

# How do you\* live with your river?

\*humans and non-human species

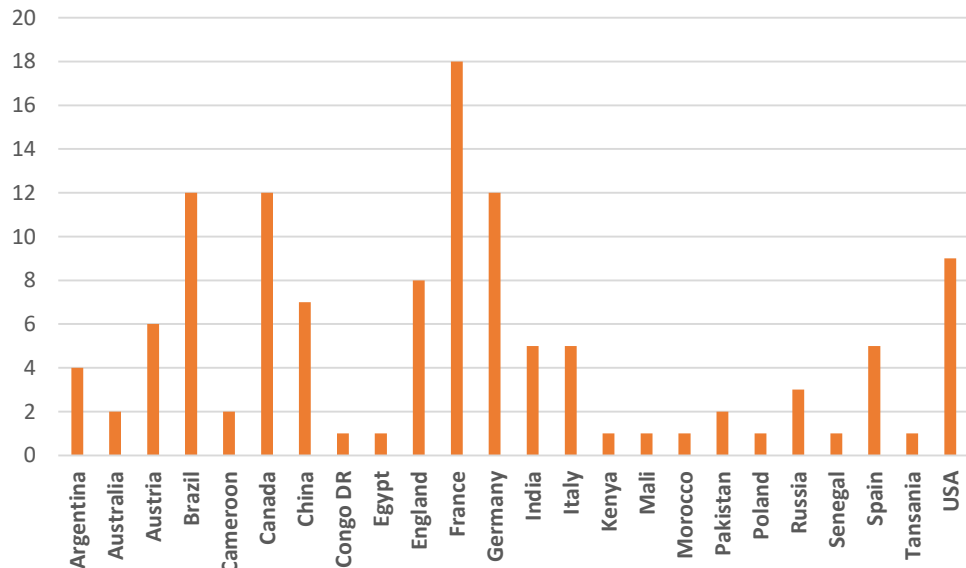
## What supports, what menaces bio-cultural diversity?

What can we learn from biotic adaptations, traditional ecological knowledge, and cultural practices for sustainable river management?

# A book on River Culture at global scale:

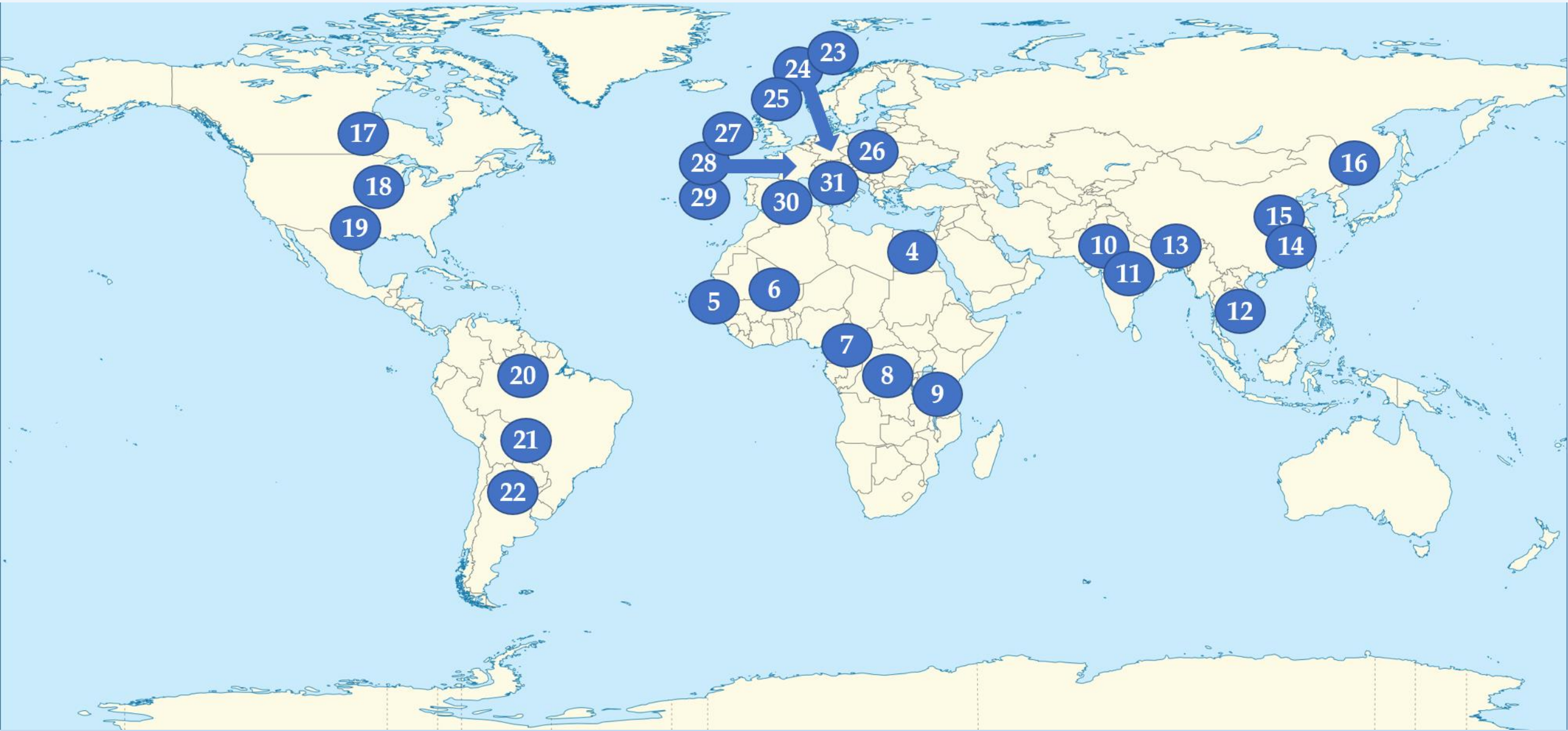
*→ Transfer of biotic adaptive strategies, traditional ecological knowledge and innovative solutions into a sustainable riverscape management*

Authors by countries



- 125 authors from 24 countries, 42% female authors
- 36 chapters, > 900 pages
- 28 chapters on river case studies from 4 continents (Africa 6, Asia 7, Americas 6, Europe 9)
- 2 chapters on artist's perspectives, 1 chapter on gender equality
- 5 chapters on socioecological concepts and on riverscape management in the anthropocene

# Localization of the river case studies



**1 Life as a Dance to the Rhythm of the Waters: An Analysis of Current Trends and Suggestions to Restore River Culture**

Wantzen, Karl M., Tharme, Rebecca E., Pypaert, Philippe

**2 Reflecting Waters – A Photographer's Reflection**

Parolin, Pia

**3 A Gender Perspective in Exploring River Culture in India**

Prothi, Nupur, Chauhan, Malavika, Lokgariwar, Chicu, Ahmed, Sara

**4 The Egyptian Nile: Human Transformation of an Ancient River**

Bunbury, Judith, Cooper, John P., Hoath, Richard, Ikram, Salima, Johnston, Christine, Schneider, Thomas

**5 The Senegal River, a Disturbed Lifeline in the Sahel**

Taïbi, Aude N., Kane, Alioune, Bourlet, Mélanie, Lorin, Marie, Ballouche, Aziz

**6 Traditional Use on the Niger River in Mali: Past Knowledge, the Current Situation and Future Options**

Berton, Jean-Pierre, Bala, Raita, Coulibaly, Baba, Wantzen, Karl M.

**7 The Sanaga River, an Example of Biophysical and Socio-Cultural Integration in Cameroon, Central Africa**

Zébazé Togouet, Serge H., Nyamsi Tchatcho, Narcisse, Tharme, Rebecca E., Piscart, Christophe

**8 The Congo – The River that Makes the Heart of Africa Beat**

Bala, Raita, Wantzen, Karl M.

**9 From the Mau Forest to Lake Victoria: The Journey of the Mara River in East**

Richards, Nathalie, Anderson, Elizabeth P., Rouillé-Kielo, Gaële, McClain, Michael, Mombo, Felister

**10 A Tail-End Tale: The Story of the Indus Delta**

Raza, Syeda M., Aslam, Mariyam, Vazhayil, Alvin M.

**11 Yamuna: A Goddess in Distress**

Vazhayil, Alvin M., Wantzen, Karl M

**12 The Mekong: Death of a River Culture?**

Campbell, Ian

**13 River Culture in China and India, a Comparative Perspective on its Origins, Challenges, and Applications**

Cao, Yixin, Vazhayil, Alvin M.

**14 The Yangtze River: Harmony between Humans and Nature**

Ding, Yuan, Xu, Ying, Ma, Zhiliang, Cao, Yixin

**15 China's Grand Canal: An Eco-Cultural Community connecting Five River Systems**

Zhang, Tinghao, Yu, Bing, Wan, Jinhong

**16 Amur-Heilong River – A Free-Flowing Transboundary River between Mongolia, China and Russia**

Tan, Chaozhong, Cao, Yixin, Simonov, Eugene, Egidarev, Eugene, Darman, Yury

**17 Healthy Delta, Healthy People: The Past, Present and Future of the Saskatchewan River Delta**

Jardine, Timothy D., Reed, Maureen G., Strickert, Graham, Massie, Merle, McKay-Carriere, Lily, MacColl, Ingrid, Carriere, Renee, Carriere, Solomon, Abu, Razak, Steelman, Toddi

**18 The Lower Illinois River, USA: The Interaction of Floodplain Culture with Scientific Understanding**

Schneider, Daniel

**19 The Trinity River in Texas – Muddy and Emblematic**

Klaver, Irene, J., Hoeinghaus, David J., Grossman, Jacob W., Frith, Aaron J., Atkinson, Samuel F., Kennedy, James H.

**20 The Várzeas of the Brazilian Amazon River: Living with the Flood Pulse**

Junk, Wolfgang J., Schöngart, Jochen, Piedade, Maria T.F., Soares, Gercilia M.,

Wittmann, Florian

**21 The Pantanal: How long will there be Life in the Rhythm of the Waters?**

Wantzen, Karl M., Girard, Pierre, Roque, Fabio O., Nunes da Cunha, Cátia, Chiaravalloti, Rafael M., Nunes, André V., Bortolotto, Ieda M., Guerra, Angélica, Pauliquevis Carolina, Friedlander, Mario, Penha, Jerry

**22 Bio- and Cultural Diversity in The Middle Paraná River**

Blettler, Martín, Espínola, Luis A., Berros, Valeria

**23 The Rhine – An Important Biocultural Axis for Europe**

Wantzen, Karl M., Schmitt, Laurent, Wirbelauer, Eckhard

**24 River Restoration on Catchment Scale in the Metropolitan Region and Post-Mining Landscape of the Emscher Catchment, Germany**

Gerner, Nadine V., Sommerhäuser, Mario M., Heldt, Sonja, Sutcliffe, Robynne, Stein, Ulf, Tröltzsch, Jenny

**25 The Isar River: Social Pride as a Driver of River Restoration**

Zingraff-Hamed, Aude, Lupp, Gerd, Bäuml, Klaus, Huang, Joshua, Pauleit, Stephan

**26 The Danube: On the Environmental History, Present, and Future of a Great European River**

Schmid, Martin, Haidvogel, Gertrud, Friedrich, Thomas, Funk, Andrea, Schmalfuss, Lisa, Schmidt-Kloiber, Astrid, Hein, Thomas

**27 The Seine, the River dedicated to Paris**

Lestel, Laurence, Meybeck, Michel, Carré, Catherine, Belliard, Jérôme

**28 The Loire – A Cultural and Environmental Exception in Europe**

Wantzen, Karl M., Berton, Jean-Pierre, Boisneau, Catherine, Greulich, Sabine,

Marmioli, Bruno, Rodrigues, Stéphane

**29 Dordogne: The First UNESCO Biosphere Reserve Covering an Entire River Basin**

Michau, Raphaël, Guerri, Olivier, Brun, Alexandre, Quetier, Justine

**30 Nature-Human-River Relationships at the Ebro River and its Delta (Spain)**

Mariano, Mercè, Abella, Susanna, Araujo, Rafael, Ibisate, Askoa, Ollero, Alfredo

**31 The Waterways of Venice as an 'Extended Museum': New Opportunities for Cultural, Social and Environmental Regeneration of a Forgotten Water Heritage**

Eulisse, Eriberto, Vallerani, Francesco, Visentin, Francesco

**32 Ecohydrology and River Culture: Synergies for the Enhancement of River and Catchment Sustainability**

Zalewski, Maciej, Wantzen, Karl M.

**33 Damming and Sediment Legacies of Great Rivers: Global Challenges and Management Approaches**

Kondolf, G. Matt, Schmitt, Rafael J.P.

**34 Community-Based Conservation Initiatives in India: A Participative Movement driven by River Culture**

Vazhayil, Alvin M., Wantzen, Karl M.

**35 The River/Lake Chief System in China: A New Policy to Improve Environmental Quality in Hydrosystems**

Cao, Yixin, Wantzen, Karl M.

**36 Rivers: An Artist's Perspective**

Irland, Basia





Reset values in  
river ecosystem  
management



Adapt human  
activities to the  
rhythm of the  
river



Political  
management at  
the river basin  
scale

# The River Culture Concept: *learn from the river to live with the river*

Ecosystem-  
scale bionics:  
Copy biotic  
strategies



Transform  
traditional /  
cultural uses  
into modern  
management



# River Culture

Life as a dance to the rhythm of the waters

## SHORT SUMMARY

Back to life in the rhythm of the waters

The global crises of biodiversity and cultural diversity are interdependent, especially so in rivers. While we know that 84% of the freshwater fauna has disappeared between 1970 and 2014, the loss in cultural diversity connected to the river and its floodplain (e.g., spiritual linkages, traditional use forms, adapted architecture, etc.) is as yet unknown.

This book makes a first attempt to deal with biological and cultural diversities altogether, depicting the bio-cultural diversities, historical human-river relationships, threats, and practical examples of how to mitigate the crisis in riverscapes. More than 120 authors present interdisciplinary studies from river systems all over the world, and explore overarching issues on river management in the Anthropocene.

*Modern societies increasingly re-integrate the river into their lifestyle, driven by citizens' movements and/or by governments*

Practitioners and scientists in landscape and urban planning, ecologists, sociologists, NGOs and governments are invited to disseminate the positive examples presented here, to document their own work, and to contribute to a more harmonious and peaceful life in riverscapes.

**84% loss**  
of biodiversity in  
freshwater,  
the cultural  
consequences are  
unknown



**unesco**

'Since wars begin in the minds of men and women it is in the minds of men and women that the defences of peace must be constructed'

**This book will soon be available as free download @ UNESCO publishing, *the site for download will be soon communicated to all WAMU-net members.***

**Wantzen, K.M. (ed., 2022): *River Culture – Life as a dance to the rhythm of the waters*. UNESCO publishing, Paris, 902 pp, ISBN 978-92-3-100540-4**