

Editorial

Dear members, dear friends and dear facilitators of **Technology without Borders**,

in the statutes of our association the purpose of the association is "the help for people in poverty. This help is provided through projects, especially in the context of technical assistance and training". Projects are therefore the central element of our association work. For this reason we attach great importance to the training of our project participants and especially the project manager, before he goes out, must have attended our 2-day project management workshop. This workshop is our way to ensure the quality of our projects on a high level. Usually it is held 4 times a year. In order to ensure the quality we have already standardized the workshop some time ago. On the basis of this standard the workshop is continuously developed further and so we have now arrived at PM Workshop 3.0. Julia Schupp and Franziska Enzmann have done a great job in "purifying" the training materials that have grown over many years and in doing so have also uniformly applied our corporate design to all documents. This PM Workshop 3.0 is now the new standard to be used for all further training courses. Many thanks to Julia and Franzi for this great work.

Speaking of which: There is one more achievement to be highlighted. Our "Regenerating Wells" project initiative has been running since 2015. Together with our Ghanaian members, we have now regenerated wells in 13 villages with a total of approx. 25,000 inhabitants so that they have now access to drinking water according to WHO standards. Representing all the many committed German and African members, we would like to mention Joseph Maudjorm, John-Doku Marfo, Anthony Hunkpe, Samuel Osei Yaw Elijah and Edmund Arthur Brown. Thanks to the commitment of the latter, the regeneration of wells is now carried out completely independently by Ghanaian members. As part of the well regeneration, the pumps are also inspected and usually repaired from the spare parts warehouse that has now been set up in Sunyani. All this was made possible by the start-up financing of the Rotary Club Göttingen Hann.-Münden, which covered a very large part of the costs of the last years. We would like to take this opportunity to thank you once again on behalf of all those involved and the Executive Board.



*Projekt-Team RG Accra & Kumasi:
Joseph, Edmund, John
(from left to right)*

+++ Newsticker: Team from Nepal flown back early because of Corona - see report below **+++**

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Water supply for hospital in Tanzania

The Bishop of Mbinga, who is responsible for the Ruanda Mission Hospital (RMH), has asked Technik ohne Grenzen e.V. and the KAB Alzenau for project proposals to significantly improve the hospital's performance. Following a visit to the hospital in 2017, the hospital doctor emphasised the need for access to clean drinking water. With the aim of improving the water supply, the RG Aschaffenburg-Alzenau and the Technical University of Aschaffenburg joined forces.

A geological report from 2016 indicates the presence of groundwater and recommends drilling to a depth of 120 m. The project was then divided into two parts: firstly, an exploratory drilling with special rock drilling equipment, secondly, the planning and installation of the water supply system. A small group from the RG went on site in October 2019 to participate in the drilling and to collect all necessary data for the continuation of the project.



The presence of water at a depth of 24m was a surprise! After various pump tests, the measured flow rate is about 1.5 m³ per hour. The water analysis showed a positive result and was in accordance with the relevant Tanzanian standards.

During this time the university took care of the planning of the supply system with the help of several students. Besides the pump and the pipes, this system includes a water tower, two water tanks and a tap in the courtyard of the hospital.

Currently the partners in Tanzania are preparing the installation according to this planning.

RG Aschaffenburg-Alzenau

Potable Water for Nzindong – Pre-exploration completed

About 6 hours' drive, the last 2 on a dusty gravel road, from Douala, Nzindong is located in the mountains of Western Cameroon. Potato fields, banana trees and tea plantations surround the village and its inhabitants.

Most people here live on agriculture, meaning that everything is based on dry and wet season. Our pre-exploration is in the last two weeks of February, the end of the dry season. The farmers just start to prepare the fields for the arrival of the rainy season in March. But as in many African countries, the climate change is visible; the dry seasons become longer, here, the last rain fell in October. The few streams and springs ran dry, the only hand driven well of the village can sometimes not be used for several days. As a result, contaminated surface water is used for drinking, washing and cooking, waterborne diseases are regular.



A workshop for water pumps is given

To sustainably improve the situation in Nzindong, we plan to drill a well equipped with a solar driven electric pump that brings the water up to a storage reservoir. From there, the local school and hospital as well as two public water areas will be supplied.

At the lowest point of the village, the well digger Rene carries out a hydrogeological measurement. The resulting soil report shows us that the well has to be 90 m deep to connect two water containing levels. This is the only way to ensure that even during dry season enough water can be provided. A similar solution for the water supply in a school is planned for another village, Bayangam. Using the information gained from the pre-exploration, we start the technical configuration of the pumps (sponsored by KSB SE & Co. KGaA), the piping and the energy supply as well as the acquisition of dona-

tions. So, there is still pretty much to do before we start the implementation in the next dry season in November. Then, we will accompany the well drilling and start up of the well, give additional workshops for the students of the technical schools within the region, train the technicians in maintenance of the solar plant and control of the pump and school the doctors and teachers in Nzindong which will have an eye on the public water areas. Apart from that we hope to start a TeoG RG in Cameroon which will continue supervising the project and starts new projects to ensure the sustainable development of the region.

Franziska Enzmann, RG Rhein_Main

Incinerator for the Manekharka Health Center, Nepal 3

In February/March 2020 a Mark 8a incinerator was built by Luca Frericks and Henning Risse of RG Erlangen at the outpost of Dhulikhel Hospital in Manekharka, Nepal. This incinerator enables the safe and professional disposal of infectious hospital waste. Due to the new type of corona virus, the team returned early after project completion.

The project took place in a small mountain village called Manekharka in the Himalayas. At 1800 m, even from the construction site, there was a breathtaking view of the panorama of the snow-covered mountains of Langtang National Park. At the second largest hospital outpost of the Dhulikhel Hospital located here, an average of 30 patients per day from the surrounding villages are treated.

Shortly after our arrival we were confronted with the waste disposal problem. Dark clouds of smoke of burned garbage rose from the villages of the whole valley. Motivated by the fact that even the hospital has no possibility to dispose of its garbage safely so far, but the infectious garbage was buried in holes, we started the project.

We were thrilled by the helpfulness of the people in the village. One hour after we arrived, the first materials for the incinerator reached Manekharka and, no matter if doctor, nurse, cook or neighbour, everyone pitched in and worked until it got dark.



Step by step a Mark 8a type incinerator was gradually built over the next two weeks with local bricklayers and welders. After completion of the construction we trained the hospital staff how to operate and maintain the furnace. With great interest and commitment, the entire hospital staff participated in the training and commissioning of the furnace. For this reason we are confident that the furnace is in good hands and that in future infectious hospital waste can be disposed of safely.

Unfortunately the corona crisis also caught up with us in this remote location. Due to the rapidly developing situation in Germany and the unforeseeable consequences, we accepted the offer of the German Rotary Volunteer Doctors (GRVD) for an earlier return flight after a short consultation with our TeoG board. Since the project was successfully completed in the time that had passed, we shortened our stay by 6 days. Special thanks go to Julia Seifert and the GRVD for the fast, uncomplicated and helpful support in this difficult situation.

We would also like to thank the Rotary Club of Tutzingen, the Namaste Foundation, as well as all participants from Nepal for the good cooperation in this successful project.

Luca Frericks und Henning Risse, RG Erlangen

Short messages

Invitation to the general assembly on May 16, 2020 in Aschaffenburg

Dear members,

we hereby would like to invite you with the following agenda to the general assembly for the association year 2019 in the

Aschaffenburg University of Technology
Wuerzburger Str. 45
63743 Aschaffenburg

Agenda:

- Welcome and verification of the quorum
- Adoption of the minutes of the Members Assembly 2019

- Report of the Executive Board on the 2019 Association Year
- Report of the treasurer and cash auditor of the association year 2019
- Discharge of the treasurer and the board for the association year 2019
- Renewed appointment of the 3rd Executive Board Robert Schullan
- Appointment of the Board Secretary Lara Hachmann from 1. 1. 2020
- Election of the auditors:
- Preview of the association year 2020
- Date and place of the general meeting 2021
- Others:

Executive Board

TeoG project presentation at RC Göttingen-Hann. Münden

As already mentioned in the editorial the major proportion of the funds for our borehole project in Ghana was provided by the Rotary Club Göttingen-Hann. Münden. Our member Jannik Mechau from regional group Bayreuth visited the Rotarians in Göttingen at 10th of March to give a talk about the progress of the project. In the beginning of the talk a short overview of Technology without borders was presented. With the example of the “Sustainable Development Goals” (SDG) of the UN, Jannik Mechau illustrated that the goals of Technology without borders and Rotary are nearly identical.



Within 45 minutes many pictures and impression from the project sites were communicated to the audience. High enthusiasm was aroused by presenting the successful numbers: Thanks to the donations, we enabled a better access to drinking water with WHO standard for around 25000 people in 13 communities since 2015. Up to now, 13 boreholes were regenerated, several hand pumps were repaired or installed and a simple method for the treatment of water with high fluoride concentrations by using easily accessible plant materials was successfully implemented. The girls in these communities spend less time for fetching water now and can go to school instead. Especially highlighted was the voluntary work of our very dedicated Ghanaian members who have full independently continued with the project since 2018. At this point we would like to thank the Rotary Club Göttingen-Hann. Münden again for the invitation and the majority of the donations that enabled the great achievements within this project



Jannik Mechau, RG Bayreuth

Visit of the Deputy VC of Ndejje University at Technik ohne Grenzen



For quite some time there has been

Our members Nina Schäfer, Olivia Sigmund, Prof. Matthias Friedle, who are responsible for the foundation of the Regional Group Ndejje, Dr. Frederick Kakembo, Prof. Bastian Kaiser and our board member Dr. Fr...

teachment of a Technology without Borders (TwB) regional group at Ndejje University. In February the Deputy Vice Chancellor, comparable to the Vice President of a German University, Dr. Frederick Kakembo visited Germany. At the invitation of the TeoG Board, a meeting took place at the University of Applied Forest Sciences in Rottenburg (HFR). The main point of discussion was how the 3 projects, started by

the Ugandan regional group, can be supported (more on this in the next newsletter). The 500,- €, which were handed over to Dr. Kakembo by the TeoG Board, and which every new country organisation will receive from the TeoG Main Association in the first 3 years as administrative support and start-up financing for projects, could be seen as a first approach.

During the conversation it turned out that the guest, Dr. Kakembo, the rector of the HFR, Prof. Kaiser and our board member were all three past presidents of their respective Rotary Clubs. So of course the obligatory handing over of the pennant from the Rotary Club Höchststadt an der Aisch did not fail to take place during this meeting.



Currently running and completed projects:

www.teog.ngo