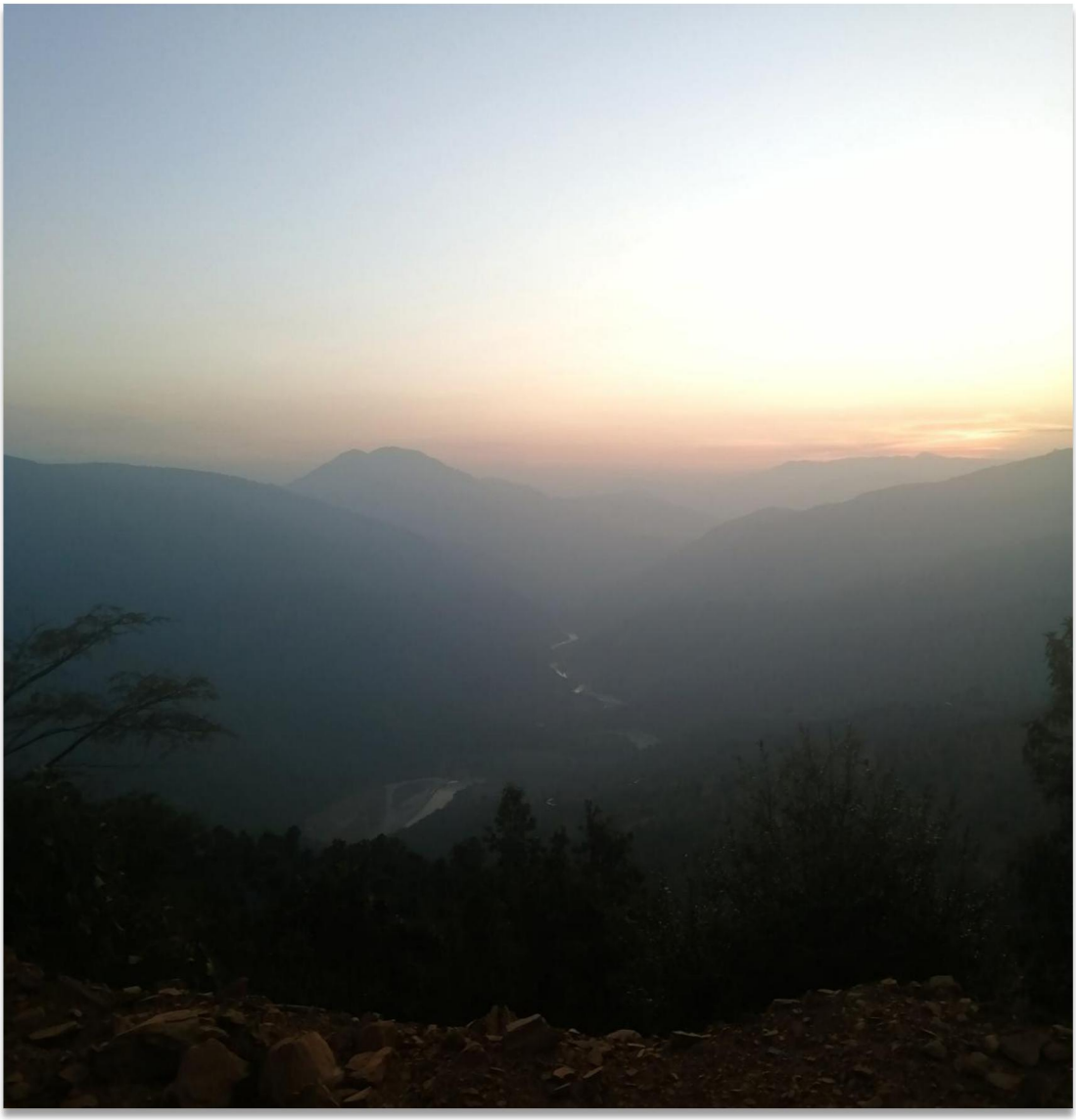
Permaculture Project - VIN

Volunteer Report

Volunteer: Guido de Vetten

Date: 25-12-2022

Location: Okhaldunga District - Siddhicharan Municipality: Thulachap, Nepal



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Introduction

My journey on working on the permaculture project within Okhaldunga started on the 3rd of December 2022 when we departed from Kathmandu.

Before arriving in this beautiful village I had a clear view on the concept of permaculture. This due to my academic background In which I followed a minor on sustainable development. During this minor the concept of permaculture was thoroughly discussed as a holistic tool for the development of sustainable food production and local socioeconomic development.

In addition to this, it also helped that apart from knowing the workings behind the concept of permaculture, I really like to perform the physical labour that is involved in actually realizing these farms.

Before heading out to Okhaldunga I discussed the set goals with Bhupi for the month that I would be working on the permaculture project in Okhaldunga. During our conversation the following goals were set:

Established goals:

- Inform and educate farmers on the concept of permaculture within the community

- Help develop a permaculture calendar for farmers for easy implementable year-around crop yield

- Creating and developing permaculture farms within the community (Instructional + Proof of concept)

Work experience

Orientation day

During my second day after arrival started to observe the CLC (community learning center) garden and discussed with the caretakers (Resham and Uttar) what areas of the garden needed work.

(My first impression of the CLC garden after arrival)

After observing the crop layout of the garden and getting a short briefing, we started with harvesting the legumes from one of the farm beds.

After harvesting all the beans we took some of the compost in the wheelbarrow and sprinkle it on the top soil of the harvested bed. Afterwards I raked the compost into the permaculture bed to allow the soil to efficiently replenish the minerals for the next crops that were set to be planted.

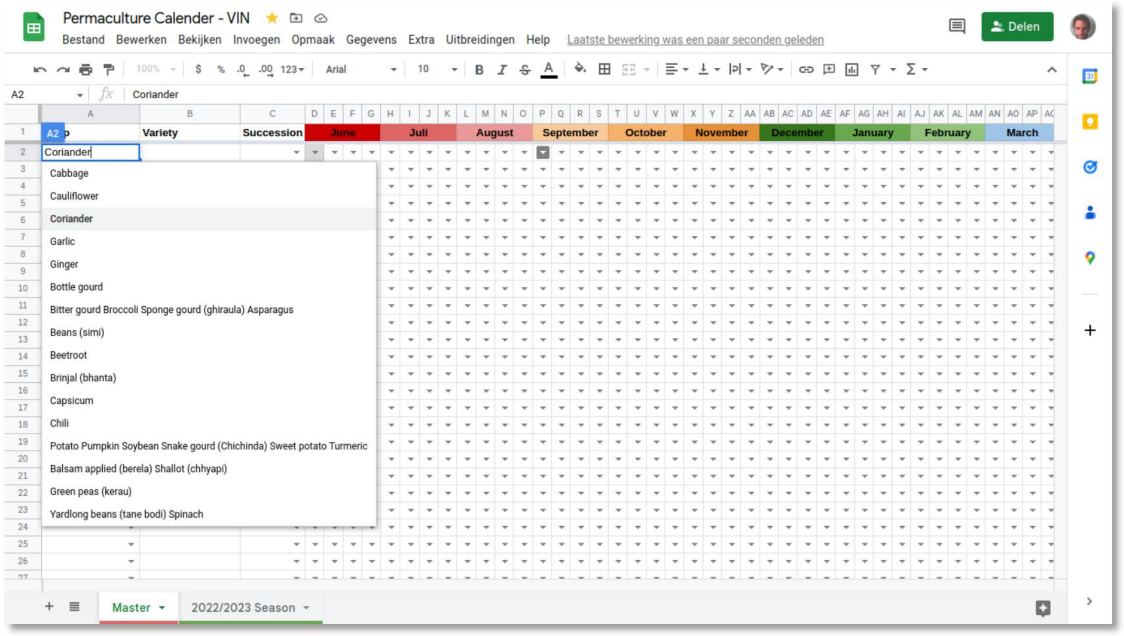
I took this day to make myself familiar with the garden and get to know all the points of improvement within the garden.

Development of permaculture calendar:

At the end of the orientation day we discussed the need of a clear permaculture calendar to distribute among farmers. In relation to the seasons, together with Bhupi I came up with a seasonal calender that allows farmers to plant crops on a bi-weekly basis to have food throughout the year. After discussing the concept with Bhupi I started on working out the calendar.

Finalizing the permaculture calender

Within the next three days I worked on finalizing the calender based upon the provided feedback. For this I incorporated the crops list provided by Bhupi. The calendar allows to easily keep track of when which crops should be planted and harvested.



(The finished permaculture calendar in it's full glory)

Working in the Community - Permaculture farms

After arriving at the first community farm with Uttar we introduced ourselves to the family. Uttar shortly explained the work we will be doing that day. We took notice of the current state of the land and created a cultivation layout.

After the husband of the family arrived I explained with the help of Uttar as my personal translator the benefits of permaculture. These advantages that I highlighted were:

- Having food available throughout the year
- More economic stability for the family due to less money spend on food throughout the year
- Bettering the nutritional value of their food through a variety of crop availability during the whole year.

After informing the family we starting to demarcate the part of the land that we wanted to prepare for the first permaculture bed. We started the process by measuring the land and asses the available resources in proximity to the land. We choose the location for the permaculture beds based upon the nearby availability of:

1. Water
2. Compost
3. The amount of sun exposure to available land

(Our first view on the selected patch of land suitable for permaculture)

Working steps on creating the permaculture farm:

Together with Uttar we first selected the land which was most suitable in relation to the above mentioned aspects.

We then started to measure the land and demarcate the area that we wanted to use for cultivation. For this we used sharpened bamboo sticks and rope to measure out one meter in width.

Uttar and I used a lint to span the area that needed to be cultivated. The permaculture bed is 1 meter in width and spanned the total length of the land that bordered the property fence.

After demarcating the cultivation area we started to dig out the soil to the depth of 30 cm.

(Precise work made easy due to line demarcation)

(The mother of the family helping us out)

(Working with Uttar on digging the permaculture beds)

(Enjoying the process of progress)

After digging out the soil to the depth of 30 cm with the help of pickaxes and shovels, we managed to finish digging out the the first permaculture bed.

This depth is needed to create sufficiënt room for planted crops to let their roots reach healthy and nutritional soil . This part takes the most effort since it is physically demanding. However once the bed has been dug and ready it is time to apply the different plant and soil layers to finish the bed.

To do this we needed to apply 3 layers of different bio-materials within the dug out permaculture bed. These layers consist of the following parts which are mentioned below in chronological order:

- Green leaves / Fresh shrubbery (First layer)
- Dry shrubbery (Second layer)
- Compost (Third layer
- Soil (Final layer)

The combination of green leaves, dry shrubbery and compost needs to be applied 3 executive times before finally putting on the top-soil. After this, the permaculture bed is ready for planting crops.

Green plant material:

The permaculture beds need to first filled with green plant material. This provides the necessary nutrition for planted crops. When buried this layer starts to slowly decay and releases nutrition into the soil.

Dry shrubbery

Dry shrubbery on top of this then works as an compactor material which allow the above and underlying layers to breath more easily and speed up the decomposing process underneath the soil.

Compost:

Finally, the compost provides important micro organisms which makes the soil fertile and helps to speed up the release of nutrients into the soil.

Top-Soil

Finally adding top-soil solidifies everything firm into the ground, making sure that the process of fertilization can gradually take place underground.

(Freshly cut branches from the surrounding trees)

(Placing the green plant material on the bottom of the dug out bed)

(Dry shrubbery suitable to cover the green plant material)

(Placing dry shrubbery on top of the plant material)

(Available fertile compost consisting of decaying plant material)

(The magic mixture after applying the three layers)

(The final result after finishing the layers and putting on the top-soil)

After completing the first permaculture bed the day before, I went back to the site to complete the next bed. This time I worked on my own to do the complete instructed process by myself since my work partner Uttar had to be elsewhere. This gave me the opportunity to put in practice what I learned before.

I managed to finish the next permaculture bed quicker on my own then I had anticipated beforehand. Mainly by following the advice that Uttar gave me the day before and working out the steps in a precise and zen-like way.

CLC Garden work

I addition to working within the community we als worked on developing and building the CLC garden. This mainly due in part to finalizing the design of the garden related to creating a learning environment to teach young students on the concept of permaculture.

(Helping to dig out the trenches for laying the wall foundation)

One of the main things that needed to be done in the garden was finalizing the wall construction. This helps with demarcating the land that is suitable for permaculture and allows to consolidate the garden design.

Our main tasks consisted of:

- Clearing trenches for the wall foundation
- Carrying + Sorting stones for the wall construction
- Making and delivering concrete. (Carrying concrete in wheelbarrow, adding water and delivering the concrete mixture)

It was a hard endeavour but at the same time amazing to slowly see the end result coming together after working so hard as a team.

In the span of two weeks we continued to finish constructing the garden wall. In order tot do so we created the concrete mixture and apply it on top of the finished stone walls that were constructed by the masons.

(Local mason applying the concrete mixture for the wall construction)

(Step by step seeing the fruits of our labour coming into effect)

(Posts that are anchored within the wall for future fence installation and light application)

Personal experience

My time in Okhaldunga has been nothing short of amazing. From the people that I have had the honor to be working with, to the incredible inhabitants of this beautiful village.

On a personal level I opened myself to the community and thereby also learned allot about myself in return. The most important aspect during my time working on the permaculture project is feeling and understanding the community itself in relation to the developments that are happening within the village.

No matter how much we try to introduce a new concept like permaculture, I truly felt that the personal connection with people was the most pivotal in inspiring people and fostering progress.

I am forever thankful of experiencing this beautiful and enlightening time in Okhaldunga.

Communication with families

During the permaculture project we regularly visited different families related to introducing and creating permaculture farms. The warmth that was carried over during these interactions was nothing but inspiring and enlightening.

A careful mixture of curiosity and enthusiasm was always there. This made it easy to connect and share with the families that we were working with. Despite the apparent language barrier, I truly felt and experienced that a smile and a well placed interaction went a very long way.

Working with the soil that provides us all was a universal point of connection. The passion and sweat we put into our work seemed contagious and many times the family members spontaneously started to help us with our labour.

I remember even the children of the family starting to help us fetch branches that fell down from the trees and the husband of the household picking up the pickaxe to help us progress in our endeavour.

All-in-all I believe that a great future lies ahead for Okhaldunga an her beautiful inhabitants. For me it was a truly inspiring experience and a testimony of true hospitality and hidden ambition.