



Charles Sturt
University

Gulbali Institute
Agriculture Water Environment



2nd Lower Mekong Fish Passage Conference

February 2025 Program



2nd Lower Mekong River Fish Passage Conference 2025

Dates

Wednesday, 5 February – Friday 7 February 2025

Location

Siem Reap Province, Cambodia Borei Angkor Resort and Angkor Wildlife and Aquarium (Dinner Venue)

Event Summary

Join experts and practitioners from across Southeast Asia and beyond for a focused two-day conference on sustainable fisheries, water management, and regional development. The event will explore the theme “advancements in fish passage technologies, the impact of hydropower on ecosystems, and approaches to gender and social inclusion in natural resource management”. Attendees will engage in discussions on transboundary cooperation, practical solutions for sustainable development, and evidence-based practices that can help shape the future of fisheries and water management in the region. With a mix of presentations, interactive panels, and networking opportunities—including an evening gathering at the Angkor Aquarium—this conference offers a collaborative space to connect, share insights, and strengthen partnerships for regional sustainability and prosperity.

Challenges Facing the Mekong River Basin

The Mekong River Basin faces complex challenges as it balances the needs of sustainable development with the health of its fisheries and ecosystems. Expanding irrigation and hydropower projects offer economic benefits but often disrupt fish migration, alter water flow, and impact biodiversity. With millions depending on the Mekong for food security and livelihoods, addressing these issues is critical. This conference will examine the latest research and practical approaches to support sustainable development that preserves both the environment and the river communities that rely on it.

About the Venue and Region

Set in the vibrant Siem Reap region of Cambodia, the conference will take place at the Borei Angkor Resort, known for its warm hospitality and stunning traditional architecture that captures the spirit of Khmer culture. Siem Reap, the gateway to the iconic Angkor Wat temples, is a region rich in history, cultural heritage, and natural beauty. Attendees will also experience an evening event at the Angkor Aquarium, an innovative facility dedicated to educating visitors on Cambodia’s unique aquatic ecosystems. This location not only provides an amazing cultural backdrop but also reinforces the conference’s focus on sustainable practices, environmental conservation, and cultural connection in the Lower Mekong Subregion.

High Level Program Overview

Day 1: Wednesday, 5 February

8:00 AM - Registration opens

Opening Ceremony: Morning updates, official welcomes from government and organizational representatives.

Session 1: Challenges for Mekong fisheries

Keynote: Hear from experts on innovations on regional challenges facing fisheries across the basin and a summary of solutions being implemented.

Panel Discussion with presenters sharing perspectives on fish passage solutions in various countries.

Session 2: Transboundary fisheries and water management

Keynote: Explore cross-border water management and collaborative strategies for sustainable fisheries.

Presentations: Perspectives on regional cooperation from researchers and practitioners.

Session 3: Hydropower – Regional challenges and global solutions

Keynote: Experts discuss hydropower's impact on fisheries and potential solutions.

Presentations: Perspectives on hydropower across the Mekong and various transboundary challenges and opportunities.

Dinner at Angkor Wildlife and Aquarium

Evening networking and conference dinner at Angkor Wildlife and Aquarium. Spend the evening with colleagues with cocktail dinner and drinks service walking among giant fish from across the Mekong region.

Day 2: Thursday, 6 February

Session 4: Fish passage challenges in partner countries

Keynote: Discuss advancements and unique challenges in fish passage efforts across Southeast Asia.

Panel Discussion with industry and research leaders on sustainable practices.

Session 5: Getting the technical solutions 'right' – Recent Innovation in fish passage research and development

Keynote: Explore leading research developments with experts focused on local and regional fisheries impact.

Session 6: GEDSI - Ensuring equitable solutions in development projects

Keynote: Gain insights from specialists on GEDSI initiatives in fisheries.

Panel Discussion focused on promoting inclusive practices in the field.

Session 7: Regional development and sustainability

Keynote: A look at sustainable regional development strategies in Southeast Asia. Insights on international development and its role in supporting sustainable practices.

Dinner at Borei Angkor Resort and Spa

A networking evening celebrating Khmer culture and cuisine. A stand-up dinner event poolside at the conference venue.

Day 3: Friday, 7 February

Field trip to Angkor Wat Temple and Sleng Dam Dual fishway – the first site in the Lower Mekong Basin where two fish ladders were constructed to support fisheries recovery.

Event Organisers



The Gulbali Institute at Charles Sturt University is dedicated to advancing research that enhances the understanding of land and water systems, especially within the unique ecologies of Australia and Southeast Asia's Mekong region. Focusing on sustainable development and environmental resilience, the Institute works to support communities and ecosystems through innovative research and practical solutions. Guided by the Wiradjuri phrase 'Gulbali ngurumbang', our researchers are committed to 'understanding Country' through the establishment of strong, respectful, local partnerships, and implementing sustainable practices that benefit both people and nature.

Event Sponsors

The Gulbali Institute at Charles Sturt University, Australia are extremely grateful for the support of many agencies to help bring this event to life.



The DFAT-funded Mekong Australia Partnership aims to strengthen sustainable development across the Mekong region through collaboration and capacity-building in areas like environmental resilience, water management, and community development. By fostering partnerships and supporting innovative solutions, the initiative addresses shared challenges in sustainability and resource management. The partnership is committed to enhancing regional stability, prosperity, and environmental health for communities throughout the Mekong basin.



The Australian Centre for International Agricultural Research Fisheries Program supports sustainable fisheries development in partnership with communities across the Indo-Pacific, with a focus on enhancing food security, livelihoods, and environmental stewardship. Through collaborative research and innovation, the program addresses challenges in fisheries management, aquaculture, and aquatic ecosystem health. ACIAR is committed to empowering local communities and fostering sustainable practices that benefit both people and marine environments across the region.

FishTech Project

The FishTech project aims to synthesize and generate research, facilitating greater adoption of fishway technology in Asian countries through improved capacity and governance structures. Many fisheries in Southeast (SE) Asia are currently under threat from the growing development of irrigation and hydropower infrastructure. Harvesting fish migrations in SE Asia has long been an integral part of most rural community's livelihood systems. Fish are a main protein source and trade/barter commodity, as well as being a vital source of micronutrients in diets. However, the barrier impacts posed by such infrastructure on fish migrations can be significant. Rice is equally as important as fish production for food security and household incomes and is actively farmed in all SE Asian countries. Most rice production occurs in floodplain systems where there is fertile and productive soil. But floodplains have been extensively developed with flood control and irrigation systems to improve rice production and prevent crop inundation during seasonal flooding. Although such flood control and irrigation systems are advantageous for rice growing, they block important migration pathways for fish seeking access to critical nursery and feeding habitats. The 2nd Lower Mekong Fish passage conference is a major deliverable of the FishTech project, supported by ACIAR and the Mekong Australia partnership.

End of Project Outcomes

- Understanding the motivations of donors, investors and irrigation agencies for choosing whether or not to include fish passage within development projects
- Defining institutional capacity needs to enable design and implementation of future fish passage programs and facilitate uplift in fishways capability
- Filling critical knowledge gaps needed to demonstrate proof of concept to donor agencies.
- Identifying policy needs of the partner countries and donors

Project partners and Implementation Countries

Lao PDR	National University of Laos Department of Irrigation Department of Livestock and Fisheries	 
Cambodia	Fisheries Administration of Ministry of Agriculture, Forestry and Fisheries Ministry of Water Resources and Meteorology	 
Indonesia	National Research and Innovation Agency Ministry of Public Works and Housing	 
Vietnam	Ministry of Agriculture and Rural Development Research Institute for Aquaculture	 
Thailand	Royal Thai Irrigation Department Thai Department of Fisheries	 

Keynote Speaker Biographies

Session 1: Challenges for Mekong fisheries

Professor Zeb Hogan, University of Nevada

Professor Zeb Hogan is an assistant research professor at the University of Nevada-Reno, the United Nations Convention on Migratory Species Councillor for Fish, and a National Geographic Society Explorer. Zeb also hosts Nat Geo WILD's series Monster Fish, taking viewers to remote locations around the world to find the most elusive fish, which has included episodes on Australia's Murray cod and Sawfish. Zeb's research interests include freshwater fish ecology, fisheries management, and endangered species issues. Since 2006, Zeb has worked with the University of Nevada and the National Geographic Society to merge conservation science with education and action. Project outputs to date have included contributions to understanding the migratory patterns and population structures of focal fish species, designation of the Mekong giant catfish and other species as Critically Endangered on the IUCN Red List, and awareness-raising through international and local media. Zeb's articles include 'Engaging Recreational Fishers in Management and Conservation: Global Case Studies', 'Endangered River Fish: Factors Hindering Conservation and Restoration', and 'Size-biased extinction risk of the world's freshwater and marine fishes'. Zeb's research has also been featured in Science (2007), Bioscience (2005), and American Scientist (2004). A web series on Zeb's research won the Science Journalism Award (online category) from the American Association of the Advancement of Science (AAAS) in 2008. Zeb received his Ph.D. in Ecology from the University of California, Davis in 2004.



Session 2: Transboundary fisheries and water management

Mrs Caroline Turner, Food And Agriculture Organisation

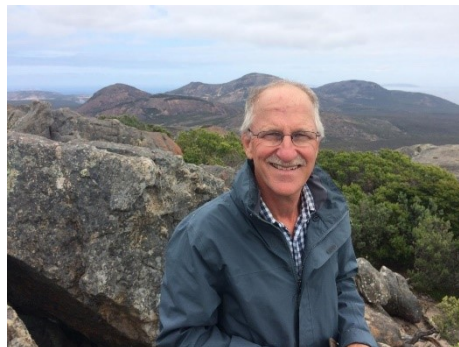
Caroline Turner is an international public policy professional, programme manager, and policy analyst specializing in environmental governance across the Asia-Pacific Region. Currently serving as a Programme Manager at the Food and Agriculture Organization (FAO), Caroline is responsible for successfully overseeing the implementation of various projects, including the Asia-Pacific Water Scarcity Programme (WSP). With a Master's degree in Environmental Management and Development Economics from the Australian National University and a Bachelor's Degree in International Relations from the University of Queensland, Caroline brings a strong academic background in economics, environmental studies, and politics to her work, enabling her to navigate the intricate intersection of science, policy, and governance to achieve meaningful outcomes.



Session 3: Hydropower – Regional challenges and global solutions

Professor Martin Mallen-Cooper, Fishway Consulting Services.

Professor Mallen-Cooper has been a specialist fishway biologist for over 30 years. His initial research in the 1980s on fish swimming ability and behaviour identified the role of turbulence in pool-type fishways, particularly for small fish and non-salmonids, and led to the first effective fishways in Australia. He has designed over 200 fishways in Australia and overseas, from fish locks and fish lifts on large dams to low-level pool-type and nature-like fishways. His approach to projects is to clarify ecological function, develop migration models and integrate fish behaviour into all aspects of dam, weir and fishway design. A key aspect of this is integrating biology, hydrology and hydraulics, which has led to new approaches and applications in fishway design and improved ecological function. In the last 10 years, Professor Mallen-Cooper has had a significant focus on hydropower and fish passage in the Mekong Basin, where freshwater fish provides food security and livelihoods for millions of people, and on broader linkages for fish passage within catchments that maximise benefits of environmental flow services.



Session 4: Fish passage challenges in SE Asian partner countries

Dr Arif Wibowo, National Research and Innovation Agency, Indonesia

Dr. Arif Wibowo is a distinguished research scientist at BRIN (the Indonesian National Research and Innovation Agency), where he contributes to advancing Indonesia's inland fisheries and aquatic resource management. With a career dedicated to preserving Indonesia's rich aquatic biodiversity, Dr. Wibowo specializes in river ecology, fish migration, and sustainable fisheries. His research addresses critical environmental challenges affecting Indonesian rivers and explores innovative solutions to support fisheries sustainability amidst pressures from development and climate change. Dr. Wibowo has led numerous high-impact projects, particularly in studying the migratory patterns and habitat requirements of economically significant species, such as eels, which are vital for rural livelihoods and regional biodiversity. His expertise in fish passage solutions and habitat conservation has been instrumental in developing science-based policies that balance development needs with ecological sustainability. Dr. Wibowo's collaboration with international research institutions, including Charles Sturt University's Gulbali Institute, reflects his commitment to building global partnerships for sustainable river management. Recognized as a leader in his field, Dr. Wibowo's work continues to contribute to policy innovation, capacity-building, and knowledge-sharing, enhancing the resilience of Indonesian aquatic ecosystems for future generations.



Session 5: Getting the technical solutions 'right'. Recent Innovation in fish passage research and development

Professor Lee Baumgartner, Charles Sturt University

“My grade five teacher once said to my class ‘Future wars will be held over water’.” At that time it was such a strange comment which he found hard to grasp. Move forward 30 years and the Murray-Darling Basin is in the midst of a significant water war. North vs South, irrigators vs environment, governments vs communities. It is a significant social, economic and environmental issue which requires us to all work together to save our inland rivers. The development of rivers, and solutions which allow irrigation and the environment to co-exist, is the focus of Prof Baumgartner's applied



research. A former ASPIRE nominee, and winner of several national and international awards, he holds a PhD in Applied Ecology from University of Canberra (2005) and has worked in both academia and government on water issues. Prof Baumgartner has published over 200 scientific publications and secured over \$50m in competitive funding in his career. Prof Baumgartner is passionate about healthy rivers. His mantra ‘A healthy river is an economic and environmental engine’, has been the topic of his recent research and engagement. He is active in international and national media and works with both television and written press to convey his passion for healthy rivers.

Session 6: GEDSI – Ensuring equitable solutions in development projects

Dr Victoria Syddall, Director Ocean Research Consulting and Advisory

Dr Victoria Syddall is a marine and fisheries science and policy specialist with over fifteen years of experience in policy, research and project management of complex issues in New Zealand, the Pacific, and Southeast Asia. She is experienced in policy and science analysis, having served in this capacity for central and regional government, fisheries industry, and as a consultant for the past eight years. Extensive knowledge of New Zealand and Pacific transboundary resource management has included Master's and PhD research and over a decade in the sector. Victoria is passionate about the Big Blue, people's connections to it, and their relationships with each other because of it. For the past ten years Victoria has focussed her skills on exploring social-ecological systems of fisheries with a specific focus on gender and climate change.



Session 7: Regional coordination: How to integrate technical and social benefits into development, donor and lender frameworks

Mr Ryutaro Takaku-Bessho, Asian Development Bank

Ryutaro Takaku-Bessho is a Principal Water Resources Specialist in ADB. He has developed agriculture sector strategies and projects on irrigation, flood mitigation, and integrated water resources management (IWRM) in Asian countries for more than 30 years. Before joining ADB, he worked in the Ministry of Agriculture in Japan. He also worked on agriculture sector for Cambodia and with the Mekong River Commission when working in the Embassy of Japan in Cambodia. He is the team leader for the recently approved IWRM Project for Cambodia, which includes remodeling/constructions of 13 fish passages in Tonle Sap basin.



Australia's Ambassador to Cambodia, H.E. Mr Derek Yip, joined Cambodian senior government officials, local authorities and communities to open the Svay Chek Fishway in Kampong Chhnang (source: ACIAR).

Wednesday 5 February

Time	Program	
8.00am	Registration opens	45 min
8.30am	Conference Open – Introduction to the day's activities <i>Charles Sturt University Representatives</i>	
8.45am	Official welcome <i>Governor of Siam Reap Province – H.E. Prak Sophoan</i>	15 min
9.00am	Australian Government perspective <i>Australian Ambassador to Kingdom of Cambodia – H.E. Derek Yip</i>	10 min
9.10am	ACIAR – Australia Centre for International Agriculture Research <i>ACIAR – Chief Executive Officer – Professor Wendy Umberger</i>	10 min
9.20am	Cambodian Government <i>MAFF Minister – H.E Dith Tina</i>	30 min
9.50am	Morning Tea Break and Group photos	40 min
<u>Session 1: Challenges for Mekong fisheries</u>		
10.30am	<u>Keynote Speaker</u> The future of the Mekong's aquatic resources: bending the curve for fisheries and biodiversity <i>Keynote Speaker - Dr Zeb Hogan</i>	30 min
11.00am	Fisheries challenges and opportunities in Cambodia <i>Cambodia – Mr Chann Aun Tob</i>	15 min
11.15am	15 years of achievements from Lao PDR. Opportunities and lessons learned <i>Lao PDR – Dr Oudom Phonekhempeng</i>	15 min
11.45am	Developing rivers and fisheries in the Kingdom of Thailand <i>Thailand – Ms Aom Ksanayai and Mr Prongmokol Chidchob</i>	15 min
12.00pm	Panel discussion <i>Keynote speaker and all presenters</i>	15 min
12.15pm	Lunch Break <i>Borei Angkor Resort garden area</i>	60 min

Session 2 : <u>Transboundary fisheries and water management</u>		
	<u>Keynote Speaker</u>	30 min
1.15pm	Regional challenges for river development and water scarcity across South East Asia <i>Keynote speaker – Mrs Caroline Turner</i>	
1.45pm	Transboundary fisheries management and cooperation across the Lower Mekong Sub Region <i>Dr. Lai Tung Quan</i>	15 min
2.00pm	Irrigation Trends in Asia Under Climate Change: Challenges and Opportunities <i>Dr Somayeh Shadkam</i>	15 min
2.15pm	Transboundary migrations: Unlocking secrets of the Mekong catfish <i>Dr Vu Vi An</i>	15 min
2.30pm	Panel Discussion <i>Keynote speaker and all presenters</i>	10 min
2.40pm	Conference host to close session – afternoon tea break	20 min
Session 3: <u>Hydropower – Regional challenges and global solutions</u>		
	<u>Keynote Speaker</u>	30 min
	Balancing hydropower, fish, and human needs. <i>Keynote speaker: Professor Martin Mallen-Cooper</i>	
3.30pm	Update on Xayaburi and Luang Prabang fish passage solutions <i>Dr Michael Raeder and Mr Thanasak Poomchaivej</i>	15 min
3.45pm	Don Sahong hydropower and fish passage through the Khone falls <i>Dr Somphone Phommanivong</i>	15 min
4.00pm	Fish and Chips: Monitoring approaches for hydropower sites <i>Dr Wayne Robinson</i>	15 min
4.15pm	Panel Discussion <i>Keynote speaker and all presenters</i>	20 min
4.35pm	Conference host to close session <i>Advise dinner arrangements, bus pick up times, bus returning times</i>	10 min
5.45pm	Bus pick up from Borei Angkor Resort and Lotus Blanc Resort	
6.30pm	Dinner at Angkor Wildlife and Aquarium	3 hrs
9.30pm	First bus returns to hotels	

Thursday 6 February

Session 4 : <u>Getting the technical solutions 'right' – Recent innovation in fish passage research and development</u>		
9.00am	<u>Keynote Speaker</u> Getting it right: Technical solutions need to be technically correct <i>Keynote speaker – Prof Lee Baumgartner</i>	20 min
9.20am	Motivations and Abilities: Factors that drive integration of technical solutions into development programs <i>Dr Jen Bond</i>	15 min
9.35am	Scaling fish passage across the Mekong region: From demonstration to uptake <i>Dr Ivor Stuart</i>	15 min
9.50am	Training the next generation of fish passage leaders: Development of the fish passage masterclass and education programs <i>Dr John Conallin</i>	15 min
10.05am	Panel Discussion <i>Keynote speaker and all presenters</i>	25 min
10.30am	Conference host to close session – morning tea break	30 min
Session 5 : <u>Fish passage challenges in SE Asian partner countries</u>		
11.00am	<u>Keynote Speaker</u> Fish passage challenges in Indonesia – Eels and megadiverse rivers <i>Keynote speaker – Dr Arif Wibowo</i>	20 min
11.20pm	Myanmar: From hilsa to catfish – Fish migration in Myanmar and the importance of free flowing rivers and fish passage <i>Dr Zau Lunn</i>	20 min
11.40pm	Panel Discussion <i>Keynote speaker and all presenters</i>	20 min
12.00pm	Lunch break <i>Lunch to be served in the foyer</i>	1 hr

Session 6: <u>GEDSI - Ensuring equitable solutions in development projects</u>		
1.00pm	<u>Keynote Speaker</u> Ensuring inclusive and equitable outcomes of technical solutions to fisheries declines <i>Keynote speaker – Dr Victoria Syddall</i>	20 min
1.20pm	GEDSI case studies in fish passage: Lessons learned from Laos and Cambodia <i>Ms Mia Urbano</i>	15 min
1.35pm	Fish for Whom: How to integrate nutrition into technical investments for irrigation and fisheries <i>Ms Nicki Duncan</i>	15 min
1.50pm	Challenges and opportunities for mainstreaming GEDSI in river development planning and implementation <i>Dr Eang Chorney</i>	15 min
2.10pm	Panel Discussion <i>Keynote speaker and all presenters</i>	20 min
Session 7 : <u>Regional coordination: How to integrate technical and social benefits into development, donor and lender frameworks</u>		
2.30pm	<u>Keynote Speaker</u> The importance of safeguarding: Ensuring fisheries are captured in planning processes of the Asian Development Bank <i>Keynote speaker – Mr Ryutaro Takaku-Bessho</i>	20 min
2.50pm	Mapping and prioritising river development structures across the LMB <i>Mr Tim Marsden</i>	15 min
3.05pm	Transboundary collaborations on fish passage – The MRC fish passage program <i>Mr Tomohiko Sakamoto</i>	15 min
3.20pm	Panel Discussion <i>Keynote speaker and all presenters</i>	15 min
3.40pm	Concluding session <i>Wrap up and conference conclusion</i>	20 min
6.00pm	Dinner <i>Borei Ankor Hotel Poolside – Cambodian cultural evening</i>	Until close

Friday 7 February – Field Trip

Transport	Fish ladder sites
8.00am	Bus 1 pick up from Lotus Blanc Resort
8.15am	Bus 1 pick up from Borei Angkor Resort
10.00am	Bus 2 pick up from Lotus Blanc Resort
10.15am	Bus 2 pick up from Borei Angkor Resort
	Bus number 1 – Departs 8am returns approximately 11am.
	Bus number 2 – Departs 10am returns approximately 1pm.
	Note: Bus departure time selection will be available at conference registration. Seats on each bus will be available on a first come – first serve basis.
	Lunch: As a take-way box, will be provided for all participants. This can be consumed on the bus or at site.
3.30pm	Finish for the Day, hotel and airport drop off. Delegates are responsible for arranging their own transport to the airport.

Sleng Dam fishway

The Sleng Dam fishway, in the Kralanh district of the Siem Reap province, was recently constructed thanks to the combined efforts of a diverse team, including researchers and funding providers from ACIAR and DFAT, fisheries experts and water engineers from Charles Sturt University, the Fisheries Administration of Cambodia, and the active participation of local communities and authorities. It is the first site in South East Asia where two fishways were constructed at a single site. This shared commitment has resulted in a valuable community asset that will increase fish yields, bolster food security and promote conservation efforts. The Sleng Dam fishway is expected to benefit over 20,000 individuals from 31 villages directly through improved access to food and biodiversity.



Angkor Wildlife & Aquarium

Cambodia's premier wildlife sanctuary and first aquarium is just 30 minutes from Siem Reap and a key conference partner! They have diverse ecosystems, a state-of-the-art aquarium, and awe-inspiring Mekong River Monsters featuring Giant Barb and Giant Catfish, along with a dedicated breeding project. At Angkor Wildlife & Aquarium, there's always something exciting to do! From mesmerising aquatic journeys and unforgettable touch pool adventures to exploring a diverse range of rescued and donated animals by NGOs. We are excited to host our conference dinner, and to launch, a new display at AWA at part of conference proceedings!



Host country Cambodia

We extend our deepest gratitude to our host country, Cambodia, and to the Cambodian Fisheries Administration for their warm welcome and invaluable partnership. Their dedication to sustainable fisheries and community well-being inspires our work, and we are very grateful to collaborate with them in advancing research that strengthens both livelihoods and ecosystems. Together, we want to see resilient, sustainable fisheries that benefit Cambodia and the Lower Mekong sub-region.

A heartfelt thank you to all our Mekong partners—including Indonesia and Myanmar—whose collaboration and shared vision make this vital event possible. Your dedication to sustainable development, regional resilience, and environmental stewardship strengthens our collective impact. Together, we are creating pathways to a sustainable future for the Mekong and beyond.


We wish all our delegates a rewarding experience and safe travels throughout the Mekong region and beyond. May your time here be filled with meaningful connections, inspiring discoveries, and a shared commitment to sustainable development. Together, we're paving the way for a brighter, more resilient future for the communities and ecosystems we serve.





Source: Wonders of the Mekong

Gulbali Institute
Agriculture, Water and Environment

Charles Sturt University
Boorooma Street
Locked Bag 588
Wagga Wagga NSW 2678

 1800 275 278 (free call within Australia)
+61 1800 275 278 (callers outside Australia)

 gulbali@csu.edu.au

 [gulbaliinstitute](#)  [gulbali_inst](#)

 [gulbaliinstitute](#)  [charlessturtuni](#)

 **Charles Sturt
University**
—
Gulbali Institute
Agriculture Water Environment