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New Governance Ways Aimed at Protecting Nature for Future Generations: The Cases of Bangladesh, India and New Zealand: Granting Legal Personhood to Rivers

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Abstract. Recently, three important rivers in Asia and Oceania were acknowledged as legal persons. Questions emerge, such as: Which motivation drives the people who urged the respective courts and governments to grant these rivers legal personhood, in other words, to create Rights of Nature? Do these events lead to transformative social innovation and change our perspectives of how we see nature? As methodology we employ doctrinal research, examining original legal documents and contemporary news sources concerning the three grassroots initiatives on the rivers. The analysis reveals that there are different reasons for proposing this innovative legal approach of creating Rights of Nature. They include: providing people access to clean rivers for drinking water, sanitation, transportation and agricultural purposes; preventing the river from disappearing; addressing the issue of pollution and toxicity of river water; acknowledging the divine status of the river; and honouring indigenous beliefs concerning the river. The research findings demonstrate transformative social innovation: in all three cases, grassroots initiatives led to a system change. Moreover, dissemination of information concerning individual cases inspires other societal groups to reconsider the situation of their own ecosystems and to develop innovative governance possibilities, thereby honouring an alternative worldview in which human beings see themselves as part of nature rather than owning it just for utilitarian purposes.



1. Introduction

Reconsidering our position and role as humans in the natural world is the biggest challenge of the 21st century. Reports alarm that we are driving the earth ecosystems and species into mass extinction if we do not act now [1-3]. The same applies to the indigenous people and cultures living in certain ecosystems, such as the Amazon forest and other tropical forests as well as the marine nomads in the Indian Ocean, and the Inuit and others living in the Arctic regions [4,5]. The Anthropocentric paradigm has got the Earth and its species to the point of facing global exhaustion and extinction. The era of growth has reached its limits. Individuals are longing for new ‘sense-making’ and reconnecting with nature in the collective web of relations.

The relational nature of reality compels a rethink of humanity’s relationship with nature and the cosmos at large [6]. To reconsider the position of humans in the natural world, we must explore alternative horizons that focus on and include the wellbeing of flora, fauna and future generations. In many international treaties and soft law documents, the members of the United Nations (UN) have agreed upon intergenerational justice [7,8]. It means that future generations also should have the freedom to choose their own path in life and be able to feed themselves, to find drinkable water, to live in the houses of their ancestors, and last but not least, to enjoy the beauty of nature. Besides the international law principle of intergenerational justice, scholars point out that nature has intrinsic value of itself [9,10], arguing that we do not need economic or legal arguments to protect nature, because nature does not exist just to serve us as humans. In this view, nature has its own *raison d’être* and we should not continue to disturb or destroy the beauty and complexity of ecosystems. Following that view requires that we reconsider our position and role as humans in the natural world. This compels a mind-set and paradigm shift from our contemporary paradigm in which people mostly view nature from a utilitarian or capital perspective [11].

The transformation of the current paradigm opens up room for joint ownership of societal and ecological challenges among public institutions, non-profits, industries and civil society. To address these challenges, value-sharing partnerships have emerged with multiple stakeholders in society [6]. They aim to increase people’s respect for the environment and its relationship with all living beings and ecosystems. One of the avenues which has been followed recently in innovative social action is to call for legal representation of natural ecosystems in legislative systems, that is to grant rights to nature. These initiatives are often referred to as ‘Rights of Nature’ (RoN), ‘Harmony with Nature’ (HwN), or ‘Earth Jurisprudence’. The rights granted to nature can be the same types of rights as those which can be held by human beings and, among other, legal entities such as companies, foundations, states, provinces and municipalities [12]. Worldwide, 369 RoN initiatives were identified by Putzer et al. [13], among which many grassroots initiatives. The Putzer et al. overview indicates that initiatives can be found in more than 35 countries across the world. Especially in the USA, there have been many initiatives, mostly aiming at the establishments of rights for nature through local regulations.

In this paper, we argue that these innovative initiatives sow seeds for renewed legal systems, and maybe also new mental frameworks, in which our worldview is reconsidered with a post-anthropocentric meaning. To assess this argument, three recent cases are explored in which legal personhood has been granted to rivers in three different countries. The geographical area is Asia and Oceania, because the conference where this paper was first presented was organised from China (<http://www.confiswee.com>, 6th-8th December 2020). In each case, we assess the peoples’ motivation for change and the respective systems change.

The research question posed in this paper is: “Does engaging in new legislation and governance aimed at protecting nature for current and future generations lead to transformative social change?”.

The method is doctrinal research. In order to make the study tangible, we propose to focus on three cases of rivers in New Zealand, India and Bangladesh. Each of the rivers has been granted legal personhood by the national legislator, respectively the High Courts.

The theories we relate with are mostly: Harmony with Nature and Transformative Social Innovation. The latter theory refers to a process of changes in social relations, involving the challenging, altering and/or replacing of dominant institutions and structures. It fosters cultural and systemic change [14-18].

In the second section, the concepts and the theory are explained. The third section explores three RoN initiatives in three countries as examples of the growing movement. The fourth section analyses the findings in view of the theory of transformative social innovation. The fifth section draws conclusions, communicates the limitations of the study, and proposes avenues for further research.

2. Concepts and Theory

2.1. Mother Earth

The HwN movement builds upon, among others, the Gaia metaphor. Indigenous people speak clearly of protecting the rights of 'Mother Earth'. For example, 'La Via Campesina, International Peasants' Movement' states: "Our Mother Earth, her heritage and common goods cannot sustain the spurious over-consumption and over-production of this modern and globalized industrialized society" [19]. The Gaia metaphor pictures the world as one connected living earth system [6]. The perspective compels humanity to look at its place in the ecosystem, that is not as humans versus the environment, but as active agents that are all part of a larger ecosystem. It emphasises the natural dynamic balance and interconnected interplay between all living beings and the geological ecosystem. The emerging role and position that occurs from it is called ecocentrism, protecting and valuing biodiverse ecosystems. The metaphor of one living earth system is based on the belief of relationships between biological organisms but also between (future) organisms and their geophysical environment. The Gaia perspective is a change of heart [6] when people become conscious of it. What then seems to happen is the reshaping and reframing of the relationships with the ecosystem at large, resulting in changing the beliefs that are shaping the ecosystems. The HwN movement guides us in the same direction and it is therefore relevant to explore the motivations, actions and intentions of the people who campaign for granting rights and/or legal personhood to nature, in this paper, the three rivers mentioned in the Introduction. Aligning with the terminology of Mother Earth, RoN initiatives that have led to granting rights to natural entities, e.g. to a river, a specific orang-utan, or species of dolphins, have also been referred to as 'Earth Jurisprudence'.

2.2. Harmony with Nature - position of the UN

The HwN movement is supported by the United Nations (UN) Programme 'Harmony with Nature' (HwN) [20]. The latest report of the HwN Programme contains a Supplement that includes over 170 inspiring range of cases and developments in 'Earth Jurisprudence', i.e. cases or initiatives to grant rights to nature, advances in law and policy, and initiatives in both formal and informal education, learning and public outreach activities worldwide, during the second half of 2019 and the first half of 2020 [21,22]. Advances which are contributing to the non-anthropocentric or Earth-centred approach for the protection of planet and people. The HwN Programme has an office, collects information regarding on-going cases in the world and publicly share their data-bases. The HwN Programme brings forward new partnerships and nurtures the movement of alliances with nature and unites (proposed) pacts, agreements, policies and laws. One of the partners is the grassroots network, the Global Alliance for the Rights of Nature [23]. This network organisation is very active in collecting information and supporting new RoN initiatives. In this paper, we use the term RoN for initiatives that aim to grant rights to nature. Such rights need be granted by a public authority, either a legislative body or a judicial body. The term Earth Jurisprudence is only used when we refer to a text that specifically mentions Earth Jurisprudence rather than RoN. We employ the term HwN when referring to the UN HwN Programme or grassroots movements communicating the concept of HwN.

2.3. *Institutional Setting*

Biodiversity and ecosystems have been the object of various international treaties and many national laws. The motivation to adopt legislation has usually been to safeguard the ecological values of ecosystems. Traditionally, such safeguarding has been the role of governments and other public bodies. The most important international treaty is the Convention on Biological Diversity [24], because it was agreed upon by 193 of the UN Member States. Pursuant to the CBD, each Member State must take appropriate action to implement the treaty's content into the national setting. The CBD is rooted in the UN aim to support and safeguard 'sustainable development', that is meeting our needs while ensuring that we leave a healthy and viable world for future generations [25]. The CBD has three explicit goals: 'the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources' [26]. Biodiversity refers to the variety of life on Earth and the natural patterns it forms, which includes the wide variety of plants, animals and microorganisms and also the genetic differences within each species. The patterns are indicated as ecosystems. They comprise deserts, forests, wetlands, mountains, lakes, rivers, and agricultural landscapes, in which living creatures form a community, interacting with one another and with the air, water, and soil around them. It is this web of life which we call nature. However, as indicated in section 1, despite the CBD and many national laws, biodiversity and ecosystems are deteriorating worldwide. Hence, the ambition of governments to protect biodiversity and ecosystems has so far not yet succeeded. It is noted that the RoN initiatives endorse and strengthen the CBD goals, in particular the first two goals, but the RoN initiatives go beyond protecting as they grant rights to nature itself, such as a river or a mountain.

2.4. *UN SDGs*

RoN initiatives are also supportive to the UN Sustainable Development Goals [27]. They align with the SDGs 5 (Clean Water), 14 (Life below Water), 15 (Life on Land) and 16 (Peace, Justice and Strong Institutions). SDG 16 stipulates: "Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels" [27]. In our view, granting rights to nature, supports to build inclusive institutions. Currently, ecosystems are often an object of discussion, that is between public regulators, inhabitants and businesses that intend to utilise those ecosystems, e.g. for fishing, harvesting timber, discharging polluted water or materials, irrigation goals, or converting the land in order to build houses or factories or to start mono-plantations. If an ecosystem holds rights, it can participate as a stakeholder at the table and represent its own needs. Similar to the legal entity fiction of a corporation, the ecosystem can be represented by its board or representatives. They need to operate in line with the goals as stated in the constitutional incorporation documents, e.g. a law, court decision, or special public ordinance. This enhances the creation of strong institutions as aimed for by SDG 16. Furthermore, indigenous communities and other people traditionally living in the area can be included in the group representing the ecosystem. That would contribute to the goal 'inclusive institutions'.

2.5. *Transformative Social Innovation*

The nature of reality is being found in the relationship with one another. The relationships of all phenomena in complex open dynamic systems are the nature of our society and economy. Transformative social innovation is depicted as a process that brings about "new socio-material relations" by "challenging, altering and replacing the dominant institutions" through the adoption of new ways of doing, organising, framing and knowing [15-16]. It represents not only a process as it is also normative: transformative social innovation aims to create societal transition towards a more "sustainable, just and resilient" common future [15-16]. As the HwN movement transforms interconnected sets of elements in the systems of society and

engages in participatory organisation for change into new ways of becoming, it could be considered a manifestation of transformative social innovation.

Beyond the immediate events as will be described in this paper in regard to the three rivers, there are root causes of why those events happen. The ‘iceberg model’ portrayed in figure 1 refers to the different levels of change in any societal system [28]. It is a tool that allows the observer of the events to review, redesign and shift the perspectives and to see deeper and integrated levels of abstraction within the system that are not immediately obvious.

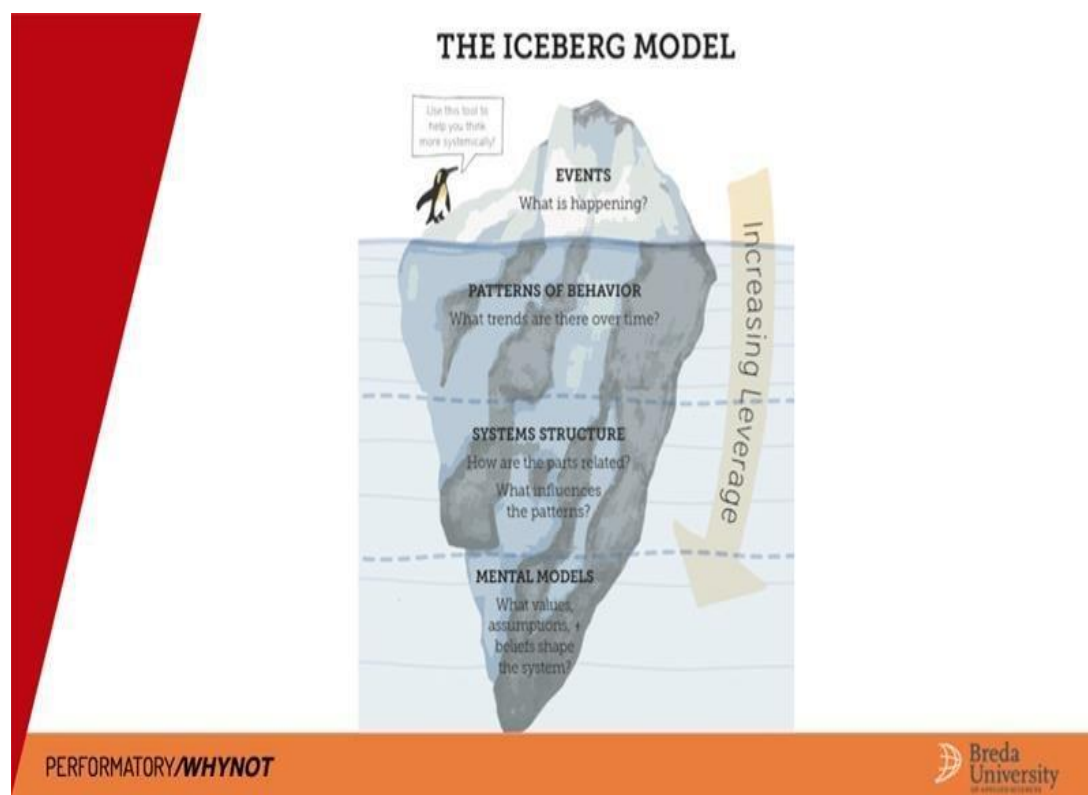


Figure 1. The iceberg model [28].

3. The Three Rivers - The Peoples' Motivation for Granting Rights to the Rivers

Worldwide, 369 initiatives have been launched aimed at granting rights to nature [13]. These initiatives indicate that people consider it high time to show respect to the environment. Environmental destruction, species extinction and cultural beliefs are among the many motives which people claim for the rights of nature to exist [13]. This section dives deeper in the examples of three counties: the granting of legal rights to rivers in New Zealand, India and Bangladesh.

3.1. Whanganui River in New Zealand

Indigenous Māori tribes had filed claims against the State of New Zealand to legislate the Whanganui River (the River) because they wanted to have the authority over the fishing rights and to protect the River against overexploitation. The Māori people believe that their own wellbeing and that of the River, are one and the same [29]. By them, the River is seen as a spiritual entity and they refer to it as ‘Te Awa Tupua’, i.e. their river of sacred power [12, 30]. This is the River that for more than 700 years the Whanganui tribes controlled, cared for, and depended on [31]. Hence, these people are considered to be in religious and spiritual relationships with the River (see figure 2). The Māori people feel highly responsible and connected to the wellbeing and health of the River.

In 2017, after multiple decades, the Whanganui River Pact was agreed upon between the government of New Zealand and Māori tribes. Part hereof was the recognition of the River as a legal person. The River was recognised as a living entity and an ancestor and life force of the tribe. The River now possesses the rights, duties, powers and liabilities of a legal person, whose rights can be judicially enforced by guardians appointed in the law [29, 21]. Acting on behalf of the River is made possible through the establishment of the Whanganui River Board. The animistic worldview and spiritual ecology of the tribes became integrated in the law [9].

The Whanganui River Pact stressed the interdependence of the Māori tribes with the River through a list of intrinsic values, dictating an ‘unalienable connection’ with the River [29]. Furthermore, the legal personhood of the River empowers the marginalised voices of the indigenous peoples. In respect of this River, the local peoples’ beliefs concerning rights of nature, differ from the perspectives on granting rights to nature in other countries. The reason is that the local indigenous people see themselves and nature as a part of bigger ideas and spiritual beliefs. It has been argued that by the establishment of the rights of the River under the legal system of New Zealand, the indigenous Māori cosmology is integrated in the law [32]. Hence, the main motivation of this civil society initiative was to obtain legal recognition of the Māori traditional beliefs and style of life as well as legal authority to manage the River.

3.2. *Ganga River in India*

Ganga is the personification of the river Ganga. Hindus worshipped her as the goddess of purification and forgiveness. Ganga is often depicted as a beautiful fair woman, riding a divine creature called Makara (see figure 2). Varanasi, India, on the banks of the river Ganges (in Hindi: Ganga; hereafter: the River)), is one of the oldest, continuously inhabited cities in the world, because the River is a spiritual destination for millions of Hindus, who believe that bathing in its waters will absolve them of their sins. Also, Hindus believe that dying along the banks of the River in Varanasi will release you from the cycle of rebirth. People with money organise a ceremonial cremation. For the vast majority of the poor, however, their bodies are floated into the River without cremation, hence exposed to the elements [33].

For decades, the Ganga River Basin has been in serious decline because the pollution is enormous. Depended on by human and natural communities, it is an ecosystem in collapse. Since 2013, the National Ganga Rights Movement, a civil society initiative, has been calling for the recognition of the ‘Rights of the Ganga River Basin’ [34]. The civil movement claimed that a fundamentally new form of governance was necessary to protect and restore this precious ecosystem. The people argued for the establishment of “a legal system in which ecosystems and natural communities have an inalienable right to exist and flourish places the highest societal value on those natural systems and communities”. The stated that “Establishing Rights of the Ganga River Basin would enable government, civil society, and the people of India to take action on behalf of the river basin to defend it against actions that would interfere with its integrity, existence, and functioning” [34].

The proposal for a ‘National Ganga Rights Act’ was drafted by environmental organisations, fuelled by civil society [35]. Their cause was driven by the lack of standing of the River under pertinent legislation. Hence, it was impossible to commence litigating in court for the protection of the River against pollution.

People living near the river are highly dependent on the water for everyday life and suffer greatly from the pollution. The Ganga Rights Act would “recognize the river’s right to exist, thrive, regenerate, and evolve” [35]. It prohibits activities interfering with those rights and establishes enforcement mechanisms. Such mechanisms include the establishment of government offices for defending the River’s rights. Any damages awarded for violations are intended to be used to restore the ecosystem to its pre-damaged state [35].

As the previous paragraphs demonstrate, an active and broad coalition initiated a social movement for meaningful legislation to protect the River. The people asked for recognition of the relationship they nurture with the River. The people are interdependent with the river as they recognise the River as a holy body. The socio-cultural religious meaning of the River was highly important to the claim for legal recognition. Besides, the human rights of the local people are violated on the availability of clean sanitation water, due to the pollution of the river [36]. Furthermore, species like the dolphin are endangered. When the River would be declared to be regarded as a living entity, the cultural beliefs and the rights of the people are integrated in the legal system. The sacred nature and religious significance of the River would then be unprecedentedly recognised.

In 2017, the proposed National Ganga Rights Act had not yet been adopted by the Indian legislative bodies. The movement-initiated court cases in the Indian State of Uttarakhand claiming that the River be granted legal personhood in order to protect it against pollution and further deterioration. The judicial power was willing to follow up on the claims of the civil movement. The High Court of the Indian State of Uttarakhand (i.e. the highest court in the State) decided in a series of decisions to grant the legal personality to the River. The decision regarded two of Indian most sacred rivers, the Ganga River and the Yamuna Rivers, as well as the Himalayan Yamunotri glaciers and the Himalayan Gangotri that feed the rivers [37]. These ecosystems are all acknowledged in the judicial decisions as living organisms and granted legal personhood in 2017 [36]. Forests, lakes, meadows and waterfalls were also made part of the legal personality.

Hence, the main motivation of this civil society initiative was to obtain legal recognition of the Hindu traditional beliefs and style of life as well as legal power to protect the River against further deterioration from pollution.

However, after the delivery of the High Court judgements, the Uttarakhand government suggested to make the order “legally untenable” and submitted a request to that end to the Federal Supreme Court of India [37]. The Federal Supreme Court of India has ordered a stay (due to ongoing legal procedures), arguing that legal personality cannot be established in a court case but requires a law. Moreover, the River runs through multiple Indian States, hence the High Court judgements have caused confusion as to the legal status of the River in other Indian States.



Figure 2. Three rivers with legal personhood.

Credit: Lisa Dröes (<https://labtoekomstigeneraties.nl/2020/12/18/rechten-van-de-natuur-wereldwijd/>).

3.3. Turag River in Bangladesh

The Bangladeshi people observed that (big) companies, business individuals and local authorities contributed to the disappearance of Bangladeshi rivers. For example, they put sand and industrial waste into the Turag River (the River) and built illegal constructions on the River banks, e.g. new industrial buildings (see figure 2). The Turag River was declared dead in 2016 by 'The Daily Star' newspaper: "We are dismayed by the slow death of the river. It, in our childhood, used to be a mighty river and we fondly called it the Kahar Daria," said Hafizul Islam, an elderly farmer ... Today, with unbridled grabbing of the river foreshore by "land claimants," the river is barely surviving. It has become a lean flow like a drainage ditch, he lamented." [38]

This frontpage news caused the turning point for how people saw and spoke of the River. People organised themselves and later, a civil movement submitted a claim to the court pointing out that local authorities killed the River. The people stressed the need to stop pollution and the occupiers of the River. Influencing groups signed a petition asserting: “landcroachers are taking the River away and the River is disappearing”. Also, they indicated that the ecosystem was literally dying, with fish and other forms of life disappearing from the River.

In 2019, the High Court of Bangladesh recognised that the River was a living entity and granted legal personhood to the River [39]. The High Court indicated that the same decision applied to all rivers in Bangladesh. The Court acknowledged that the existence of the River and the cleanliness thereof is essential for the people and their way-of-life. It stated that for centuries, Bangladeshi people have lived near the water, use the water for their cooking, sanitation and agriculture, catch fish, and organise their transport via the water [39]. The High Court decision included a poem painting the disappearance of the River: “Once upon a time there was a frenzy river named Turag” [39]. The River would become history, kept alive in the memories of the people. The High Court indicated that such a future should be avoided. The High Court endorsed the claims to protect the River from illegal pollution and encroachment, because the forecast of irreparable loss was to be deemed unacceptable [39]. The governance of the legal personhood of the River was given by the High Court to the ‘River Protection Commission’. The High Court ordered that the topic of River protection and pollution avoidance is to be included in the school system in order to educate and raise awareness, and also integrated in the communication within factories. According to the court decision, any costs of eviction and restoration of the River, will have to be recovered from the (illegal) occupier(s) of the River [39].

4. The Transformative Potential of Granting Legal Personhood to a River

The examination of the civil society initiatives that caused changing the legal status of the three Rivers merits several observations and discussion points.

Firstly, we observe that local people started to organise themselves mostly because of unacceptable life situations or disparity in beliefs and traditions among people in one nation [30,32]. In New Zealand, the people defend their traditional way of living, which is based on and entwined with the nature in their areas. The spiritual dimension plays a large role: the tribes felt that the River in New Zealand was part of them and that they were part of the River. In India, the spiritual dimension also played a role as the Indian River is regarded by the Hindu as the goddess Ganga, representing purification and forgiveness. The severe pollution spoiled the image of purification powers. Moreover, the people who live in the area also depend on this River for their daily live and activities. The pollution is harmful for their health and beliefs. In Bangladesh, the local people also depend on the Turag River for their transportation, sanitation, etc. By asking legal rights for these three Rivers, the people implicitly asked for support and protection of their lifestyles and livelihoods. They organised themselves to ask the respective governments and courts to grant rights to those Rivers, seen by them as a last resort to stop the pollution and encroachment. Resuming, we argue that the selected cases show that the HwN movement nurtures societal movements in various countries that engage the participatory organisation of people.

Secondly, the arguments, which were put forward in the respective proposals in the three countries, all explained that the initiators considered themselves as either a part of the River or that they valued the existence of the River without pollution as essential for their lives. Based thereon, we argue that this implies that their view on implementing environmental protection and justice through adopting innovative RoN legislation or court decisions reflects a transformation in norms and beliefs. We also contend that this is reciprocal: humanity's role and position systematically change when its environment gains rights and occupies new roles and interests in the economy [12]. The more the changes happen in the deeper levels of the iceberg (see figure 1), the more leverage it has to systematically shift and transform the systems in

society [40]. Then we could call it systemic societal change, hence transformative social innovation. Granting rights to rivers has multiple level life-changing effects and implications that lead to deep leverage in the system. Parties involved change their legal structures, beliefs and norms. The Indian judge observed a shift in the law system from an anthropocentric approach to a more nature's rights centric approach in international environmental law [41].

Thirdly, when interdependency between people and nature becomes our renewed understanding of the world, as well as seeing both people and nature as participants of the larger natural world, we can conclude that the relationship between people and nature has been transformed [42]. Through creating a legal representation of nature, it becomes clear that humans and nature both have the right to exist, thrive and grow. Granting rights to nature can transform a society in a systematic way as those new norms apply at once to all people and legal entities in the jurisdiction concerned (country). The legal act of granting rights to nature empowers and strengthens the process of developing new norms and structures, such as in schooling systems and workers' instructions. Rethinking humanity's relationship with nature and the cosmos at large is currently being considered by various groups around the world. They target rivers, land areas, mountains, glaciers, lakes, seas, and animals. As stated above, worldwide, 369 cases have been identified, although not all of them have succeeded in granting rights to nature [13]. It is becoming a legal movement around the globe. Granting rights to ecosystems has multiple life-changing effects and implications that lead to systemic change. Parties involved change their structures, beliefs and norms, assisted by legislation. Social, economic and ecological norms, beliefs and structures in society transform with the representation of the interests for the wellbeing of the environment. It is an unprecedented reshaping of shared life purpose and perspective, supported by the creation of new institutions whose aim is to represent the interests of nature.

Furthermore, we maintain that when social, economic and ecological norms, beliefs and structures in society transform and start to include the representation of the interests of a river for the wellbeing of its natural environment, this implies that also the interests of future generations receive more attention in the decision-making processes. The role and relationship with nature opens up an ecocentric mindset and behaviour that is protective of the wellbeing, rights and existence of natural ecosystems and aims to maintain them in a good condition for future generations' enjoyment.

Finally, as the HwN movement is young, i.e. the HwN Programme commenced in 2009, and the three Rivers examined in this paper were granted legal personhood in 2017 and 2019, it is too early to draw conclusions about the profoundness of the transformation incited by RoN cases. However, granting legal personhood to these three Rivers already demonstrates a change of the system, i.e. the legal system in each of the three countries. That refers to an increasing leverage considering the iceberg terminology (see figure 1). The deepest level, i.e. which mental models, values, assumptions and beliefs shape the system, could be addressed in future research. In the cases at hand, it seems that humanity steps into a post-Anthropocentric age. HwN requires the kindling of an unprecedented relationship with the Earths' system and humankind's existence. In this way, humanity becomes more holistically integrated with nature and protective of ecosystems pursuant to each case in which an ecosystem is recognised as a legal entity (guardianship). Small steps might lead to a fundamental change in society as it spurs new forms of behaviour, thinking processes and organising. Concluding, the three RoN cases which have been examined in this paper, each reveal a process of transformative social innovation, although further qualitative research would be needed to establish the profoundness of the transformation.

5. Conclusion, Limitations and Future Research Avenues

5.1. Conclusion

In order to respond to the research question: “Does engaging in new legislation and governance aimed at protecting nature for current and future generations lead to transformative social change?”, we selected three RoN cases of rivers in New Zealand, India and Bangladesh. Each of the selected Rivers has been granted legal personhood by the national legislator, respectively the High Courts. We examined relevant news items, academic articles, legislative documents and court documents in order to find out if, and to what extent, new socio-material relations have emerged by “challenging, altering and replacing the dominant institutions” [15,16].

We found that indeed by granting legal rights to these Rivers, prompted by societal action, new ways of doing, organising, framing and knowing have been adopted. The three Rivers have been considered by the legislator of New Zealand and the High Courts of the Indian State of Uttarakhand and Bangladesh as living entities that merit legal personhood. Although the Indian court decision has been submitted by the government of Uttarakhand to India’s federal Supreme Court with the request to reconsider the decision, the Uttarakhand’s High Court’s decision has certainly received ample attention in the national and international press and has inspired others to start similar initiatives. In all three cases, specific (new) authorities have been appointed to represent the Rivers. Hence, their legal status has changed, the organisation of the discussions about developments that regard the Rivers has changed, and dominant legal concepts have been altered and replaced. Also, the Bangladesh High Court ordered schools and companies to spend time on educating children and employees about the River concerned, its history, functions and ecology. When these orders are put into practice, also the ‘knowing’ of people in Bangladesh will change.

Based upon these findings, we conclude that engaging in new legislation and governance aimed at protecting nature for current and future generations can lead to transformative social change.

5.2. Limitations

Concerning the information regarding the case in Bangladesh, a translation of the original text into English was prepared by native speaking co-author Setara Begum. Regarding the cases in India and New Zealand, all texts and literature were available in English.

5.3. Further Research

Avenues for further research could be to explore through conducting qualitative case studies: What has come from granting legal personhood and/or rights to nature? What are the stories of change in the local communities following these decisions and actions, in the short- and long term? Has the court or governmental decision changed the perspective of the local people concerning the role and position of human beings in relation to nature? What is the further impact of the legislation on the concerned ecosystem? Have the three decisions discussed in this paper initiated changes elsewhere, e.g. incited social action in other countries to grant rights to rivers or other ecosystems? Lastly, it might be interesting to dive deeper into the impact of this movement for the lives of future generations. Specifically, scholars from various cultural and institutional backgrounds could address the question: What might granting rights to nature mean for future generations?

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