Right to Freedom of Religion and Right to Clean Environment: A case of Bagmati River, Pashupatinath Temple

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Abstract

This research deals with two fundamental rights listed in the Constitution of Nepal, 2015; the Right to freedom of religion and the Right to clean environment with a special reference to the Bagmati River and riverbank in Pashupatinath Temple. The aim of the research is to visualize a clean river while keeping in mind the continuation of centuries-old traditions. The research explores the question of whether the religious practices performed in the river are destructible to the river ecosystem or not. It further tries to see the stance of state regarding its approach to finding the middle ground between the two different fundamental rights. The researchers have assessed this dimension through the study of ritual performance in the banks of Bagmati River, state policy and citizen's attitude regarding this issue. Bagmati River is considered as a holiest of holy by followers of Hinduism. It provides a sample to understand the significant role played by other Hindu temples and their river banks located in the territory of Nepal in determining the river's purposes along with the sustainability of the river and its tributaries.

Introduction

River and river banks have played a key role in the development of civilization of human race across the world, for instance the Indus Valley Civilization in the Sindh River, the Chinese Civilization in the Yellow River (Huang He), the Egyptian Civilization in the banks of Nile River, and Mesopotamia Civilization in Tigris and Euphrates River. It is an undoubted fact that rivers and river banks play a significant role in our everyday lives. The value of the river and river banks have seemingly slipped into our lives. It not only provides us with water supply to sustain our lives but it is also a symbol of cultural heritage that tells the story of generations-old traditions and customs.

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The River Valley Civilization Guide available at http://www.rivervalleycivilizations.com/, accessed on 16 April 2018.

In Nepal's context, the river and river banks play an important part in people's daily lives. Their lives depend not only on the rivers and the river banks for the water supply but act as a central point for fulfilling the spiritual path and performing traditions passed down by ancestors. However, the rivers and their banks have lost its aesthetic charm in Nepal. They have been degrading and vanishing due to the reasons related to the anthropogenic activity.

One such river, is the *Bagmati* River. The river is considered to be the holiest of holy. According to the legend, the sacred river is believed to have originated from the laughter of Lord *Shiva*.² In the 10th century, King *Guankama Deva* is known to have established a city at the banks of *Bagmati* River.³ The *Bagmati* River and its tributaries are the valley's principal river system. Its springs are the main source of drinking water for residents, particularly for greater Kathmandu – the valley's urban core.⁴ Along with its tributaries, the river is a key landmark, the Kathmandu Valley civilization's artery.⁵ Hence, *Bagmati* River plays an important role in shaping Kathmandu valley civilization and providing the water supply to the people residing in the valley. *Bagmati* River is attached to the spiritual and emotional significance of the Nepali people, most of the important temples, shrines; *ghats*⁶, etc. are located along the river banks and are used for different cultural and ritual purposes.⁷ The flow of river *Bagmati* is linked with God and Goddess⁸. According to Amatya (1994):

The *Bagmati* River system is the vein of life of the people of Kathmandu. For many centuries it has irrigated the soil of the valley, made it fertile and green. For both the Hindus and the Buddhists the river is a sacred place. It is the ultimate desire of every Nepalese to be cremated on the banks of a holy river.⁹

That booming laughter rolled out of his mouth took the forms of an unsullied river, swirling with sacred water, and whitened by foamy waves. See Lucia De Vires, 'Walking the holy river', *Nepali Times* (29 Jan-4 Feb 2016 #793) available at http://archive.nepalitimes.com/article/Nepali-Times-Buzz/need-to-preserve-the-spiritual-heritage-of-the-Bagmati-river,2844, accessed on 30 September 2018.

Oskar Frelin & Jens Hansen Holm, 'Healing Bagmati', Masters of Landscape Architecture thesis, University of Copenhagen, 2016 available at http://www.healingbagmati.com/., accessed on 30 September 2018.

Kathmandu Valley Environment Outlook, International Centre for Integrated Mountain Development (ICIMOD) Ministry of Environment, Science and Technology (MoEST) and United Nations Environment Programme (UNEP), January 2007 available at http://lib.icimod.org/record/7434/files/KVEO-Full-text. pdf.,accessed on 30 September 2018.

Oskar Frelin, 'Resurrecting the river', Nepali Times (2-8 March 2018) available at http://archive.nepalitimes. com/page/resurrecting-bagmati-the-river, accessed on 30 September 2018.

The *ghats* (cremation platforms) are located at the banks of *Bagmati* River in *Pashupatinath* temple. It is listed in the World Heritage site (WHS) and is divided into *Arya Ghat* and *Bhansmeshwor Ghat*. See Frelin and Holm. According to the legend, *ghats* are also known as stairs. It used to refer to the meaning of stairway to heaven or the path of salvation. The descending steps of *ghats* are interrupted at regular intervals with specially raised circular or cylindrical stone platforms known as *Bhakari*. The *Bhakaris* are square in shape and are used for cremation. See Prabhat Shrestha, Deputy Project Director of Bagmati River Basin Improvement project, A Brief on Ghats and Bhakaris along Bagmati River, Bagmati, published by High Powered Committee for Integrated Development of the Bagmati Civilization, Chaitra 2074.

Bagmati Action Plan (2009-2014), published by High Powered Committee for Integrated Development of the Bagmati Civilization and National Trust for Nature Conservation available at http://www.bagmati.gov. np/uploaded/Bagmati-Action-Plan-En.pdf., accessed on 30 September 2018.

Sudip Phyual, Bagmati Cleaning Campaign- No ultimate Victory, published by High Powered Committee for Integrated Development of the Bagmati Civilization, Chaitra 2074.

⁹ Frelin & Hansen (n 3).

The *Bagmati* River of *Pashupatinath* Temple¹⁰is not only considered sacred because of its water but it also considered home to one of the incarnations of Hindu god Lord *Shiva*, Lord *Pashupatinath*. According to Forbes and Chaubey (2015):

The great God Shankhamuleshvara lives there. Perform an act of worship to him...This Tirtha is the greatest of all other tirthas. From a holy bath in it, all one's sins committed by the mind, the speech, and body are destroyed. ¹¹

The banks of *Bagmati* River are crucial for devotees to perform their rites and rituals¹². This is evident in the architectural design of the temple steps. These steps lead devotees to directly down from the temple into the water flow, thereby creating an architectural edge¹³. The steps¹⁴ are considered as pathways to purity and cleanliness of a soul giving it a ritual significance. Since most of Nepal's population follows the Hindu religion, river and river banks in the country act as a space to perform rites and rituals. Besides the significance of the *Bagmati* River to the Hindus, the river plays a vital role in all Nepali people's lives. All historical and religious books based on Buddhism and Hinduism acclaim rivers to be a source of salvation, asserting that our religious and cultural practices are incomplete without purification at the river.¹⁵

The *Pashupatinath* Temple is listed as one of the world's cultural heritage and enjoys protection under the World Heritage Convention of 1972.¹⁶ The temple is located on both the banks of *Bagmati* River at on the eastern outskirts of Kathmandu. The river runs through the Kathmandu valley of Nepal and separates Kathmandu from Patan. However, past decades have witnessed the river being polluted because of unplanned urbanization and industrialization.

The recent decade has found the *Bagmati* River being threatened - on both religious and environmental aspects. Various campaigns to restore *Bagmati* to its former glory have taken place and some are still undergoing. The waters of *Bagmati* have given to the pollution, as in the addition of any substance (solid, liquid, or gas) or any form of energy (such as heat, sound, or radioactivity) to the environment at a rate faster than

The Pashupatinath Temple is considered as one of the sacred Hindu temples. It is located on the banks of the Bagmati River in the Kathmandu Valley, the capital city of Nepal. The temple is considered as a home of Hindu deity, Lord Pashupatinath. This temple complex was inscribed on the UNESCO World Heritage Sites' list in 1979.

O Frelin & Hansen (n 3).

There are certain rituals which involve offerings to the river, for example, Hindu followers offers *Pinda*, *Arpan*, and *Tarpan* to the memories of their deceased loved ones, believing that deceased will obtain those offerings through the *Bagmati* River which has a holy status. This rite is known as a *Shrada* in Hindu culture.

Katrina Keane, 'Suitably Modern' available at http://katrinakeane.com/abstract/, accessed on 30 September 2018.

Each step symbolizes the next part of a religious practice which has had been passed down from generation to generation. One side of the river focuses on the transition into the next life, which includes blessings, the burning, and parting of the physical body. The stairs of the other side of the river is reserved for rituals of blessing, offerings, and the absolution of sins in the current life. See Katrina Keane, 'Suitably Modern' available at http://katrinakeane.com/abstract/, accessed on 30th September 2018.

Keshab Poudel, 'Where the River Flows', ECS Nepal, July 10, 2010 available at http://ecs.com.np/features/where-the-rivers-flow, accessed on 16 April 2018.

UNESCO, World Heritage Site List available at http://whc.unesco.org/en/list/121, accessed on 16 April 2018.

it can be dispersed, diluted, decomposed, recycled, or stored in some harmless form.¹⁷

Most of these campaigns have focused their attention in maintaining the sewage system and garbage disposal. It has left untouched the question of - how much the religious rites and rituals in the banks of *Bagmati* River in *Pashupatinath* contribute to the river's pollution. Here, the question begs, can religious rights override environmental rights or vice versa?

Religion and Environment is a crucial component of human life. The right to freedom of religion allows an individual to practice and profess their religion without any hindrance from outside forces. Similarly, the right to live in a clean and sustainable environment guarantees that an individual has a clean and healthy environment to sustain one's life.

Research Methodology

Through the analysis of both secondary and primary data, the authors have provided insights into this article. To discover the general public's views, the authors created e-questionnaires through Google forms and distributed it among various stakeholders by a social forum like Facebook. For this article, the *Bagmati* river of *Pashupatinath* Temple has been taken as a universe, whereas pilgrims and devotees in the temple are taken as a sample. The sampling was done using a random sampling method. The authors interviewed the Project Manager of High-Powered Committee for Integrated Development of the *Bagmati* Civilization regarding the committee work in the field of management of rites and rituals performed in the *Bagmati* River with the focus on the *Pashupatinath* Temple area. The authors also interviewed Environment Scientists and Environment Engineer regarding the impact played by rites and rituals in the river ecology.

Research Problem

The authors have recognized three research problems of this study:

- How does the rites and rituals performed in the river and in the banks of *Bagmati* River of *Pashupatinath* temple affect the sustainability of *Bagmati* River?
- What are the laws and policies regarding the right to freedom of religion and right to clean environment and do they align with one another?
- Whether the *Bagmati* Clean-up Campaign addresses the rites and rituals performed in the *Pashupatinath* Temple?

Jerry A. Nathanson, 'Environmental Pollution', Encyclopedia Britannica available at https://www.britannica.com/science/pollution-environment, assessed on 30 September 2018.

International Covenant on Civil and Political Rights, 999 UNTS 171, adopted on 16 December 1966 AD, art. 18.

International Covenant on Economic, Social and Cultural Rights, 993 UNTS 3, adopted on 16 December 1966 AD, art. 12(b).

Overview of the Literature Review

The water in the river may be polluted by chemicals or by organic matter, but it is not necessarily considered impure in a religious sense. So, it is rather of the otherworldly notion, that the cultural rites and rituals performed in the bank of *Bagmati* River would pollute the river. On the contrary, the performance of rites and rituals are an important part of social, religious and spiritual life. The culture which is somewhat translated as *Sanskrit* in the Nepali language vocabulary is derived from the *Sanskrit* word *Sanskar* which means ritual performance. This ritual performance is a significant part of a person's social life. It is embodied in his/her other living factors too i.e. economic, caste, ethnicity, culture, ethnic group etc. They create a standard for norms and values for people living in the society which helps to determine the role and status of the people in the society.

The banks of *Bagmati* River in *Pashupatinath* Temple provide a glimpse of people's way of life. The various rites and rituals performed in banks and the river give us an inside look into a Hindu's way of life and account of their culture. It gives a sample to understand the significant role of other Hindu temples and their river banks located in Nepal in determining the river purposes and its sustainability. As such, culture is an integral part of their identity. This is how many see them being directly connected to their ancestors and this is how they see themselves carrying on the legacy of their forefathers.

So, at times, even when people are aware of the possible negative impact of these rites and rituals being performed at the bank of *Bagmati* River towards the life of the river in itself; even when they see for themselves, half-burnt woods floating in the river, clothes and other materials floating by the waters, they still do not see it as causing harm to the environment, rather they see it as an essential part of the rituals.

Amos Rapaport²² explores and defines cultural-environment relations and the impact they have on each other. He claims that culture may not be the only relevant consideration, as in the sole motivating factor, but he explains that it's a central and inescapable one. He addresses the topic within the broader context of Environment-Behavior Relations (EBR), which he had propounded in his earlier book *History and Precedent in Environment Design*²³. He dwells on how culture's role can be seen considering other aspects of this set of relationships. To him, it is easier to neglect another aspect in this spectrum when it comes to culture.

As Roger S. Gottlieb, a professor of philosophy and an author puts, the 'problem' per se is humanity's devastation of the natural world. He argues that it is very difficult to face

Rajendra Pradhan, 'Law, History and Culture of Water in Nepal' available at; http://soscbaha.org/lecture-series-xliv-2/, accessed on 25 September 2018.

²¹ The word culture is used in various settings to convey different meanings. But commonly it is regarded as an acquired knowledge from one's society.

Amos Rapoport born on 28 March 1929 in Warsaw is an architect and one of the founders of Environment-Behavior Studies (EBS). He is the author of over 200 academic publications in this field. His work has focused mainly on the role of cultural variables, cross-cultural studies, and theory development and synthesis.

²³ Amos Rapoport, *History and Precedent in Environment Design*, Plenum Press, New York and London, 1990.

this devastation. By which we can infer, that often, it may seem easier to hide from the information of degradation than to accept it.²⁴ He essentially points towards is that the threats to the environment are so often threats to our own lives, and at most times, the causes are often anthropogenic. However, it is our refusal to see the truth that keeps this toxic cycle going. We refuse to investigate our everyday lives and activities, which might contribute to the harm.

But the harm here is not just of the natural world – the *Bagmati* River, but also of the culture. As the river's life is intertwined with the culture, it seems impossible to substitute the role of the river from the cultural practice. However, as Joanna Macy observes, it is human nature to believe that we will inevitably pull through any amount of data that questions the survival of our culture, our species, and even our planet as a viable home for conscious life.²⁵ And it is of the human nature attribute to believe that even if the ecological apocalypse is lurking, it would not be in our lifetime. For example, it is estimated that our consumption pattern, i.e., the huge amount of resources and energy garnered together to produce meat and dairy products, is the primal cause of environmental destruction - from greenhouse gas emissions to destruction fertility of the soil, among others.²⁶However, it is impossible to imagine that everyone on this planet will go vegan in the name of cutting out the environmental footprint even when people are aware of it.

Ann²⁷ expounds that the deterioration of the *Bagmati* River is due to the unplanned urbanization – in the 1990s the carrying capacity of the city had not been considered in name of development and political volatility in Nepal. Her argument exclaims that the history of *Bagmati* Civilization identifies two strains of forgetfulness: a general social disregard of the rivers and their significance, and an administrative oblivion: a failure of the state to adhere to its river stewardship responsibilities. The pollution of *Bagmati* is detrimental both in relation to the environment and the culture. It dives deep into the intertwining branches of culture and environment and how they shape the lives of people; as cultural practices of people heavily impact their lives and at the same time, the environment in which the people live also shape their culture. *Bagmati* River Civilization portrays reciprocity of culture and the river. The restoration and revival of the river are of utmost importance as the survival of the river is the key to development of the residing cultures on its bank.

From the lens of 'Environmental Ethics' 28, the discipline in philosophy that studies the moral

Roger S. Gottlieb, The Sacred Earth; Religion, Nature, and Environment, Routledge, New York and London, 2006, p. 2.

²⁵ Joanna Macy, World as Lover, World as Self, Parallax Press, Berkeley, California, 1991, pp. 16–17.

Rob Bailey, Antony Froggatt & Laura Wellesley, Livestock - Climate Change's Forgotten Sector: Global Public Opinion on Meat and Dairy Consumption, Chatham House, The Royal Institute of International Affairs, 2014 available at https://www.chathamhouse.org/sites/default/files/field/field_document/20141203LivestockClimateChangeForgottenSectorBaileyFroggattWellesleyFinal.pdf, accessed on 25 September 2018.

Anne M. Rademacher, 'Restoration, and Revival: Remembering the Bagmati Civilization' in Arjun Guneratne (ed), Culture and the Environment in the Himalaya, Routledge, London and New York, 2010.

^{428 &#}x27;Environmental Ethics', first published 03 June 2002, substantive revision 21 July 2015, Stanford Encyclopedia of Philosophy available at https://plato.stanford.edu/entries/ethics-environmental/, accessed on 30 September 2018.

relationship of human beings to, and the value and moral status of, the environment and its nonhuman contents. It is related to the conceptual foundations of environmental values as well as more concrete issues surrounding societal attitudes, actions, and policies to protect and sustain biodiversity and ecological systems. In the literature on environmental ethics, the distinction between instrumental value and intrinsic value (in the sense of "non-instrumental value") has been of considerable importance. The former is the value of things as means to further some other ends, whereas the latter is the value of things as ends in them regardless of whether they are used as means to get to other ends. From this notion, the former would present rites and rituals as an essential and integral part for the community to carry on these long-standing religious beliefs. However, the latter would argue that the rites and rituals in it are the community's sole identities.

In both scenarios, the underlying principle stems from a need for balance between the two, i.e., cultural practices and environmental protection. According to Jack Donnelly, the right to practice and profess of every individual is secured as both collective right and individual one.²⁹ But under his theory of cultural relativism, the practice needs to be assessed according to the need of time and should be constructed accordingly not to cause any harm.

Facts and Findings

The rites and rituals performed in the banks of *Bagmati* River is an integral part of Nepali Society. The *Bagmati* River Basin (BRB) has a cultural and economic significance to the people of Nepal.³⁰ It provides most of the city's drinking water in its upper basin, hydropower generation in the middle basin, and large-scale irrigation in the lower basin.³¹ So, the *Bagmati* River not only signifies the holiness and sacredness, but it is also a source of water to the people residing in the Kathmandu valley.

According to Nivesh Dugar³², the major source of pollution of the river can be categorized as the industrial discharge, domestic runoff, and agricultural runoff. The pollutants from the industrial discharge are cyanide, zinc, lead copper etc., for domestic runoff, it is the sewage and solid waste whereas for agricultural runoff it is fertilizers and pesticides. These hamper the ecosystem in a way that technically causes the river's death, meaning that it induces lack of oxygen for the organism present in the river.

However, he also points out that the rites and rituals performed in the River affects the river ecology. The major solid waste such as flowers and ashes derived from the cremation of dead bodies changes the color of the river. It leads to production of algae which causes eutrophication, further contributing to pollution. It is necessary to acknowledge that when the algae die, they are broken by the action of bacteria using

²⁹ Jack Donnelly, *Universal Human Rights in Theory and Practice*, Cornell University Press, 2013, p. 30.

³⁰ Bagmati River Basin Improvement Project (BRBIP) available at http://www.brbip.gov.np/index.php., accessed on 30 September 2018.

³¹ Ibid.

Nivesh Dugar is an Environmental Engineer based in Nepal. He is a freelance researcher working in the field of water quality and solid waste management.

all the oxygen present in the water, resulting to the death of the river. In his opinion, certain section of the river needs to be cordoned off just like in *ghats* of Varanasi for *Ganga* where the stream has been divided into two. One is for the natural flow and the other is for the public. The water in the section dedicated to public usage is treated before being released to be mixed with the natural one.

Dugar, further points out about the river capacity to fight off the pollutants. He illustrates through the analogy of the human body: that like the human body requires oxygen to breathe and produce a supportive system to fight off the diseases which can be obstructed by the increase of pollution such as an increase in carbon monoxide that affects the lungs causing permanent damage to the cells. Similarly, the river system has its own dissolved oxygen used by the river to breathe, which in turn strengthens the river. Still, with the increase in the burden of pollutants, the river eventually breaks off causing its death.

He points out that the rituals performed in the banks of *Bagmati* River of *Pashupatinath* Temple affects the sustainability of the river. Even though individuals and community at large have their own cultural obligations in the society, the rites and rituals performed in the banks of *Bagmati* River, *Pashupatinath* Temple affect the river in different way than the industrial wastages and other anthropogenic activities. It causes eutrophication which not only degrades the quality of the river but also the quantity of water in the river.

Asana Shakya³³ affirms that in the context of Nepal, the major pollutants of the river are domestic wastewater, solid waste, and industrial effluents. These pollutants cause decrease in water discharge and narrowing and deepening of the waterway which ultimately leads to the degradation of river water quality and a decrease in aquatic biodiversity.

The environmental scientist also asserts that rites and rituals performed in the river affect its ecology. The organic matters, from the rites and rituals, disposed into the river have the same effect as pollution by chemical fertilizers. The water is contaminated with an abundance of food for micro-organisms which stimulates their growth and those organisms soon deplete the supply of oxygen when they decompose making the water uninhabitable by aquatic organisms.

The e-questionnaire done for the general public revealed that out of 147 responses³⁴, 110 respondents thought that the rituals performed in the banks of *Bagmati* River at *Pashupatinath* Temple add to the pollutants to the river. These rites and rituals may include—burning of the dead bodies³⁵ and throwing the remains in the water-body, last rites like *Tarpan* and *Arpan*, offerings such as flowers, fruits, incense etc. Whereas, 30 respondents thought that performance of rites and rituals do not contribute to the pollution of *Bagmati* River. However, four respondents reflected that even though they

Asana Shakya is an Environmental scientist based in Nepal whose field of interest is in water quality and soil waste.

³⁴ The respondents were from the age group 16-25(119 respondents), 23-35(24 respondents), 36-45 (2 respondents), 46-55 (1 respondent), and one respondent did not identify the age.

Deaths, and especially cremation, are symbolically constructed as a sacrificial offering of the self to the gods. See, Jonathan P. Parry, *Death in Banaras*, Lewis Henry Morgan Lectures, Cambridge University Press, 1994, chp. 5.

might be pollutants of the river, but on a large scale, this is not the cause of the river pollution. As the wastes produced from performing rites and rituals in the river and in the banks of *Bagmati* River, *Pashupatinath* Temple is a degradable waste. One respondent also mentioned that this may be regarded as an agent of river pollution through a means of a cultural factor. The other respondent explained that rites and rituals performed in the river to certain extend added to the pollution but compared to the pollution caused by mismanagement of drainage and sewage pipes, these are negligible at present. However, the respondent believed that they too should be managed (especially the ashes and remains of the dead bodies) and as long as other massive causes of pollution exist, these factors should not be blamed. One of the respondents pointed out that even though that performance of rites and rituals add to the pollution of the river, it cannot be disregarded as it is concerned with faith of people.

When the respondents were asked if they would still continue to perform certain cultural practices, even after the realization that it would be cause environmental degradation? Out 147 responses, 93 respondents responded that they would not perform cultural practices which would cause environmental degradation to the environment. Whereas, 37 respondents responded that they would continue to perform certain cultural practices, even after the realization that it would cause environmental degradation. However, 17 respondents responded with various stances regarding the performance of certain cultural practices. Their stance was; the cause of the degradation is primarily not because of the cultural practices but rather industrial and households wastes. The extent to which such cultural practices are affecting the environment and other factors must be weighed. A fair balance must be struck between cultural practices and sustainable environmental usage.

Some of the respondents also responded to rely on practices of culture which do not cause environmental degradation. For e.g.: Doing a simple prayer. However, three respondents mentioned even though one does not prefer to follow a certain aspect of their cultural practices, one is culturally bound to do it. For e.g. as per the Hindu religion, the dead body shall be cremated by fire in a bank of the river which is hard not to follow. One of the respondents stated that it is necessary to weigh the cost of the damage vs. the cost of not practicing the cultural practices while deciding whether to continue to follow certain practices even if it would lead to environmental degradation.

One response highlighted that the rituals should be performed by minimizing environmental degradation. Two of the responses say that the continuation of any cultural practices depends upon the ritual. For instance: offerings to a river are a nono but performing death rites is hard to compromise with since there exists a strong Hindu thought that death ceremony should be performed in *Bagmati*.

Other responses expressed that performance of any cultural practice in the river does not pollute it with a high impact. One of the respondents mentioned that there is no other option than to continue cultural practices. One of the responses highlighted that the bio-degradable wastes would decrease as more people opt for electronic cremation.

Whereas, three of the responses asserted that there should be a balance between performance of any cultural practices and the environment as both are vital to the survival of human beings. Protection of cultural practices is important, so there is a need to develop alternative ways to ensure that rituals do not add to pollution. This can create a balance on both the aspects of cultural continuation and environment safety.

According to Rudra Prasad Parajuli³⁶ and Rudra Bhandari³⁷, who facilitate the devotees and pilgrims in performing various rites and rituals in the bank of Bagmati River, the offerings do not cause any pollution to the river. Bagmati River is a holy river. The performance of rites and rituals in the rivers help human beings to get rid of sins of this world. According to Rudra Bhandari, when people offer Pinda to their ancestors from the banks of Bagnati River, it directly reaches their ancestors. Whereas, Rudra Prasad Parajuli mentioned that Pinda can be given through three ways. He stated that these methods are mentioned in the book written by Valmiki which is referred as Shradai Kitab. He said that in the book the author has mentioned Pinda can be given to cow; or put in the shades of banana tree or through the river. They both reiterated that rituals performed in the banks of Bagmati River at Pashupatinath Temple do not add to the river's pollution. It is due to the Kaliyug, that people are not interested in their religion and cultural heritage. The piousness of *Bagmati* River is being polluted by various wastes and discharge of sewage in the river. They mentioned by performing Tarpan and Aarpan in the Bagmati River it will flow to the Kasi. Whereas, cremating dead bodies in banks of Bagmati River allows the mortal soul to rest in peace. If dead bodies are not cremated, the soul of the dead might haunt the living for eternity³⁸. Hence, they both believed that performance of rites and rituals does not pollute the river and considered it to be part of Hindu culture.

Shanti Khadka³⁹ explained that this is the part of a culture that has been transferred from one generation to another generation. If one does not follow through it, then one is not following his/her duty. When asked whether the rites and rituals do contribute toward the pollution of the river. She answered that they do not and advised that plastics should not be thrown in the river. She added that to be cremated in the river is to take a step to heaven.

According to Shambhu Paudel⁴⁰, performance of rites and rituals like the last rite do not pollute the river. He said the electronic crematorium has the least environmental impact and is time-efficient and financially feasible. Kumar Thapa Magar⁴¹also confirmed that electronic crematorium has the least environmental impact. According to him, The Electronic Cremation at *Pashupatinath* Temple was established back in

Originally from Kaveri District of Nepal, Rudra Prasad Parajuli has been working as a Pundit in the Pashupatinath Temple for 25 years.

³⁷ Originally from Ramechhap District of Nepal, Rudra Bhandari has been working as a *Pundit* in the *Pashupatinath* Temple for 15 years.

³⁸ If the mortuary rites are neglected or inadequately performed, the cycle is disrupted, and the result is barrenness, miscarriages, the death of infants and a decline in the family fortunes. See, Jonathan P. Parry, *Death in Banaras*, Lewis Henry Morgan Lectures, Cambridge University Press, 1994, chp 7.

³⁹ Shanti Khadka is a devotee of Lord *Pashupatinath*. She visits the Temple more than four or five times a week.

Shambhu Paudel works in register desk at Pashupati Electric Crematorium, Ring Road, Kathmandu 44600.

⁴¹ Kumar Thapa Magar works as Administration Officer at *Pashupati* Electric Crematorium, Ring Road, Kathmandu 44600.

2015 (2017/10/10) and till date has cremated more than 7833 dead bodies⁴² with a daily average of 10-12 bodies and a monthly average of 312 bodies. The crematorium currently owns two electronic pyre which work alternatively to let the other cool, and get cleaned for another service. No environmental tax has been levied to electronic cremation because of the assumption that it creates less environmental footprint.

However, the influence of culture is still present in the process. All the last rites are reperformed here as well. The remaining ashes are collected and stored and when the high tides flow in the river, the ashes are released in the body of the holy river. This is done as regards and respect to the cultural practices that have been going on for decades.

One of the major concerns in this process is the disposal of 45000-50000 liters of carbon dioxide mixed water from the cremation into the river, which is done once in an interval of every 15 days. To minimize air pollution by filtering the harmful chemicals from mixing directly into the air and also for the functioning of the burning electronic pyre, these huge quantities of water reserve act as a natural trap to absorb harmful chemicals.⁴³ And the release of the water every 15 days directly into the river is harmful to both the ecology and sustainability of the river.

According to Shambhu Paudel⁴⁴, there is a charge of *Batabaran Sulka* in *Arya Ghat* and *Bhansmeshwor Ghat*⁴⁵. The price ranges from 500 from 1,000 respectively. The *Batabaran Sulka* is used to clean the surrounding area of *ghats* and the money also goes to the worker of the *ghat*.

Ashish Ghimire⁴⁶stated that, any wastes produced from the performing rites and rituals are a bio-degradable waste. But a recent shift in practicing cultural rites has led to formation of solid wastes from performance of rites and rituals. For example: plastics that wrap the incense package. He mentioned that till date there have been no plans or programs form the government to see the environment impact done by rites and rituals in the *Bagmati* River, *Pashupatinath* Temple. He further mentioned that the environment impact created by rites and rituals in the *Bagmati* River, *Pashupatinath* Temple has not been assessed in the Environment Impact Assessment (EIA).

This lack of EIA regarding the harm caused by inorganic and organic materials is fairly

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<sup>42</sup> Annual Bodies Burned in Pashupati Electronic Pyre: 2072/10/10 – 2073 /03/30: 1853 2073/04/01 – 2074/03/30: 3715 2074/04/01 - 2075/03/30: 2267
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^{43 &#}x27;Cremation Waste and Toxins', Metals in Medicine and the Environment available at http://faculty.virginia.edu/metals/cases/huffman1.htm, accessed on 30 September 2018.

⁴⁴ Shambhu Paudel works in register desk at Pashupati Electric Crematorium, Ring Road, Kathmandu 44600.

Bodies Burned in *Pashupati* Pyre in last six months: 2075/01/31:567 2075/02/31:715 2075/03/32: 574 2075/04/31:824 2075/05/31:669 2075/05/12:261

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under researched in the entire world. One of them is about the impacts of burning woods and other materials submerged into the river. Coal has been subject to a lot of misinformation. There is a lot we should know but do not know about coal. For example, we do not know nearly enough about how charcoals and coal dust and how they affect and alter freshwater and marine environment. But there is no doubt that they often contain a range of pollutants, including uranium, thorium, arsenic, mercury, lead, and other elements that are toxic at low concentrations.⁴⁷

In recent years, scientists have studied contamination, which is a source of polycyclic aromatic hydrocarbons (PAHs) and other pollutants.⁴⁸ Other studies of PAH contamination from coal have been similarly inconclusive, mainly owing to a lack of adequate investigation. However, researchers at the University of Vienna observed that PAHs from unburnt coal might be a major source of aquatic contamination. But they concluded that the issue has not been well studied and that the data is presently insufficient.⁴⁹

Apart from the presence of pollutants like PAHs, the simple presence of coal dust has been found to cause ecological harm. Studies have concluded that it could harm the flora and fauna living on the bottom of the sea⁵⁰ as oxidizing coal particles reduce the oxygen. However, there is a reason to be concerned that pollution from the charcoals and ashes is being openly disposed of in the *Bagmati* River for a long time.

The present scenario of *Bagmati*River, *Pashupatinath*Temple: Litigation, Legislation, and Initiatives taken.

I. Litigation

The court provides the interpretation of law and judge's decision reflects the state's interest and priorities. Till date, the various writ petition regarding the protection, preservation, and rehabilitation for *Bagmati* River has taken place in the Supreme Court of Nepal. The Supreme Court of Nepal has taken an active stance on the protection, preservation, rehabilitation of the *Bagmati* River. This can be seen by the various court precedents regarding the cases of *Bagmati* River.

Some of the landmark precedents in the present scenario of *Bagmati* River have been; the court has established that the Environment Impact Assessment is mandatory while carrying out the construction.⁵¹ Therefore, the court held it clear that the concerned

Eric de Place & David Kershner, 'How Coal Affects Water Quality: State of The Science', 20 March 2013, Satellite Institute available at https://www.sightline.org/2013/03/20/how-unburnt-coal-affects-water-the-state-of-the-science/, accessed on 30 September 2018.

⁴⁸ Peter M. Chapman, James Downie, Allan Maynard et al., 'Coal and deodorizer residues in marine sediments contaminants or pollutants?', vol. 15, no. 5, *Énvironmental Toxicology and Chemistry*, 1996, pp. 638–642.

⁴⁹ C. Achten & T. Hofmann, 'Native polycyclic aromatic hydrocarbons (PAH) in coals - A hardly recognized source of environmental contamination', vol. 407, no. 8, Science of The Total Environment, pp. 2461-2473.

Ryan Johnson & R.M. Bustin, 'Coal dust dispersal around a marine coal terminal (1977–1999), British Columbia: The fate of coal dust in the marine environment', vol. 68, no. 1-2, *International Journal of Coal Geology*, 2006, pp. 57-69.

⁵¹ Prakash Mani Sharma on behalf of Pro-public v. His Majesty's Government Council of Ministers and others, NKP,

agencies must make due consideration for the environment as well as the monuments.⁵² The court held it to be of very high importance to protect rivers such as the *Bagmati* which is of extremely high significance considering from religious, cultural and environmental perspective.⁵³ It is of utmost significance to protect the environment and environment cleanliness should be protected in practice.⁵⁴ For the environment cleanliness, the mandamus on use and prohibition of plastics bags in Kathmandu Metropolitan was issued.⁵⁵The court has also been vocal regarding the active participation of the citizen in the promotion, preservation, and rehabilitation of the cultural property enlisted in the World Heritage Site⁵⁶.

II. Legislation

The legislation provides the key to understanding the state's priorities in a given matter. While analyzing the Constitution of Nepal, it could be found that the fundamental right to freedom of religion was enshrined in Nepal's first Constitution⁵⁷. The preamble provided insights on the significance of Lord Pashupatinath. 58 The second Constitution of Nepal⁵⁹, made it clear that it is the responsibility of state to protect and preserve monuments.⁶⁰ The third Constitution of Nepal⁶¹ affirmed the citizen's right to practice and profess his/her own religion as handed down from ancient times.⁶² The fourth Constitution of Nepal,⁶³ introduced the concept of fundamental duties of the citizens. It considered the duty of citizen to protect public property and to exercise one's rights without infringing the rights of others.⁶⁴ Article 15 of the 1962 Constitution also stated that citizens have a right to practice rituals in regard to their traditions.⁶⁵ The sixth Constitution, provided the platform for the religious denomination to have the right to maintain its independent existence and to manage and protect its religious places and trusts.⁶⁶ The Constitution of 1990 had kept the state priority to protect and prevent environmental degradation under the chapter of directive principles and policies of the state.⁶⁷ It is in the seventh Constitution of Nepal, that the state recognized the right relating to environment and health as fundamental rights of the citizen.⁶⁸ Whereas, the right to live in a clean environment has been guaranteed as the fundamental right

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⁵² Ibid

⁵³ Bharat Mani Gautam v. His Majesty's Government, Council of Ministers and others, NKP, 2056.

⁵⁴ Ibid

⁵⁵ Santosh Kumar Mahot v. Council of Ministers. WN 3034, 2061.

⁵⁶ Ibid.

The Government of Nepal Act, 1948(2004 B.S), see part II, art. 4.

⁵⁸ Ibid, preamble.

⁵⁹ The Interim Government of Nepal Act, 1951 (2007 B.S).

⁶⁰ Ibid, art. 12.

⁶¹ The Constitution of the Kingdom of Nepal, 1959 (2015 B.S).

⁵² Ibid art 5

⁶³ The Constitution of Nepal, 1962 (2019 B.S).

⁶⁴ Ibid, art. 9.

⁶⁵ Constitution of Nepal (n 62), art. 15.

The Constitution of the Kingdom of Nepal, 1990 (2047 B.S)

⁶⁷ Ibid, art. 24.

The Interim Constitution of Nepal, 2007 (2063 B.S.), art. 16.

in the existing Constitution of Nepal. So much as so, that an individual can claim compensation against the harm caused to them. However, it has also been provided that the State has the power to strike a balance between development projects and environmental protection.⁶⁹

The government of Nepal⁷⁰ has specially created the *Bagmati* Action Plan (BAP)⁷¹ to bridge the gap between the right to environment and right to profess one's traditions and religious practices in the case of *Bagmati* River. The BAP was formulated with the aim to restore and conserve the *Bagmati* River and its tributaries in an integrated and coordinated approach. Whereas, the *Pashupati* Area Development Trust Act, 1987 (2050) focuses on the development and conservation of the *Pashupati* area. *Pashupati* Area Development Fund is formed under this act to manage, maintain and preserve the natural and cultural heritage in the *Pashupati* area and prohibit the registration of land within the area to any person or organization.

In the arena of environmental protection, the government of Nepal has passed various legislation; The Environment Protection Act, 1997 (2053) and Environment Protection Rule, 1997 (2054). The Environment Protection Act makes legal provisions in order to maintain a clean and healthy environment by minimizing, as far as possible, adverse impacts likely to be caused from environmental degradation on human beings, wildlife, plants, nature, and physical objects. The Act further aims to protect the environment with the proper use and management of natural resources, taking into consideration that sustainable development could be achieved from the inseparable inter-relationship between economic development and environmental protection. The Solid Waste Management Act, 2011 (2068) mandates local bodies to take the necessary steps to promote reduce, reuse, and recycle (3R), including segregation of municipal solid wastes at source. It also provides opportunity for the involvement of the private sector, community-based organizations (CBOs), and non-government organizations (NGOs) in solid waste management through competitive bidding. Its objective includes maintaining a clean and healthy environment by minimizing the adverse effects of solid waste on public health and the environment. The local bodies, such as municipalities, have been made responsible for the construction, operation, and management of infrastructure for the collection, treatment, and final disposal of municipal solid wastes. The Water Resource Act, 1992 (2049) focuses on preventing water resources from pollution and other environmental and hazardous effects.

In the a action as mentioned above plan and other legislation, it has been clearly stated that it aims to protect and preserve the resources along with wise and proper utilization of the said resources. In terms of the *Bagmati* River, it is clear that the State has

⁶⁹ The Constitution of Nepal, 2015 (2072 B.S.), art. 30.

In which the Ministry of Urban Development High Powered Committee for Integrated Development of Bagmati Civilization (HPCIDBC) came up with the BAP as one of the major achievements of the collaboration with National Trust for Nature Conservation (NTNC).

BAP covered the Bagmati river system from Shivpuri hill to Katuwal Daha. The total plan outlay for five years was approximately NRs. 15,000,000,000 (Fifteen Billion) to tackle the issues of decrease in water discharge and the degradation of river ecosystems. Also, narrowing and deepening of the waterway, degradation of catchment quality and water quality, eroding aesthetic and cultural values, riverside land use changes etc. were seen as some of the critical issues of the Bagmati river system.

recognized the river's importance both as a cultural entity and environmental resource. However, what does seem lacking is culture's role in the protection and preservation of the environment. For the purpose of the research, the authors remained focused on viewing whether the impact of culture on the sustainability of *Bagmati* river were studied, reviewed, or regulated and the research shows that the State has not prioritized it.

III. Initiatives

On 29 September 2018, the *Bagmati* Clean-Up Campaign reached its 281st Week. After more than 5 years from its inception back in May of 2013, the campaign still works to restore *Bagmati* River to its former glory. Thousands of volunteers from over 100 governmental and non-governmental organizations have joined the on-going attempt to clean out the pollution from the river. According to Ashish Ghimire 3, the pollution results from a lack of proper solid waste management and drainage system. The priority of the State at the moment, hence accordingly lies in tackling these issues. The river is cleaned every Saturday at a different point, yet the amount of waste collected each time has remained stagnant over the past few years. The priority of the State at the moment, hence accordingly lies in tackling these issues.

Even if wastes are not thrown into the water-body inside the *Pashupatinath* Temple, the wastage from other points do find their way into the holy waters of *Pashupatinath*. Also, it becomes rather pointless to keep a small portion of the river clean while other points are left vulnerable, as rivers are moving body, unlike solid grounds.⁷⁵Among many other reasons for pollution, the rites and rituals at the banks of the river are also a contributor. However, as resources are driven towards the major pollutants, no substantive research has been done.

⁷² '273rd week of Bagmati clean-up drive marked', The Himalayan Times, 05 August 2018 available at;https://thehimalayantimes.com/Kathmandu/273rd-week-of-bagmati-clean-up-drive-marked/, accessed on 30 September 2018.

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At every clean-up, on the low end, at least 10 metric tons of waste has been taken out of the river at different locations. In December of 2017, 37 metric tons of waste was collected from *Bagmati* River across the Kathmandu Valley, and just a month later, in January of 2018, 30 metric tons of waste were collected, which begs the question about the approach of the clean-up. Of course, major sewerage points have been diverted away from the river and throwing waste directly into the water body has been strictly regulated. However, a stroll near the banks of Bagmati and its rivulets at different points inside the valley shows plastic bags stuffed with household waste still floating in the body. To give a larger picture, at the beginning of 2017, 37 metric tons of waste was collected from the river. See

^{&#}x27;No reduction in plastic litter in Bagmati', *The Himalayan Times*, 02 August 2017 available at https://thehimalayantimes.com/kathmandu/no-reduction-plastic-litter-bagmati/, accessed on 30 September 2018.

[&]quot;Bagmati River gets polluted yet again; fish start dying', *The Himalayan Times*, 13 January 2018 available at https://thehimalayantimes.com/kathmandu/bagmati-clean-up-campaign-river-gets-polluted-yet-again/, accessed on 30 September 2018.

^{&#}x27;Over 37 metric tons of garbage collected in Valley', *The Himalayan Times*, 23 December 2017 available at https://thehimalayantimes.com/kathmandu/over-37-metric-tonnes-of-garbage-collected-in-valley/, accessed on 30 September 2018.

^{&#}x27;37 metric tons of garbage managed from major rivers in the valley', *The Himalayan Times*, 22 April 2017 available at https://thehimalayantimes.com/kathmandu/37-metric-tons-garbage-managed-major-rivers-kathmandu-valley/, accessed on 30 September 2018.

P. K. Goel, Water Pollution: Causes, Effects, and Control, New Age International, 2006.

Religion and rivers are interconnected; civilizations have been built based on these two aspects. Hence, it becomes natural for the two to intertwine with each other. On a similar notion, the banks of *Pashupatinath* are one of the most important places for Hindus in Nepal and outside Nepal. Hundreds of people pay their pilgrimage to the temple. From rites related to birth to death, the bank of *Bagmati* at *Pashupatinath* is considered sacred and holy making it the part of everyday living. It is because of this eternal connection that many rituals are performed in the river banks which also contribute to the pollution of the river. As mentioned earlier in the introduction, the rituals of the last rites of the deceased include submerging the ashes and the woods into the river directly. Similarly, garlands of flowers, oil lamps, and red powder, fruits are part and parcel of offerings during the ritual performed in the river.

At the moment, these cultural aspects of the clean-up campaign have been neglected. The river plays a vital role in the lives of people in Nepal and around the world. However, in South Asian nations, the role of the river is more significant because of its part in religion.

Challenges

There are various challenges to align both the right to freedom of religion and right to clean environment. There exists possibility of clash as illustrated above. People's sentiment regarding their religious rites and rituals will come to interplay while trying to balance between right to freedom of religion and right to clean environment. This can be resolved by providing platforms for citizens to participate and provide community support. *Bagmati* River Clean-up campaign is not enough. We need campaigns focused more on a community forum, where everyone can own the campaign spirit.

People may feel threatened that the new technologies or modification in some of their rites and rituals might erase the tradition, customs, norms, and values. So, it is important for policymakers to be sensitive toward the customs and traditions. But at the same time, the *Bagmati* River is a living entity. So, it also needs protection. This might create friction between people and concerned stakeholders. However, this is a necessary evil for Bagmati River's protection and rehabilitation r and its tributaries to restore its former glory.

It is important for the public to internalize that the initiatives taken for the preservation of the *Bagmati* River concerning rites and rituals are not an attack toward their culture but is an attempt to minimize the harm toward the cultural practices from environmental degradation. This stands as one of the biggest challenges when trying to create plans and policies which are directly linked to the rites and rituals.

Recommendation

Nepal is considered to be a hub for tourism related to nature and spirituality. *Bagmati* River of *Pashupatinath* Temple is a significant place for all the Hindus around the world. It is also a place where people from different backgrounds come to learn about the

Hinduism and Hindu way of life. *Bagmati* River is the core of *Bagmati* Civilization. As various clean-up campaigns around the *Bagmati* River are being conducted, the committee should also look into the impact created by the performance of rites and rituals on ecology of river.

Various forms of rites and rituals affect both the aesthetic and ecology of the *Bagmati* River. Hence, it becomes important to work on solving this issue. As aforementioned under the challenges, creation of public awareness about the importance of preservation of the environment to protect the culture is necessary for feasible implementation of any plan and policies. These values should be imprinted in the local level community who are directly affected by it. When the public finds the changes that affect their religious practice, they should view it with a positive mindset. On the outset, the center should be individuals who would work to protect and preserve the *Bagmati* River by considering both its cultural and environmental aspects.

The Road Ahead

The Constitution of Nepal has guaranteed both right to freedom of religion and right to clean environment. River and its tributaries, play a huge role in shaping the culture and traditions and being the main source of water. But, due to the recent unplanned urbanization and industrialization, the river ecology has come under threat. Consequently, it has degraded the water quality of the river, hampering the water ecosystem. We have to acknowledge that one of the agents of pollution of the river is the residue collected from the performance of rites and rituals at the banks of the river.

The Bagmati River of Pashupatinath Temple illustrates both the cultural and environmental factor. It is a focal point for the development of Kathmandu valley civilization. Understanding Bagmati River of Pashupatinath Temple will allow us to conceptualize and create adequate strategies for protection and preservation of other sacred river and its tributaries of Nepal.

While various initiatives are being taken by the government of Nepal and civil societies regarding rehabilitation of the *Bagmati* River, it is crucial to analyze all the agents of pollution of the river. Reports have shown that the rites and rituals are causing environmental degradation and harm to the river's ecosystem. Although the impact created by of rites and rituals' performance might be in a small percentage, it is vital to consider their role in the river ecology in the long haul. If we are not to consider threat created to river life by performance of rites and rituals, the damage might be irreversible.

This unique situation presents a challenge where one fundamental right, at first glance, seems to have collided with another. However, on deeper introspection, we can find that rights to a clean environment and culture are intertwined in regards to the *Bagmati* River. As without environmental stability, there exists possibility of obstruction to right to culture and vice-versa as without promoting the cultural significance of the river to the people, it is difficult to save its ecosystem. Considering this, policymakers can create adequate strategies, which can be implemented in an effective manner to

solve the environmental concerns, which in turn does not undermine the cultural rights.

Preservation of *Bagmati* River and its restoration to its former glory is not just about the protection of the river ecology but is also about preservation and continuation of cultural practices. We should attempt to create harmony among rights related to culture and environment as they are the part of key components of human civilization. The current scenario of *Bagmati* River portrays threat to both the river ecology and practice of culture. The existence of right to clean environment and right to profess religion should not threaten one another. Their survival depends upon co-dependency and co-relation with each other.