



Innovation with the Poor

Aquaculture Innovations with poor people and Coastal Environmental Change

The main objective of this transdisciplinary research is to support a sustainable coastal transformation in saline and brackish coastal environments by co-developing innovative Integrated Multi-trophic Aquaculture (IMTA) and associated institutions along ecosystem-based principles in collaboration with poor coastal residents whose livelihoods are most undermined by salinization and other environmental change.

Selected publications

- Ahmed, N., Thompson, S. & Glaser, M. (2018). Global Aquaculture Productivity, Environmental Sustainability, and Climate Change Adaptability *Environmental Management*
- Ahmed, N., Thompson, S., Glaser, M. (2018) Transforming organic prawn farming in Bangladesh: Potentials and challenges *Journal of Cleaner Production* 172, pp. 3806-3816.
- Ahmed, N., Thompson, S., Glaser, M. (2017) Integrated mangrove-shrimp cultivation: Potential for blue carbon sequestration *Ambio* online

Theses/Dissertations

- Tacke F. (2017) *Integrated multi-trophic aquaculture in coastal Bangladesh - Approaches for a sustainable social & ecological adaptation process*. BSc thesis.
- De Buhr, S (2018) *Sustainable Livelihood Outcomes: Lessons from two NGO approaches in Bangladesh* MSc Thesis
- Nagel, Ben (2019 in prep) *Innovative technologies as transformation tools for coastal households in Bangladesh*, MSc Thesis

International conference presentations

- Leverage Points** Lüneburg (Glaser) Feb 2019

KEY FACTS

ZMT Contacts: PD Dr. Marion Glaser (WG Social-Ecological Systems), Dr. Andreas Kunzmann (WG Experimental Aquaculture)

Departments: Social Sciences, Ecology

Cooperation Partners: Samiya Selim (University of the Liberal Arts - ULAB, Bangladesh), Centre for Sustainable Development (Dhaka, Bangladesh), Anisul Huq (Khulna University, Bangladesh), Harunur Rashid (Bangladesh Agricultural University, Mymensingh, Bangladesh) Lucinaldo Blandtt and Roberta Barbosa, (University of Pará, Brazil), Nesar Ahmed (University of Manitoba, Canada)

Partner Countries: Bangladesh, Brazil, (South Africa)

Project Duration: since 2016

Funding: Alexander von Humboldt Foundation, Centre for Science and Technology of the Non-Aligned and other Developing Countries

Status: ZMT is project coordinator

ZMT Programme Area: PA 1 -Aquatic Resource Use and Protection

Future Oceans2, Brest (Selim) June 2019

MARE Amsterdam (Selim/Glaser) June 2019

Current activities

- Second phase of proposal EU Atlantic Collaboration for the development of sustainable marine aquaculture practices and trainings (ACD-MAP (with work proposed in South Africa and Brazil))
- Preparation of small pilot experiments with landless groups in Bangladesh
- Aquaculture value chain studies with ULAB
- Two articles in preparation
- Further search for funding



Innovation mit den Ärmsten

Innovation in der Aquakultur mit den Ärmsten bei Umweltveränderungen in Küstengebieten

Das Hauptziel dieser transdisziplinären Forschung ist die Förderung einer nachhaltigen Umgestaltung der Küste in Salz- und Brackwassergebiete durch die gemeinsame Entwicklung einer innovativen Integrated Multi-Trophic Aquaculture (IMTA). Dies wird umgesetzt zusammen mit dem ZMT verbundenen Institutionen auf der Grundlage ökosystem-basierter Prinzipien und gemeinsam mit armen Küstenbewohnern, deren Lebensgrundlagen am stärksten durch Versalzung und andere Umweltveränderungen beeinträchtigt werden.

Ausgewählte Publikationen

Ahmed, N., Thompson, S. & Glaser, M. (2018). Global Aquaculture Productivity, Environmental Sustainability, and Climate Change Adaptability *Environmental Management*

Ahmed, N., Thompson, S., Glaser, M. (2018) Transforming organic prawn farming in Bangladesh: Potentials and challenges *Journal of Cleaner Production* 172, pp. 3806-3816.

Ahmed, N., Thompson, S., Glaser, M. (2017) Integrated mangrove-shrimp cultivation: Potential for blue carbon sequestration *Ambio online*

Bachelor-/Master- und Doktorarbeiten

Tacke F. (2017) *Integrated multi-trophic aquaculture in coastal Bangladesh - Approaches for a sustainable social & ecological adaptation process.* Bachelorarbeit.

De Buhr, S (2018) *Sustainable Livelihood Outcomes: Lessons from two NGO approaches in Bangladesh* - Masterarbeit

Nagel, Ben (2019 in prep) *Innovative technologies as transformation tools for coastal households in Bangladesh*, Masterarbeit

SCHLÜSSELDATEN

ZMT-Kontakte: PD Dr. Marion Glaser (AG Sozialökologische Systemanalyse) Dr. Andreas Kunzmann (AG Experimentelle Aquakultur)

Abteilungen: Sozialwissenschaften, Ökologie

Kooperationspartner: Samiya Selim (University of the Liberal Arts (ULAB), Centre for Sustainable Development (Dhaka, Bangladesh), Anisul Huq (Khulna University, Bangladesch), Harunur Rashid (Bangladesh Agricultural University, Mymensingh, Bangladesch) Lucinaldo Blandt and Roberta Barbosa, (University of Pará, Brasilien), Nesar Ahmed (University of Manitoba, Kanada)

Partnerländer: Bangladesch, Brasilien, (Südafrika)

Projektdauer: seit 2016

Förderung: Alexander von Humboldt Stiftung, Centre for Science and Technology of the Non-Aligned and other Developing Countries (NAM)

Status: ZMT koordiniert das Projekt

ZMT-Programmbereich: PB 1 - Nutzung und Schutz aquatischer Ressourcen

Vorträge auf internationalen Konferenzen

Leverage Points Lüneburg (Glaser) Feb 2019

Future Oceans2, Brest (Selim) Juni 2019

MARE Amsterdam (Selim/Glaser) Juni 2019

Laufende Aktivitäten

- Zweite Antragsphase EU Atlantic Collaboration for the Development of Sustainable Marine Aquaculture Practices and Trainings (ACD-MAP) (mit Arbeitsvorschlägen in Südafrika und Brasilien)
- Vorbereitung kleiner Pilotversuche mit landlosen Gruppen in Bangladesch
- Wertschöpfungsstudien zur Aquakultur mit ULAB
- Zwei Publikationen in Vorbereitung
- Weitere Suche nach Finanzierungsmöglichkeiten

