

Kottakarai Farm

Kottakarai farm is a mixed crop certified organic (under TNOCD) farm with the focus on vegetables, dairy and fruit cultivation. The farm was originally established in 1970 by early Aurovillians and planted with fruit trees but now is currently managed by Amudha and Sundaram and their family. The vision of the farm is to produce food for Auroville while also offering a place for farming education for young children.

Labour

Managers: Amuda and Sundaram

No of Aurovillians working on the farm: 6

Regular workers: 5

600/ day (men)

300 / day (women)

Bonus: Regular workers get a percentage of their salary as retirements based on years of work. Workers also get Diwali and Pongal Bonuses

Seasonal workers: 2- 4 depending on the activity

700 - 800/ day (men)

300 / half day (women)

Land

Total Acres under management: 10

Acres Utilised: 10

7.5 acres of this are located next to Ganesh Bakery where the family managing the farm also stays. **2 acres** allocated to the farm are located in **Alankuppam** which also includes a 0.5 acre land parcel within it that does not belong to Auroville. Kottakarai farm leases this part to be able to utilise the entire land

Out of the **7.5 acres**, Kottakarai farm intensively grows **vegetables in 2.5 acres**.

A dedicated **orchard space** of **2.5-3 acres** for mangoes, **0.5 acres of bananas** while citrus and other tropical fruits are intercropped throughout the vegetables growing area. 0.5 acres of area is dedicated for the growing fodder grass under irrigation for the dairy.

Kottakarai farm also tries to grow **rain-fed paddy** on **2 acres** of land near Alankuppam tank. This part of the land is used only sometimes to grow pulses and paddy under rainfed conditions as there is no irrigation source on this part.

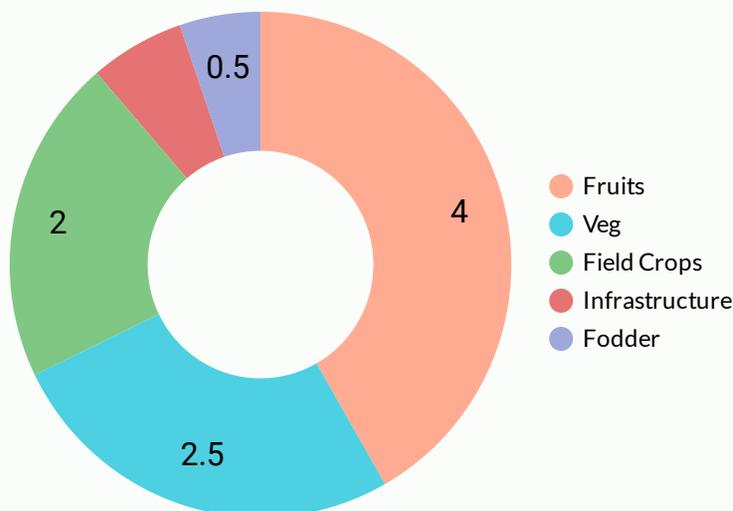


Chart 1: Breakup of utilised area (acres)

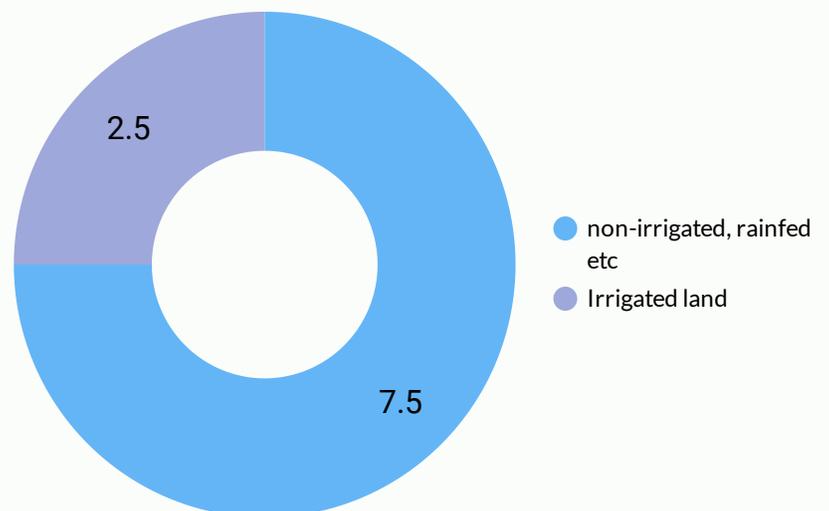


Chart 2: Proportion of irrigated Land (acres)

Production (Foodlink Sales)

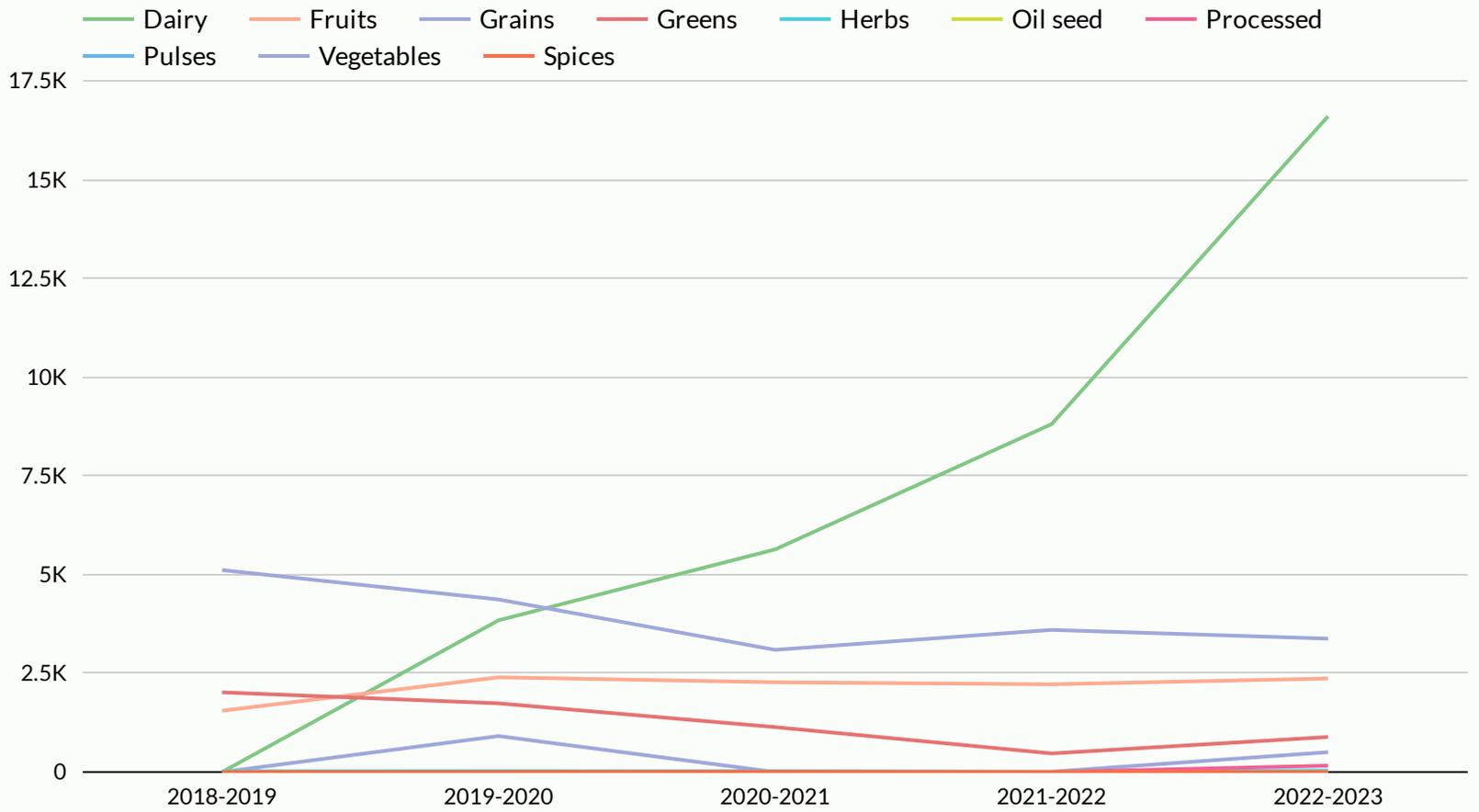


Chart 4: Sales in Kgs per category of food type across 5 years

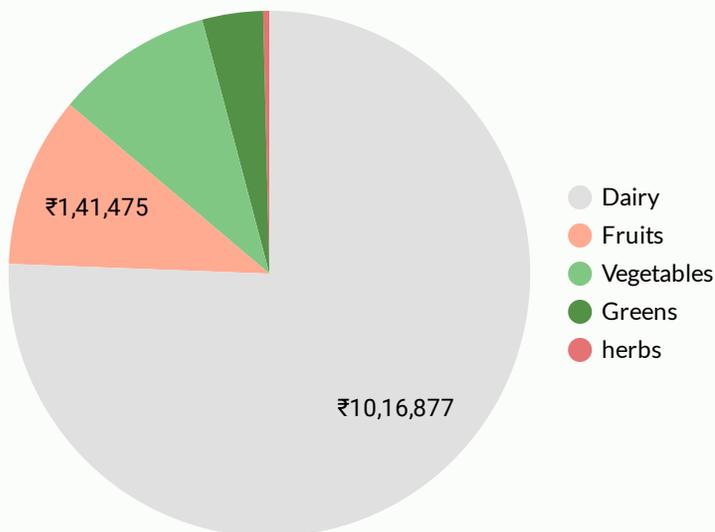


Chart 5: Breakup of Sales for FY 22-23

While the main focus of the farm has been vegetables, since the last 3 years, the farm has **expanded its dairy and increased its milk production** substantially. According to the farmers, this not only helps meet the demand for milk in Auroville, but also provides additional revenue much needed for the maintenance of the farm. Along with vegetables, the farm also produces a significant amount of greens (spinach) in some seasons.

A significant portion of the milk is distributed to consumers directly without going through the distribution channel of Foodlink. For example, in **FY21-22** Foodlink only accounted for **58%** of Kottakarai's milk sales.

Vegetables and Fruits

The farm follows **crop rotations** and **intense intercropping** to cultivate vegetables throughout the year.

The farm is **self-sufficient in its soil fertility needs** for the vegetable cultivation due to availability of cow dung from the dairy. One of the main challenges is pest management for which the farmers actively experiment with making and applying different varieties of liquid fertilisers and bio-pesticides.

The mango trees are between 20 and 70 years old, while the other fruit trees are about 10 years old. The farm also maintains a small plantation of **bananas** and **papayas**. The **vegetables are irrigated using micro sprinklers**, while the **fruit trees are rain-fed**.

Kottakarai farm also tries to grow rain-fed rice on 2 acres of land near Alankuppam tank but the results are not very encouraging due to erratic monsoon patterns.

Top Vegetables in FY22-23 (Kgs)

Brinjal	1,641.35	
Pumpkin Big	467.82	
Cucumber	330.01	
Lukki	316.08	
Lady Finger	266.96	

Top Fruits in FY22-23 (Kgs)

Banana Yellow	1,036.01	
Papaya	985.7	
Lime	289.07	
Coconut Dry Kg	161.98	
Ramphal	40.72	

Dairy practices and culture

Kottakarai farm's dairy herd consists of **13 milking cows** and 3 female calves. As part of the Auroville dairy group, the dairy tries to adhere to the basic dairy group standards.

The purpose of the dairy is to produce manure for the vegetable cultivation and milk to supplement the income of the farm.

The dairy feed (grain concentrate) consists of millets (if available), rice, wheat bran, pulses, oil cakes - peanut and sesame. Gliricidia, Leucaena, weeds/wild grasses from the vegetable beds, other crop residue and cultivated cow grass are fed to the cows for green fodder. The **cows graze outside the farm**, and at times in **0.5 acres leased land** when rainfed grass is available to graze.

30% of the herd is bred on the farm. Female calves are kept on the farm, fed milk from the mother for 2-3 months till the calf starts eating fodder/grains.

The cows are treated with herbal mixes for minor diseases while veterinary help is called for in serious cases.

Finances

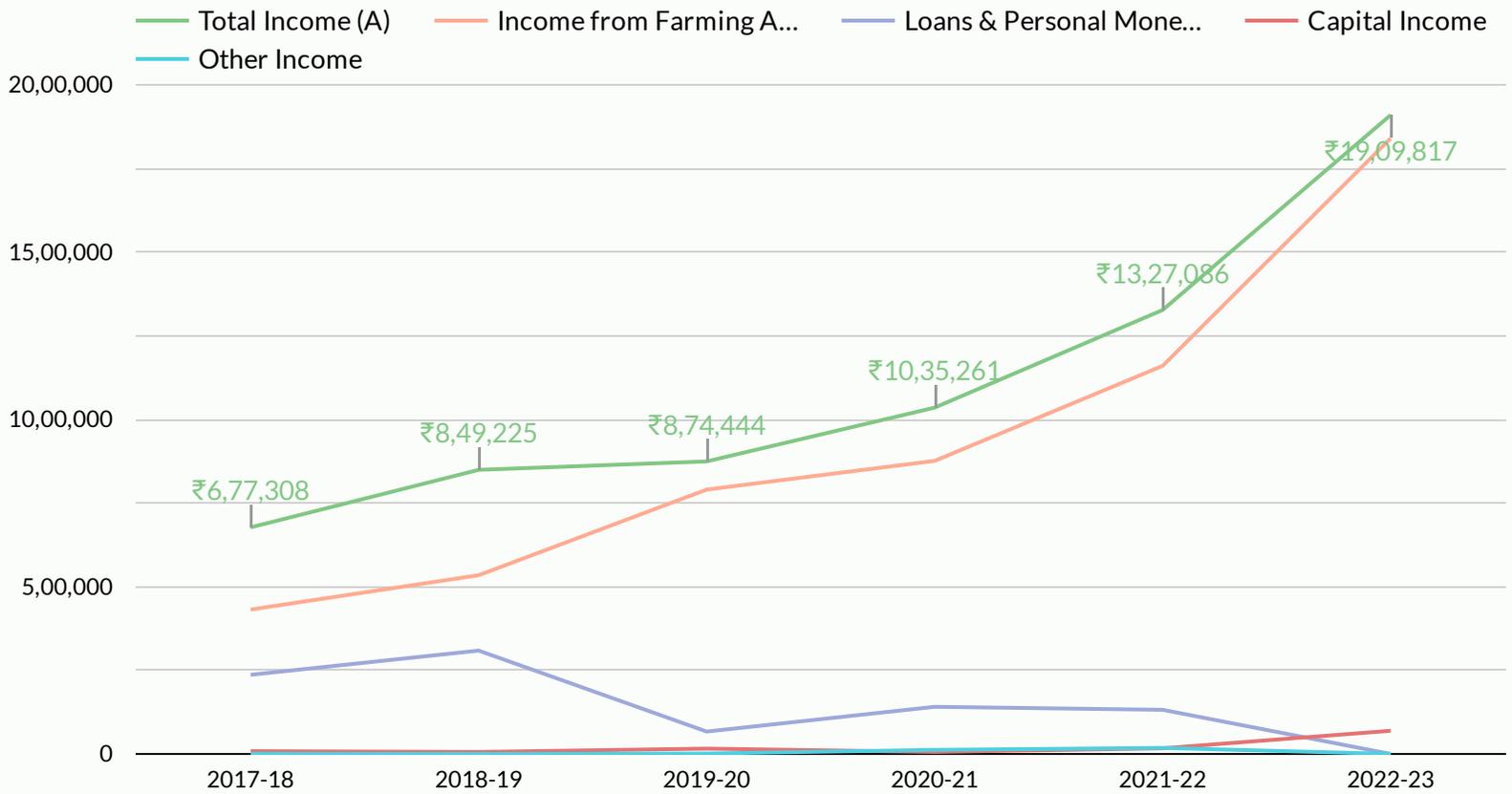


Chart 6: Break-up for farm income during 2017-23.

The farm has been able to increase its income from farming activities over the years and as seen in the sales data (**Chart 5**), this is mainly due to increase in sales of milk. We can also correlate the expenses from livestock activities and wages. The expenses follow a similar trend as the income since most of the expenditure is for the feed and care of the cows.

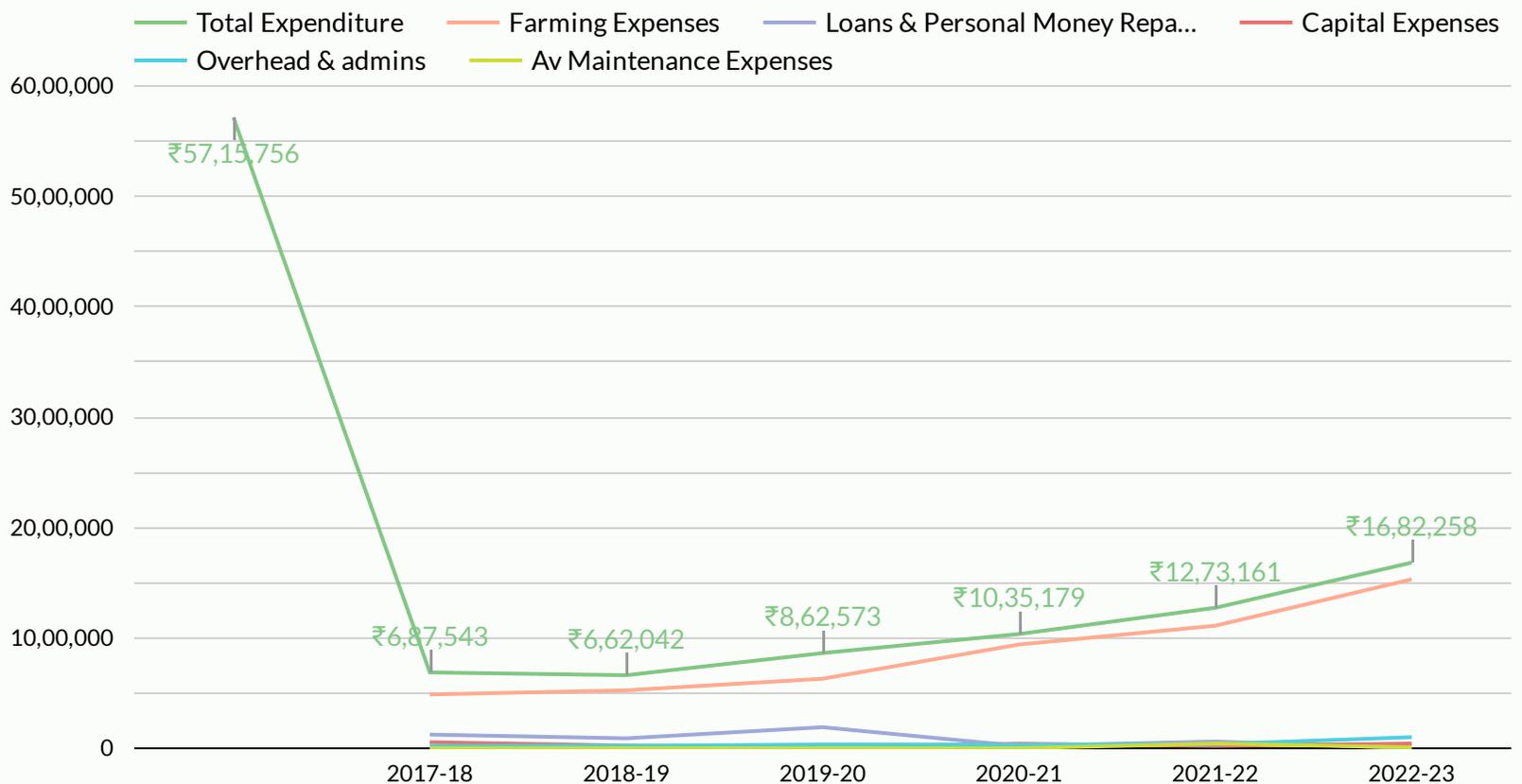


Chart 7: Expenses across years 2017 - 23

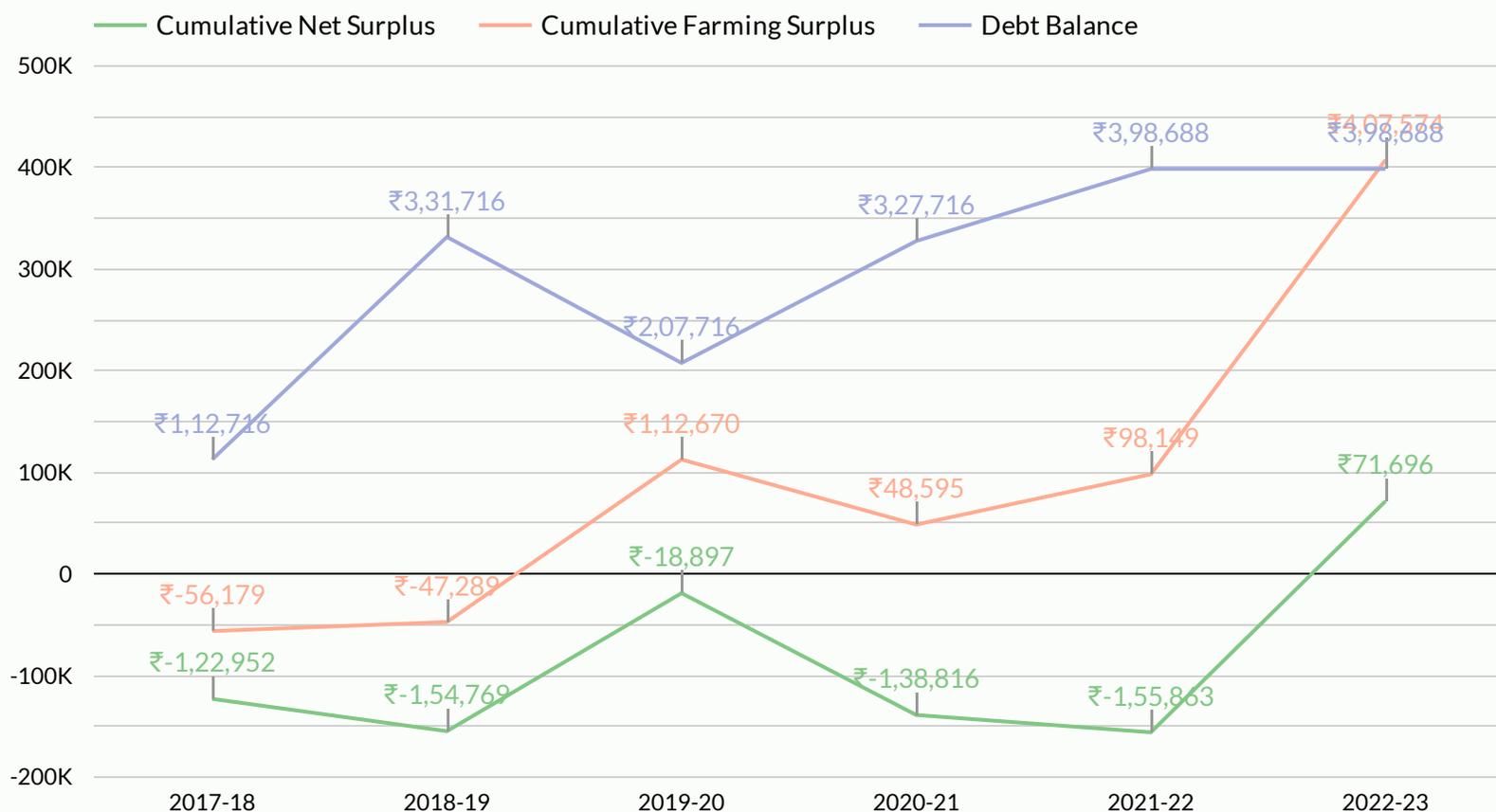


Chart 8: Cumulative Net Surplus, Cumulative Farming surplus and Debt Balance

The farm's activities have generated a surplus in 4 of the last 6 years and has remained profitable in the last two years. However, a good amount of finances have come through loans and personal money. As these investments have clearly helped increase the income generating capacity of the farm, this farm demonstrates the ability to utilise investments effectively and create returns on the investments over time.

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 FY17-18. Chart is cumulative starting in 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 in 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 in 2017-18.

Challenges and Needs

The farm needs investment in fencing as protection from wild life is one of the most pressing concerns for the farm. Pest management remains another area of concern, and this requires regular and meticulous preparation and application of bio-pesticides which are both time consuming and labour intensive.

The farm also occasionally requires large capital investment for activities, such as maintenance of irrigation infrastructure, for which the farmer has to rely on donations or loans. However, donations are hard to come by and loans have severe repercussions on running the farm operations.

One of the needs the farmer stresses on is to provide a borewell on the 2 acres land near Alankuppam tank which will help the farm to scale up the production of vegetables, grains and pulses.

Conclusion

The farmer aspires to upkeep a very large cow herd and to sustainably provide for the nutritional needs of the herd. For this, the farmer needs to explore how to increase the available green fodder, diversify the fodder and grazing land for the animals. At the moment this is constrained due to the land already being used for vegetable and fruit production. The farmer may have to re-evaluate the acreage being allotted to different activities and prioritise fodder production and grazing activities if the dairy needs to grow sustainably.

The farmer aspires to cultivate vegetables on the 2 acres of land that is outside the existing farm. While this could give more space within the farm for fodder and grazing, installing the borewell may not be enough. The farmer has already pointed out the damage from wildlife and the challenge of pests. The initial investment in setting up the required infrastructure and hiring the necessary labour to regularly work on the fields and apply biological pest controls should be planned to assess the growing potential of the land.

Overall, Kottakarai farm is one of few farms consistently producing vegetables and milk for Auroville and will benefit from an assessment of the uncultivated land, planned investment in infrastructure and a financial and ecological plan for the growth of the dairy so that their activities remain sustainable and ethical.