Environmental and Economic importance of Plants Used in Halchhath Pooja, Dist Mahasamund Chhattisgarh.

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Abstract
Halchhath Pooja is a traditional agro-cultural festival widely observed in Mahasamund district of Chhattisgarh, reflecting a close relationship between nature and rural life. This study highlights the environmental and economic importance of plants used in Halchhath Pooja. Various plant species, seasonal crops, fruits, bamboo, and other plant-based materials are used during the ritual, promoting eco-friendly and biodegradable practices. The festival encourages conservation of natural resources and traditional ecological knowledge. Economically, it supports local farmers, artisans, and vendors by creating seasonal demand for agricultural produce and plant-based ritual items. Overall, Halchhath Pooja contributes to environmental sustainability and rural economic development.
Key Words - Halchhath Pooja, Ethnobotany, Ritual plants, Environmental sustainability, Rural economy, Chhattisgarh.

Introduction

Plants have played a vital role in human culture, economy, and environmental sustainability since ancient times. **Bhatt, D.C. et al., 2001.** In India, traditional festivals and rituals are closely linked with nature and agriculture, reflecting indigenous knowledge systems that promote harmony between humans and the environment. Halchhath Pooja, also known as Hal Shashthi, is one such important agro-cultural festival celebrated mainly in rural areas of Chhattisgarh, including Mahasamund district. The festival is primarily observed by women and is associated with fertility, child welfare, and agricultural prosperity.Halchhath Pooja is deeply rooted in agrarian traditions and is performed during the post-monsoon period, when agricultural activities are at a significant stage. **Borthakur S.K..et al.,** 1999. The ritual emphasizes the worship of agricultural tools, soil, crops, and various plants and plant-based products, highlighting their importance in sustaining rural livelihoods. Locally available plant resources such as cereals, pulses, seasonal fruits, bamboo, banana leaves, and other vegetation are essential components of the worship process. **Sane Hema and Ghate Vinaya 2006.** The exclusive use of natural and biodegradable materials makes the festival environmentally significant.From an environmental perspective, the use of plants in Halchhath Pooja encourages conservation of biodiversity, sustainable harvesting, and eco-friendly practices by avoiding plastic or synthetic materials. It also promotes respect for nature, soil fertility, and water resources, which are crucial for agricultural sustainability. Economically, the festival generates seasonal demand for agricultural produce and traditional plant-based items, providing income opportunities to local farmers, artisans, bamboo workers, and small vendors. Thus, Halchhath Pooja serves as a link between cultural traditions, environmental awareness, and rural economy. **Singh T.et al.,2004.** he present study aims to explore the environmental and economic importance of plants used in Halchhath Pooja in Mahasamund district, emphasizing the role of traditional practices in promoting sustainable development and preserving indigenous cultural heritage.

Methodology-

The present study on the fasting practices and rituals associated with Hal Chhath (Hal Shashthi) in Mahasamund district, Chhattisgarh, was conducted using a descriptive and ethnobotanical approach. **Gill, L.S. et al.,** 1997. The methodology focused on documenting traditional knowledge related to ritual practices, plant usage, and cultural beliefs associated with the festival. Primary data were collected through field surveys, participant observation, and informal interviews with elderly women, ritual performers, and local households who traditionally observe the Hal Chhath fast. Special emphasis was given to understanding the significance of plant species and food restrictions followed during the ritual.

Ghate, Vinaya S. 1998. Observations were made on the day of Hal Chhath to record fasting rules, preparation of ritual space, and worship procedures. It was noted that women brush their teeth using Mahua (Madhuca longifolia) twigs and clean the worship area with cow dung, reflecting traditional hygienic and eco-friendly practices. The preparation of "Jal Kund" or "Jal Hari" in a corner of the house was carefully documented. The ritual burial of branches of Ber, Palash, Fig, Kush, and Kans (Saccharum spontaneum) grass was recorded as an important symbolic practice linked to fertility and nature worship. (Fig.-01 to04)

Jain, S.K. 2006.,Upadhye.etal., 2008. Dietary restrictions were also documented, including the prohibition of ploughed or sown food, consumption of only pashar rice, and avoidance of cow's milk. The offering of roasted seven cereals—wheat, gram, rice, maize, sorghum, millet, and pigeon pea—was noted. Information on worshipped deities such as Lord Ganesha, Lord Shiva with Parvati and Halchhath Maa, Lord Balram, and Lord Krishna was collected. Plant-based ritual items served in dona made from Butea monosperma and the consumption of six types of bhaji were recorded. Finally, the chanting of the concluding mantra and its meaning were documented to understand the spiritual significance of the ritual.(table -01)

Plants used in Halchhath Pooja are: -

Table -01

S. No.	Local/Common Name	Botanical Name	Family	Economic Importance	Environmental Importance
1	Amaranthus	*Amaranthus viridis*	Amaranthaceae	Leafy vegetable, nutrition, fodder	Soil fertility, ground cover
2	Anar	*Punica granatum*	Lythraceae	Fruit, juice, medicine	Pollinator support, agroforestry
3	Bajra	*Hordeum vulgare*	Poaceae	Food grain, fodder	Drought tolerance, soil conservation
4	Bans	*Dendrocalamus strictus*	Poaceae	Construction, crafts	Carbon sequestration, erosion control
5	Bathua	*Chenopodium album*	Amaranthaceae	Leafy vegetable	Improves soil organic matter
6	Ber	*Zizyphus jujuba*	Rhamnaceae	Fruit, medicine	Shelter for birds, arid land stability
7	Bhaji	*Oxalis* sp.	Oxalidaceae	Edible leaves	Ground cover, soil protection
8	Bhaji	*Portulaca oleracea*	Portulacaceae	Vegetable, medicinal	Prevents soil erosion
9	Chameli	*Jasminum officinale*	Oleaceae	Perfume, ornamental	Pollinator attraction
10	Chana	*Cicer arietinum*	Fabaceae	Pulse crop, protein source	Nitrogen fixation
11	Chandan	*Santalum album*	Santalaceae	Perfume, medicine	Biodiversity conservation
12	Chandni	*Tabernaemontana divaricata*	Apocynaceae	Ornamental, medicinal	Urban greenery
13	Charota	*Cassia tora*	Fabaceae	Medicinal, soil improver	Nitrogen fixation
14	Coconut	*Cocos nucifera*	Arecaceae	Food, oil, fibre	Coastal protection
15	Corn	*Zea mays*	Poaceae	Food, fodder, industry	Crop diversity
16	Cotton	*Gossypium herbaceum*	Malvaceae	Fibre, oil	Supports agro-economy
17	Cucumber	*Cucumis sativus*	Cucurbitaceae	Vegetable	Soil cover

S. No.	Local/Common Name	Botanical Name	Family	Economic Importance	Environmental Importance
18	Gehu	*Triticum aestivum*	Poaceae	Staple food crop	Food security
19	Gooler	*Ficus glomerata*	Moraceae	Fruit, fodder	Keystone species
20	Gudhal	*Hibiscus rosa-sinensis*	Malvaceae	Ornamental, medicine	Pollinator support
21	Haldi	*Curcuma longa*	Zingiberaceae	Spice, medicine	Soil microbial health
22	Jou	*Avena sativa*	Poaceae	Food, fodder	Soil improvement
23	Kaddu	*Benincasa hispida*	Cucurbitaceae	Vegetable	Organic farming support
24	Kaner	*Nerium indicum*	Apocynaceae	Ornamental	Air pollution tolerance
25	Kans	*Saccharum spontaneum*	Poaceae	Thatching	Riverbank stabilization
26	Kapoor	*Hedychium spicatum*	Zingiberaceae	Medicine, fragrance	Soil moisture retention
27	Kujariya	*Triticum aestivum*	Poaceae	Food grain	Agro-ecosystem stability
28	Kush	*Desmostachya bipinnata*	Poaceae	Ritual use	Soil binding
29	Lai	*Oryza sativa*	Poaceae	Staple food	Wetland ecosystem
30	Lal Bhaji	*Amaranthus tricolor*	Amaranthaceae	Vegetable	Nutrient recycling
31	Mahua	*Madhuca latifolia*	Sapotaceae	Liquor, oil, food	Forest livelihood support
32	Millet	*Pennisetum glaucum*	Poaceae	Nutritious grain	Climate-resilient crop
33	Mirch	*Capsicum annuum*	Solanaceae	Spice, vegetable	Crop diversity
34	Moong	*Phaseolus mungo*	Fabaceae	Pulse	Nitrogen fixation
35	Mosambi	*Citrus sinensis*	Rutaceae	Fruit, juice	Orchard biodiversity
36	Munaga	*Moringa oleifera*	Moringaceae	Nutrition, medicine	Drought resistance
37	Palash	*Butea monosperma*	Fabaceae	Dye, medicine	Forest regeneration
38	Pigeon Pea	*Cajanus cajan*	Fabaceae	Pulse	Soil fertility
39	Rice (Pashar)	*Oryza nivara*	Poaceae	Wild rice germplasm	Genetic diversity
40	Supari	*Areca catechu*	Arecaceae	Chewing nut	Plantation ecology
41	Sorghum	*Sorghum vulgare*	Poaceae	Food, fodder	Drought-tolerant crop

Fig.01-Jal Kund

Fif.02Plant Materials

Fig.03 Six type of Bhaji


Fig.04 Pooja Sthal

Result and Discussion –

1. Environmental Importance

Use of Natural and Biodegradable Materials- Ritual items like fruits, bamboo baskets, clay pots, and plant-derived materials are used instead of plastics or synthetic products, reducing environmental pollution and waste. Respect for Nature Halchhath, like the related Chhath tradition, includes worship of natural elements — Surya (Sun), Jal (Water), Anaj (Crops), and plants. This reflects respect for natural **cycles and ecosystems**-Plants and Trees as Ritual Supports Materials such as bamboo, banana leaves, and other plant parts are used for carrying offerings and preparing altars. Plants hold symbolic reverence for life, growth, and nature's bounty. Using plant materials encourages minimal environmental impact compared to non-biodegradable alternatives.

Promotion of Plant Biodiversity- Many offerings include seasonal fruits and grains that highlight the variety of plants cultivated in local agro-ecosystems (like sugarcane, cereals, fruits). This traditional practice promotes and values biodiversity and seasonal produce.

2. Economic Importance

Boost to Local Agriculture-The demand for crops, fruits, and plant parts for Halchhath materials supports local farmers and cultivators. Crops like rice, grains, seasonal fruits, and sugarcane see increased local sales each festival season.

Income for Local Artisans & Vendors-Items such as bamboo baskets, clay wares, and traditional plant-based products provide jobs and income for local artisans, potters, and vendors. These are often produced by cottage industries, helping sustain livelihoods in rural areas.

Market for Seasonal Produce- Festivals trigger seasonal markets for fruits and plant products. The sale of fresh produce provides farmers with higher returns during festival periods, strengthening rural economic cycles.

Preservation of Traditional Economic Activities-Traditional crafts (e.g., making baskets, soop/doura) and plant-based ritual products continue because of such festivals, preserving skills that might otherwise decline.

Conclusion-

The plants and plant-based materials used in Halchhath Pooja in Mahasamund and wider Chhattisgarh have deep environmental and economic benefits:

Environmental-They support eco-friendly worship by using biodegradable, locally sourced materials.

The rituals foster respect for water, sun, crops, and nature, reinforcing sustainable and nature-centric values.Using plant parts instead of plastics reduces waste and encourages ecological mindfulness.

Economic-Festival demands create seasonal economic opportunities for farmers, artisans, and vendors.

It helps preserve traditional crafts and supports livelihoods linked to plant-based products.Local agricultural produce like fruits and grains gains market growth during festival seasons.

In essence, Halchhath Pooja is not only a culturally rich festival but also one that integrates environmental stewardship and economic sustenance through the use of plant-based materials that are both sustainable and economically meaningful to the local community.

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