



## Promotion of Cow Dung-Based Diya and Idol Making as a Sustainable Livelihood for Rural Women

\*Rishika Karmakar and Dr. Subuhi Nishad

Department of Genetics & Plant Breeding, College of Agriculture, IGKV, Raipur,  
Chhattisgarh, India

\*Corresponding Author's email: [rishikakarmakar2024@gmail.com](mailto:rishikakarmakar2024@gmail.com)

This article explores the potential of cow dung (gobar)-based diya and idol making as a sustainable livelihood option for rural women in Raipur district. Traditionally used as manure and fuel, cow dung is repurposed in this initiative to create biodegradable and culturally meaningful products that align with growing environmental concerns. As part of a field study conducted through village visits in 2024–2025, data was collected from three villages namely Banarsi, Jarauda & Nakati involving 70 respondents, with focused analysis on 50 women. Using baseline surveys, skill demonstrations, and follow-up interviews, the study assessed employment status, adoption willingness, market prospects, and key challenges. Results revealed that a significant proportion of women expressed willingness to adopt the activity as a means of income generation and self-reliance.

**Keywords:** Cow dung, diyas, idols, gohar, eco-friendly products, women employment, sustainable, livelihood, Chhattisgarh, biodegradable, village, entrepreneurship, income generation

### Introduction

In the heart of rural India, where tradition and sustainability often go hand in hand, cow dung has long been regarded as more than just an agricultural waste. Its historical role as manure, fuel, and disinfectant reflects the deep-rooted wisdom of utilizing every resource with care and purpose. Today, this humble by-product is gaining renewed attention, not just for its traditional uses, but as a foundation for creating eco-friendly handicrafts that align with modern environmental values. These are a sustainable alternative to conventionally used clay or plaster-of-Paris products, which are not only expensive but also pose significant environmental hazards due to their non-biodegradable nature and chemical composition. The year-round relevance of diyas and idols in religious and festive traditions drives their steady sales. The increasing demand for such products presents a unique opportunity to promote sustainability while providing economic benefits to rural artisans, especially women, who can develop this craft as a source of livelihood.

### Key Benefits of Cow Dung-Based Diyas and Idols

#### • Income Generation and Economic Empowerment

These handicrafts provide a valuable livelihood opportunity for rural artisans, especially women. They create income avenues with low investment and promote self-employment, thereby strengthening local economies and reducing dependence on external support.

#### • Women's Empowerment and Social Inclusion

Engaging women in the production and marketing of gohar based diyas and idols fosters financial independence and skill development. This not only uplifts individual households but also contributes to bridging gender gaps in rural communities.

- **Environmental Sustainability**

Cow dung-based products offer a biodegradable and eco-friendly alternative to materials like plaster of Paris, clay, and plastic. Their use reduces environmental pollution by cutting down on non-biodegradable waste and minimizing the reliance on resource-intensive manufacturing processes.

- **Agricultural Benefits**

The ash from burnt gobar diyas can be reused as organic manure or mulch, enhancing soil fertility and promoting sustainable farming. It also functions as a natural pest repellent, supporting chemical-free agriculture and contributing to the health of rural ecosystems. Also, cow dung idols, when immersed in water, dissolve and release nutrients, further contributing to sustainable farming practices.

- **Resource Efficiency and Waste Reduction**

Cow dung, often considered farm waste, is efficiently repurposed into value-added products. This circular use of resources minimizes waste and promotes sustainable rural enterprise models based on the principles of reuse and recycling.

- **Cultural and Traditional Preservation**

The practice preserves traditional knowledge systems and rural craftsmanship by keeping age-old sustainable rituals alive. These are products both spiritually and ecologically significant.

### **Village Visit & Skill Demonstration**

The study was conducted in three villages of Raipur district—Banarsi, Jarauda, and Nakati—during 2024–2025. A total of 70 respondents were selected, with focused analysis carried out on 50 rural women. Data was collected through personal interviews using a simplified questionnaire. A baseline survey assessed women's employment status and the role of Self-Help Groups (SHGs), followed by a practical demonstration on making cow dung based diyas and idols. A follow-up survey was then conducted to gauge the participants' interest in adopting the activity as a sustainable livelihood option.

### **Demonstration on Gobar Diya and Idol Making**

A hands-on session was conducted at the *Mahila Bhawan* to train villagers in making cow dung-based diyas and idols using locally available materials. Additionally, personal home visits were carried out for on-site demonstrations and to gather feedback.



**Fig. 1: Home visit for promotion of cow dung- based diyas and idols**



### Materials Used

- 2 parts powdered dry cow dung cakes
- 1 part powdered dry clay
- ¼ part wheat flour
- ¼ part ash from traditional *chulhas*
- Water (as needed)
- Moulds

**Procedure:** All dry ingredients were mixed, water was added to form dough, and items were shaped by hand or molds. These were shade-dried for one day, followed by sun-drying for a day to harden completely.

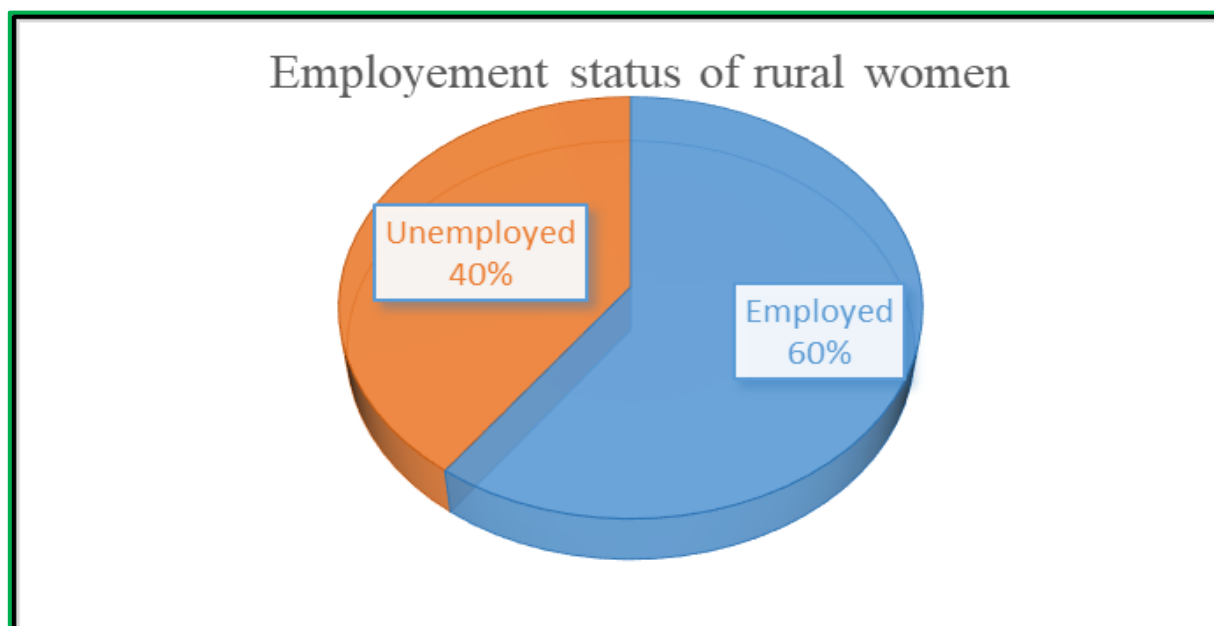


**Fig.2: Demonstration on making diyas and idols using cow dung**

### Observations & Community Response

The baseline survey revealed the following-

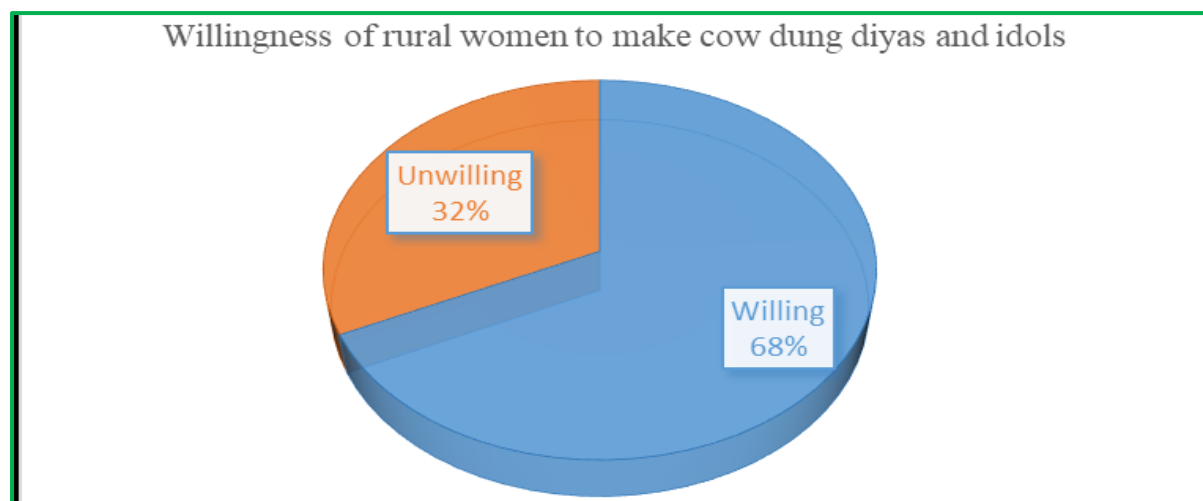
- Education attainment-
  - ✓ 27% had completed middle school education (majority)
  - ✓ 10% were graduates
- Employment status-40% of the women were employed.
- Income Level- Among the employed women, 80% earned ₹75,000 or less annually, indicating a low-income trend (48% of the total sample).
- SHGs(Self Help Groups)-The village had 28 Self-Help Groups (SHGs), but all were inactive.



**Fig.3:Graphical representation of employment status of rural women of Raipur, (C.G.) during the year 2024-25.**

### Follow-up Activities and Outcomes

The practical demonstration on diya and idol making using cow dung , conducted at the Mahila Bhawan, sparked notable interest among participants. To strengthen engagement, home visits were conducted to provide hands-on guidance and assess willingness to adopt the practice. As a result, 68% of the women expressed a willingness to try out this as an income generating source.



**Fig 4 :** Graphical representation of the respondents based on their willingness to adopt the practice of cow dung based diyas and idols making as an income generating activity in Raipur, (C.G.) during the year 2024-25

### Challenges & Limitations

Despite the enthusiasm shown by women, several challenges emerged during the study:

- **Limited Awareness and Information Dissemination** – Many women lacked prior knowledge about the economic potential of cow dung-based products and had little access to information regarding training, market demand, or government support.
- **Scarcity of Tools and Resource Infrastructure** – The lack of essential facilities such as molds, drying areas, and safe storage creates practical difficulties and limits the scope of production.
- **Prevailing Social and Cultural Constraints** – Social norms often restrict women to household roles, limiting their financial independence and participation in income-generating activities.
- **Lack of Market Access and Linkages** – Weak market connections made it difficult for women to secure regular sales and sustainable profits.
- **Low Self-Confidence and Motivation Levels** – With little entrepreneurial experience, many women doubted their ability to handle production and sales, resulting in low motivation to pursue the activity as a livelihood.
- **Time Limitations Due to Domestic Responsibilities** – Household chores, childcare, and family duties consumed much of the women's time, leaving little scope for regular engagement in diya and idol making.

To capture the scale of these problems, the following table summarizes the number of women reporting each challenge (n=50):

S.No.	Problems	Frequency	Percentage
1.	Awareness Gap	17	34%
2.	Lack of Tools/Infrastructure	10	20%
3.	Social & Cultural Constraints	35	70%
4.	Limited Market Access	30	60%
5.	Low Confidence/Motivation	25	50%
6.	Domestic Responsibilities	35	70%

## Future Scope & Recommendations

While challenges remain, gobar-based diya and idol making has strong potential to emerge as a sustainable livelihood option for rural women. The following steps can help strengthen adoption and long-term success:

- **Enhancing Awareness and Training** – Regular workshops, demonstrations, and awareness drives through SHGs( Self Help Groups), NGOs(Non-Governmental Organizations) and KVKs(Krishi Vigyan Kendras) can spread knowledge about economic opportunities and available support.
- **Improving Tools and Infrastructure** – Providing low-cost moulds, shared drying areas, and community storage facilities can make production easier and more efficient.
- **Addressing Social Barriers** – Involving families and community leaders in awareness programs can reduce resistance, while promoting shared decision-making at home encourages women's participation.
- **Strengthening Market Linkages** – Connecting producers with local fairs, eco-friendly exhibitions, temples, and bulk buyers can open steady sales channels, while rural marts and online platforms can expand reach further.
- **Building Confidence and Motivation** – Exposure visits, mentoring by successful artisans, and public recognition of women's work can inspire confidence and sustain long-term interest.
- **Encouraging Work-Life Balance** – Promoting group-based production and flexible timings, along with family support, can help women manage household duties while engaging in income-generating activities.

## Conclusion

The practice of making gobar-based diyas and idols is not just a traditional craft but also a promising avenue for sustainable livelihoods, women's empowerment, and cultural preservation. By transforming a readily available natural resource into eco-friendly products, the initiative addresses unemployment while promoting environmental responsibility. The positive response during demonstrations showed that rural women are eager to explore new opportunities when provided with the right guidance, tools, and support. With proper training, market linkages, and community participation, this activity can grow from small-scale efforts into a stable source of income, reducing dependency and strengthening rural economies. The programme raised awareness, demonstrated practical skills, and encouraged genuine interest among women, showing that even small initiatives can spark curiosity and confidence to pursue new livelihood options. With consistent follow-up and support, cow dung-based crafts have the potential to develop into a sustainable, eco-friendly livelihood that uplifts rural women and strengthens village economies.