00	Subtotal
Graphic design for ScaleSchool	500.00	1.00	1.00	500.00	
Total excluding GlobaGiving fee				10,463.50	
15% Global Giving fee	15%			1,569.53	
Grand total including GlobalGiving fee				12,033.03	



Why Sudarshan?

Sudarshan appeared to us as the right climate project leader to build the program with. He has a number of important skills required:

- He has successfully made his transition from conventional to organic farming
- He has the optimism and enthusiasm to make his vision of healthy and sustainable future come true through organic farming
- He has already experience in training other farmers in organic practices, which gives us a good starting point to develop the program further
- He is willing to share his knowledge at the largest scale
- He is willing to learn along the way how to optimize his own farm to turn it into an organic training center.



Sudarshan's story

“Namasté, I'm Sudarshan Chaudhary. My family has been farming for generations and when I was a child, my parents went with the mainstream to using chemical fertilizers and pesticides, like all of our neighbours. After a while, the soil started degrading so much that our production yield was getting lower and lower, leading our family to financial distress.



Coming back from my master studies in Kathmandu, I decided to take over the farm and turn it to organic. After 3 years, not only was my soil in much healthier condition for farming with softness and color, but also ability to retain water and the increased productivity. The switch to organic production brought my family more income, and I could sell it at competitive price to the families at the local market!



Better, healthier, affordable food for all, bringing more income to the producers? Even my father had to admit I had been right when insisting the change! So I had to spread the word. So I've decided to start training other farmers to do the switch.”

Who we are

We are Open Team, an international NGO that we created when returning from our first climate summit, the COP20 in Lima in 2014. Our goal is to increase the impact of climate solutions, in close relation with the annual COPs.

The image displays a collection of logos and a central globe. On the left, there are logos for the French Republic (Ministère de l'Environnement, de l'Énergie et de la Mer) and the Commissariat Général à l'Égalité des Territoires (CGET). In the center is a globe composed of various small images. On the right, there are logos for CCNUCC, cedep, and TECHNOLOGY SERVICES. The text "Our References" is written in green at the bottom center.



Some of our achievements so far

- We have obtained the accreditation from the United Nations to be an official representative of the civil society at the UN's annual Climate Summit COP.
- COP21: worked with the French Ministry of Environment to identify 100 innovative grassroots solutions that were encouraged to be replicated. The operation was a great success with 26.000 citizens from 213 countries engaged.
- COP22: organized a capacity building bootcamp for 10 solutions from around the world and obtained the support of the Moroccan COP22 Presidency
- We also work with corporations on employee engagement programs to inspire their staff to integrate sustainable solutions in their core business.
- We have built an advisory board with solid expertise that guides us in our programs (-> link to board profiles on our website)

Our partners

- Our institutional partner in Nepal: The French Embassy of Nepal
- Our local Nepalese partners, who help us develop the program and communicate of the project in Nepal: BoldCode, Sight Impact
- Our academic partner, whose students will work on the project's water quality analysis: Université Catholique de Louvain
- Our event partners in Paris: Maison des Acteurs du Paris Durable, Green Essentials, Les Eco-Charlie
- Our communication partner: the Elyx Foundation, the official mascot of the UN's sustainable development goals!
- Local Nepalese NGO working on social and environmental sustainability: Rural Development Effort Nepal
- Environmental department of Kathmandu University, whose student are working on water quality analysis together with Université Catholique de Louvain students

To read more about our team and organization, visit www.openteam.co, check out our news on our News Portal at www.openteam.co/news and follow us on [Facebook](#), [Instagram](#), [Twitter](#) or [LinkedIn](#).