



Rural Women Empowerment through Value Addition of Rose Flower

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Rose is one of the important commercial flower crops having considerable potential for value addition and income generation. Fresh rose flowers are highly perishable and their market value decreases rapidly when they remain unsold or are not properly handled after harvest. Value addition provides an opportunity to convert fresh and surplus rose flowers into products having longer shelf life, greater utility and higher economic potential. The present article focuses on the role of rose flower value addition in promoting rural women empowerment and improving livelihood opportunities.

The study emphasizes the preparation and utilization of five important value-added rose products, namely rose gulkand, rose potpourri, rose water, rose ubtan and rose gulaal. These products represent food, aromatic, cosmetic, decorative and festival-related applications of rose flowers. Training rural women in flower selection, cleaning, drying, processing, packaging, labelling, storage and marketing can provide opportunities for skill development and self-employment. Value addition can also help in reducing post-harvest losses and increasing the economic utilization of rose flowers.

The development of rose-based enterprises through self-help groups can further facilitate collective processing, packaging, branding and marketing. Such enterprises may provide supplementary income and encourage women to participate actively in household and rural economic activities. The article highlights that value addition of rose flower has potential to become an effective livelihood activity for rural women when supported by technical training, financial assistance, market linkages and entrepreneurship development programmes.

Keywords: Rose, value addition, rural women, empowerment, gulkand, potpourri, rose water, rose ubtan, rose gulaal, livelihood

Introduction

Rose is one of the most widely cultivated and commercially important ornamental flowers. It is valued for its attractive colour, pleasant fragrance and diverse applications. Roses are commonly marketed as loose flowers, cut flowers, garlands and decorative materials. However, the highly perishable nature of fresh flowers creates challenges related to storage, transportation and marketing.

Value addition is an important approach for improving the economic utilization of horticultural produce. Instead of selling flowers only in fresh form, they can be processed into products with improved shelf life and diversified uses. Rose petals can be utilized for the preparation of gulkand, rose water, potpourri, floral powders and cosmetic products. This provides an opportunity to reduce wastage and obtain additional income from the same raw material.

Rural women play an important role in agricultural and household activities. However, their participation in income-generating activities is often restricted because of limited access to capital, technology, training and markets. Small-scale value addition of rose flowers can provide an opportunity for women to undertake processing activities at household or self-help-group level.

The importance of value addition is particularly relevant in rural areas where flowers may be produced locally but marketing opportunities may be limited. Processing can allow women to convert perishable flowers into products that can be stored and sold over an extended period. Thus, rose flower value addition can contribute to livelihood diversification, entrepreneurship and economic empowerment.

Review of Literature

Value addition has been recognized as an important strategy for increasing the economic returns from horticultural commodities. In floriculture, processing of flowers into food, cosmetic, aromatic and decorative products provides opportunities for income generation and entrepreneurship.

Studies on floriculture and rural livelihoods have indicated that value addition can provide employment opportunities and improve income through processing and marketing activities. The development of small-scale enterprises can also strengthen the participation of rural communities in the agricultural value chain.

Research on dried floral products has emphasized the importance of appropriate drying techniques for maintaining colour, appearance and quality of flowers. Proper drying is particularly important for products such as potpourri, floral powders and other dried rose products.

Women-oriented livelihood programmes and self-help groups can provide an effective institutional framework for value-added enterprises. Collective procurement, processing, packaging and marketing can reduce individual constraints and improve the economic viability of small-scale enterprises.

However, major constraints in floral value addition include inadequate technical knowledge, limited processing facilities, lack of standardized processing techniques, insufficient packaging and branding, limited access to finance and poor market linkages. Therefore, training and institutional support are necessary for successful commercialization.

Methodology

The study was designed to examine the potential of rose flower value addition as a means of rural women empowerment. A descriptive and participatory approach may be adopted for assessing women's involvement in rose processing and value-added product preparation. Information may be collected through interviews, field observations, demonstrations and interaction with rural women. Secondary information may be obtained from research publications, books, government reports and horticultural institutions.

The value-addition activities considered in the study include:

1. Preparation of rose gulkand.
2. Preparation of rose potpourri.
3. Preparation of rose water.
4. Preparation of rose ubtan.
5. Preparation of rose gulaal.

The study may assess parameters such as knowledge gained, participation of women, processing cost, quantity of product prepared, selling price, income generated, employment days and constraints faced by the participants.

Results and Discussion

Selection and Utilization of Rose Flowers

Fresh, healthy and properly developed rose flowers are suitable for value addition. Flowers affected by disease, mechanical injury or contamination should be removed. Proper harvesting, transportation and handling are essential for maintaining the quality of the raw material. Value addition provides an opportunity to utilize flowers that are unsuitable for premium fresh-flower marketing. Instead of being discarded, such flowers can potentially be converted into suitable processed products.

Rose Gulkand

Rose gulkand is a traditional rose-based product prepared using rose petals and sugar. The petals are cleaned and arranged in layers with sugar and allowed to cure under suitable conditions. Gulkand can be prepared at household or group level using relatively simple processing techniques. Attractive food-grade packaging and appropriate labelling can increase its market potential.

Rose Potpourri

Rose potpourri is a decorative and aromatic product prepared primarily from dried rose petals. Proper drying is important to retain desirable colour and fragrance. The finished product can be packed in sachets, pouches, jars or decorative containers. Potpourri can be marketed as a household fragrance, decorative item or gift product.

Rose Water

Rose water can be prepared from rose petals through a suitable distillation or hydrodistillation process. Proper hygiene, filtration, packaging and storage are essential for maintaining product quality. Rose water provides an opportunity to develop a higher-value product from fresh rose flowers and may be marketed in attractive bottles through local and direct marketing channels.

Rose Ubtan

Rose ubtan can be prepared using dried and powdered rose petals along with suitable natural ingredients. The ingredients are cleaned, processed, powdered, mixed and appropriately packed. The preparation of rose ubtan can provide rural women with an opportunity to enter the natural and traditional cosmetic product segment. Appropriate hygiene, quality control, labelling and applicable regulatory requirements should be followed for commercial production.

Rose Gulaal

Rose gulaal provides an opportunity to utilize natural floral material for preparation of coloured powder. Properly dried rose petals can be processed with suitable natural ingredients to obtain an attractive product. The product may have potential in festival and cultural markets. Appropriate safety and quality standards should be followed before commercialization.

Cost, Return, Income and Employment Generation

Rose value addition can generate income through multiple activities including flower collection, sorting, cleaning, drying, processing, packaging, labelling and marketing.

The economic performance of each product should be calculated using the following parameters:

Total Cost = Raw material cost + Labour cost + Processing cost + Packaging cost + Miscellaneous cost

Gross Return = Quantity of product sold × Selling price

Net Return = Gross Return – Total Cost

Benefit : Cost Ratio = Gross Return ÷ Total Cost

Actual field observations should be used to calculate these parameters for the participating women. The comparison of the five products can help identify which product provides the best economic opportunity under local conditions.

Role of Self-Help Groups

Self-help groups can play an important role in promoting rose-based value addition among rural women. Individual women may have limited access to capital, equipment and markets, whereas collective action can help overcome some of these limitations.

The major activities that can be undertaken through self-help groups include:

- Collective procurement of rose flowers.
- Common processing and drying facilities.
- Preparation of standardized products.
- Collective packaging and labelling.
- Development of a common brand.
- Local marketing and direct selling.
- Participation in exhibitions and fairs.
- Digital and social-media marketing.
- Maintenance of financial and production records.

The SHG approach can also encourage women to participate in decision-making and enterprise management.

Women Empowerment through Value Addition

Rose value addition can contribute to women empowerment in several ways. First, it provides technical skills related to processing and product preparation. Second, it creates opportunities for supplementary income. Third, women can participate in marketing and entrepreneurship rather than being restricted to agricultural labour. Processing at household or village level can also provide employment opportunities close to home. This may be particularly beneficial for women who have limited opportunities to engage in outside employment. Economic participation can strengthen women's confidence and their role in household financial decisions. Collective entrepreneurship through self-help groups can further strengthen social participation and leadership.

Major Constraints

The major constraints that may affect rural women in adopting rose value addition include:

1. Lack of technical knowledge.
2. Limited availability of processing equipment.
3. Lack of adequate financial resources.
4. Poor packaging and storage facilities.
5. Lack of standardized processing methods.
6. Limited knowledge of product costing.
7. Inadequate branding and labelling.
8. Limited market access.
9. Dependence on intermediaries.
10. Lack of continuous technical guidance.

These constraints can be addressed through training, demonstrations, institutional support, access to credit, improved packaging facilities and stronger market linkages.

Conclusion

The study highlights the potential of rose flower value addition as an important avenue for rural women empowerment and livelihood development. Rose gulkand, rose potpourri, rose water, rose ubtan and rose gulaal represent diverse possibilities for converting a perishable flower into useful and potentially marketable products. Value addition can help reduce post-harvest losses, diversify rural income and provide employment opportunities. Training in processing, packaging, branding, costing and marketing can improve women's ability to establish small-scale enterprises. Self-help groups can provide an effective platform for

collective production, processing and marketing. Therefore, promotion of rose value addition through skill development programmes, self-help groups, horticultural institutions, government schemes and market linkages can contribute to sustainable rural entrepreneurship. With appropriate technical and institutional support, rose flower value addition can become a practical pathway for improving income, employment and economic participation among rural women.

References

1. Gills, R., Sharma, J.P., Burman, R.R., Sharma, R.R. and Kar, A. (2017). Peri-urban floriculture: A comparative study from NCR on production, value addition, marketing and constraints. *The Indian Journal of Agricultural Sciences*, 87(4).
2. Mulla, R. and Topno, S.E. (2022). Standardization of drying techniques of rose, carnation, gerbera and value-added products. *International Journal of Plant & Soil Science*, 34(23): 1086–1092.
3. Singh, I. and Rohilla, P.P. (2019). Post-harvest management in mint and rose. *Indian Horticulture*, 64(3).
4. Vijay, J. and Baweja, H.S. (2025). Value addition in floriculture: A review. *Journal of Ornamental Horticulture*, 28(1): 9–19.
5. ICAR-CIPHET. Rose petal processing and value addition technology. Central Institute of Post-Harvest Engineering and Technology, Government of India.
6. ICAR-Directorate of Floricultural Research. Postharvest technology and value addition. ICAR-DFR, Pune.
7. Chaubey, S., Jirli, B., Singh, P. and Roy, P. (2025). Women's psychological empowerment through floriculture: A case study of Dinapur village in Chiraigaon block, Varanasi. *Journal of Community Mobilization and Sustainable Development*, 20(Special Issue): 96–99.