

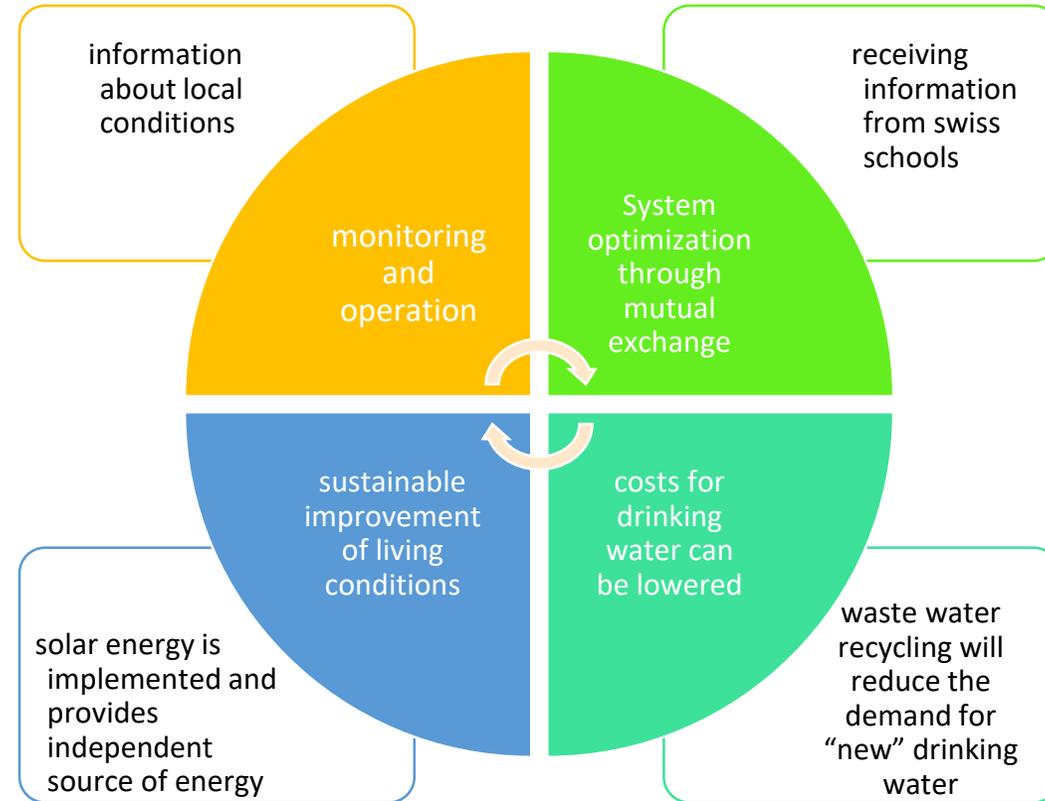
Reporting Back

Summary of research findings and next steps

Summary of completed research

| | Loris | Mavis | Kwabena | Theodora | Student 5 |
|----------------|--|--|---|---|-----------|
| Research topic | Decentralised drinking water treatment and solar-assisted groundwater well for households | Impact of climate change on drinking water production: a case study of Barekese Headworks | Solar energy on WASH improvement and living comfort in Liberia (specifically on a typical house in Monrovia) | Household Greywater Recycling: The Potential of Coconut Husk Powder | |
| Key words | GDM, Photovoltaic, SDG, drinking water | climate change, water quality, treatment cost | Solar energy, electricity, safe power | coconut husk, wastewater reuse and recycling, greywater | |
| Key findings | mechanical loads need to be considered, biofouling is an important factor, solar generator needs to be tested | high temperatures and rainfall led to poor water quality in terms of colour, high turbidity and high nutrient and phosphate concentrations | Not every household in monrovia has access to electricity, let alone safe power. The state power is not reliable enough. The cost per kilowatt is very expensive. | high turbidity and colour removal by biochar coconut husk. 50% removal of microbial populations in greywater. | |
| SDGs | Good health and well-being Gender equality Clean water and sanitation Decent work and economic growth | 6, 3 and 13 Network for Water and Life (NEWAL) | 7 (With solar power, electricity could be improved in Liberia) | 6,3,9,12 | 2 |

Common topics linking your research



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

The influence of wastewater treatment on the cost of drinking water production (Mavis, Theodora)

Project 2

Creating sustainable systems for daily needs and especially pumping water into GDM plants using solar energy (Kwabena, Loris)

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