Open Team’s mission is to support knowledge transfer and the scaling up of innovative projects in the fields of agroforestry, food security and responsible consumption, along with education, gender equality, renewable energy while ensuring respect for indigenous populations. The Scale School program enables entrepreneurs who have implemented mature and sustainable solutions to transmit the keys to their success to other project leaders. This replication model is currently being used at a biointensive microfarm in Nepal, combining permaculture with local knowhow – a fruitful learning experience focused on the challenges of deploying new agricultural practices with possible applications in urban settings.

INTRODUCTION

Spiral Farm House is a biointensive microfarm inspired by permaculture located in the Saptari district of Nepal. Its goals are to regenerate soil damaged by chemical contamination, provide the local community with food security, increase resilience to climate change, and create jobs. Convinced of the initiative’s potential, the international team from the French social enterprise Open Team is supporting its scaling up and helping to share it with other farmers so they can adopt the same approach. More generally, Open Team aims to replicate mature social and environmental solutions by providing human, financial and logistical resources, thanks to a high-impact investment model and innovative skills-based sponsorship. The Open Team knowledge-transfer model could equally be applied in other sectors.
THE OPEN TEAM KNOWLEDGESHARING PLATFORM

AN INITIATIVE THAT BEGAN LIFE AT THE LIMA COP20

Above and beyond the diversity of the projects and ecosystems involved, leaders of projects with high social and environmental impact often encounter the same difficulties in implementing their initiatives: scaling up, legal constraints, technical challenges, etc. At the same time, many social entrepreneurs are keen to share their know-how and explain the factors of their success. In 2014, at COP20 in Lima, the similarity between solutions developed by entrepreneurs in Latin America and those in Europe was very instructive. It showed the extent to which expertise has already been shared by thousands of NGOs and social enterprises, which have so much to learn from each other but lack the methodological framework to organize the transfer of knowledge and skills.

Drawing on their considerable experience in the fields of telecommunications and social entrepreneurship, Sokha Hin and Joanne Schanté led a discussion on knowledge sharing. Although it is by no means a new issue, the advent of the internet and digital has revolutionized access to information on a planetary scale, as epitomized by the online encyclopedia Wikipedia. In 2007, the Nobel Laureate in Economic Sciences, Elinor Ostrom, in collaboration with Charlotte Hess, suggested looking at knowledge as a common asset1, whose governance must be tackled at the international level. These ideas resonate even more strongly today, with increasing calls to learn from each other but lack the methodological framework to organize the transfer of knowledge and skills.

Creating the Open Team platform was an accelerator which aims to provide a framework for transferring knowledge between an accomplished entrepreneur and a group of student entrepreneurs working physically together on site, with the experience being documented to create a MOOC (massive open online course) and a knowledge hub, an opensource knowledge base.

THE SCALE SCHOOL ACCELERATOR MODEL

AN ACCELERATOR FOR KNOWLEDGE TRANSFER

Building on the platform’s success, Open Team decided to go even further and create a mediation framework for knowledge transfer. Implemented at COP22 in Marrakech, Scale Camp brought together around a dozen social entrepreneurs over two weeks and confirmed the feeling that simply linking parties digitally through the platform is not enough to bring about knowledge transfer. This “offline” experience allowed real synergies to emerge between the participants, who were able to work together and teach one another the techniques they each apply in their own region.

The approach was so productive that in 2017 Open Team launched its new Scale School program with the aim of meeting the need for face-to-face interaction. The program is an accelerator which aims to provide a framework for transferring knowledge between an accomplished entrepreneur and a group of student entrepreneurs working physically together on site, with the experience being documented to create a MOOC (massive open online course) and a knowledge hub, an opensource knowledge base.

IMPLEMENTING REPLICATION OF A PROJECT WITH HIGH SOCIAL AND ENVIRONMENTAL IMPACT

The Scale School three-year training program offers entrepreneurs with mature solutions the human, financial and technical resources they need to document their know-how and pass it on to a group of students entrepreneurs presented at COP22. Open Team used the opportunity to create a collaborative platform establishing links between candidates and champions to facilitate knowledge sharing and capitalization.

To date, the platform contains 3,000 projects from 80 countries, classified according to which Sustainable Development Goals (SDG) they address and their progress status: idea, in creation, active, in replication, or completed. Among these initiatives, soil regenerative agriculture inspired by permaculture is particularly well represented, both in rural and in urban and periurban settings. The platform features almost 200 projects focused on urban agriculture issues and how cities are adapting to climate risks, including the Baštalište network of community gardens in Serbia, Edible Garden City initiative in Singapore, Malaysian Urban Green Waste Reuse project, aquaponic solutions startup Save Our Agriculture in Cameroon, and Climate City initiative in France.

(replicators) hoping to replicate the technology and business model. The system could be described as a social and environmental franchise. In addition to sharing knowledge, the program’s aim is to roll out proven successful environmental solutions on a large scale.

The Scale School offers the tutor not only support from Open Team personnel, but also preferential access to investment and help from national and international experts.

Replicators’ technical equipment needs are met in the form of a “package” (for installing an irrigation system or solar panels, for example) financed by micro-impact investors.

For these micro-investors, financing the replication of technology or know-how that has already proven successful minimizes their risk while maximizing the social impact.

The Scale School is also a platform for companies seeking to diversify their CSR strategy, which can involve their specialists in high social impact projects (skills-based mentoring of tutors) and offer their employees the opportunity to cofinance replicators’ packages as micro-impact investors.

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THE FIRST PROJECT TO BE REPLICATED: AN ORGANIC MICROFARM IN NEPAL

AN ENTREPRENEUR SUPPORTING ORGANIC AND TRADITIONAL FARMING KNOW-HOW

The first project the Scale School helped with the replication process promotes the agricultural expertise of indigenous peoples. A champion of the 100 Projects for the Climate initiative, the Spiral Farm House project was launched in 2013 by Sudarshan Chaudhary, a young Nepalese entrepreneur and former Secretary General of the Federation of Nepalese Indigenous Nationalities. He comes from a farming family and became aware at a young age of the major environmental and health problems caused by conventional agriculture, including soil depletion, reduced crop yields and chronic illness among Nepalese farmers exposed to chemical pollution. In 2013, having completed his studies in Kathmandu, he decided to return to his home village to transform his parents’ farm into an organic farm\(^2\) and reconnect with traditional Nepalese farming methods, as practiced before the introduction of agrochemicals in the 1970s. For three years, he worked to create a sustainable chemical-free food crop production model similar to permaculture: Spiral Farm House.

Located on the Indian border in the Saptari district, 30 minutes from the district’s main city, Rajbiraj (population 40,000), Spiral Farm House successfully sells its produce

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\(^2\) Although the farm’s produce is not certified organic, no agrochemicals are used at Spiral Farm House.
locally, but hopes to supply the nearby urban centers, where residents’ spending power is increasing along with their awareness of the benefits of organic farming. The first Scale School’s aim is to respond to the challenge of scaling up and promoting alternative farming methods in Nepal, with the goal of creating an extensive network of organic microfarms organized in a cooperative which will distribute its produce in Kathmandu and other Nepalese cities.

THE REPLICATION PROGRAM

The Scale School’s first goal is to replicate the Spiral Farm House model with other Nepalese farmers, then to roll the model out internationally to other NGOs and social enterprises. The first group of “replicators” undergoing training is made up of eight farmers, each from a village in the district, chosen for their motivation and leadership capabilities, which will facilitate the transfer of knowledge. Once they have internalized the new biointensive farming techniques, they will each in turn be able to train six to eight farmers from their village. Training takes place on the farm site and is delivered in Nepalese. It takes around four months at a rate of one or two days a week (the farmers are often struggling and cannot afford to stop farming for longer than this, as they would risk losing their only source of income and/or food).

The Scale School’s objective over the next three years is to train 5,000 farmers (5% of farmers in the district), enabling them to reach a potential market of 35,000 consumers. In terms of social and environmental impact, the expected benefits are manifold:
- raise standards of living and improve health for farmers by improving crop yields (biointensive farming model) and eliminating agrochemicals;
- offer consumers healthy, high-quality food;
- promote good management of natural resources (especially water) and soil regeneration, making farms more resilient to the effects of climate change (especially the risks of lowland flooding).

Open Team personnel are divided between France and Nepal. From France, they provide support functions (program direction, digital communications, website administration, management of the MOOC platform and development of the teaching program). In Nepal, a Nepalese post-doctoral researcher specializing in analysis of Nepalese rural agriculture, three French agronomy students from AgroParis Tech and a Finnish startup manager support the training process and documentation of knowledge. Topics covered in lessons include the main principles of permaculture, effective management of resources (water, seed and soil), landscape design, and even vermicompost production. Alongside this technique-based teaching, Open Team organizes training in social entrepreneurship and “entrepreneur know-how”, and advises the farmers on their future role as trainers. Each farmer/replicator also receives a starter kit (tools, seeds and compost) to help them put the techniques learned into practice on their own farms. An impact study is planned to accurately measure the project’s environmental, social and economic benefits (in particular, the number of farmers actually converting to alternative farming methods).

CONCLUSION: EDUCATION AND OPPORTUNITIES

Implementation of the replication process raised a number of challenges. One of the most significant lay in creating teaching content to match the profiles of farmers in the Saptari district. For example, teaching materials had to be designed to reflect the fact that 55% of them are illiterate. Also, few of the farmers have internet access or the ability to use digital tools, including computers and smartphones, which limits the platform’s usefulness as a way of relaying information and requires finding other ways to consolidate onsite learning. Open Team is therefore working on designing visual aids that can immediately be understood by any farmer anywhere in the world. These lessons learned in the training domain will be applied to upcoming replication projects focusing on plastics recycling and water management.

This project in Nepal has shown that in addition to the purely agricultural challenges, gaining access to large city markets requires forming partnerships with local farming collectives and public bodies to set up distribution channels in urban centers. There are also bridges to build with the rooftop agriculture initiative being promoted by the city of Kathmandu in connection with local NGOs (the Women’s Society Cooperative and Rangjung Yeshe Shenpen4).

Although its focus is on organic permaculture, the initiative offers a number of lessons to help us better understand the necessary conditions for rolling out urban agriculture. At this stage, it would seem difficult to develop a single methodological framework. Projects such as the Scale School do nonetheless allow us to identify some key success factors: commitment from all stakeholders, a focus on training, and an approach tailored to the local situation.

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