

**GNAMAMI
GANGE**



ETERNAL WATERS:R2R

Visual journey from Religion to Resource

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION







ETERNAL WATERS:R2R

.....

Visual journey from Religion to Resource

INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

Eternal Waters:R2R

Visual Journey from Religion to Resource

© - Indian Institute of Public Administration

2023

Authors - Dr. Shyamli Singh, Prof. Vinod K. Sharma

Co Authors - Kanishka Sharma, Ratik Vohra

Publisher - Indian Institute of Public Administration,

New Delhi - 110002

All rights reserved. No part of this publication may be reproduced, or utilized in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage or retrieval system without permission in writing from the publisher.

For Citation: Singh, Sharma, Sharma, & Vohra. (2023). Eternal Waters: R2R

Visual Journey from Religion to Resource.

Indian Institute of Public Administration.

Print - Print Creations, A6/1, Naraina Industrial Area, Phase -1, New Delhi -

110028

"Ganga is not just a river to us. It is a witness to India's glorious history. With a new approach, we began the cleanliness drive of *Namami Gange*.

People must understand the Clean Ganga programme as an economic activity also. The Gangetic plains account for 40% of our population. They have over one hundred towns and thousands of villages. Improving Ganga will develop new infrastructure.

It will promote tourism. It will create a modern economy helping millions of people. In addition, it preserves the environment!

Shri Narendra Modi

Hon'ble PM of India





The United Nations (UN) has recognized *Namami Gange* initiative to rejuvenate India's sacred River Ganga as one of the top 10 World Restoration Flagships to revive the natural world.

"The recognition of *Namami Gange* as one of the top 10 ecosystem restoration initiatives in the world bears testimony to the concerted efforts being made by the National Mission for Clean Ganga, Government of India for the restoration of the riverine ecosystem. I hope that our endeavours provide a roadmap for other similar interventions across the globe."

Shri G. Asok Kumar

Director General, NMCG



Shri S. N. Tripathi
Director General, IIPA

Despite grappling with the unprecedented black swan event, the COVID-19 pandemic, my IIPA team achieved tremendous success with our project titled "Blended Capacity Building Programme for Stakeholders of River Ganga". This ground breaking initiative was conducted in blended mode, a first of its kind focused at youth of the country, and was sponsored by the 'National Mission for Clean Ganga'(NMCG) under the Ministry of Jal Shakti, DoWR, RD&GR, Government of India.

Today, we stand together as stewards of our environment, united by a common cause – the preservation and rejuvenation of our precious rivers. These rivers, the lifeblood of our civilization, have sustained us for generations, nurturing our lands, cultures, and societies. As we stand on the banks of these flowing lifelines, it is our duty, as responsible stakeholders, to pledge our commitment to keeping our rivers clean and vibrant.

In this endeavor, we find inspiration and commendable leadership in the form of the *Namami Gange* Mission. This visionary initiative, launched by the Government of India, embodies a comprehensive and holistic approach to river conservation. The project's multifaceted strategies not only addresses the physical aspects of pollution but also encompasses the spiritual and cultural significance of our rivers. It is heartening to witness the meticulous planning and unwavering dedication that have gone into making the *Namami Gange* mission a beacon of hope for our water bodies.

The *Namami Gange* mission's approach is truly commendable for several reasons. Firstly, it recognizes that the cleaning of our rivers is not merely a technical challenge, but a collective responsibility that requires active participation from all stakeholders. It brings together governments, local communities, non-governmental organizations, and industries in a united front to work towards a common goal – the restoration of the Ganga and its tributaries.

Secondly, the project acknowledges the intricate interplay between culture, spirituality, and ecology. Our rivers hold a deep-seated place in our hearts and rituals, and the *Namami Gange* Mission seeks to harness this emotional connection to inspire change. By integrating traditional knowledge, yoga, and cultural awareness programs, the project ensures that the rejuvenation of our rivers is woven into the fabric of our daily lives.

Furthermore, the *Namami Gange* Mission, is a testament to the power of innovation and collaboration. The implementation of cutting-edge technologies for waste management, riverbank development, and treatment of industrial effluents showcases India's capacity to embrace modern solutions while staying rooted in its heritage.

As stakeholders of our rivers, we are entrusted with the responsibility of safeguarding these resources for future generations. Let us pledge to uphold the principles of the *Namami Gange* Mission, not just for the Ganga but for all our rivers. Let us commit to reduce pollution at its source, adopt sustainable practices, and raise awareness about the importance of river conservation.



Acknowledgement



We are delighted to announce the successful completion of the phase I of the project titled "Blended Capacity Building Programme for Stakeholders of River Ganga" sponsored by National Mission for Clean Ganga (NMCG) under the Department of Water Resources, River Development, and Ganga Rejuvenation (DoWR, RD & GR), Ministry of Jal Shakti, Government of India, owes its success to the collaborative efforts of many individuals. We extend our sincerest gratitude to NMCG for entrusting us with this significant and meaningful project. Their everyday support and guidance throughout the year have been instrumental in our accomplishments. This initiative, with its multifaceted approach, has not only enriched our understanding of river conservation but has also significantly impacted the livelihood aspect of the communities residing along the Ganga and its tributaries.

We extend our sincerest gratitude to the visionary minds behind the *Namami Gange* Mission for recognizing the intricate link between river health and sustainable livelihoods. By supporting this capacity building program, they have showcased their commitment to holistic development and their understanding of the fact that the well-being of rivers is intricately intertwined with the well-being of the communities that depend on them.

We would like to express our heartfelt gratitude to Shri G. Asok Kumar (IAS), Director General, NMCG, for his unwavering support and active involvement in the capacity building programmes. Our sincere appreciation also goes to Shri Jagmohan Gupta, Advisor, NMCG and Shri Brijesh Sikka, Senior Consultant, NMCG. Their guidance and commitment has been invaluable to the success of our endeavours. Their support and technical expertise have played a vital role in the seamless implementation of the project. We would also like to extend our gratitude to *Namami Gange* staff for their timely assistance and provision of essential data. Their contributions have been instrumental in ensuring the smooth progress of our work.

We would like to express our profound gratitude to Shri S.N. Tripathi (IAS R), Director General, IIPA, for his invaluable support and guidance as a member of the Project Advisory Committee. His expertise and insights have played a crucial role in steering the activities of the project. We thank Imran Ahmed and his photography team for their dedication towards field and bring to table amazing shots across Ganga. We would also like to extend our appreciation to the IIPA research team including Ms. Kanishka Sharma, Mr. Ratik Vohra, Ms. Anugya Singh, Ms. Monika Saini and Ms. Himanshi Negi for their unwavering support and assistance in successfully completing the deliverables.

Through a combination of workshops, training sessions, and hands-on experiences, this program has equipped us with a diverse skill set that directly impacts our livelihood opportunities. The insights gained from expert interactions, field visits, and collaborative learning have not only broadened our perspectives but have also empowered us to explore innovative ways of harmonizing our economic activities with the imperative of river conservation.

(Vinod K. Sharma)

(Shyamli Singh)



Prof. Vinod K. Sharma
Faculty



Dr. Shyamli Singh
Faculty



Ar. Kanishka Sharma
Research Officer



Ms. Anugya Singh
Research Assistant



Ms. Monika Saini
Research Assistant



Ms. Himanshi Negi
Research Assistant



Mr. Ratik Vohra
Web Developer

Content

1. GENERATING LIVELIHOOD: MOKSHA DAYANI
2. MEDICINAL LIVELIHOOD: TAPPING INTO NATURE'S PHARMACY
3. BOATMEN: ROWING FOR LIVELIHOOD
4. BENARASI SAREE: WEAVING DREAMS
5. SIKKI PRODUCTS: MAGICAL GOLDEN TRESSES
6. CARPET MAKING INDUSTRY: CRAFTING DREAMS
7. BRASS UTENSIL INDUSTRY: ART IN METAL
8. NAINI SEWAGE TREATMENT PLANT & ROSE CULTIVATION: A STEP TOWARDS CIRCULARITY
9. THE FIN-TASTIC LIFE GENERATING LIVELIHOOD: CASTING AWAY BLUES
10. FROM MADHUBANI TO TIKLI: ENGAGING IN WORKFORCE GENERATING LIVELIHOOD
11. ATTAR MAKING: FRAGRANCE SETS YOU FREE
12. RIVER RAFTING AS LIVELIHOOD: ADVENTUROUS WATERS ROAR
13. HANDICRAFTS AND ARTISANAL WORK: RIVER'S CREATIVE FLAIR
14. KUMARTULI: KOLKATA'S ART ENCLAVE
15. AGRO BASED INDUSTRY: HARVESTING INNOVATION
16. PACKAGED DRINKING WATER: EXLIXIR FOR LIFE
17. SUSTAINABLE SANDMINING: A VITAL LIVELIHOOD







Gushing forth from Gangotri's heart, the Bhagirathi River carries tales of ancient whispers and mountain dreams

Ganga, the mighty river rising in the Himalayas is lifeline to millions. It has various references to it; for some it's *Moksha Dayani* (Salvation provider) for others, natural sources of mineral and nutrients and a living legend. It supports the existence human and wildlife alike despite the acute anthropogenic threats. National Mission for Clean Ganga (NMCG) under the *Namami Gange* Mission of Ministry of Jal Shakti, Government of India (GoI), is assiduously working towards an *aviral* and *nirmal* Ganga.

Following this, the Indian Institute of Public Administration (IIPA), has been given the responsibility of generating and disseminating awareness by involving multiple stakeholders. The project is being carried out under the leadership of Prof. V.K. Sharma and Dr. Shyamli Singh. This mighty river has a role play in each state that it traverses through; at some places it is the source of irrigation; at other places it is a source of electricity; in few places Ganga becomes the sin purifier; whereas at some other places it is a playful river that facilitates many water sports.

River Ganga with its tributaries provides livelihood and support to 450 million people in India. Never in the history of mankind had a river of medium length such colossal importance ranging from social, cultural, economic and even spiritual motives. From its beginning at *Gangotri* to its culmination at *Gangasagar*, in the entire stretch of 2,510 km, it provides means for livelihood of diverse nature and forms to groups of people.



Where Ganga begins and Earth connects: Capturing the mystique of Suryakund, Gangotri Dham the radiant point of the mighty river

"Eternal Waters: R2R - A Visual Journey from Religion to Resource" masterfully bridges the gap between the ethereal and the tangible, inviting readers to recognize the profound connection between our spiritual inclinations and the necessity of safeguarding these invaluable resources. As the pages turn, the book paints a vivid picture of how our collective journey from religion to resource is an awe-inspiring testament to our capacity to honor the divine in both the spiritual and the material aspects of life.

The picture book delves into several livelihood aspects of Ganga. The pages unfolds with sacred beginnings, takes you to nature's pharmacy further rows down to *Mallah* folk. The story becomes further more beautiful with opulent weaves of Benaras. Further the reader dives into the artisan world thru the lens of golden grass - *Sikki*, further cruising through the alleys of Mirzapur of brass making and carpet making, taking a splurge into rose cultivation, nurtured with the treated water of Naini sewage treatment plant thus establishing itself as a beacon of circularity. The readers will then be trapped in the awe, thru the nets of fisherfolk and will be bathed in the fragrances of legendary attar. The book would then further unfold into the very intricate *Tikli* and *Madhubani* art. Still mesmerised through all the inspiring economic initiatives the picture book leaps into the most prominent sector i.e, agriculture and talks about agro-based industry. Springing in action from agro industries to *Kumartuli*, a marvel to wonder. It next talks about another major bussiness sector that is packaged drinking water and sand mining. Moving back again, the adventure bones tingled for one more time in the form of livelihood through adventure tourism. Beneath the surface of this captivating narrative lies the profound realization that the veneration of rivers in various religious and cultural contexts has seamlessly transitioned into recognizing these water bodies as essential resources. The threads of spirituality and practicality are intricately woven, as the picture book delves into how our reverence for rivers guides us towards the responsible management of these precious lifelines.

The picture book attempts to narrate the resource dependency and the religious value of the mighty river. People utilize its waters for various domestic chores like washing, bathing, navigation, transportation, etc. There is a unique connection between community and the river, life is unimaginable without the mystical Ganga.

1 GENERATING LIVELIHOOD :

MOKSHA DAYANI



The Ganga River, also known as the Ganges, holds immense spiritual significance in the Indian subcontinent. It is not just a physical entity but a divine lifeline that sustains the spiritual livelihood of millions of people. The river is considered sacred in Hinduism and is revered as the Goddess Ganga, believed to have descended from the heavens to cleanse the sins of humanity. The spiritual livelihood of the Ganga River is deeply rooted in the religious beliefs and practices of the people living along its banks. Pilgrims from all corners of India, and abroad, embark on journey to bathe in the holy water and seek blessings. Varanasi, one of the oldest inhabited cities in the world, stands on the banks of the Ganges and is regarded as the most sacred destination for Hindus. The ghats, or river front steps, are the focal points of spiritual activities, where rituals, prayers, and cremations take place daily.

The Ganga is not just a physical river; it symbolizes purity, divinity, and the cycle of life and death. It is believed that taking a dip in its water can cleanse one's sins and facilitate salvation. The ashes of the deceased are often immersed in the Ganges, believed to grant *Moksh*, liberation from the cycle of reincarnation. Throughout history, the river has inspired poets, philosophers, and saints, leading to the creation of various hymns, songs, and scriptures. The spiritual connection between the river and the people has fostered a sense of unity and cultural identity.

However, earning the livelihood by performing religious practices faces significant challenges in modern times. Rapid industrialization, urbanization, and increasing pollution levels have taken a toll on the river's purity. Efforts are being made to clean and rejuvenate the Ganges through initiatives like the 'Namami Gange', a mission, launched by the National Mission for Clean Ganga, Department of Water Resources, River Development, and Ganga Rejuvenation (DoWR, RD & GR), Ministry of *Jal Shakti*, Government of India. The Ganga River's spiritual significance extends beyond just Hinduism. It holds cultural and religious importance for other communities like Buddhists and Jains. The river is an integral part of the collective consciousness of the Indians and serves as a reminder of their spiritual heritage. It won't be an exaggeration to quote the livelihood generation through the mystic spiritualism of the Ganga River as an essential aspect of India's cultural and religious fabric. It represents not only a physical water body but also a profound connection between the divine and the mortal. Preserving its sanctity and purity is crucial to maintaining the spiritual essence that has been cherished for centuries. Only by protecting the Ganges river, the spiritual livelihood could continue to enrich the lives and souls of millions.



Serving devotion: Engage into a world of reverence at the Bengali shop, where offerings meet heartfelt traditions, Bengali tola, Varanasi



Walking in the Divine's Shade: A soul carrying not just a Palki, but a canopy of faith and devotion, Gangotri Dham



Gilded by Faith, carrying the Divine: Witness the embodiment of devotion, as a man becomes a moving shrine adorned in gold, bearing the divine entourage upon his shoulders, Ganga Sagar Mela



Harmonizing Souls, Illuminating Spirits: Three priests weave melodious prayers along the sacred Ganga Ghat, as reverence at Dashashwamedh Ghat, Varanasi



Sacred Treasures amidst the Bustle: A busy street where the mundane and the divine intertwine, offering a glimpse of spirituality in every corner, Haridwar



Whispers of Wisdom: An elderly couple's humble stall, offering timeless scriptures and stories, as the sacred river carries the essence of faith, Triveni Sangam, Prayagraj



Saffron Serenity, Divine Wares: Amidst the saffron hues, a vendor offers a collection of spiritual treasures, weaving threads of devotion and tradition, Triveni Sangam, Prayagraj



Blossoms of Devotion: Along the Banks of Ganga, a humble vendor's flowers become vessels of reverence, adorning the river's beauty with heartfelt offerings, Triveni Sangam, Prayagraj



Sacred Rite: In the hands of a devoted barber, the final mundan becomes an offering of love and respect, a farewell adorned with reverence, Varanasi

2 MEDICINAL LIVELIHOOD

Tapping into Nature's Pharmacy



Beyond its spiritual significance, the Ganga River, also known as the Ganges, plays a vital role in the medicinal livelihood of the people residing along its banks. For centuries, the river has been revered for its healing properties, and its water, sediment, and the flora found in its vicinity have been used in traditional medicine systems. The Ganga's medicinal livelihood can be attributed to its unique composition. The river originates from the *Gangotri* Glacier in the Himalayas, where it accumulates essential minerals and nutrients. As it flows through the Indian plains, it collects various herbs, roots, and medicinal plants, enriching its waters with therapeutic properties.

One of the most popular medicinal practices associated with the Ganga River is the therapeutic bathing or "*Ganga Snan*." It is believed that the river's water possesses natural healing qualities that can alleviate skin diseases, joint pain, and other ailments. Many people, especially during religious festivals, immerse themselves in the holy waters, seeking relief and rejuvenation. Additionally, the sediment of the Ganges, known as "*Ganga clay*" is believed to have potent healing properties. It is used as a natural remedy for skin disorders, and some traditional Ayurvedic practitioners incorporate it into medicinal pastes and ointments.

Moreover, the Ganga River basin is rich in diverse flora, and numerous medicinal plants grow along its banks. These plants have been utilized for centuries in traditional medicine systems like *Ayurveda* and *Unani*. The herbs found in this region are renowned for their therapeutic effects, such as promoting digestion, treating respiratory issues, and supporting overall well-being. Despite the river's historical medicinal importance, the Ganga's medicinal livelihood faces challenges due to pollution and environmental degradation. Industrial waste, untreated sewage, and agricultural runoff have contaminated its waters, impacting the quality of its medicinal resources. As a result, the traditional medicinal livelihood associated with the Ganges is at risk, and efforts to restore the river's purity are crucial for preserving its medicinal significance. The livelihood generation through the medicinal avenues has been an integral part of traditional healing practices for centuries. The river's water, sediment, and surrounding plant life have provided therapeutic benefits to countless individuals seeking natural remedies for various ailments. However, the increasing pollution threatens the medicinal resources of the Ganges. To sustain and promote its medicinal significance, it is essential to protect and restore the purity of the Ganga River, ensuring that the mystic healing properties continue to benefit future generations.



Nurturing Nature's Elegance: Amidst the breathtaking expanse of the Valley of Flowers, delicate lavender blooms in harmony, a testament to the beauty of cultivation and the grace of the land, Valley of Flowers, Uttarakhand



Lavender Dreams in Full Bloom: The Valley of Flowers transforms into a fragrant canvas as vibrant lavender field paints a picture of nature's exquisite artistry, Valley of Flowers, Uttarakhand



Nature's Intimate Dance: A pollinator bee gracefully explores the intricate world of a blooming lavender stem, an enchanting partnership in the heart of nature's embrace, Valley of Flowers, Uttarakhand



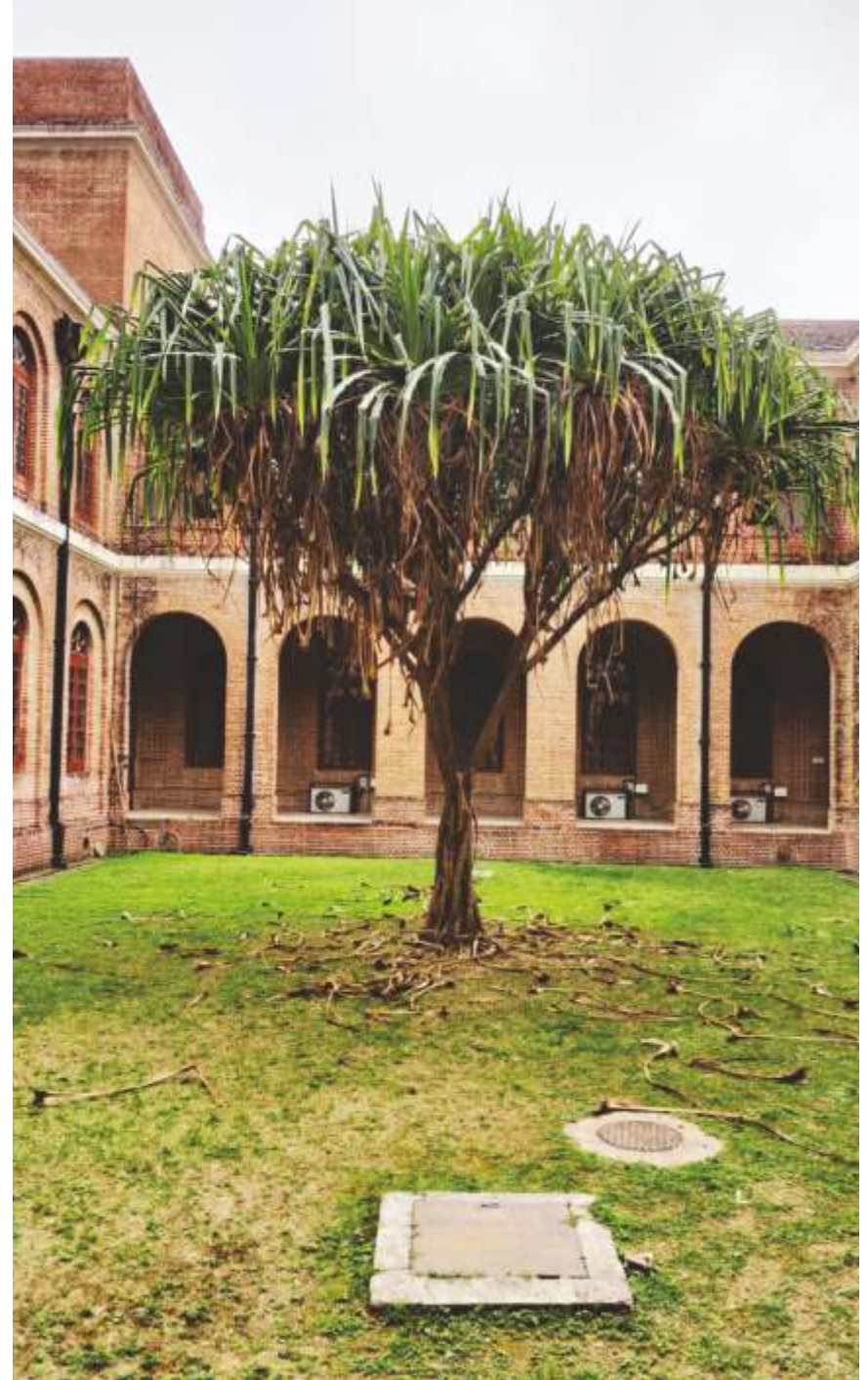
Unveiling Nature's Pharmacy: The wild carrot, an aromatic herb, thrives in the pristine beauty of Nanda Devi National Park, offering its medicinal secrets to those who seek the wisdom of the mountains, Valley of Flowers, Uttarakhand



Nature's Healing Touch: Embracing the potential herbal benefits of Geranium wallichianum, a Himalayan treasure that offers a blend of traditional wisdom and modern wellness, Valley of Flowers, Uttarakhand



Himalayan Elegance Unveiled: Behold the Large Bellflower (Campanula Latifolia), a perennial masterpiece gracing the Himalayan wilderness from Kashmir to Nepal. Adorning altitudes of 2100-3600 m, its nodding, deep blue-purple bells add a touch of royal allure to shrubberies and forests, Valley of Flowers, Uttarakhand



Guardian of Healing Secrets: The Kevda Tree stands tall, its leaves and essence holding the wisdom of centuries, a revered medicinal ally in nature's pharmacy, Uttarakhand



Nurtured by Ganga's Blessing: An Amla tree, heavy with the bounty of nature's goodness, stands as a testament to the sacred vitality flowing from the Ganga river © ePhotocorp



Ganga's Healing Embrace: A lush plantation of holy Tulsi thrives, where nature's remedy and spiritual purity converge in a symphony of wellness © Arun MR

3 BOATMEN:

Rowing for livelihood



The Ganga River, often referred to as the Ganges, not only holds immense spiritual and medicinal significance but also plays a vital role in the livelihood of the boatmen also known as 'Mallah' who navigate its waters. For generations, boatmen communities have thrived along the banks of the Ganges, relying on the river for their sustenance and economic well-being. Boatmen have been an integral part of the Ganga's culture and heritage, serving as guides, transporters, and facilitators for both pilgrims and tourists. Their traditional wooden boats either known as "shikaras" or "rowboats," provide a means of crossing the river and exploring the various facets of River. Pilgrims visiting cities like Varanasi and Haridwar often hire these boats to perform rituals, witness the mesmerizing Ganga Aarti, a ceremonial offering to the river and immerse themselves in the spiritual ambiance.

Beyond the religious activities, boatmen also offer tourists a chance to experience the cultural richness and natural beauty of the Ganga River. They organize boat rides that showcase picturesque sunrises and sunsets along the riverbanks, providing a glimpse into the traditional lifestyle of the local communities. The livelihood of Ganga River boatmen, however, faces both challenges and opportunities. Rapid urbanization, pollution, and the advent of modern transportation have impacted their traditional way of life. Additionally, during the monsoon season, when the river swells and currents become treacherous, boatmen face risks to their safety and livelihoods. Despite these challenges, efforts have been made to uplift the lives of Ganga River boatmen. Tourism initiatives and government programs aims to promote sustainable tourism along the river, ensuring that boatmen can continue their livelihoods while preserving the pristine environment. Moreover, some boatmen have embraced new technologies and marketing strategies to attract tourists and diversify their services, such as offering photography tours and cultural workshops which add to their kitty. The boatmen of the Ganga River hold a unique position as the custodians of its cultural and spiritual heritage. Their intimate knowledge of the river, its stories, and its significance make them invaluable ambassadors for those seeking to explore the essence of the Ganges. Preserving their livelihoods and traditional skills is not only essential for their economic well-being but also for safeguarding the river's rich cultural tapestry.

The generation of livelihood through the boatmen is deeply intertwined with the cultural, religious, and natural aspects of the Ganges. They play a pivotal role in connecting people to the river's spiritual and historical significance while providing essential services for pilgrims and tourists. To sustain their livelihoods and preserve the cultural heritage they embody, it is vital to address the challenges they face and promote responsible tourism practices that benefit both the boatmen and the sacred River Ganga.



Convergence of Souls and Streams: A mesmerizing sight as lines of boats gracefully navigate the sacred confluence at Triveni Sangam, where waters merge and stories intertwine, Prayagraj



Sacred Tourism: A ferry boat becomes a vessel of devotion, carrying eager masses across the timeless Ganga River, where spirituality flows with every ripple, Varanasi



Guardians of Purity: A boat dedicated to collecting waste from the ghats, embodying a commitment to cleanse the banks of Ganga, ensuring its pristine waters remain untainted, Varanasi



Sentinels of Safety: On the occasion of Chhath Puja, vigilant life guards stand ready on their watchful boat, ensuring devotees' reverence for the Ganga is coupled with utmost security, College Ghat, Patna



Navigating Livelihoods: The Chandannagar Ferry, Lifeline for Kolkata's Daily Wage Heroes



Generations embracing Ganga's Spirit: A playful duo takes charge of the boat's oars, while their father, a boatman, tends to his fishing line in the backdrop of the majestic Ganga, where play and livelihood harmonizes, Varanasi



Vasudev Kutumbkam: As one boatman guides the vessel with practiced hands, another extends a gesture of kindness, feeding the fishes of the Ganga, embodying a tranquil rhythm of life along the river's flow, Varanasi



Sailing Rainbows of Devotion: A vibrant array of boats bedecked with colorful flags awaits devotees at Triveni Sangam, where faith converges a kaleidoscope of devotion, Prayagraj



Glistening Journey: A ferry boat becomes a beacon of hope and connection as it carries devotees across the shimmering waters of the Ganga, illuminating their path with faith, Prayagraj

4 BENARASI SAREE:

Weaving Dreams



The Benarasi Saree Weaving Industry is a centuries-old tradition that has flourished in the city of Varanasi, also known as Benaras, in Uttar Pradesh, India. Renowned for its exquisite craftsmanship and intricate designs, the Benarasi saree holds a special place in Indian culture and is celebrated for its timeless elegance. The origins of the Benarasi saree can be traced back to ancient times when skilled weavers from different parts of India settled in Varanasi and began weaving the fabrics that exude opulence. The art of weaving Benarasi sarees has been passed down through generations, and today it remains a significant source of livelihood for thousands of weavers and their families.

The unique feature of Benarasi sarees lies in the use of pure silk and gold or silver zari threads, which add a touch of opulence to the fabric. These sarees are characterized by their rich, intricate patterns, including brocades, paisleys, floral motifs, and geometric designs. The weaving process involves the use of traditional handlooms, and the craftsmanship often involves months of painstaking work to create a single piece. Needless to say that each piece is a Master Piece! The Benarasi saree weaving industry is deeply integrated into the cultural and economic fabric of Varanasi. It has not only preserved a traditional craft but also contributed significantly to the city's economy. Many weavers work independently or in small family-run workshops, while others are associated with larger weaving cooperatives and enterprises. Over the time, the industry has faced challenges, particularly with the rise of power looms and machine-made fabrics, which can produce sarees at a faster pace and at a lower cost. However, despite these challenges, the allure of authentic handwoven Benarasi sarees remains unmatched, and efforts are being made to promote and sustain this art form.

The Benarasi saree weaving industry has received recognition and support from the government and various organizations. Geographical Indication (GI) tags have been provided to ensure the authenticity of genuine Benarasi sarees. Additionally, exhibitions, fashion shows, and marketing initiatives have been organized to promote these sarees both nationally and internationally. The Benarasi Saree Weaving Industry is a symbol of India's rich cultural heritage and craftsmanship. The art of weaving Benarasi sarees has been nurtured and preserved over centuries, with weavers passing on their skills from one generation to the next. While facing modern challenges, the industry continues to thrive due to its timeless appeal and the efforts to sustain and promote this traditional art form. As long as there are patrons who appreciate the beauty and craftsmanship of Benarasi sarees, this ancient tradition will continue to flourish, enriching the lives of both weavers and saree enthusiasts alike.



Timeless Elegance: Strolling Through Varanasi's Heritage Street, Where Benarasi Sarees Weave Stories of Tradition and Craftsmanship



Stitching Dreams on Paper: The intricate pattern of a Benarasi saree comes to life on graph paper, where each square becomes a canvas for the artistry that will soon grace silk threads and weave tales of elegance, Varanasi



Threads of Tradition: A single Benarasi saree, a symphony of 5600 threads woven into a canvas of 45 inches width. The tale unfurls as perforated cards choreograph their dance, guiding the myriad colored threads to craft a masterpiece that captures the essence of centuries-old artistry, Varanasi



Elegance Woven in Threads: A masterpiece in the making, a Benarasi saree unfolds its intricate design through perforated cards, meticulously paddled to ensure the weave captures the precise hues and patterns, Varanasi



Artistry in Motion: A Benarasi saree artisan pours heart and soul into the intricate weave, threads intertwining with dedication, transforming mere fabric into a timeless masterpiece of elegance and tradition, Varanasi



Weaving the grandeur: Benarasi sarees are the meticulous effort of artisans who weave them with utmost faith using traditional handloom machine. The fascinating weaving techniques of Benaras bestows this luxurious feel to fabric, Varanasi

5 SIKKI PRODUCTS:

Magical Golden Tresses



The *Sikki* grass industry is a significant traditional craft that thrives in the regions surrounding the River Ganga in India, particularly in the state of Bihar and parts of Uttar Pradesh. *Sikki* grass, scientifically known as *Saccharum Bengalense*, is a type of wild grass that grows abundantly in the marshy areas near the riverbanks. This eco-friendly and sustainable craft has been an essential part of the local livelihoods and cultural heritage for eon. The process of making products from *Sikki* grass is intricate and labor-intensive, requiring skillful craftsmanship. The grass is harvested by local artisans, primarily women, who collect it in bundles and then dry it in the sun to enhance its durability. Once dried, the grass is meticulously handcrafted into various items, including baskets, mats, trays, decorative pieces, and even jewellery.

The *Sikki* grass craft holds both economic and cultural significance for the local communities. For many families living in the villages along the Ganga River, *Sikki* grass weaving is a primary source of income. The craft provides employment opportunities to numerous artisans, empowering women by offering them an avenue for financial independence and recognition for their artistic talents. Apart from its economic impact, the *Sikki* grass industry is deeply rooted in the cultural traditions of the region. The craft has been integral part of festivals, rituals, and ceremonies, where *Sikki*-made items are used as offerings, decorations, and functional tools. The skill of *Sikki* grass weaving is often passed down from mothers to daughters, preserving the traditional knowledge and techniques. In recent years, there has been a growing interest in the *Sikki* grass craft due to its eco-friendly and sustainable nature. With increasing environmental consciousness and a focus on supporting local artisans and traditional crafts, *Sikki* products have gained popularity not only within India but also in international markets.

However, like many traditional crafts, the *Sikki* grass industry also faces challenges. The encroachment of modern materials and mass-produced alternatives poses a threat to the demand for authentic *Sikki*-made products. Additionally, the environmental changes and pollution affecting the River Ganga and its surroundings can impact the growth of *Sikki* grass and the artisans' livelihoods. The craft of the *Sikki* weaving has its root in traditional beliefs of Indian Value System, a perfect example of sustainability in contemporary times. The *Sikki* Grass Industry near the River Ganga is an ancient craft that sustains the cultural heritage and economic well-being of local communities. The skillful art of weaving *Sikki* grass into functional and decorative items is a testament to the craftsmanship and creativity of the artisans. Preserving this traditional craft is vital not only for supporting the livelihoods of the weavers but also for safeguarding the unique cultural identity and eco-friendly practices associated with the *Sikki* grass industry. Efforts to promote and sustain this craft are crucial to ensure that it continues to flourish and enrich the lives of the artisans and the communities along the sacred Ganga River.



"Ganga's Green Bounty: Along the river's sacred banks, Sikki grass cultivation flourishes, weaving tales of sustenance and tradition inharmony with the nurturing Ganga, Bihar"



Woven with Care: Sikki grass sticks transform into eco-friendly treasures, a symbol of conscious craftsmanship that weaves together nature's bounty and a commitment to a greener world, Bihar



Nature's Palette Preserved: Dried and dyed Sikki grass sticks showcase the vibrancy of earth's colors, a testament to the craft that transforms humble materials into vibrant works of art, Bihar



Empowerment Unfolds: A close-up glimpse of an empowered woman's hands weaving Sikki grass, each delicate strand echoing her strength, artistry, and the stories woven into her journey, Patna, Bihar



Empowering Hands, Crafting Dreams: An empowered woman weaves her strength into every strand of Sikki grass, creating intricate wonders that reflect her resilience, skill, and the beauty of her journey, Patna, Bihar



Grassroots Elegance, Nature's Gift: In Sikki grass industry households, sustainable products bloom as a harmonious alternative to plastics, a testament to eco-friendly ingenuity and a step towards greener tomorrows, Patna, Bihar



Artistry in Bloom: Sikki grass sticks metamorphose into a radiant Radha Krishna painting on a canvas of deep black, where tradition and creativity entwine to craft a masterpiece of devotion and natural beauty ©Vibecity



Bihar's empowered woman: A skilled Sikki grass artisan from Bihar, crafting intricate and detailed artistry. She embodies empowerment, weaving her passion into every creation © Okhai

6 CARPET MAKING INDUSTRY:

Crafting Dreams



The carpet making industry near the River Ganga, particularly in the region of Bhadohi-Mirzapur in Uttar Pradesh, India, is renowned for its exquisite craftsmanship and has been a significant part of the local economy for centuries. This industry is deeply ingrained in the cultural heritage of the region, and the art of carpet weaving has been passed down through generations, making it an essential aspect of the communities' livelihoods. The art of carpet making near the River Ganga involves traditional handloom techniques that require skill, precision, and patience. The weavers use a variety of materials, including wool, silk, and cotton, to create intricately designed carpets and rugs. Each carpet is a masterpiece of art, featuring elaborate patterns, vibrant colors, and impeccable attention to detail. The carpet making industry plays a crucial role in providing employment to thousands of artisans, with many families engaged in the craft for generations. In these regions, it is not uncommon to find entire villages dedicated to carpet weaving, with each household contributing to the process in some way.

The carpets produced near the River Ganga are highly sought after both domestically and internationally. The quality and craftsmanship of these carpets have earned them a global reputation, making them valuable exports that contribute significantly to India's economy. Despite its success, the carpet making industry faces challenges in the modern era. The rise of machine-made carpets and the availability of cheaper alternatives pose competition to the handcrafted carpets. Efforts have been made to promote and preserve this traditional art form. Various government initiatives and non-profit organizations have been working to support the carpet making industry near the River Ganga. They provide training, access to modern tools, and marketing assistance to help weavers adapt to changing market demands while maintaining the authenticity of their craft.

The carpet making industry near the River Ganga is a testament to the rich cultural heritage and artistic skills of the local communities. The tradition of handcrafted carpets has provided sustainable livelihoods for countless artisans and has become an integral part of the region's identity. Preserving this traditional art form is not only vital for the weavers' economic well-being but also for safeguarding the cultural legacy associated with the carpet making industry near the sacred River Ganga.



Vibrant Weaves of Mirzapur: A carpet industry worker surrounded by bundle of colorful threads, poised to weave the world-renowned carpets of Mirzapur, where artistry and hues converge in a symphony of craftsmanship, Jugnu Carpet Factory, Mirzapur



Threads of Tradition: In the heart of a Mirzapur village, an elderly woman prepares threads with timeless expertise, infusing every strand with the essence of heritage that carpets the town's artistry, Jugnu Carpet Factory, Mirzapur



"Stitching Stories, Weaving Magic: Amidst the looms of Carpet workshop in Mirzapur, an artisan's hands blend threads of tradition and artistry, giving life to carpets that speak volumes of skill and dedication, Mirzapur



Crafting Dreams with Skilled Hands: At Jugnu Carpet workshop in Mirzapur, an industry worker brings life to intricate patterns, adding soul to each knot, and weaving aspirations into every thread, Mirzapur



Elegance Unfolding Stitch by Stitch: Witness the creation of beauty as skilled hands in Mirzapur intricately weave threads into a masterpiece, transforming fibers into a tapestry of artistry, Mirzapur



Threads of Artistry Unveiled: Mizapur's skilled hands weave intricate tales into every fiber, creating carpets that transcend utility to become works of art that adorn homes with elegance, Mirzapur

7 BRASS UTENSIL INDUSTRY:

Art in Metal



The brass utensil industry near the River Ganga holds a significant place in the traditional crafts of India. Situated in the cities of Mirzapur, Moradabad in Uttar Pradesh and Kishanganj in Bihar, this industry has a rich history that spans centuries. The craft of making brass utensils is deeply rooted in the cultural heritage of the region, and the artisans involved in this trade have passed down their skills from one generation to the next. The brass utensil industry relies on the abundant availability of brass, an alloy of copper and zinc, which is found in the region's soil. The Ganga River's presence in the vicinity has historically facilitated transportation and trade, making it an ideal location for this industry to flourish. Artisans in this industry create a wide range of brass utensils, including pots, pans, plates, bowls, lamps, and various decorative items. The process involves various stages, such as melting and molding the brass, handcrafting the utensils, and intricate detailing through embossing and engraving. Each piece reflects the craftsmanship, creativity, and cultural influences of the artisans. These brass utensils hold both utilitarian and decorative purposes. They are an integral part of Indian households, used for cooking, serving, and religious rituals. Brass lamps, in particular, play a significant role in various festivals and ceremonies, symbolizing the triumph of light over darkness.

The brass utensil industry near the River Ganga has been a significant source of livelihood for many families. Artisan communities have established close-knit clusters, where specialized skills are passed on from elders to younger members, ensuring the continuity of the craft.

However, like many traditional crafts, the brass utensil industry faces challenges in the modern era. The availability of mass-produced, machine-made alternatives and changing consumer preferences have impacted the demand for handcrafted brass utensils. Economic fluctuations and global market pressures have also affected the industry's stability. To sustain this ancient craft and uplift the artisans, various initiatives have been undertaken. Non-governmental organizations and government agencies have provided training, access to credit, and marketing support to help the artisans adapt to changing times and expand their market reach. The brass utensil industry near the River Ganga is an integral part of India's cultural heritage. The skill and artistry of the artisans involved in creating these beautiful and functional brass utensils are admired both nationally and internationally. Preserving this traditional craft is crucial not only for the artisans' livelihoods but also for safeguarding the cultural identity and craftsmanship associated with the brass utensil industry near the sacred River Ganga. Efforts to promote and sustain this craft are vital to ensure that it continues to flourish and enrich the lives of the artisans and the communities along the Ganges.



Crafting Beauty from Earth: Discovering the artistry of Mirzapur as skilled hands prepare molds using the rich local soil, shaping timeless brassware, Mirzapur



Breathing Life Into Art: Witnessing the transformation as skilled hands place brassware into the furnace, where craftsmanship and fire unite to create beauty, Mirzapur



Forging Excellence: The rhythmic dance of hammer and metal, where skill and passion converge to shape raw brass into exquisite artistry, Mirzapur



Elevating Elegance: Every curve polished, every surface buffed to perfection - a craftsman's dedication reflects in the gleaming beauty of handcrafted brassware, Mirzapur



Unveiling Brilliance: The final touch, where dedication and precision shine through as artisans polish and buff brassware to perfection, Mirzapur



Crafted with Care, Shining for All to Share: Behold the exquisite final products of the brassware industry, ready to grace homes and hearts, Mirzapur

8

NAINI SEWAGE TREATMENT PLANT & ROSE CULTIVATION:

A step towards Circularity



The Naini Sewage Treatment Plant and Rose Cultivation are two interconnected initiatives in the city of Prayagraj in Uttar Pradesh, India, that demonstrates the dual benefits of environmental conservation and economic sustainability. The Naini Sewage Treatment Plant is a crucial project aimed at addressing the issue of untreated sewage that was being discharged into the River Ganga, one of India's holiest and most revered rivers. The uncontrolled flow of sewage was not only polluting the sacred river but also posing significant health and environmental hazards. To combat this problem, the Naini Sewage Treatment Plant was established to treat the wastewater before it could be released into the river.

The sewage treatment plant utilizes advanced technologies to treat the wastewater and remove harmful pollutants, ensuring that only treated and clean water is discharged back into the Ganga. This initiative has not only helped in conserving the purity of the Holy river but has also improved the overall environmental health of the region. In conjunction with the Naini Sewage Treatment Plant, the authorities launched a rose cultivation project in the reclaimed and treated wastewater areas. Instead of allowing the treated water to go to waste, it is utilized to irrigate rose gardens. This innovative approach has several benefits. Firstly, by using treated wastewater for irrigation, there is a reduced demand for freshwater resources, thus alleviating the strain on the local water supply. Secondly, the rose cultivation project has created employment opportunities for local farmers and communities, contributing to the region's economic growth. The roses cultivated in these gardens have commercial value, and they are often sold in local and regional markets, generating income for the farmers and supporting the horticulture sector. Additionally, the rose gardens add to the aesthetics of the area and attract tourists, further boosting the local economy through increased tourism.

The Naini Sewage Treatment Plant and Rose Cultivation project exemplifies how sustainable and eco-friendly initiatives can yield positive results for both the environment and the community. By treating sewage water and utilizing it for rose cultivation, this integrated approach has not only helped in preserving the purity of the River Ganga but has also contributed to economic development, job creation, and sustainable agricultural practices in the region. Such projects serve as valuable examples for other regions to follow, as they showcase the potential for synchronising environmental conservation with socio-economic growth.



Nature's Resilience: A symbol of beauty and renewal as a rose blooms with grace, nurtured by treated sewage water, Naini, Prayagraj



Transforming Waters, Enriching Lives: The sewage treatment plant at Naini, a testament to our commitment to a cleaner and greener future, Naini, Prayagraj



Guardians of Purity: The vigilant monitoring system at the Naini sewage treatment plant, ensuring every drop is purified before it finds its way back to nature, Naini, Prayagraj



Precision Unveiled: Inside the water testing laboratory at the Naini sewage treatment plant, where science safeguards the purity of every drop, ensuring a cleaner, safer environment, Naini, Prayagraj



Nurturing Blooms: The intricate water channel distribution network weaving life into rose farms, sustaining a tapestry of vibrant beauty, Naini, Prayagraj



"Blossoming Futures: STP treated water nurturing rose farms, a harmonious blend of sustainability and livelihood, painting the landscape with hues of prosperity, Naini, Prayagraj



Unveiling Brilliance: The final touch, where dedication and precision shine through as artisans polish and buff brassware to perfection, Mirzapur



Crafted with Care, Shining for All to Share: Behold the exquisite final products of the brassware industry, ready to grace homes and hearts, Mirzapur

9

THE FIN-TASTIC LIFE

Generating livelihood casting
away Blues



The livelihood of fishermen along the River Ganga is deeply intertwined with the river's flow and the rich aquatic biodiversity it supports. For generations, fishing has been a primary source of sustenance and income for many communities living in the Ganga basin. The river's abundant fish stocks have not only provided nourishment to these communities but have also played a significant role in the regional economy and culture. The River Ganga is home to a diverse range of fish species, both indigenous and migratory. Some of the common fish found in the river include *Rohu*, *Hilsa*, and *Catla*, among others. These fishes have become an integral part of the local cuisine, and their availability impacts the food habits of millions of people in the region.

Fishermen living along the Ganga utilize various fishing techniques to catch fish. Traditional methods like net fishing, angling, and bamboo traps are commonly employed. The fishing practices are often passed down from one generation to another, preserving age-old techniques and knowledge. Fishing not only provides sustenance but also acts as a significant economic activity for these communities. The surplus catch is sold in local markets and neighboring towns, generating income for the fishermen and their families. Moreover, the fish trade has created employment opportunities for fish vendors, transporters, and other stakeholders in the supply chain. However, the livelihood of fishermen along the Ganga is facing several challenges. One of the most pressing issues is environmental degradation and pollution of the river. Industrial waste, sewage discharge, and agricultural runoff have resulted in water pollution, negatively impacting fish populations and threatening the health of the river ecosystem. Overfishing and destructive fishing practices also contribute to the decline of fish stocks and disrupt the balance of the aquatic environment. Conservation efforts and sustainable fishing practices are crucial to ensure the long-term livelihood of these fishermen and protect the biodiversity of the River Ganga. Government agencies, NGOs, and local communities need to work together to address pollution, enforce fishing regulations, and promote responsible fishing practices.

Promoting alternative livelihoods and economic diversification can also reduce the community's dependence solely on fishing. Initiatives like aquaculture, fish farming, and vocational training can provide supplementary income sources and reduce the pressure on natural fish populations. The livelihood of fishermen along the River Ganga is closely tied to the health and vitality of the river's ecosystem. Protecting the river and its biodiversity is not only essential for their survival but also for the sustenance of countless families and the preservation of cultural traditions tied to this iconic river.



Harvesting from the Heart of History: Fisherfolk cast their nets along the ancient ramparts of Allahabad Fort, a timeless dance between tradition and the Yamuna's embrace, Prayagraj



Ripples of Tradition: A fisherman casts his fishing rod, holding upon stories of generations past, as the Ganga yields its bounty to skilled hands, Chandannagar, Kolkata



Serenading the Waters: Fisherman navigate the tranquil expanse of the river , where their timeless craft creates a symphony of life between land and water, Chandannagar, Kolkata

10

FROM MADHUBANI TO TIKLI:

Engaging in workforce generating
Livelihood



The *Tikli and Madhubani* art forms are traditional folk art styles that have flourished in the rural regions of Bihar, India, particularly in the areas near the River Ganga. These art forms are deeply rooted in the cultural heritage of the region and hold immense significance for the local communities. *Tikli* is a decorative art form primarily practiced by women, who use a fine bamboo stick or pen to create intricate geometric patterns on the walls and floors of their homes. The designs are typically made during festivals, weddings, and other auspicious occasions. *Tikli* art is characterized by its symmetry, precision, and vibrant colors, which bring life to the otherwise plain surfaces of rural homes.

Madhubani art, on the other hand, is a unique style of painting that originated in the *Madhubani* district of Bihar. Also known as *Mithila* painting, *Madhubani* art involves using natural pigments and dyes to create exquisite paintings depicting mythological themes, folktales, religious motifs, and scenes of rural life. This art form is believed to have originated centuries ago and has been passed down through generations of women in the region. Both *Tikli* and *Madhubani* art forms have been closely connected to the daily lives, rituals, and customs of the people living near the River Ganga. The artistic expression not only adds beauty to their surroundings but also reflects their cultural identity and creativity. The River Ganga has played a significant role in the cultural and artistic traditions of the region. It has been a source of inspiration for many art forms, including *Tikli* and *Madhubani*, where elements of the river and its ecosystem are often depicted in the paintings.

In recent years, efforts have been made to promote and preserve these traditional art forms. NGOs, government initiatives, and art enthusiasts have organized workshops, training programs, and exhibitions to showcase the beauty and uniqueness of *Tikli* and *Madhubani* art to a wider audience, both within India and internationally. By preserving these art forms and providing opportunities for artists to showcase their talents, the *Tikli* and *Madhubani* art of Bihar near the Ganga River not only contributes to the preservation of cultural heritage but also serves as a source of economic empowerment for the local artisans. These art forms not only beautify spaces but also act as a medium to pass on stories, traditions, and values from one generation to another, ensuring that the cultural legacy of the region remains alive and vibrant for years to come.



Celebrating Love in Colors: A mesmerizing Tikli art masterpiece by a master artist, vividly capturing the essence of a joyous wedding ceremony in every stroke, Upendra Maharathi Shilp Anusandhan Sansthan, Patna, Bihar



Guiding the Brushstrokes of Tomorrow: Shri Ashok Kumar Biswas master of tikli art shares his wisdom and passion with eager students, passing on the legacy of creativity and tradition, Upendra Maharathi Shilp Anusandhan Sansthan, Patna, Bihar



Strokes of Wisdom: Padma Shri awardee Baua Devi, renowned for her Madhubani artistry, imparts her final touches to a creation that carries not just color, but a lifetime of stories, Upendra Maharathi Shilp Anusandhan Sansthan, Patna, Bihar

11 ATTAR MAKING:

Fragrance sets you free



Attar making in Kannauj, a city situated along the banks of the River Ganga in Uttar Pradesh, India, is a time-honored tradition that has flourished for centuries. Kannauj is renowned as the "Attar City of India" and has gained international recognition for its production of exquisite natural perfumes, also known as *Attars*. The process of *Attar* making in Kannauj is an art that has been passed down through generations. It involves extracting the aromatic essences from various flowers, herbs, and other natural ingredients using the age-old method of hydro-distillation. This traditional technique ensures that the delicate and pure fragrance of the botanicals is preserved, making Kannauj attars highly sought after by perfumers and enthusiasts worldwide.

The process begins with the careful selection of raw materials. Flowers such as roses, jasmine, and marigolds, along with sandalwood, *oudh*, and other aromatic herbs, are sourced from nearby regions and even farther afield. The flowers are collected during specific times of the day when their fragrance is most potent, usually in the early morning. Once collected, the flowers are subjected to the hydro-distillation process. A large copper vessel called a *deg* is used, which is connected to a traditional receiver called a *bhapka*. The *deg* is filled with water, and the flowers are immersed in it. The vessel is then heated, and as the steam rises, it passes through the flowers, extracting their essential oils. The steam carrying the fragrance then condenses in the *bhapka*, where it forms the *Attar*. The *attar*-making process requires great skill and patience, as it can take several hours to extract a small quantity of pure *Attar*. The artisan must ensure that the fragrance is captured at its peak and that the attar is free from impurities. The River Ganga plays a significant role in the *Attar*-making process in Kannauj. The water from the Ganga is often used in the hydro-distillation process, believed to add a unique purity and spiritual essence to the final product.

The *Attar*-making industry in Kannauj is not just a source of livelihood for many families but also a cultural heritage that reflects the region's rich history and traditions. The fragrances produced here are valued not only for their commercial worth but also for their cultural and religious significance. In recent times, the attar industry in Kannauj has faced challenges due to the rise of synthetic fragrances and changes in consumer preferences. However, efforts are being made to preserve this traditional art form and promote Kannauj attars on the global stage. *Attar* making in Kannauj along the River Ganga is a captivating example of India's rich cultural heritage. The art of extracting fragrances from natural ingredients using time-honored methods showcases the harmony between nature and tradition. Preserving and promoting this craft is essential to ensure that the enchanting scents of Kannauj attars continue to waft through the generations to come.



Sensory Symphony: Explore a kaleidoscope of flavors and fragrances showcased within the lab where scents and tastes unite in a captivating dance, Fragrance and Flavour Development Centre, Kannauj



Blooms in Transformation: Step into the enchanting world of rose attar making, where petals metamorphose into liquid poetry, preserving the soul of roses, Kannauj © ThePrint



Harvesting Energy and Aroma: Explore the ingenious biogas attar making unit and distillation plant, where sustainable energy and fragrant essence intertwine to create a harmonious cycle, Fragrance and Flavour Development Centre, Kannauj



Essence Unveiled: Witness the transformative process of 'deg bhapka' distillation, where raw materials yield their precious essence, revealing the heart of traditional craftsmanship, Kannauj © Newsclick



Capturing Essence in Modern Motion: Witness the mesmerizing process of deg bhapka distillation, where the magic of extraction unfolds, one precious drop at a time with modern touch to store energy judiciously, Fragrance and Flavour Development Centre, Kannauj

12 RIVER RAFTING AS LIVELIHOOD:

Adventurous Waters Roar



River rafting has emerged as a significant livelihood opportunity for communities living along the River Ganga, particularly in regions like Rishikesh and Haridwar in Uttarakhand, India. These areas have become popular adventure tourism destinations, attracting tourists from all over the world seeking the thrill of white-water rafting in the mighty Ganges.

River rafting as a livelihood has transformed the lives of many locals who have embraced this adventurous profession. Several factors contribute to its emergence as a viable source of income for these communities. The popularity of adventure tourism and river rafting in particular has grown substantially in recent years. As the Ganges became known for its exciting rapids and scenic beauty, tourists started flocking to these areas, creating a demand for rafting services. River rafting has generated employment opportunities for a wide range of people. Local residents have found work as rafting guides, safety instructors, and support staff. Campsites and adventure tour operators employ people for various roles, including kitchen staff, maintenance personnel, and housekeeping. River rafting requires specialized skills and training. Many locals have undergone formal training to become skilled rafting guides. These skills not only allow them to provide a safe and enjoyable experience for tourists but also enhance their employability in the adventure tourism industry. For many communities whose livelihoods were primarily dependent on traditional occupations like agriculture and fishing, river rafting has provided an additional source of income, making them more economically resilient. The growth of adventure tourism, including river rafting, has also led to infrastructure development in these regions. New businesses, guesthouses, and restaurants have sprung up to cater to the needs of tourists, boosting the local economy. River rafting has provided an opportunity for locals to showcase their culture and traditions to visitors. It has encouraged the development of community-based tourism initiatives that incorporate local customs and practices.

However, there are also challenges associated with river rafting as a livelihood. Safety is of paramount importance, and ensuring the well-being of both tourists and rafting guides requires strict adherence to safety protocols and continuous training. Environmental concerns, such as waste management and river pollution, also need to be addressed to ensure the sustainability of the adventure tourism industry. Community involvement and responsible tourism practices can play a significant role in mitigating these challenges. River rafting along the River Ganga has emerged as a lucrative livelihood option for communities living along its banks. This adventurous profession not only generates income and employment opportunities but also contributes to the local economy and cultural enrichment. By embracing responsible and sustainable practices, river rafting can continue to thrive while preserving the beauty and sanctity of the Ganges for future generations.



Prepared for Thrills: Along the serene banks of the Ganga, adventure beckons as river rafting gear stands at the ready, promising an adrenaline-fueled ride through the rushing currents, Rishikesh



Riding the Rapids, Creating Livelihoods: River rafting emerges not just as an adventure, but a vital livelihood for those in Rishikesh, where passion for the sport creates sustainable opportunities along the Ganges, Rishikesh ©Nisangha



Leap of Courage: Behold the cliff jumping point in Rishikesh's rafting realm, where adventurers take a bold plunge into the Ganges, merging the thrill of freefall with the beauty of nature, Rishikesh



Gear of Adventure: At the ghat in Rishikesh, the tools of exhilaration lie in wait - river rafting equipment ready to embark on a journey through the heart-pounding rapids, Rishikesh



Conquer the Rapids: Experience the thrill of river rafting in Rishikesh, where the Ganges becomes a playground of adventure, testing your mettle against the untamed currents, Rishikesh

13 HANDICRAFTS AND ARTISANAL WORKS: River's Creative Flair



Handicrafts and artisanal work along the River Ganga have been an integral part of the cultural and economic fabric of the region for centuries. The Ganges, with its rich heritage and spiritual significance, has inspired artisans to create exquisite handicrafts that reflect the essence of the river and its surrounding culture. These traditional crafts not only serve as livelihoods for many but also preserve the region's artistic heritage.

Wood carving is another prominent artisanal work found along the Ganges. In places like Haridwar and Rishikesh, artisans create intricate wooden sculptures, furniture, and decorative pieces, showcasing their craftsmanship and preserving the cultural heritage of the region. Pottery has been a traditional livelihood in many Ganges-basin villages. Skilled potters create earthenware, terracotta items, and clay idols used for religious and household purposes, adding to the cultural richness of the area. Some communities along the Ganges are skilled in crafting beautiful handmade jewellery using traditional methods. These unique pieces of jewellery often feature religious symbols and are popular among both locals and tourists. Lacquerware is a craft practiced in parts of Bihar and West Bengal along the Ganges. Artisans create colorful and decorative lacquer-coated items like bangles, boxes, and ornaments.

Handicrafts and artisanal work along the River Ganga not only contribute to the livelihoods of many families but also promote cultural heritage and tourism in the region. These traditional crafts are not only appreciated in India but also garner attention and demand globally. However, in the face of modernization and mass production, many traditional artisans face challenges in sustaining their livelihoods. To support and preserve these traditional crafts, it is essential for governments, non-governmental organizations, and the public to promote and buy handmade products, encourage skill development, and provide market access to artisans. By recognizing the cultural and economic significance of these crafts, we can ensure that the artistic heritage along the River Ganga continues to thrive for generations to come.



Divine Colors Unveiled: Behold the mesmerizing hand-painted mural of Radha Krishna in Mathura, where art transcends to depict the eternal love and grace of divine beings



Crafting Elegance, One Inlay at a Time: Step into Agra's exclusive Inlay Art shop, where centuries of craftsmanship come to life in exquisite marble creations



History in Every Curve: Explore Agra's exclusive collection of intricately carved artworks, where timeless tales are etched into every masterpiece



Epic on Canvas: Witness the birth of a breathtaking masterpiece as an artist in Rishikesh meticulously brings to life a sprawling mural, where imagination flows onto the canvas



"Rishikesh's Living Canvas: Witness the birth of a captivating masterpiece as an artist breathes life into a sprawling mural, where creativity flows as freely as the Ganges"

14 KUMARTULI:

Kolkata's Art Enclave



Nestled in the vibrant city of Kolkata, *Kumartuli* stands as a testament to artistic ingenuity, cultural richness, and a unique livelihood intricately entwined with the revered Ganga River. This centuries-old potters' quarter is a haven of creativity, where skilled artisans craft intricate clay idols, breathing life into religious and cultural festivities. *Kumartuli's* livelihood is a symphony of craftsmanship and tradition. The artisans, known as *kumars*, meticulously sculpt clay into awe-inspiring idols of deities, mythological figures, and more. Their skillful hands shape delicate facial features, intricate ornaments, and expressive postures, turning blocks of clay into divine masterpieces. Throughout the year, these artisans pour their dedication into their work, preparing for the grand showcase during festivals like *Durga Puja*.

The Ganga River, flowing majestically by Kolkata's side, plays a profound role in *Kumartuli's* livelihood. The clay used in idol-making often comes from the river's fertile banks, infused with its sanctity. The final act of the artistic process culminates in a poignant connection with the *Ganga*—the immersion of idols into its waters. This act is a ritualistic return of the divine to its source, embodying the cyclical nature of life and faith.

Kumartuli's artisans derive sustenance from this age-old craft. Their work not only feeds their families but also fuels the local economy, as the idols they create are the heart and soul of grand festivities that draw pilgrims, tourists, and devotees from across the world. The intricate artistry of *Kumartuli* stands as a testament to the city's cultural heritage and artistic prowess. In a world shaped by modernity, *Kumartuli* remains a sanctuary of tradition, a place where ancient skills are preserved and passed down through generations. Its proximity to the Ganga River infuses the art with spirituality, creating a harmonious blend of culture and devotion. As the clay idols merge with the river's currents, a profound connection is forged between *Kumartuli's* livelihood, Kolkata's identity, and the sacred flow of the Ganga.



Sculpting with Heart and Hands: Amidst the artistic haven of Kumartuli, an artist tends to the soul of his grand sculpture, molding the very earth that will birth divine idols, Kolkata



Forging Divine Forms: Inside the vibrant workshop of Kumartuli, colossal sculptures of gods take shape, an ode to craftsmanship and devotion intertwining, Kolkata



Crafting Deities, Shaping Devotion: In the heart of Kumartuli, skilled artisans breathe life into massive sculptures, infusing them with divine presence, Kolkata



Strokes of Devotion: Inside the Kumartuli workshop, skilled hands delicately paint the Durga idol, infusing vibrant hues with spiritual grace, in Kolkata



Navaratri's Splendor: Kumartuli, comes alive with artistic fervor as a Durga Pandal takes shape, adorned with intricate paintings, celebrating the divine during the festive season, Kolkata

15 AGRO BASED INDUSTRY

Harvesting Innovation



The Ganga River, a lifeline of India, has nurtured civilizations for millennia and continues to play a pivotal role in the country's socio-economic fabric. Along its banks, a tapestry of livelihoods flourishes, and among them, agro-based industries emerge as a cornerstone of sustenance and prosperity. The fertile plains adjoining the Ganga offer a fertile ground for agro-based industries to flourish. These industries encompass a spectrum of activities, from cultivation and processing to manufacturing and distribution, all revolving around the cultivation of crops and the utilization of agricultural resources. This symbiotic relationship between the river and agro-industries forms a vital economic backbone for countless communities.

Agricultural practices along the Ganga's fertile floodplains benefit from the river's bounteous waters. The river's water not only irrigates the fields but also replenishes the soil with essential nutrients, making it highly conducive for diverse crop cultivation. As a result, a multitude of crops, including rice, wheat, sugarcane, and various fruits and vegetables, thrive in these regions. These crops serve as raw materials for agro-based industries, initiating a chain of production and commerce. Food processing units, cotton ginning mills, and sugar factories are prominent examples of agro-based industries that dot the Ganga's landscape. These industries transform raw agricultural produce into value-added products such as refined sugar, cotton textiles, and packaged food items. They not only contribute to the economy by generating employment opportunities but also aid in value retention and export potential.

Moreover, the agro-based industries along the Ganga River align with sustainable practices, as many are deeply rooted in traditional knowledge and techniques. This amalgamation of age-old wisdom and modern technology creates a resilient foundation for economic growth while respecting the environment.

The Ganga River weaves a narrative of sustenance and prosperity through its association with agro-based industries. Its waters and fertile plains provide the ideal milieu for cultivation, while the industries that flourish along its banks capitalize on this abundance. This harmonious coexistence exemplifies the intricate link between nature's bounty and human endeavor, shaping a vibrant mosaic of livelihoods along the sacred Ganga River.



Nurturing Nature's Balance: Witness the agricultural synergy as poplar trees stand tall, companionably woven amidst the vibrant wheat crops in the fertile fields of the Ganga belt © Pradeep Gaur



Unveiling Nature's Secrets: Step into the Innovation of Research Centre, where experiment meets nature to unlock new frontiers in sustainable forest management, Forest Research Institute, Dehradun

16 PACKAGED DRINKING WATER:

Exlixir for Life



The Ganga River, a symbol of spiritual significance and ecological importance, has not only nourished civilizations but also emerged as a source for addressing modern-day needs, including access to safe drinking water. Along its sacred banks, the establishment of packaged drinking water facilities stands as a testament to the marriage of convenience, sustainability, and responsible resource utilization.

Packaged drinking water facilities play a pivotal role in meeting the growing demand for safe and potable water, particularly in regions where traditional water sources might be compromised due to pollution or contamination. These facilities collect water from the *Ganga* River and subject it to rigorous purification processes, ensuring that it meets stringent quality standards set by regulatory authorities. Examples of such packaged drinking water facilities along the Ganga River include bottling plants and water purification units. These facilities utilize advanced technologies such as reverse osmosis, UV treatment, and ozonation to eliminate impurities, pathogens, and contaminants. The resulting purified water is then packaged in sealed bottles or containers, maintaining its quality and hygiene until consumption.

One notable example is the "*Ganga Jal*" project initiated by the Government of India. Under this project, water from the Ganga River is treated, bottled, and distributed as "*Ganga Jal*," offering devotees and citizens the opportunity to consume water from this revered river in a safe and convenient manner. This initiative not only addresses the need for clean drinking water but also fosters a connection between spirituality and responsible water consumption.

While packaged drinking water facilities undoubtedly offer a solution to the challenge of safe water supply, it is imperative to approach this practice sustainably. Ensuring responsible water extraction, waste management, and adherence to environmental regulations are essential to prevent overexploitation and maintain the Ganga's ecological health.

The packaged drinking water facilities along the Ganga River exemplify the fusion of tradition and modernity, addressing the essential need for clean water while respecting the river's cultural and ecological significance. As society progresses, it becomes vital to leverage technology and innovation to provide safe hydration solutions while also preserving the sanctity of the Ganga and its surrounding ecosystem.



Pure Hydration: Discover premium range of commercial water bottles, your convenient companion for staying refreshed wherever life takes you © happyfoto



Sacred waters at your reach: Experience the purity of the Ganga as the government introduces 'Ganga Jal' available for sale at post offices, a divine offering for every seeker ©The Economic Times



Pure Elixir from the Himalayas: Experience the untouched essence of nature with our packaged Himalayan Spring Mineral Water, a refreshing sip of the majestic mountains in every drop © Cyrus Dalal

17 SUSTAINABLE SANDMINING

A vital livelihood



The Ganga River, revered for its spiritual significance and ecological importance, also plays a central role in sustaining livelihoods of communities along its banks. One notable but often contentious livelihood activity in the Ganga River Basin is sand mining. While sand mining provides employment and economic opportunities, it raises significant environmental and social concerns that need careful consideration. Sand mining involves the extraction of sand from riverbeds, floodplains, and other aquatic environments. The extracted sand is a valuable resource used in construction, infrastructure development, and manufacturing. It serves as a key ingredient in concrete, cement, and various building materials, making it a vital component of modern urbanization.

In many regions of the Ganga River Basin, sand mining has become a major source of livelihood for local communities. It provides employment to laborers, truck drivers, and others involved in the supply chain. These communities often depend on sand mining for their sustenance and economic well-being, particularly in areas with limited alternative employment opportunities. However, the rapid and often unregulated pace of sand mining raises serious environmental concerns. Unsustainable sand extraction can lead to erosion of riverbanks, loss of habitat for aquatic life, alteration of river courses, and disruption of sediment flow. These activities can result in reduced water quality, increased vulnerability to flooding, and overall ecological imbalances.

Furthermore, the social impacts of sand mining cannot be overlooked. Conflicts may arise over access to sand resources, leading to disputes among different user groups. There can also be negative consequences for the health and safety of laborers involved in manual sand extraction, particularly when working under hazardous conditions. To strike a balance between livelihoods and environmental conservation, sustainable sand mining practices are essential. Government regulations and policies should be in place to monitor and manage sand extraction, ensuring that it is carried out in an environmentally responsible manner. This includes measures to prevent illegal and excessive sand mining, promote reclamation and rehabilitation of mined areas, and safeguard the river's ecological integrity. Sand mining is a major livelihood in the Ganga River Basin underscores the complex interplay between economic aspirations, environmental preservation, and social well-being. Balancing the needs of communities with the imperative to protect the river's health requires a holistic approach that combines sustainable resource management, regulatory oversight, and community engagement. Only through such careful consideration can sand mining continue to support livelihoods while safeguarding the precious Ganga River ecosystem for generations to come.



Nature's Sculptor: Witness the timeless dance of the Ganges as it carries and deposits the precious gift of river sand, shaping the serene edges with its gentle touch, Tehri, Uttarakhand



Unveiling Earth's Treasures: Explore the sand mining in Ganga, where nature's geological riches are responsibly harnessed to shape construction and growth, Gangotri, Uttarakhand.

Blended Capacity Building Programme for Stakeholders of River Ganga

Phase I



Blended Capacity Building Programme for Stakeholders of River Ganga

Phase II











**GNAMAMI
GANGE**



