Moonlight Farm

Kumar started Moonlight farm in 2014, in the outskirts of Kottakarai village, after having worked in several Auroville farms for many years. His vision is to grow healthy organic food for Auroville.
Up until the year 2023, the farm mainly focused on vegetable cultivation along with occasionally grains and pulses. In the year 2024 the farmer is trying to scale the grain cultivation over vegetables.

The farm is certified organic

Philosophy
The farmer follows organic farming practices and uses channel irrigation and micro-irrigation drips for vegetables and employs a traditional way of farming, which involves tilling the land and using organic inputs.

Kumar works alone on the farm and hires a seasonal worker occasionally.

Land

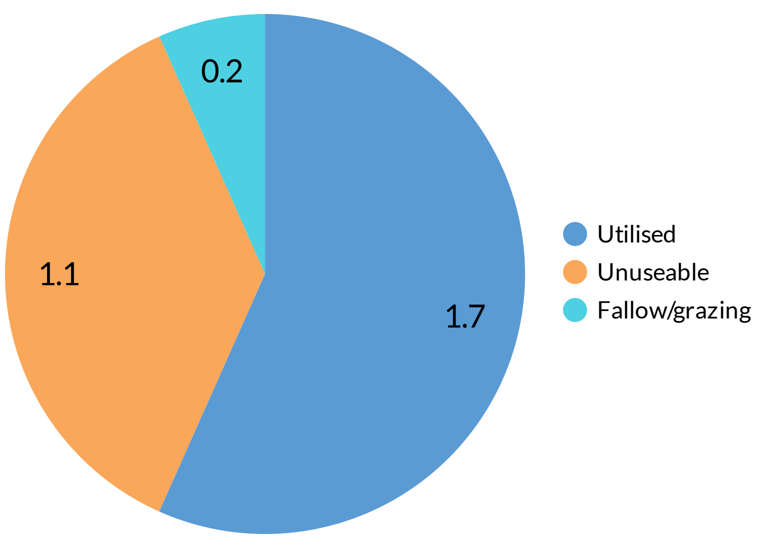

Chart 1: Utilised area vs Fallow area

Total land under management: **3 acres**

Utilised: 1.7 acres

All the land is used in seasonal rotation and has irrigation connection. As of 2023, out of 1.75 acres, 85 cents are used for vegetables cultivation and remaining are used for grains.

About **1.1 acres** of the 3 total is under some **dispute** and cannot be used.

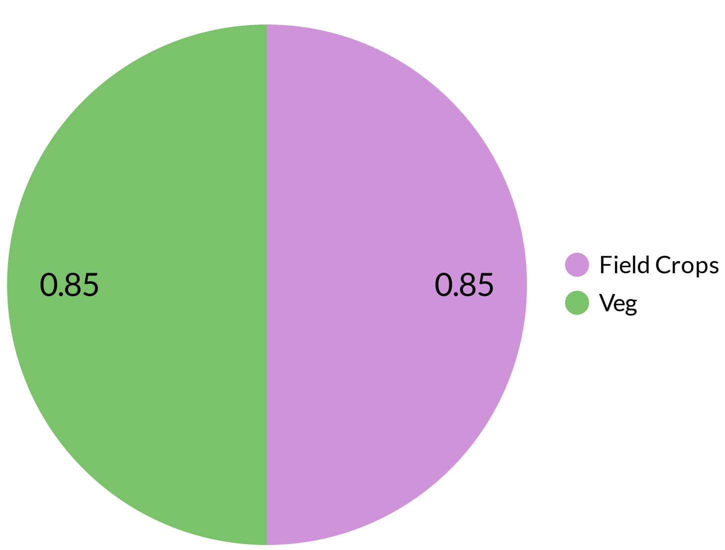

Chart 2: Breakup of utilised area (acres)

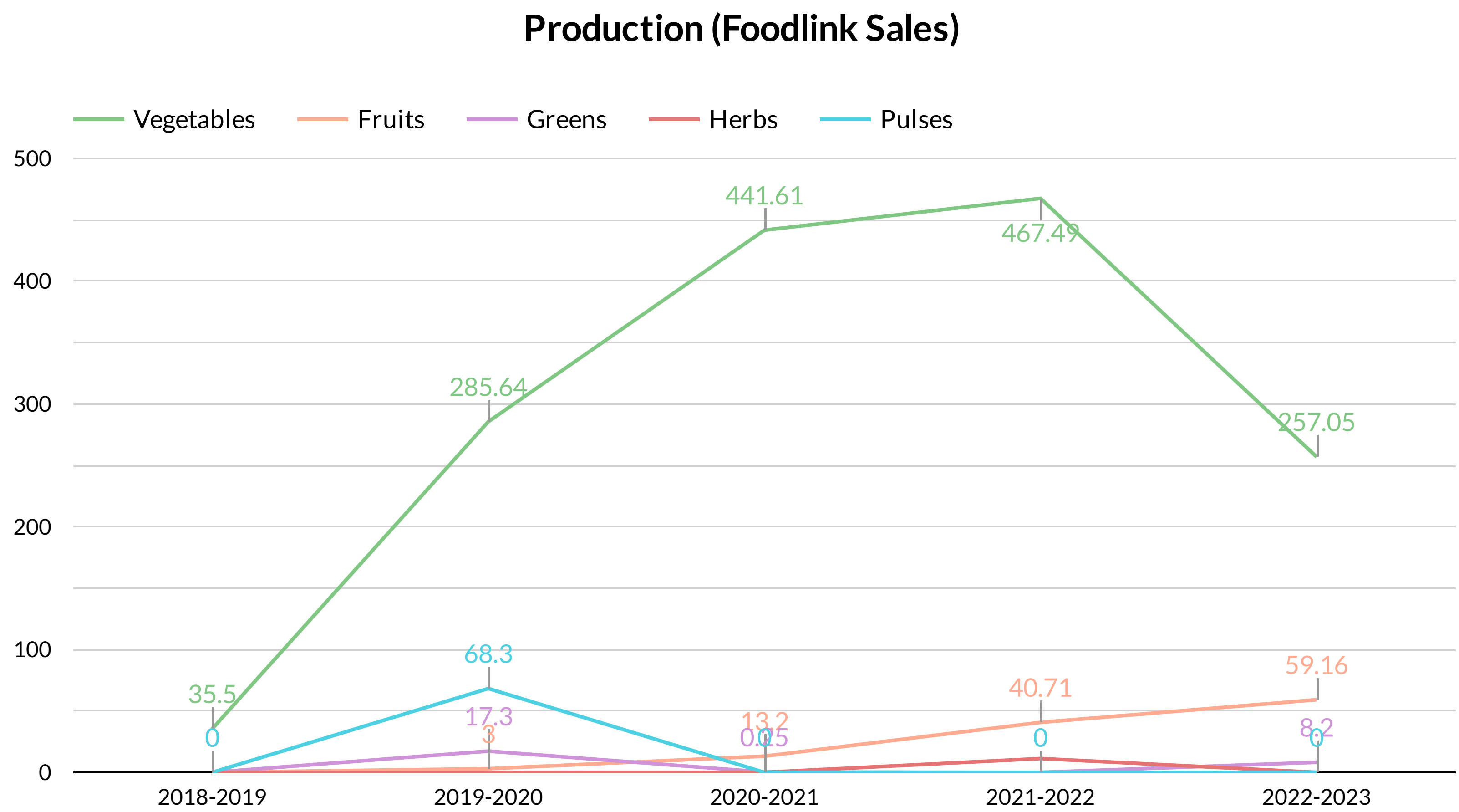

Chart 3: Sales in Kgs per category of food type across 5 years

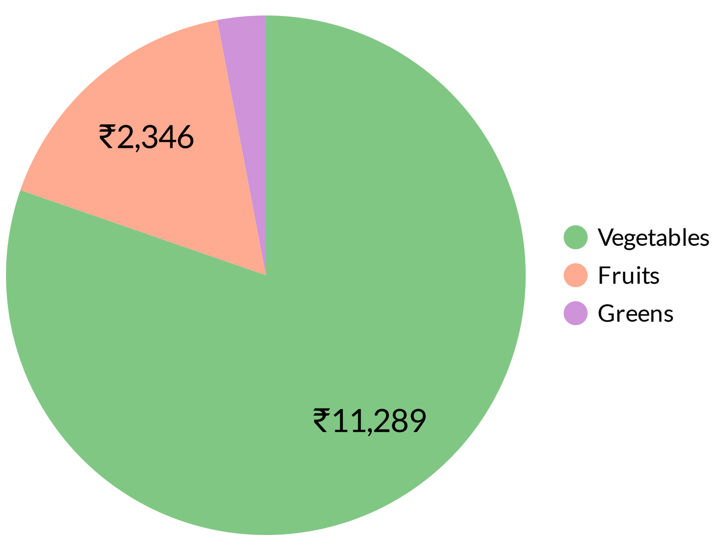

Chart 4: Breakup of Sales for FY 22-23

Item Name	Qty
Brinjal	77.2
Lady Finger	59.3
Long Beans	57.7
Water Melon	29.3
Radish White	23.3
Mango C	21.4
Snake Gourd	12.5
Cucumber B	10.9
Sweet Potato	10.2
Chikoo	8.5

Chart 5: Produce Sales in FY22-23 (Kgs)

The farm grows vegetables throughout the year and the production is increasing since 2018. However, the damage from pests and wildlife is a big challenge and keeps the production limited. The seeds are procured locally; the farmer mainly relies on the cow manure purchased from outside for fertility of the soil, along with Jeevamrutha. Occasionally the farmer also tries to integrate sunhemp as green manure for the soil and tries to utilise the biomass from the gliricidia trees which are planted along the fence.

The farm does not have a dedicated orchard, except perennials such as papaya, banana and some other fruit trees in small numbers such as guava, custard apple.

Finances

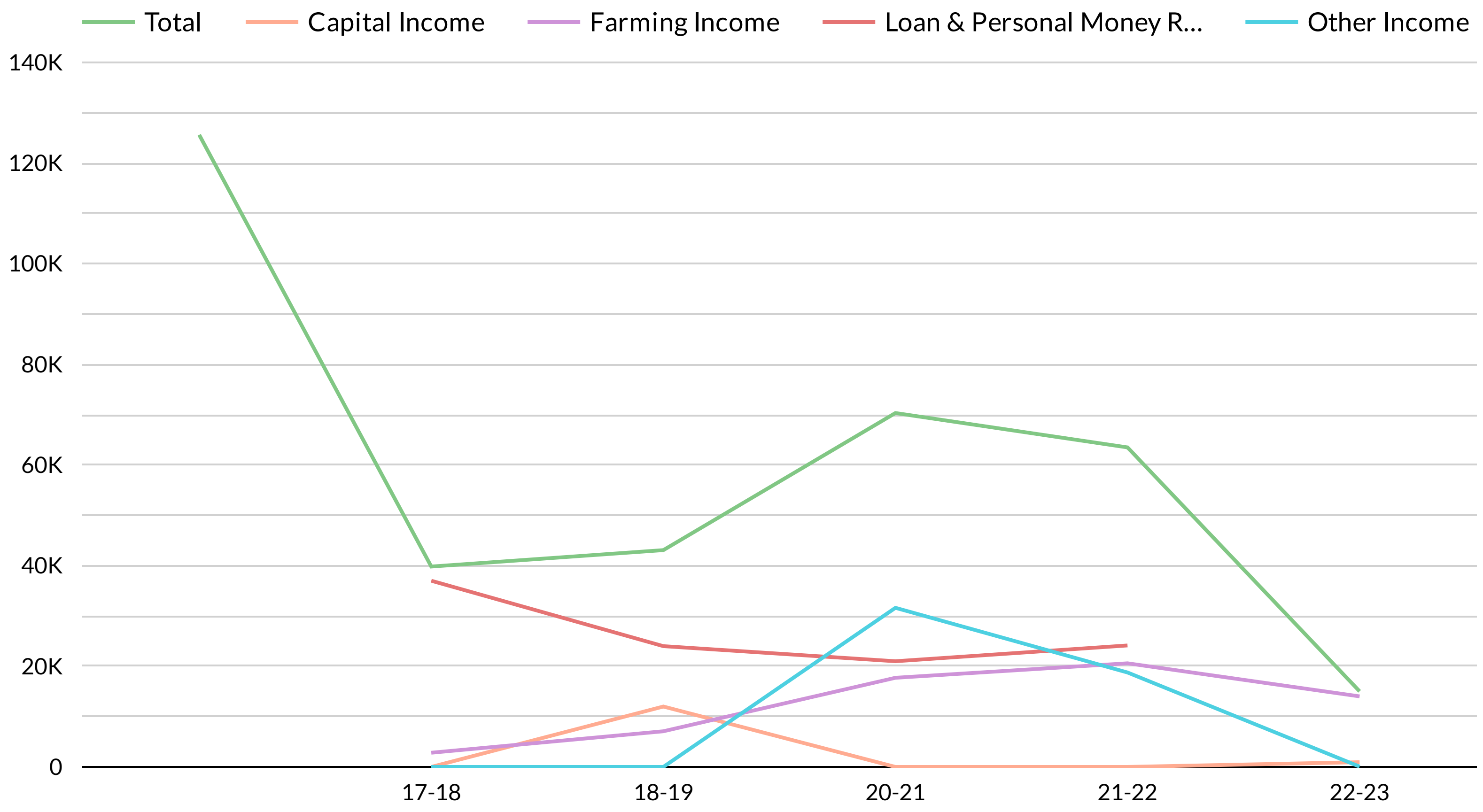

Chart 6: Break-up for farm income during 2017-23.

The farm has been trying to increase its farming operation every year. The money for investment in the farm has come from loans and personal money is also invested every year. While his farming expenses have increased in FY22-23, the income of the farm has actually dropped due to crop pests and wildlife. resulting in a loss of ₹72,948 in the same year.

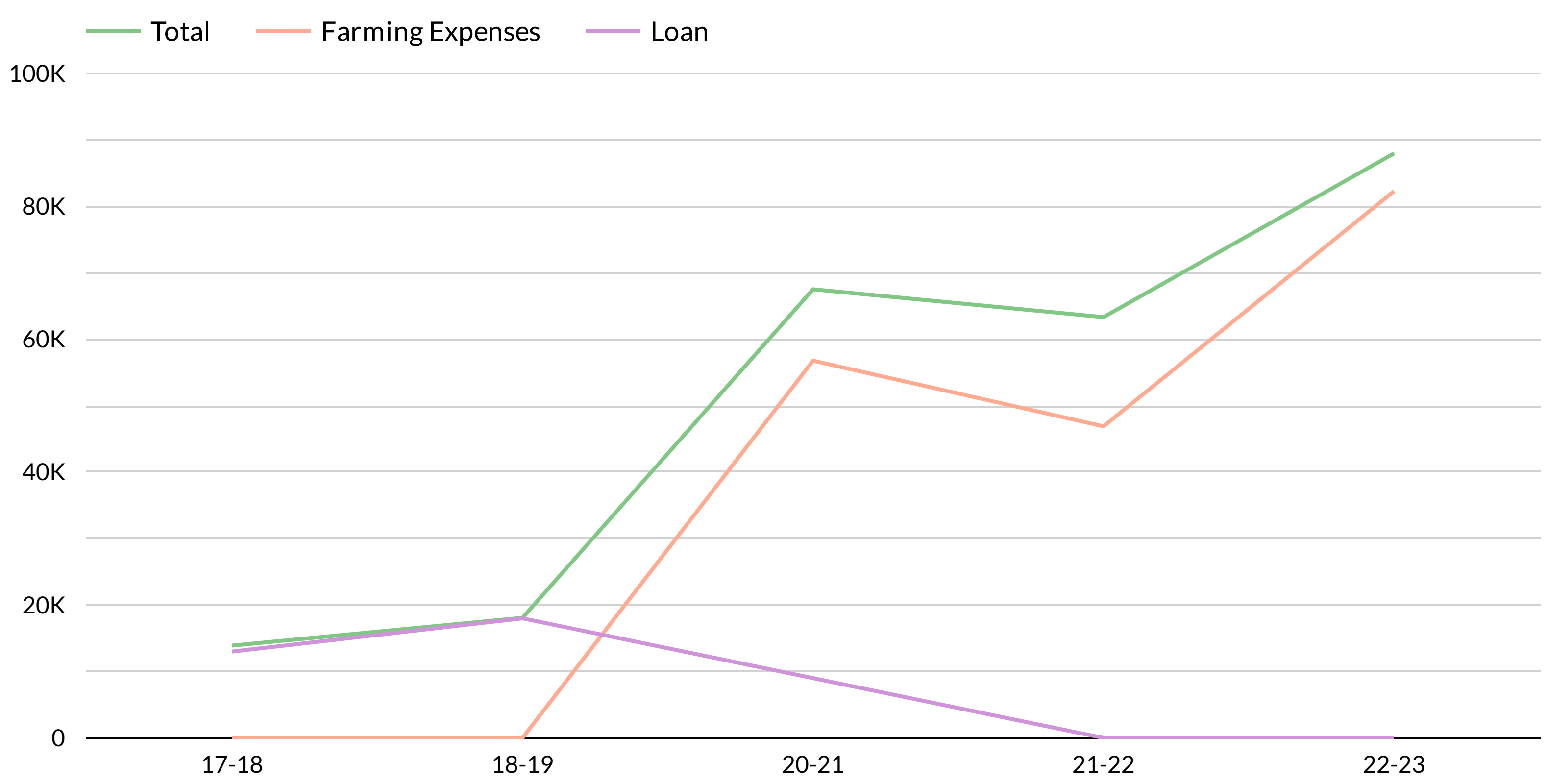

Chart 7: Expenses across years 2017 - 23

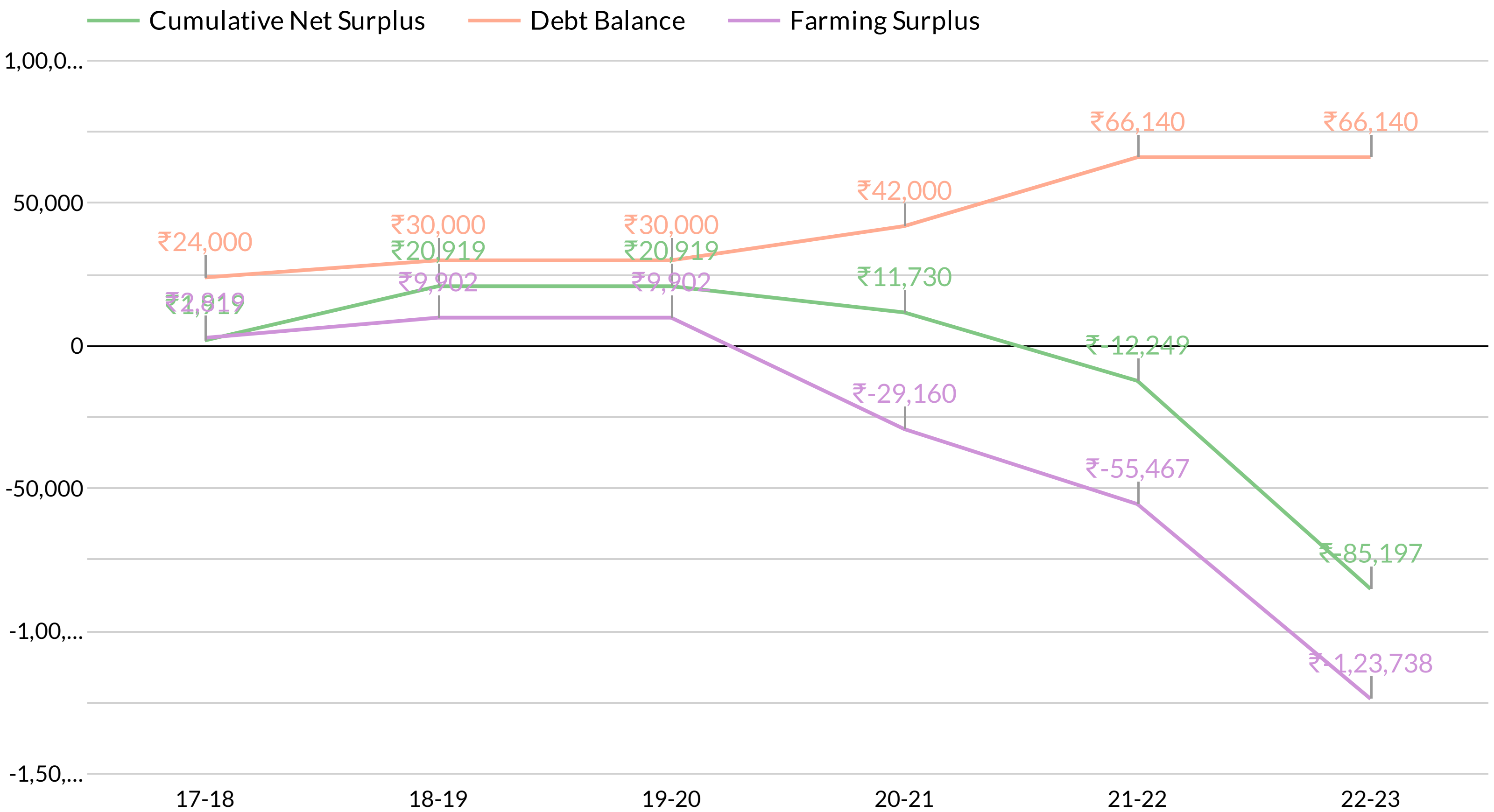

Chart 8: Cumulative Net Surplus, Cumulative Farming surplus and Debt Balance

Farming activities have yielded a loss since 2020-21. This might be because the farmer does not havemuch diversity in his activities relying primarily on vegetable cultivation. The farmer has offset the farm's deficits by paying from his personal funds.

Net surplus is the "total income" - "total expense" of a farm for a year. This does not include any debt. The chart shows this number cumulatively starting from 2017-18.

Farming Surplus is "farming Income" - "farming expenditure". This is the surplus a farm is able to generate from its activities alone. Chart is cumulative starting from 2017-18.

Debt Balance is the remaining debt that the farm owes. This "debt" can be in the form of external loans or personal investments by the farmer. Chart is cumulative starting from 2017-18.

Challenges and Needs

The farm is not fenced and attracts browsing fauna such as goats and wild boars. The farmer has set up electric fences in some areas of the farm to protect the crop but this requires meticulous maintenance.

Managing pests is the main challenge for the farm especially if the farm plans to increase its vegetable production. Cultivating only seasonal crops on a small piece of land has not helped Kumar to cover all the cost and be financially sustainable. Often the farmer struggles to procure farm inputs such as compost.

Since Kumar works on the farm single-handedly, machines for ploughing, weeding and other farm tools can help him be efficient and offset seasonal labour needs. He also believes a cow would help him with his fertility needs and that he has enough grazing area for this.

Conclusions

Kumar is persistent and trying to set up the basic infrastructure to help him produce crops more efficiently like solar water pump on openwell, drip irrigation and electric fencing.

As Kumar manages and works on the farm on his own with just simple tools, simple machinery like brush-cutter, wheelbarrow or a minitractor could go a long way to help him further develop the farm.

The financial sustainability of the farm will be challenging if the farmer continues to focus on growing only seasonal vegetables which is labour intensive and is prone to attack from pests. Kumar is now exploring to cultivate more grains which could be mechanised and would be less labour intensive.