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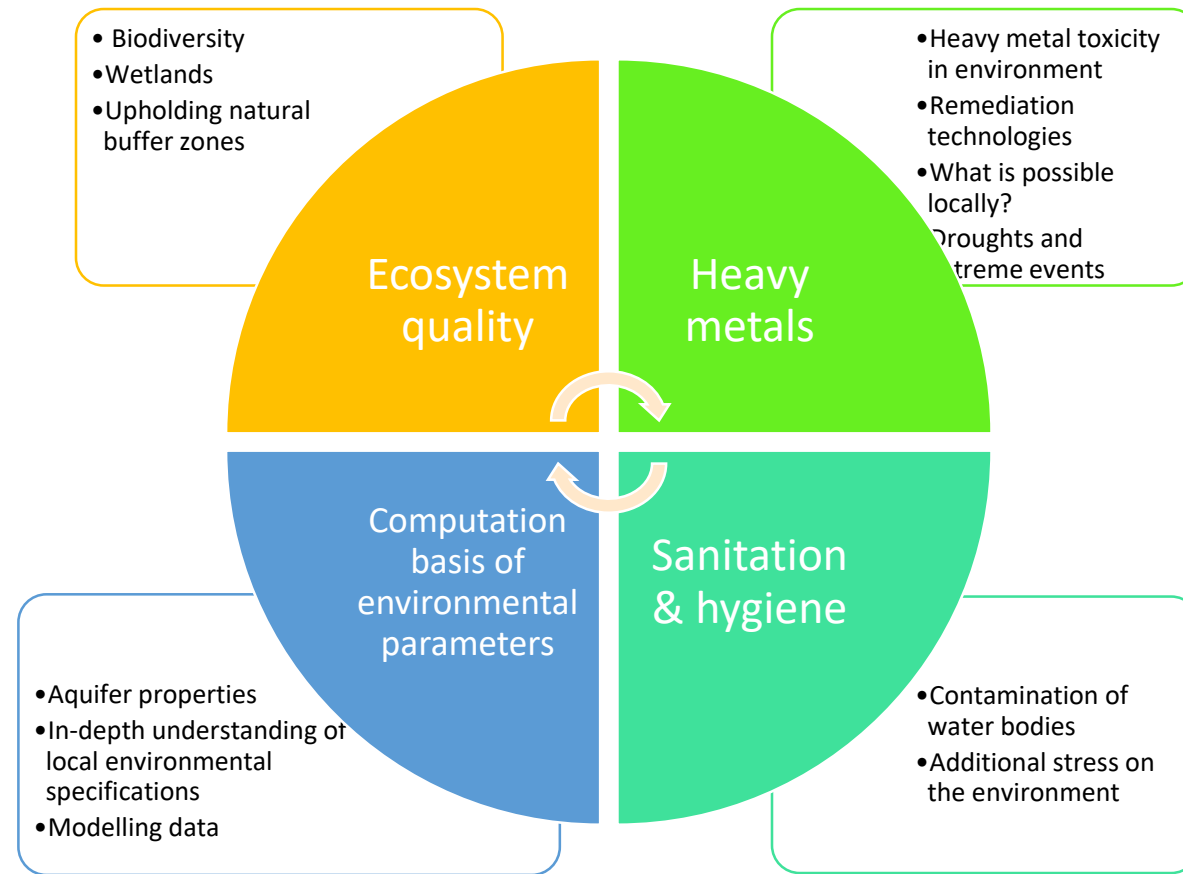
Summary of research findings and next steps

Summary of completed research

	Rockson	Nina	Ella	Christian	Sylvia
Research topic	Analysis of the functional state of Owabi wetland	Risk and impact of illegal alluvial mining in the Pra basin	Bamboo biochar and moringa oleifera seeds as an adsorbent for heavy metals in water	Characterization of indicators of success likelihood to optimize the production of boreholes in a hard rock aquifer	Quantitative and qualitative metrology of faecal sludge at the Abobo Zoo Discharge (Abidjan)
Key words	CCA, wetlands, Owabi	Galamsey, mining, heavy metals, erosion	Adsorption, heavy metals, moringa, biochar	Hydraulic parameters, Benford Law	Sewage sludge, sanitation, environmental risk
Key findings	The wetland is under severe stress from human activities. These include farming, illegal logging, unsustainable fishing in the dam, solid waste from urban centres. Majority of the plant species recorded in the Owabi wetland are upland plants.	2% of the basin are covered in open mining pits & related bareland, erosion is a key risk but not captured in existing models, environmental pollution is significant, highly mobilizable and driven by the river as a key transport mechanism.	Adsorption is known to be the best technique for heavy metal removal, bamboo biochar and moringa oleifera can effectively take up heavy metals	Expect to find how human decisions can affect borehole production levels, how Benford Law can link different hydraulic parameters.	Significant quantities of sewage sludge are released at the Abobo Zoo station without treatment, how their physico-chemical and bacteriological characteristics can harm environment
SDGs	6, 15	3, 6, 12, 14	3,6	3, 6	3,6

Common topics linking your research

- Biodiversity
- Wetlands
- Upholding natural buffer zones

- Heavy metal toxicity in environment
- Remediation technologies
- What is possible locally?
- Droughts and extreme events

Ecosystem quality

Heavy metals

Computation basis of environmental parameters

Sanitation & hygiene

- Aquifer properties
- In-depth understanding of local environmental specifications
- Modelling data

- Contamination of water bodies
- Additional stress on the environment

Some questions to consider:
- How could another student's research enhance yours? i.e. modeling tools, data, innovations, etc…
- How could a local perspective enhance your research findings?
- How will future conditions affect your research conclusions (climate change impacts, population growth, etc)

Practical projects that could be based on your common topics

Project 1
- Assessment on economic values of ecosystems (wetlands, etc.)
- Explore links and potential synergies with other IWRM goals/priorities

Project 2
- Support use, generation and accessibility of public data

These projects will be further discussed during the afternoon session and at the November meeting in Switzerland