

Loose flower cultivation in Tamil Nadu

S. Kavinilavan and C. Ravindran

Research Fellow, Dept. of Floriculture and Landscape Architecture, TNAU, Coimbatore
Associate Professor and Head, Horticultural Research Station, Kodaikanal, Dindigul, Tamil Nadu, India
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Introduction

Tamil Nadu continues to take the first place in the production of loose flowers in the Country, the production being 5.15 lakh MT during the year 2021 – 2022. Tamil Nadu takes the third place in regard to area, by cultivating the flowers in an area of 42,920 Ha (NHB, 2022) and Dharmapuri, Salem, Dindigul, Krishnagiri, and Tiruvannamalai districts play a major role in achieving the target. Assistance is extended for cultivation of loose flowers, bulbous flowers and cut flowers. Quality planting materials are being produced in State Horticulture Farms and distributed to farmers in subsidized cost to encourage flower cultivation.

In this study, we collected data of the present status of farmer's technique and their production technology for loose flower cultivation in Tamil Nadu. These data has been collected from various parts of Tamil Nadu. The flower crops namely *Jasminum sambac*, *Jasminum auriculatum*, *Jasminum grandiflorum*, tuberose, chrysanthemum, nerium, rose, marigold and ixora are taken into the study. The locations taken for the study are Madurai, Karamadai, Nilakottai, Salem, Vadalur, Mettupalayam and Trichy. The crop wise analysis of the loose flowers gives us the clear view of the different cultivation practices among farmers all over Tamil Nadu.

The other important aspect is the cost economics. The profit of the farmers determines the growth of the flower area and production. It also paves the way for the new farmers to take flower cultivation in Tamil Nadu.

Jasminum sambac (Gundumalli)

Suresh, a farmer from Paraipathy, Madurai cultivates *Jasminum sambac* in 2.5 acres. He

follows organic farming for the past 15 years. He uses 2–3-month-old cuttings for propagation with spacing of 6ft x 6ft and 5ft x 3ft (**1.25 m x 1.25 m**) and plants all around the year. The plants last up to 5 – 10 years. His cultivation practices are quite different from other farmers. From ploughing and making irrigation channels then digging holes and filling it with vermicompost +FYM + seaweed application. Dipping with VAM + *T.viride* + *B.subtilus* and planting. Irrigation is given at 2 days interval and weeding monthly once. Pruning is done Yearly once and Bio fertilizers weekly twice and Micronutrients monthly once. Major problem is budworm and thrips.

Particulars	Amount (rupees)
Gross income	9,60,000
Expenses	3,00,000
Profit	6,60,000
Benefit Cost Ratio	3.2
Break-even point	1.5 yrs

Rajan from Eliyarpatti, Madurai is a conventional farmer who cultivates J. sambac over 2 acres. He uses 6 - 12-month-old cuttings for propagation with spacing of 2ft x 2ft and 3ft x 3ft and plants all around the year. The plants last up to 7– 10 years. 12000 cuttings are required for an acre. The cultivation practices are Ploughing with plant leaf mould (7-10T). Irrigation’s weekly once upto 2 months then application of Complex + urea + Sulphate. After 2 months application of monochrotopas or rogor and then weekly once weeding. Pruning is yearly thrice and often the field is allowed for the goat gazing for better yield and also to reduce labor cost. Average yield is 1.8 T/acre.

Particulars	Amount (rupees)
Gross income	2,60,000
Expenses	1,00,000
Profit	1,60,000
Benefit Cost Ratio	2.6
Break-even point	1 yr

***Jasminum auriculatum* (Mullai)**

Prabhakaran, a farmer from Chinnathottipalayam, Karamadai grows J. auriculatum in 2 acres over a period of 10 years. He uses 1.5 – 2-month-old cuttings for propagation with spacing of 6ft x



6ft and plants all around the year. The plants last up to 10 - 12 years. 1000 cuttings are required for an acre. The cultivation practice starts with Ploughing with FYM (10T/acre) + DAP (100kg/kg). Then 1 ft x 1 ft digs with 1 or 2 cuttings in it and irrigate 2-5 interval. After 1.5 months urea application and weeding after 2-3 months. The different operation which he uses is Pinching after 3 months and complex application along with it. Application of 17:17:17 (10-15 kg/plant) is done and FYM (2 kg). After 4 months, application of monochrotophas (15ml / tank). The **Pinching is done upto 5 months. The average yield** starts with 100g and goes upto 50-60 kg after 1.5 years. Pruning's done yearly once (**last week of Jan**). Major problem is mites and thrips.

Particulars	Amount (rupees)
Gross income	22,40,000
Expenses	7,50,000
Profit	14,90,000
Benefit Cost Ratio	2.98
Break-even point	1.5 yrs

***Jasminum grandiflorum* (Jathimalli)**

Subbaiyan, a farmer from T.G.Pudhur, Karamadai grows *J. grandiflorum* in 10.5 acres over a period of 25 years. He uses 3-month-old cuttings for propagation with spacing of 9ft x 4.5ft and plants all around the year. The plants last up to 7 - 10 years. 600 cuttings are required for an acre. Ploughing is done without FYM application. After that DAP + Urea – 50g/plant is given. Weeding is done along with application of FYM (cow or chicken). Irrigation is given with 3-4 days interval. Pruning yearly once and takes 4 months to set flowers then continuous flowering for 8 months. (**Pruning time: last week of dec**). The average Fresh yield is 1kg / acre and 2nd year yield is 30kg / acre (after pruning).

Particulars	Amount (rupees)
Gross income	3,00,000
Expenses	1,00,000
Profit	2,00,000
Benefit Cost Ratio	3
Break-even point	.5 - 1 yr



Nerium

Shanmuga Sundaram, a farmer from S. Pungampalayam, karamadai has been growing nerium for the past 7 years around an area of 2 acres. He uses 1 year old cuttings with spacing of 10ft x 8ft and plants them during May – June period. It last up to 6 to 10 years. Application of Complex + FYM +DAP. After 5 months pruning is done. 10 days once irrigation is given for 3hrs/day. Bending is done whenever is necessary. Harvesting time is usually 6-8 am. Major problem is the harvesting time.

Particulars	Amount (rupees)
Gross income	4,00,000
Expenses	110,000
Profit	2,90,000
Benefit Cost Ratio	3.63
Break-even point	1.5 yrs

Chrysanthemum

G. Chinnathambi from Kuthiraikuthipallam, Salem is a chrysanthemum farmer and has a nursery for the flower crop. He cultivates chrysanthemum in 2.5 acres. He uses 2-month-old cuttings (rooted) for propagation with spacing of 1ft x 1ft and plants from july to december. The plants last upto 4 – 5 months. Irrigation is given from 3rd day with 5 days interval. Then 15th day, humic acid @ 10ml / 10 lit is given. 30th Redomil gold +SAAF applied. For pest, proclain is sprayed. Finally, 40th day - DAP-50kg/acre is given. Harvesting starts from the third month it is done with an interval of 7days once (90-110 days), 2days once (110-130 days) and daily (5th month). Major problem is thrips and uneven climate.

Particulars	Amount (rupees)
Gross income	2,25,000
Expenses	1,44,000
Profit	81,000
Benefit Cost Ratio	1.56
Break-even point	1.5 yrs

Tuberose

Ramasamy from malliyampatti, Nilakottai is tuberose farmer for over 15 years in an area of 3 acres He uses 4-year-old corms for propagation with spacing of 15cm x 15cm and plants from



April – May. The plants last up to 4 – 7 years. 500kg corms/1 acre is required. Irrigation is given in 5days interval. After 1.5 to 2 months DAP -250kg/acre + groundnut cake is applied. It takes 3 months to flower and Bud to flower-10 to 20 days. Commercial flowers come after 6 months. No pesticides and fungicides are used. Sprinklers are installed for Pests (**mealy bug**) and it is used in between 2days interval. The average yield is 100-150kg/acre of flowers. During (Apr-Jun) Season, flower price is ₹100-150/kg and normal - ₹50-70/kg. During (Dec-Mar) is the Lowest - ₹10-30/kg.

Particulars	Amount (rupees)
Gross income	14,00,000
Expenses	6,65,000
Profit	7,35,000
Benefit Cost Ratio	2.1
Break-even point	2.1 yrs

Rose

Krishna Kumar from Vellipalayam, Karamadai grows rose in an area of 1.5 acres over a period of 8 years. He uses 4 months old (clonal) cuttings for propagation and plants with a spacing of 7ft×7ft. the crop duration is 5years. For 1 acre, 800 cutting are required. Ploughing is done with FYM 10 T and application of Feuradon (2g/dig). Irrigation is given with 3-4 days interval. DAP + Potash + Urea is given when required. Groundnut cake + Sesame cake is given after weeding after 6 months. Harvesting yields over 7,20,000 flowers/year/acre. Major problem is budworm, mites, powdery mildew and crown gall.

Particulars	Amount (rupees)
Gross income	2,88,000
Expenses	2,00,000
Profit	88,000
Benefit Cost Ratio	1.44
Break-even point	2 yrs

Ixora

Kumar from Neithalur, Trichy grows ixora in an area of 1.5 acres over a period of 10 years.



He uses 3 month old cuttings (rooted) for propagation with spacing of 7ft x 6ft and plants from June - July . The plants last up to 2 – 6 years. 1000 cuttings are required for an acre. Ploughing with FYM until powdery form comes. Digging holes and drying it out. Planting is done with 2 cuttings per hole. Irrigate in 3 days interval and accordingly apply DAP (10g) in the field. After those 15 days once pesticide spraying is done (Dithane + propanopas)) and 10 days once in winter. 20-30 days once weeding and soil loosening is done regularly and checking for earthworms. Roping and pruning is done after 6 months then flowers arrive.

Particulars	Amount (rupees)
Gross income	7,00,000
Expenses	3,00,000
Profit	4,00,000
Benefit Cost Ratio	2.33
Break-even point	1.5- 2 yrs

Marigold

Ethiraj, a farmer in Vadalur, Cuddalore cultivates marigold in 2 acres. He uses 18 – 20 old plants for propagation with spacing of 120cm x 30cm and plants all around year. The plants lasts upto 3 months. 700 seedlings are required for an acre. Ploughing along with application of FYM (4-5T/ acre) and DAP (50kg/acre) during winter and rainy season. Transplanting and after 20-25 days earthening up is done. After 45 days staking is done. After 50 days harvesting stage arrives. Complex + micronutrient is applied during earthening up and 19: 19: 19 during flowering stage (10 – 12kg/acre). Major problem is rot and powdery mildew.

Particulars	Amount (rupees)
Gross income	1,50,000
Expenses	60,000
Profit	90,000
Benefit Cost Ratio	2.5
Break-even point	2 months

SWOT Analysis of loose flower cultivation in Tamil Nadu

Strength:

- High returns
- Regular market flow
- Year around cultivation



- Family labors
- Connection with various markets and industries

Weakness:

- Unavailability of labors during harvest
- Pest and disease management
- Lack of good quality planting material
- Lack of knowledge

Opportunities:

- Growing flower markets
- Increased customer preferences
- More seasonal Price of flowers
- Regular demand for traditional flowers
- Festival demand

Threats:

- No awareness over pest control
- Huge decrease in Agricultural labor
- Flower quality maintenance
- Taxes for goods

Conclusion

As the farmers use very traditional and different method for cultivation of loose flowers, many advantages and disadvantages are there. More communication between farmers and scientists will lead to a prosperous future for the flower production not only in Tamil Nadu and also all over India and the world. Hence the farmers can get better yield and more income. Knowledge over markets and their fluctuations will help the farmers be more aware of the demand and supply of the flowers. Even with all the differences our farmers are doing an excellent job in the loose flower production. Innovative adaptation of modern technologies will also help the farmers. Therefore, farmers are going in the right path in flower business to increase their income and also nations GDP. From the above data it proves that the farmers are earning in profit in the flower with a good return with traditional and conventional production technology.

