Manvasam Farm

Manvasam is a relatively a new farm of Auroville established in 2019 and is managed by Selvam.

Philosophy & Aspiration:
Manvasam aspires to be a dairy farm that herds indigenous cows producing organic A2 milk for Auroville. At present, Manvasam's herd consists of 8 cows (milking), 1 heifer, 5 female and 3 bull calves.

The goal of the dairy is to have a herd of 10-15 animals with an upper limit of 10 milking animals and maybe even goats in the future. As part of the Auroville dairy group, the dairy tries to adhere to the basic dairy group standards.

Labour

Selvam singlehandedly works on the farm along with some volunteers

Land

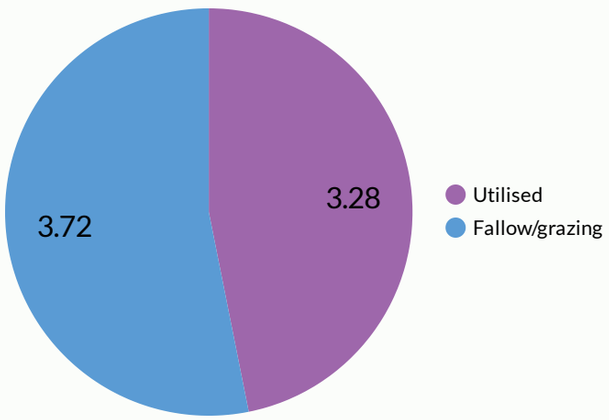

Chart 1: Utlised area vs Fallow area

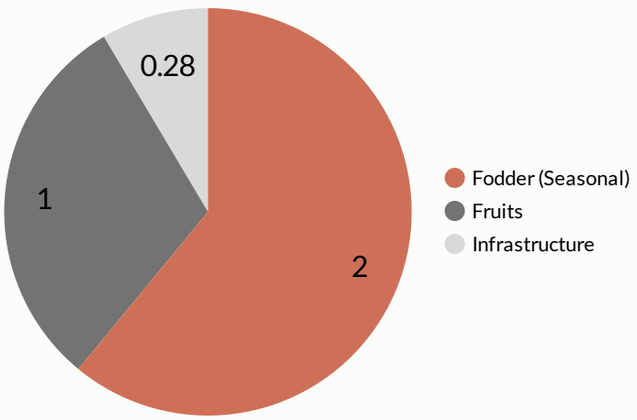

Chart 2: Breakup of utilised area

The **2 acre** irrigated land is used to grow **fodder grass** for the cows. However, due to the farms proximity to the Irumbai tank, the whole farm (except cowshed) floods during heavy monsoon. This limits the farms ability to produce fodder during and post monsoon months.

The farmer has also started growing fruit trees on **1 acre** to diversify his farm produce and utilise the space optimally. So far, he has planted mango (3 years old), banana, coconut, chickoo and citrus fruit trees.

A 150x7 sq. m. **(0.25 acres)** stretch has been given as an access to other surrounding farms.

Threst of the area **(3.72 acres)** was used to cultivate dryland pulses such as green gram, black gram and cowpea but is discontinued due to uncertainty of weather and costs of labour. Currently this area is used for grazing cows but the farmer intends to grow fodder in the future.

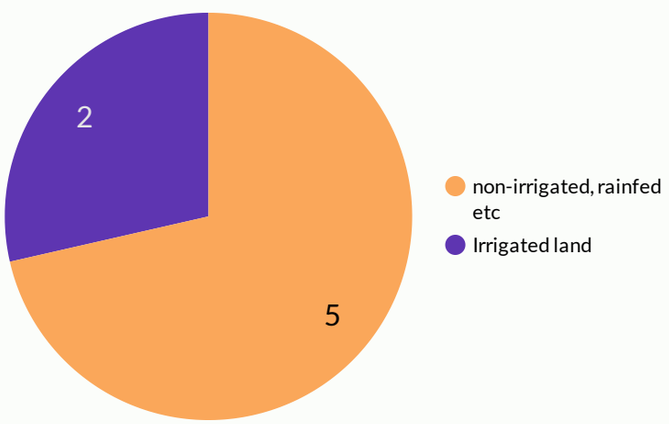

Chart 3: Proportion of irrigated Land

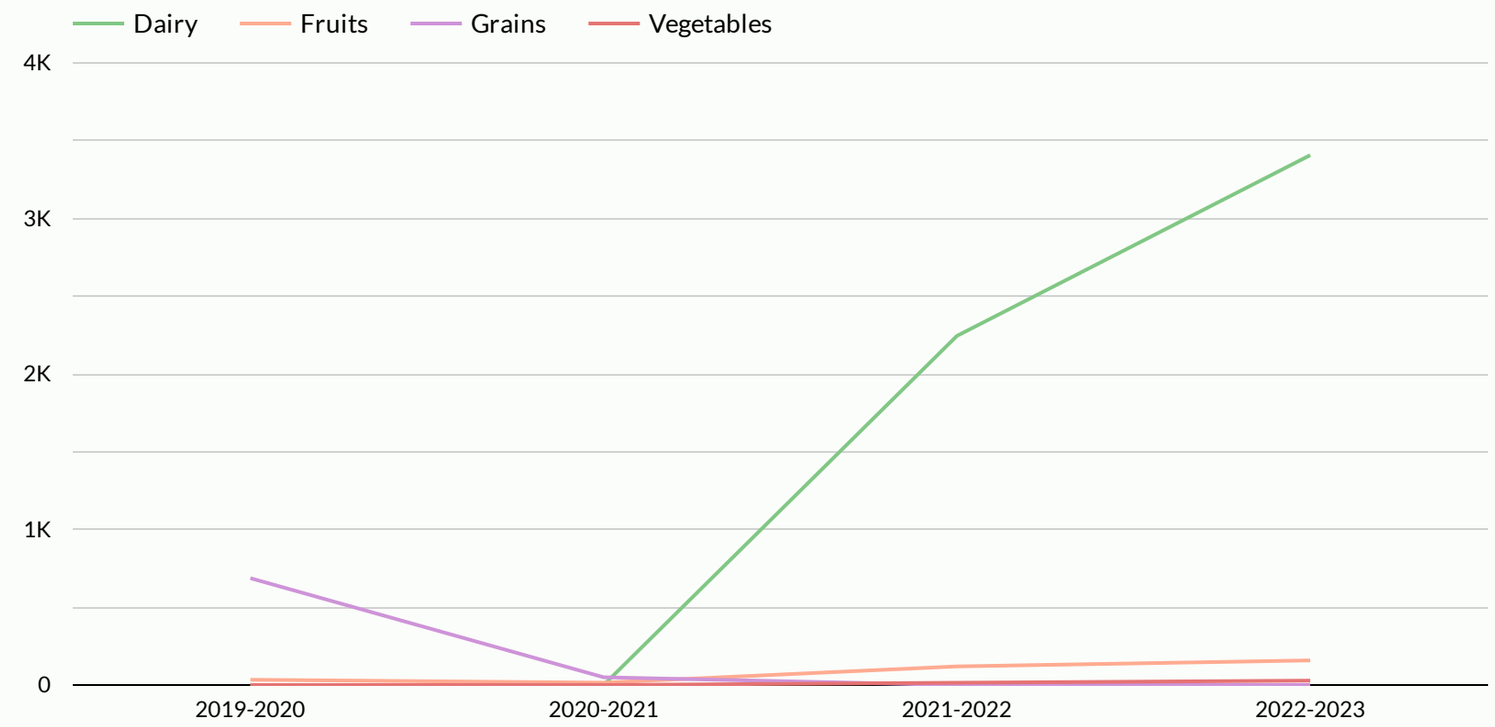

Chart 4: Trend of Foodlink Sales by Category for 2019-2023

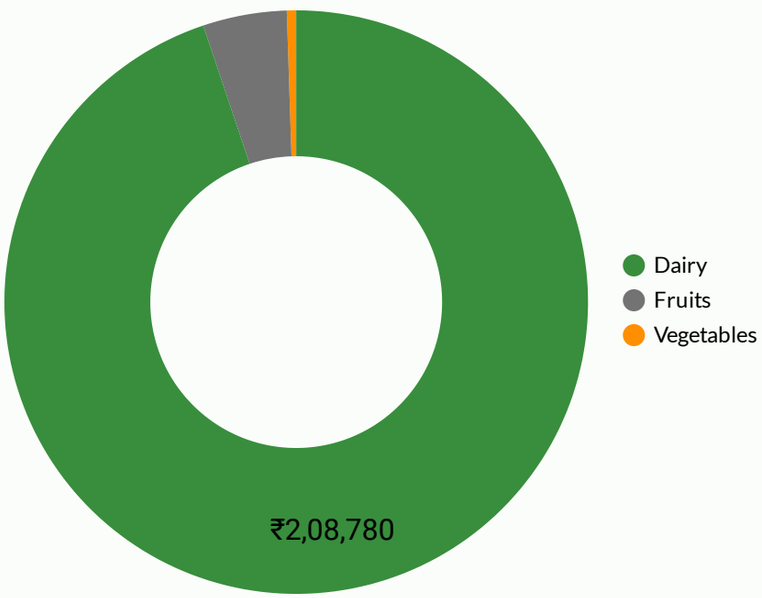

Chart 5: Revenue from Foodlink Sales by Food Category FY22-23

Sales have risen by 51% in FY22-23 compared to FY21-22. This is almost entirely due to Dairy.
Dairy production started in the FY2021-2022 and rose by around 52% in FY2022-23.

Although Fruits and Vegetables are in relatively low quantity, it might be noted that production in these categories have risen as well.

In FY21-22, Foodlink sales accounted for 92% of Manvasam's Milk and 80% of its non dairy sales.

Dairy Culture and Practices

As of March 2024, Manvasam dairy herd consists of 8 milking cows, 1 heifer. 3 bull calves and 5 female calves. The herd is made up of some pure Gir cows (fully indigenous), but predominantly Gir cross and other cross breeds which are considered part indigenous, part exotic.

The farmer intends to have indigenous animals in the dairy to produce 'A2 milk' which is considered to have more health benefits than A1 milk produced by exotic or cross breeds. The price of A2 milk is also higher (about double of A1 milk). The farmer's view is that there are several advantages to having indigenous breeds- more adapted to the local climate and context, resistant to diseases, feed better on local fodder grasses and are even better treated when given away (bulls, unproductive or aged). However, at the moment, the farmer still has cross breeds because of their higher milk production and the lack of market for a more expensive A2 milk within Auroville.

In a good season, about 80-90 kg of green fodder is fed to the cows per day. However, in the dry or too-wet season, the fodder is procured from the neighboring Ashram Farm. Paddy straws are fed as a roughage when available.

All the calves are kept with the mother for the year and fed 1.5 litres milk a day with a bottle and sometimes directly with the mother cow (by leaving one teat for the calf while milking).

The cows are impregnated using artificial insemination, but the farmer is also raising two indigenous bulls (Gir) for natural breeding. The animals are treated using homeopathy or ayurvedic treatments. In severe cases, antibiotics are used and the farmer informs us that he follows the required withdrawal period.

In the beginning soil inputs like compost were brought from outside and presently in-house cow dung/fym is used.

The farmer intends to have dairy animals grazing in the established orchard in the future.

Finances

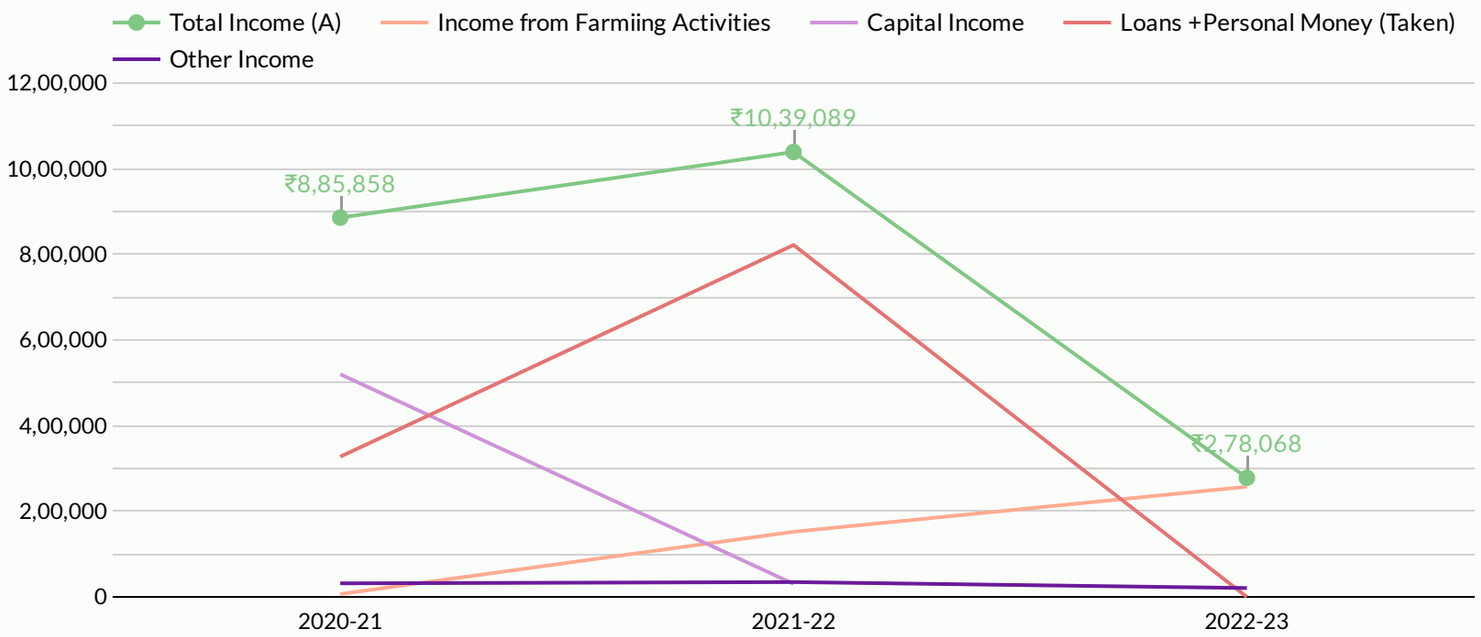

Chart 6: Break-up for farm income during 2020-23

Since its establishment, Manvasam has spent ₹17.61 Lakhs on capital assets gathered mostly through donations by individuals. While there are no big donations since 2021-22 as the farm income is steadily increasing, the farm continues to depend on loans and personal money to continue investing in crucial infrastructure to develop the young farm. Added to the monthly expense, is the loan repayment of ₹8000 to ₹8500

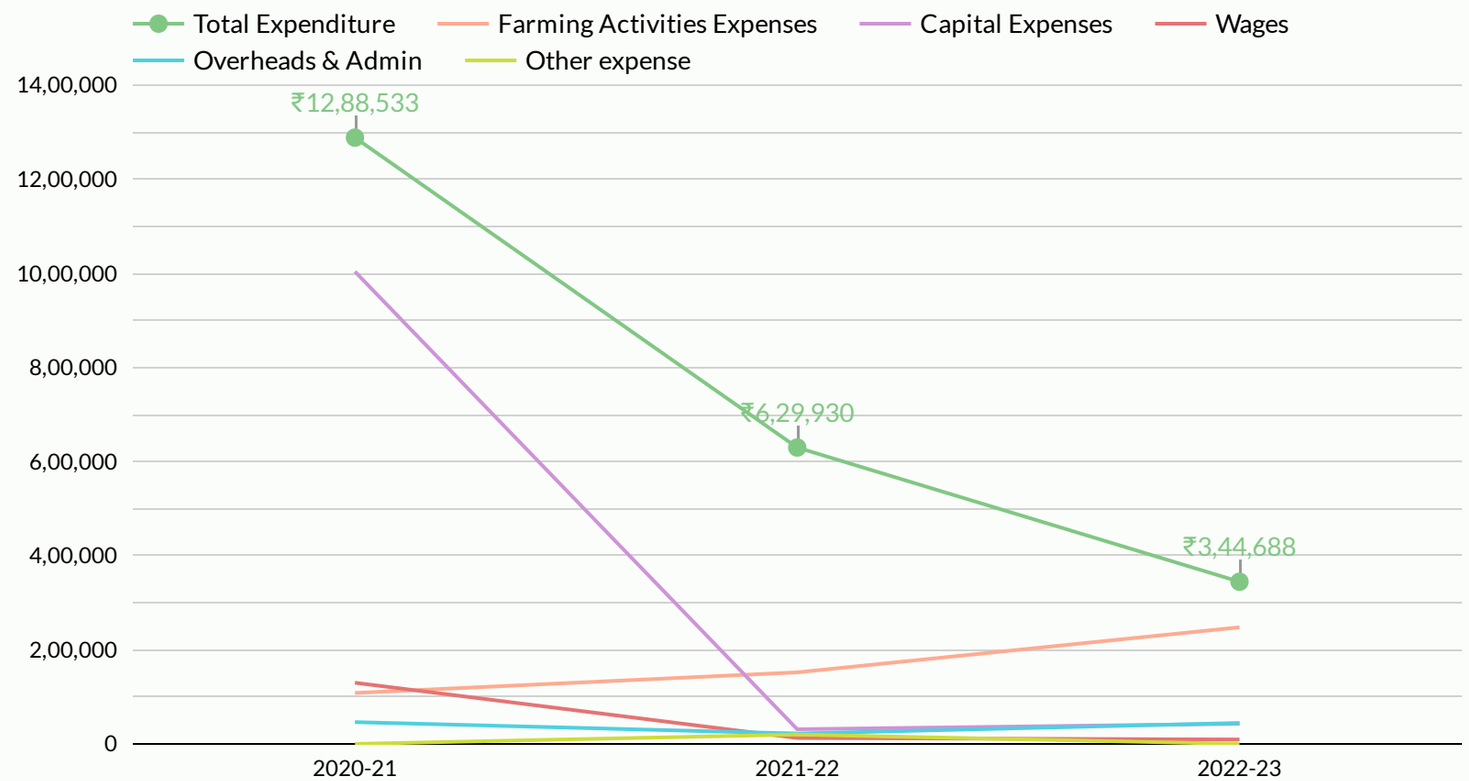

Chart 7: Break-up for farm expenses during 2020-23

The total expenditure has come down significantly since 2020-21 as the farmer has not invested heavily in infrastructure since then and also because the labour expenses have gone down.

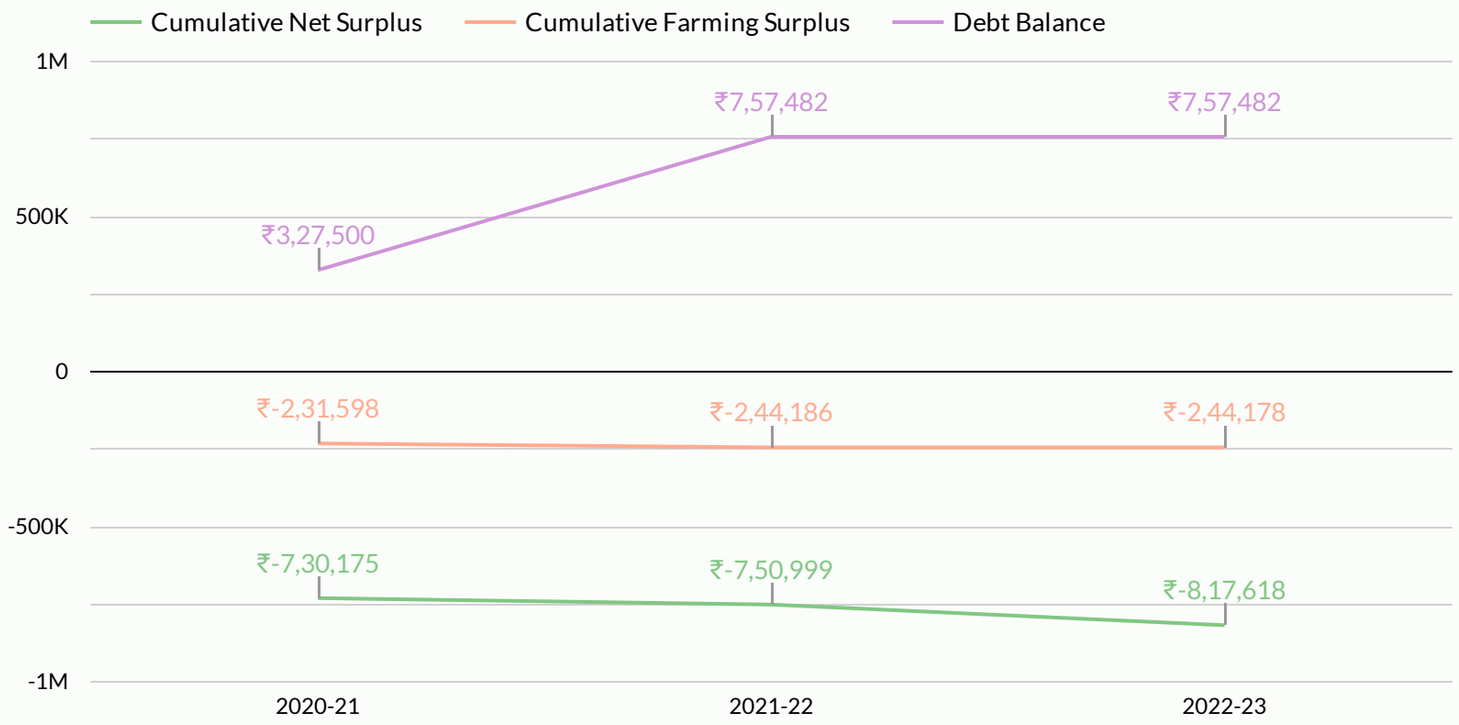

Chart 9: Cumulative Net Surplus, Cumulative Farming surplus and Debt Balance

The farm heavily depends on loans for its survival. Due to a large capital investment in infrastructure it has a negative surplus in the year 2020-21. There is another big loan in 2021-22 and the farming activities are not yielding any profit (cumulative surplus remains more or less the same). Therefore, the farm has a high debt balance and an overall negative net surplus.

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 & Needs

Selvam would require funds to reinforce his fence, an agriculture electricity connection, farm labour, a higher capacity pump for the borewell and so on. The farm is fully fenced with chainlink however it is already breaking down in certain areas due to rust or damage by other people

When the land floods heavily, it takes longer to dry and so the land is uncultivable for a large part of the year.
The farm also needs a dedicated person or team to help with the managerial and admin related works.

The aspiration of the farmer of having indigenous cows only and provide higher quality A2 milk to Auroville is met with the challenge of the low yield from indigenous cows and the high price of A2 milk for consumers. Conducting research about the need for A2 milk in Auroville and the willingness of consumers to pay premium price for this milk will help understand if this vision can be fulfilled. Owing to these challenges, the farmer has already resorted to cross-breeds (which produce more) instead of pure indigenous breeds.

Overall, the farm needs a plan to explore how indigenous cow keeping can be made financially sustainable given the context of the farm and Auroville and utilising its strengths (and the strengths of the farmer).

Conclusions

Although Selvam cares about his animals and is a dedicated and hard worker he struggles to effectively manage the farm by himself. His challenge with financial planning and low cash flow from the milk sales makes him depend on loans for the farm's expenses.

As the current utilisation of the land is only 2 acres out of the 7 acres, other activities can be explored to complement the dairy income, e.g. fruit trees. The fruit trees will eventually also shade the area and offer a wonderful grazing space for the herd. While fruit trees have been planted in 1 acre, there can be better planning around the area of fruit trees planted, the grazing space required and the number of cows the land can support.

The dairy farmers of Auroville are trying to maintain 0.5 acre of fodder+ grazing space for each cow to allow for enough space for them to move an graze on a diversity of cultivated and dryland wild fodder. The farm may have to limit its number of animals especially if the intention is to have more indigenous animals which require more grazing space.

The farmer might also explore better yielding indigenous breeds and may also need some short term crops (Papayas, bananas, grains, vegetables) to yield some income to help the farm/farmer get out of debt and have some cash flow for regular expenses like cow feed.

Of course, these plantations will need some investment themselves in labour, irrigation and fencing. Support for creating and executing a plan to implement small projects of this kind in 1 acre will help the farm progress slowly.

Other livestock activities like rearing goats (for milk) and chickens (for eggs) can also be explored once there is enough ecological infrastructure (trees, biomass, water etc.) to support more animals on the farm. The farmland has huge potential and with Selvam’s hardwork it would be possible to optimise its use given the needed financial, technical and social support.