Chapter 14
The Cultural Approach for Community-Based Conservation of River Basins: A Case Study of the Basin School Network, Taiwan

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Abstract Tackling the gaps between diverse knowledge and interests among stakeholders in basin management, the chapter introduces a civil initiative named 'Basin School' in Taiwan. With the aim of orientating grassroots vitality into water environment issues, the new movement attempts to connect local culture, knowledge, and everyday life when empowering community-based basin conservation. Launched in 2017, the Basin School Network contains 69 member groups, covering urban and rural river basins. Based on first-hand observations and reflections by the author, the chapter portrays the practices of the Basin School Network, along with the cultural strategies in mobilising participants and networking the basin communities. The discussion focuses on the role of Basin School Network in incubating new basin citizenship, following the three principles of its membership: adoption of a basin, regular activities, and commitment to the water body. The chapter indicates that in addition to the formal deliberation in policy making, the soft approach integrates everyday, grassroots-based engagements by local communities, thus envisioning a more diversified and balanced partnership for basin conservation.

Keywords Basin conservation · Community-based environmental management · Cultural approach · Civil participation · Grassroots initiative

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14.1 Introduction

In basin governance, enhancing partnerships surpassing sectors has been emphasised in recent frameworks. To tackle regional conflicts in water resource sharing and basin conservation, multi-scalar networks are proposed to balance local authorities and regional dynamics. Furthermore, when improving transparency and trust of the institutions, which are mostly designed and led by technocrats or hydraulic experts, the embedment of civil society is also suggested. Relevant cases can be observed in the administrative committees of Biwa-Yodo Basin, Japan, and the Bow River Basin, Canada (Hill et al., 2008; Nakamura et al., 2012; Stewart & Bennett, 2017). Meanwhile, involving grassroots citizens in basin governance is not an effortless invitation. Since the water issues are complicated, and people's perceptions of environmental risks are diversified, communicating the policy and engineering measures to the non-experts has become a challenging task (Chiang et al., 2021; Nakamura et al., 2012). When pursuing civil participation in decision-making, inclusiveness and openness throughout the process still face challenges (Kochskämper et al., 2016; Sneddon & Fox, 2007). Given the access to participation, another problem lies in encouraging citizens' engagement. Regardless of direct incentives such as regulation or economic subsidies, examples have presented that place attachment is an intrinsic factor for the motivation of environmental conservative activities (Gosling & Williams, 2010; Ryan et al., 2003). Nonetheless, place attachment still requires empowerment and mobilisation before reaching collective actions. The approaches can be creations of common knowledge and collaborative experiences (Heinmiller, 2009; Ishihara & Pascual, 2009), while the non-government organisations (NGOs) can facilitate the process as a mediator between the technocracy and the grassroots society (Bennett et al., 2016; Lassa, 2018; van Aalst et al., 2008). These organisations often have stronger connections with the civil society; therefore, they can not only assist in policy communication but also apply local knowledge in decision-making.

The chapter introduces a bottom-up example of basin conservation that mobilises citizens via grassroots groups in Taiwan. Besides the specified environmental organisations, a special actor in the network is the community college. The community college[1] is a form of local-based NGO that provides lifelong learning programmes for citizens. Under the supports from the central government and the supervision by the National Association for the Promotion of Community Universities [NAPCU], there are 89 community colleges around the country, covering every municipality (NAPCU, 2022). Due to its close attachment to the grassroots society and environment, most community colleges provide lectures and activities that investigate local history, cultural heritages, and ecological

[1] The English translation of the organisation can be 'community college' or 'community university'. Although the supervising association used the term 'community university', the chapter chooses 'community college' to distinguish it from the academic university that provides formal diplomas and is established in a larger size.

systems. These experiences have made the community colleges a granary of indigenous knowledge. Besides, the community colleges also function as critical gatekeepers of the local civil society when external agents (e.g. the government, consulting firms, and academics) enter the community, further facilitating the resources and understandings brought by diverse sectors (Chiang et al., 2022). To bridge the grassroots activities and supportive partnerships with other sectors, the community colleges launch a nationwide 'Basin School'. The network aims to integrate education, eco-actions, and policy engagement, particularly from a cultural approach. Since the Basin School is an innovative and ambitious attempt of building a national network that surpasses scales and level, an exploration of its strategies in mobilising the grassroots citizens provides insights into the bottom-up construction of similar partnerships.

The materials for the case study come from first-hand observations and reflections by the authors, with four of them being key organisers and practitioners of the network. Supplemental data is achieved through the publications of the Basin School, as well as the reports provided by the member groups. The chapter first reviews the formation and organisation of the Basin School and then introduces the culture-focused practices in inspiring citizens' environmental awareness and actions in basin conservation. Finally, the case study indicates the contributions and existing issues of the Basin School in networking and mobilising new basin citizenship.

14.2 Overview of the Basin School Network

The formation of the multi-regional basin partnership could be traced back to 2004 when the community colleges and related NGOs organised a platform for environmental conservation in the basin of Tamsui River, New Taipei City. In 2006, corresponding to the national programme of flood adaptation, the NGOs with concerns of river and basin conducted a conference. The participating groups further constructed an alliance to monitor the governmental flood management in 2007, later hosted another national drainage conference in 2008. Entering the 2010s, coping with the national initiatives of involving stakeholders in basin management, the role of NGOs had been more significant in public-private partnerships. However, due to the requirement of highly specialised knowledge when engaging in river restoration projects, the NGOs decided to separate their approaches to address compatible scopes on different issues. From the hardware approach, the NGOs with expertise in ecological assessment and environmental technology had formed a river platform to oversee the engineering practices. On the other hand, from the software approach, the NAPCU focused on working with grassroots groups to enlighten the citizens' awareness of the basin environment. With the 'soft' perspectives, since 2015, the NAPCU brought out a new programme called 'Learning about the basin'. The programme encourages the community colleges to design lectures and actions on local basins, which were also connected with the existing activities of community revitalisation.

When organising the community-based basin network, examples of Japanese basins have inspired the design of the Basin School. In the basin of Genbei River, Shizuoka Prefecture, Japan, during the 1960s, water pollution had triggered conflicts between farmers and urban residents for almost 20 years (Watanabe, 2006). As an alternative, the municipality of Mishima proposed a participatory river improvement project, and the Groundwork Mishima, a non-profit organisation, functioned as the major facilitator among the administration, enterprises, and civil groups (Okamura, 2003; Watanabe et al., 2006). In addition to the activities surrounding the Genbei River basin, the Groundwork Mishima enlarged its scope to engage in grassroots actions such as the conservation of environmental and cultural heritages (JSCE Infrastructure Partners, n.d.). The success of networking partnerships in basin management was then spread to Taiwan. The NAPCU developed the agenda of the Taiwanese Basin School based on a similar structure in 2017, when the Basin School conducted its first national conference. In the same year, several indigenous communities in Western Taiwan formed a prototype of Basin School. The NAPCU officially launched the Basin School Network in 2018. As a result of the discussions among invited members, the partnership announced three principles to enrol its membership.

1. *Adoption of a basin.* The member should choose a certain part of a basin as the target area for its activities. The size of the area is flexible and can be decided by the member. For instance, a community group can adopt the upstream basin of a river or the waterways within its region.
2. *Implementation of regular activities.* The member should conduct learning activities on a regular basis. Being active once a year is not acceptable.
3. *Commitment to the waterbody.* The member should intervene if any problem is noticed in the adopted area.

The aspiration of the Basin School is to involve at least one partner every basin nationwide. However, the partnership is still on its way of growth after being implemented for five years. In 2022, the network has contained 69 members, with 35 members focused on urban basins and 30 members focused on rural basins.[2] Figure 14.1 illustrated the rivers adopted by the Basin School partners.

Looking at the geographical distribution, the river basins covered by the partnership were concentrated in the Northeast Taiwan, while most of the adopted rivers in the south were located in rural basins. If focusing on the attributes of the partners, the local community colleges, with 30 of them enrolled, still occupied the majority. However, to ensure the diversity of this partnership, the NAPCU determined that the community colleges should not take over more than half of the membership. Other than the community colleges, there were 14 NGOs from the grassroots to national level engaging in the Basin School. Most of the member groups focused on environmental issues and landscape conservation. The 11 enterprises joining the

[2]Three of the members concentrated on multi-basin facilitation, and one new member had not yet confirmed its basin to adopt.

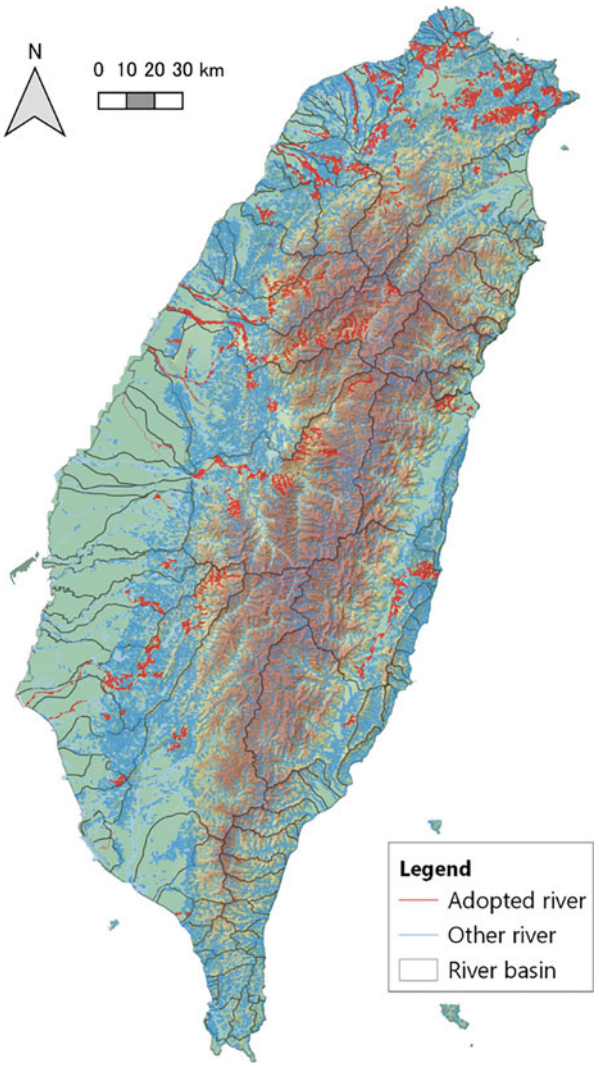

Fig. 14.1 The rivers adopted by the Basin School Network members. (Map source: Water Resource Agency, 2017a, 2017b, 2017c). Note: The map presented the large basins and whole waterway of rivers, while some of the rivers were only partly adopted. Besides, the map had dismissed small waterways or tributaries that were excluded in the map source

partnership consisted of 4 consultant companies, and the other corporations included farms, agricultural and social business, or agency that provides local tourism packages. Another critical group targeted by the NAPCU was the community association. Along with the community revitalisation movements in the 1990s, community associations had been one of the most active agencies. Their initiatives included cultivating grassroots activities and events to strengthen the residents' local attachment, and to promote local industry or tourism (Chen, 2014). There were seven community associations enrolling in the Basin School Network, and the NAPCU was still inviting more participants to integrate their grassroots experience in

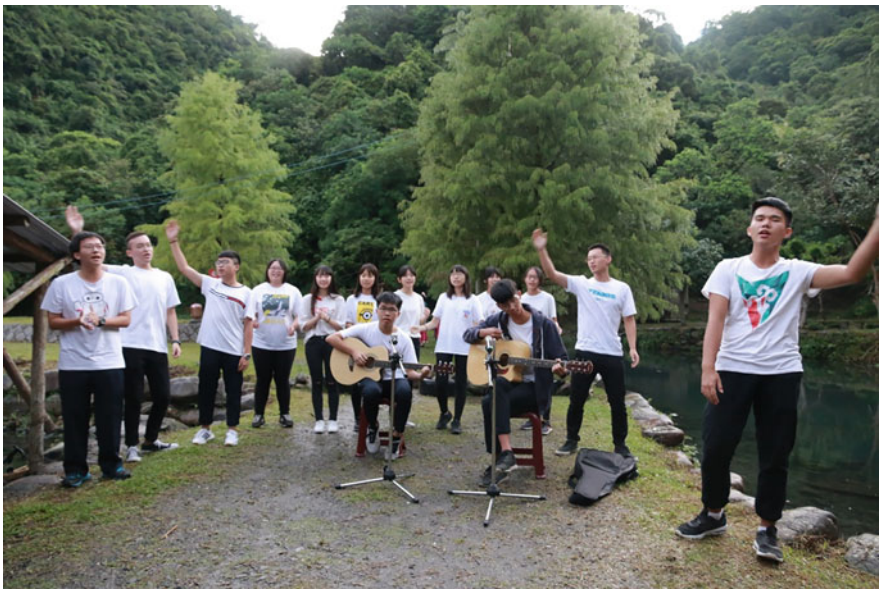

Fig. 14.2 Local high school students presenting their poems at the waterfront concert by Dahu River, Yilan County (Photo source: Luodong Community College)

collaborating with the citizens and knowledge of local culture into the network building.

Despite the limited coverage and membership of the Basin School due to its brief period after launch, the member groups enrolled had already designed and conducted creative activities in basin conservation. The following section introduced the attempts to cultivate grassroots water culture in the daily life of communities, thus enhancing community-based basin protection.

14.3 Cultivating the Grassroots Water Culture

14.3.1 Designs of Local Actions for Basin Conservation

Local activities brought out by the Basin School partners served the fundamental role of mobilising the citizens to engage in basin conservation. The activities included regular events on a weekly basis, as well as seasonal or annual festivals (Fig. 14.2). The regular events included walking tours, bird watching, ecological and cultural surveys, water quality monitoring, river patrol or clean-up programmes at the waterfronts. Some member groups also participated in public hearings, vision workshops, and policy assessments. Among all the activities, environmental education programmes and river patrol were the most popular practices since both adults

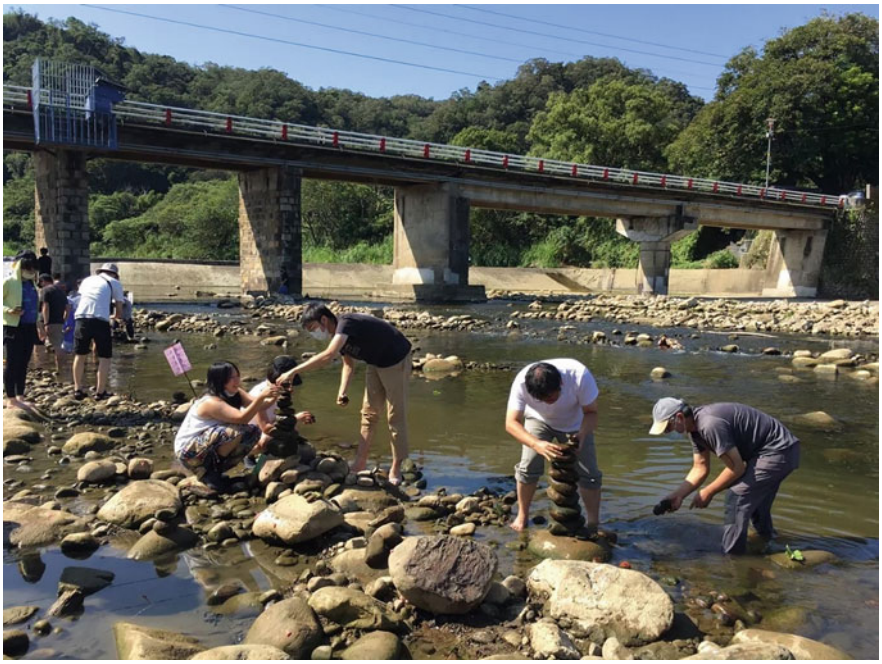

Fig. 14.3 The stone stacking championships (Photo source: NAPCU)

and children were capable to engage. Regarding the environmental education programmes, in addition to lifelong learning organisations, partners in school systems, such as Yilan Senior High School in Yilan County and Zhonghe Junior High School in New Taipei City, also integrated the explorations of grassroots knowledge and basin environment into the curriculums of geography and local studies. Besides, the river patrols not only monitored illegal activities and removed invasive species. Some of the member groups also conducted water quality investigations applying citizen science measures such as biodiversity surveys or testing kits, further contributing the data to public sectors or the scientific community for policy making in water management.

Other creative activities were also carried out by the Basin School partners. Stone stacking championships presented an example of rethinking the water environment from leisure events (Fig. 14.3). The first stone stacking championships took place at the waterfront of Fengshan River, Hsinchu, under a historical stone bridge. The competition was organised on an annual basis by a local environmental NGO, and attracted participants of a broad range of ages. Most players joined with family members, and the eldest player in 2019 was a 90-year-old lady. Aside from the stone stacking championships, the participants could also enjoy various side events such as guided tours in the neighbourhood or music concerts. Later, similar competitions were implemented at the waterfronts in other regions. When the organisers enrolled

in the Basin School programme, the design of the competition began to involve deeper and wider concerns about the basin environment. For instance, a desirable waterfront for stone balance should provide stones of diverse sizes, as well as a clean river environment that ensures safety and scenery. These characteristics could be diminished by pollution or concretisation. Therefore, the choice of a suitable place for conducting the stone stacking championships could also function as an examination of the basin environment.

14.3.2 Connecting Grassroots Citizens Through a Cultural Approach

In addition to the on-spot activities, walking tours that connected waterscapes and local lives also enlightened the environmental awareness of citizens. Furthermore, many of the activities adopted the methods of participatory design, making the preparation a process of empowerment and mobilisation. Examples could be found in the basins of New Taipei City, one of the two municipalities of the capital metropolis. The San-Ying walking festival has been conducted annually since 2013. The name San-Ying referred to two neighbouring districts, Sanxia and Yingge, that shared the same basin of Dahan River. The walking festival was hosted by a local NGO that promoted sustainable environmental and cultural conservation. Coping with the event, the NGO cultivated local tour guides to provide a comprehensive introduction to the cultural and industrial landscapes of the basin. The training programme also accumulated a collection of historical records and maps throughout the fieldwork.

A similar initiative of empowering bottom-up engagement was launched in the basin of Jingmei River, Taipei City, by the consulting firm Classic Design and Planning. In 2019, the firm brought out a series of seminars, workshops, and fieldwork that covered spatial design, land use, and environmental revitalisation. The organiser encapsulated the grassroots discussions as action plans and planning insights, then submitted to the local administration for future improvement. On the other hand, some community colleges also attempted to upscale their influence. The Hsindian Chungkuang Community College, New Taipei City, organised regular river patrols and hosted monthly multi-sectoral meeting with the basin authority, interest groups, and hydraulic or ecological experts. The topics in the meeting compassed environmental impacts of river constructions, blue-green infrastructure around the basin, as well as bottom-up policy monitoring and educational programmes. In the basin of Shumeikeng River, New Taipei City, local communities, residents, and external groups had formed an alliance to protect the basin environment. In 2019, the Bamboo Curtain Studio, a member NGO focusing on arts-based engagement and local revitalisation, New Taipei City, took a further step in public participation. The Studio developed a national network that oversaw the

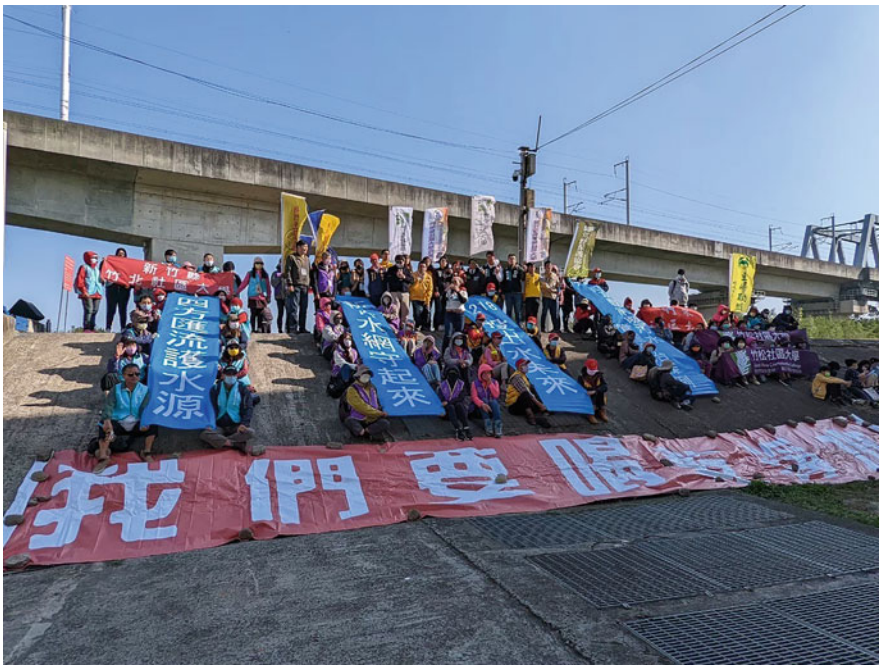

Fig. 14.4 The Clean Drinking Water Alliance announcing their statements. (Photo source: NAPCU)

river constructions around the country. People can access and subscribe visualised details of the engineering projects on an online map platform.[3]

14.3.3 From Local Crises to Collective Actions

Besides community mobilisation and policy engagement, networks facilitated by the Basin School programme had also achieved a regional referendum to protect the local drinking water. In Hsinchu area, one of the biggest manufacturing bases nationwide, water distribution between the industrial sector and settlement had triggered conflicts. In 2017, local citizens found industrial pollutions in the drinking water source. The grassroots groups, NGOs, and community colleges then launched the 'Clean Drinking Water Alliance' (later registered in 2020) (Fig. 14.4). The alliance organised ecological surveys, protests, and other advocative events to raise awareness of the citizens and authorities. Under the pressure from citizens, in 2020, the municipality removed more than 6000 tons of waste from a landfill located

[3] See the website: https://river-watcher.bambooculture.tw/map?limit=3000

in the water conservation area. Furthermore, at the end of 2019, the communities proposed a regional referendum for a clean water act.[4] Following the referendum, the Basin School partners, collaborating with citizen groups and a local university, developed a series of workshops throughout 2020 and 2021. In December 2021, right before the referendum, local stakeholders conducted a conference to compile common visions of the Hsinchu basins. The public discussion suggested putting biodiversity and civil participation in a higher priority. Moreover, the objectives should be accomplished by improving the intimacy between the water environment and the residents. In practice, the conference suggested systematic environmental education about local waterscapes and community developments for all ages, as well as bottom-up, multi-sectoral integrations. Facilitating indigenous knowledge was also a critical aspect. Participants indicated that local citizens should be the key actors to discover and conserve the grassroots knowledge. Communicating the legacies with the public were further expected to enhance local identity and to develop new ways of living. Eventually, the clean water referendum was approved by more than 131 thousand votes (87% of the participating voters with 43.39% of the voter turnout) (Hsinchu Election Commission, 2021b). Responding to the success in the referendum, the mayor promised to legitimise drainage management and improve pipeline facilities to maintain the quality of drinking water (Hsinchu City Government, 2022).

14.4 Networking the Basins by Co-learning

14.4.1 Connecting the Common People

In facilitating the Basin School Networks, a fundamental strategy was to promote a decentralised linkage among member groups, and the citizens should engage as residents of the waterscapes. The strategy enabled the grassroots community to flexibly respond to the highly divergent issues. Furthermore, the diversity of participants also reflected multiple imaginations of local water environment. In practice, the Basin School focused on three basins as demonstrations of networking: Touqian River in the northwest, Dajia River in the west, and Zengwen River in the southwest. It was also stressed that regional connections could better mobilise grassroots communities with various concerns into a shared basin platform. By bridging different problematics and characteristics of the partners, the Basin School Network attempted to develop long-term and divergent relations between society and the

[4]The voters were asked, 'Do you agree that Hsinchu City should make Self-Government Ordinance for Wastewater Management, which stipulates that both wastewater and polluted water produced by industries, hospitals, and businesses must be treated to remove contaminants via specially designed pipelines, instead of allowing the disposal of such water into waterways upstream to contaminate drinking water intake and irrigation water intake areas?' (Hsinchu Election Commission, 2021a).

water environment. The diversity of member groups also extended accesses to more resources and opportunities of interactions from different sectors in society.

In the Touqian River basin, the clean water referendum had incubated a basin network that connected five community colleges along the river. Recently, the Network had been discovering a small historical harbour settlement and developing the neighbourhood as a new hub for environmental activities. In the basin of Zengwen River, the NAPCU had started to target and encourage potential groups to engage as new partners, such as the upstream indigenous hunters and the downstream farmers' groups. The recent event in 2022 was a land art festival with Tainan University of Arts. Entitled 'A Thousand Names of Zengwen River', the land art festival aimed to intertwine discussions of basin issues with cultural creations through arts, thus creating an advocative art festival. The basin community of Dajia River was still at an early stage of formation trying to move forward from experience exchange. Coping with the new scope of the everyday landscape, an experimental initiative was to identify the waterscapes with contexts of basin culture and then invite local partners to investigate and manage them. Furthermore, the practice also aimed to address the connections between community and the water environment and, moreover, to attract citizens to engage waterfront activities and basin conservation.

In addition to providing opportunities for the citizens to investigate local waterscapes, the Basin School partners also contributed data to the scientific community. Such initiatives of citizen science could be found at the fishing championships in Shengou Village, Yilan County. The competition was organised by a group of local scientists under a project entitled 'Sciences in the Farmland'. As an alternative to the ecological surveys, the competition had been conducted annually since 2018. Within the limited time span (around 9 days in the 2022 competition), the participants could freely explore the water environments and capture the living creatures (Sciences in the Farmland, 2022a). After uploading the photos of the animals, the participants should release them at the same spot. The competition had accumulated more than 2500 observation records and attracted external tourists visiting the village (Sciences in the Farmland, 2022a). Furthermore, in 2022, the participants recorded eight protected species, and five of them were newly discovered (Sciences in the Farmland, 2022b).

14.4.2 Communicating the Outputs

To facilitate experience sharing at the grassroots level, since 2017, NAPCU had launched an annual conference with advancing stages of the Basin School's general theme. The development of the Basin School programme could be divided into three phases. The years 2017 and 2018 were the primary phase when the concept, vision, and general principles of Basin School membership were established. The second phase (2019 and 2020) marked a cultural turn of the Basin School. The transformation was highlighted by proposing the idea of 'water culture', and the activities

focused on soft approaches instead of overseeing hard constructions. Since 2021, the water culture was then narrowed down to the 'everyday landscape', with particular regard to the connection between daily life and waterscapes.

As a platform for co-learning, the agenda of Basin School conferences included plenary speeches by the invited experts and panel discussions among community workers. Participants could also engage in the side events such as walking tours, salons, and workshops. For instance, the 2019 conference focused on the application of visualised data and multimedia to communicate indigenous knowledge. The basin salons then introduced the investigation of waterscape transformation through historical maps or aerial photographs. In 2020, following the cultural turn of the Basin School, the salons presented examples of integrating grassroots knowledge into various aspects of community building, such as the construction of an indigenous settlement at an urban waterfront. The panellists included the leaders of NGOs and a consulting firm targeting environmental protection and cultural heritage. The panel discussion was then followed by a general conversation. Applying the method of the World Café, the participants exchanged their knowledge, experiences, and problematics in cultivating basin partnerships at the grassroots level. In 2021, corresponding to the theme of water culture, the basin salon invited five authors to portray six everyday waterscapes as demonstrative cases. Besides, discovery of alternatives in the COVID-19 pandemic was also a critical issue. With the growing limitations of conducting in-person activities, online tools served as a substitute. Taking the online walking tour as an example, some member groups adopted a new mobile application to record the waterscapes during walking tours or in everyday observations. These examples showed that digitalisation of everyday waterscapes not only created archives for the local heritages but also provided a co-learning platform that surpassed the community borders.

Along with the annual conference, NAPCU also published a journal entitled 'The Flower Buds of the Locals' (later renamed 'The Flower Buds of the Basins') to communicate the accomplishments of Basin School members. In 2019, the journal introduced the initiatives throughout the year conducted by the 30 members then. The 2020 issue presented a chronology of the cultural heritages of water, covering hardware infrastructures such as water resources development and river improvements, as well as bottom-up activities related to water environments. For further dialogues with diverse alternatives, the journal also contained columns contributed by local actors or external experts. In the 2021 issue, the articles introduced the geographical concepts surrounding landscape, as well as their connections with local water issues. For instance, in urban habitats, flowing rivers and water infrastructures such as pipelines and drainage had weaved the urban texture that incubated certain ways of living (Yu, 2021). Furthermore, despite the impacts of urbanisation, revitalising traditional waterways into urban blue-green infrastructure could also reconnect modern living with local heritages (Chang, 2021).

14.5 Towards the Incubation of Basin Citizenship

14.5.1 Basin Adoption and Reconnection to Everyday Life

The first principle of the Basin School Network is the adoption of a certain basin. Compared to the experts or specified NGOs in environmental conservation, although the grassroots groups' technical knowledge is limited, their experiences on the ground can better facilitate the localised visions that balance community development and basin protection. For instance, in the Fengshan River basin, Hsinchu City, the Ruowu College, a rural hostel in a renewed traditional house, has contained the landscapes of paddy fields and river into its walking-tour packages. Taking the visitors to the waterscapes provides a reconnection between everyday life and the basin environment. Instead of expressing the concepts of basin conservation, the grassroots groups focus on building a new lifestyle that emphasises deeper interactions with local waterscapes. Furthermore, regarding the facilitation of grassroots partnership, the existing network of community revitalisation plays the role of gatekeeper for grassroots intervention, particularly when seeking support from key actors within the neighbourhood.

Cultural approach of basin conservation also creates an alternative to bringing environmental awareness back to the ground. Many communities have started to draw out waterfront events as part of local revitalisation. In this sense, new perspectives of grassroots water culture can not only bridge more external engagements but also promote local tourism. Like the newly launched land art festival in the Zengwen River basin, the Meinong Yellow Butterfly Festival in Kaohsiung City marks a distinguished cultural turn of post-movement contributions. The festival has been designed as a main event of the anti-reservoir movement since 1995. Conducted in the river valley that was planned to be submerged by the reservoir, the festival integrated the local beliefs of 'Tudigong', the lord of the ground, and the yellow butterfly as the symbol to represent the ecological impacts of the reservoir construction (Chiu, 2021). After the administration eventually cancelled the reservoir construction, the festival remained as a representative local event. Entering the 2000s, the festival applied the insights of Satoyama initiative and enlarged its scope to a wider concern of cultural and environmental conservation. The cultural turn emphasised involvement of a larger diversity of participants in a longer time span. The 2019 festival invited the participants to a series of artwork creations, including workshops on theatre, music, literature, and dance, to reconnect themselves with the waterscape (Chiu, 2021). Succeeding the achievements in social movements, commitments of continuous efforts to enlarge the influence in both political realms and civil society is a crucial issue. The Meinong Yellow Butterfly Festival presents a successful example of the transition from social movements to cultural actions in promoting basin conservation and finally became a key to community prosperity.

14.5.2 Regular Activities and Accumulation of Basin Heritages

The second principal stresses regular actions surrounding the adopted basin. Although annual or seasonal events can involve large participants and inspire environmental awareness, everyday practice is also inevitable to sustain people's enthusiasm and consideration of basin conservation. Implementing regular activities has two meanings in incubating basin citizenship. On the one hand, consistent engagements encourage local citizens to embed the river into their daily life, and the outputs can be accumulated as heritages of the basin. For instance, the story-map mobile application builds an archive of historical, cultural, and natural legacies in the waterscape, and the river patrol empowers a group of citizens to oversee potential hazards in the basin. On the other hand, creating a compilation of basin activities also develops different relations between humans and water. These diversified human-water connections are expected to nurture deeper understanding and wider imagination about basin conservation. Regular activities acquire grassroots knowledge about the local waterscape, while annual or seasonal events contribute creative insights to the environmental practices. When achieving civil participation in basin conservation, compared to the emphasis on water resource management and disaster mitigation, cultural strategies focuses on embedment of collective memories and encouragement of different imaginations. In this sense, the cultural approach of civil mobilisation concentrates on the process of directing people to local waterscapes, from raising one's attraction to facilitating observations and reflections, further generating alternative visions for future actions and a shared commitment between different stakeholders.

Through the multi-regional network of the Basin School, members can communicate the local heritages and upscale the impacts. The conference and journal provide platforms that surpass regional borders, and the contributions of citizen science also connect grassroots knowledge to governmental decision-making. Besides the regional collaboration across basins, generational succession is also crucial for sustainable engagement. Corresponding to the educational programmes in some high school Basin School partners, in 2022, NAPCU organised a 3-day summer camp for high school students. The summer camp took the students to different waterbodies in the community, including the valleys with or without hardware constructions such as levees and sluices or the streams polluted by upstream development. Nonetheless, the students also participated in conservative activities like cleaning the ecological ponds and investigating the water pollution of local drainage.

14.5.3 Rooted Commitment and Active Citizens

The third principle of the Basin School Network is a commitment to protect the adopted basin. In other words, the network requests its member groups to act when

the basin faces threats. This commitment transforms the position of citizens from passive audiences that enjoy the waterscapes to active stakeholders that engage in public discussions and actions of basin conservation. Along with the activities that accumulate grassroots knowledge and understanding about the basin environment, the Basin School partners are capable to observe potential hazards to either the water quality or the surrounding ecology. The threats include industrial pollution and the impacts of hardware construction. For instance, governmental treatments for disaster recovery tend to cover the waterfront with river embankments. As a result, the authentic environment, both the scenery and the ecology, can be soon interrupted by engineering solutions if no objection is declared immediately. Based on the experience of bottom-up engagement, many Basin School members have built access to voice opinions, and some of them are invited by the authorities for policy consultation. The multi-sectoral meeting hosted by Hsindian Chungkuang Community College, New Taipei City, ensures a platform for civil groups and external experts to participate in decision-making. In recent years, the water governance frameworks have been enhancing civil discussion and public-private partnerships; thus, a more effective role of citizens can be expected.

The commitment of the member groups is a rooted promise to actively engage in community-based basin conservation. Nonetheless, the bottom-up approach distinguishes the Basin School Network from the experts or the environmental education programme provided by the central government. The programme designates environmental education centres in multiple basins, and the materials are produced by experts in related fields. Meanwhile, grassroots groups have more potential to develop intimate relations and localised alternatives. Compared to traditional environmental education which tends to be general and technical, the community-based strategy emphasises that education should be integrated with actions in basin conservation. In particular, community colleges have a broader scope compared to other citizen groups that focus on specified issues. For instance, the community colleges often provide art or cultural courses. Consequently, bridging the activities with local waterscapes can initiate creative outputs in basin conservation. Relevant practices include the artwork creations that use local rivers as the theme, as well as the walking tours and exhibitions that bring the works and the audiences to the waterfront. The strategy opens an innovative pathway that uses leisure activities to variegate the dimensions of grassroots water culture.

14.5.4 Implications and Challenges

When seeking community-based environmental conservation, to guarantee the self-determination of local citizens, integrations of knowledge are often highlighted (Boulton et al., 2000; Duker & Klanarongchao, 2022). In the mobilisation of stakeholders (especially citizens), empowerment in learning and facilitating diverse interests are also stressed (Vall-Casas et al., 2021). The Basin School Network provides an example of adopting cultural strategies to mobilise grassroots residents

as active citizens, thus facilitates a platform for community-based basin conservation. At the individual level, the case portrayed the importance of embedding environmental concerns into everyday life in local communities. Apart from the design of civil participation measures (Rydin & Pennington, 2000; Vall-Casas et al., 2021), as a supplemental alternative, the soft approach provides a fundament to cultivate public discussion. Furthermore, at the community level, the rooted human-water linkage promotes a shared sense of responsibility, leading to more creative imaginations of the basin's prosperity. At the basin level, the Basin School demonstrates a flexible and decentralised partnership that connects diverse groups. The member groups function as bridging organisations between grassroots citizens and external groups (Lee & Krasny, 2021). The network focuses on empowering citizens to accumulate basin legacies and embrace the commitment to protect the water environment. Although the Basin School intendedly distinguishes itself from the focus on policy making, the cultural actions still contribute to the formation of a basin community.

Regardless of the innovative attempts to mobilise community-based basin conservation, challenges remain in the development of the Basin School Network. The soft approach lowers the barrier of involvement, but, at the same time, faces difficulties when building a stable and sustainable partnership. In the first place, the programme is still new and experimental. Consequently, despite the determined three principles, the NAPCU and the member groups are still adjusting practical strategies corresponding to the local contexts. In addition, although the loose structure has advantages in mobilising various stakeholders, the understanding and engagements by different member groups are disparate. As a result, within 3 years, several partners have dropped out from the network due to organisational restructure or other reasons. Tackling the issue, NAPCU has picked up three basins as key areas for networking before upscaling to a nationwide platform.

14.6 Conclusions

Considering the problematics of community-based basin conservation, the chapter introduces the cultural approach as an alternative to improve grassroots citizens' environmental awareness and commitment. Taking the Basin School Network, a bottom-up platform composed of non-governmental groups in Taiwan, as an example, the case study reviews the network's practices and strategies for grassroots networking and incubation of basin citizenship. Learning from the multi-sectoral platform Groundwork Mishima, Japan, the Basin School aims to connect grassroots groups to develop alternative imaginations of basin conservation. The Basin School distinguished itself from the policy making process that requires more scientific expertise, thus suggesting a soft and cultural perspective regarding the basin issue. In mobilising the partnership, all the member groups must follow three principles: adoption of a basin, implementation of regular activities, and commitment to the waterbody. The three principles also refer to three dimensions of cultural

mobilisation in community-based practices. First, basin-focused partnerships bridge the two streams of environmental actions and everyday community life. Deepened connections between community and local waterscapes not only enhance the citizens' environmental awareness but also create opportunities for community revitalisation. Second, regular activities can ensure consistent involvements. Furthermore, the activities also accumulate community heritages of the local water environments. An integration of constant activities and creative events, such as weekly river patrols and seasonal waterfront festivals, facilitates divergent human-water relations and visions. Examples have shown that the diversity of actions can be succeeded by collaborations with different groups of actors, including schools and artists. Utilising the courses of community colleges is also an alternative. Furthermore, the Basin School provides co-learning platforms for the exchange of outputs. The third principle calls for a rooted commitment to the adopted basin. This guarantees the bottom-up actions towards potential hazards to the waterbody, further enabling the communities to contribute and upscale their influence in policy making.

Regarding the limitations of the current case study, more detailed fieldwork at different basins advances further investigation. Besides, future studies can adopt and develop the three principles of partnership in comparison between different cases. The principles also provide an agenda to analyse or examine the practices of similar networks. The chapter illustrates the practices and possibilities in applying cultural dimensions as a strategy to network the basin community. Integration of the soft approach and formal deliberation enlarges the contributions of grassroots actors in community-based watershed management, thus envisioning a more diversified and balanced partnership for basin conservation.

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