Rotary Waterseminar 2017: Reports breakouts

Breakout session 1: 'Developing Future Water and Peace leaders'

Session presenter	: Guy Alaerts
Student	: Milad Fakhari
Moderator	: Henk Jaap Kloosterman
Reporter	: Kees Möhring

Theses Guy Alaerts:

- 1 The forecasts that water will become scarce in many regions in the world are exaggerated. The Rotary core values of fellowship and peace do not apply to water problems. We should not be concerned with water scarcity and its possible impact on political and social stability in the world.
- 2 If we should feel concerned with "water and stability" and "conflict resolution", the worldwide Rotary Club can provide useful instruments and leverage to play a constructive role in mitigating these stresses.
- 3 The worldwide Rotary Club will achieve more and deeper impact by working together with other organisations that can add special project and policy knowledge on water as well as access to local networks, champions and other actors.
- 4 Working on "water and peace" can be best done by short-term, quick and small activities. Rotary Clubs should only deal with small, very local water supply projects for poor communities.
- 5 Leaders who are able to work on "water and peace" in their country will arise automatically. No need to find and nurture them or support them.

Report:

The session presenter gave a short overview of water conflicts in several regions, referring as well to his plenary key note speech. The student gave his view on specific water conflicts in his area (Iran-Afghanistan) and also reflected on these 5 (Leaders who are able to work on water and peace will arise automatically). He stated that he did not agree with the these because educating these potential leaders (by example through the IHE course) is an essential condition.

Through the moderator we discussed the other theses.

Regarding these 1 (Rotary core values do not apply to water problems) the group did not fully agree. The general opinion was that Rotary could and should play a vital role in discussing water

problems. However, the group stated that the way forward should go through small scale projects and not grand designs. One specific suggestion was made through a Rotary member who worked with the city of Rotterdam. Rotterdam is connected to a international city network in which probably a lot of other Rotary members are involved. They could use their position as civil servant to plead for more attention for water problems.

The group agreed with these 2 (the worldwide Rotary club can provide useful instruments) and pointed out that there are already some examples in that direction which should be encouraged.

The same goes for these 3 (Rotary should work more together with other organisations).

Regarding these 4 the group supported this these. Out of the group there was a concrete suggestion to use the old windmill location in Kinderdijk for providing small scale information about Rotary water projects to the loads of tourist who visit the site each day.

Breakout session2: 'The Water enterpreneur', more than smal water wells and safe drinking water

Sustainable supply of safe drinking water in rural Northern Benin.

Presenter:Chris Engelsman (RC Op Seyst) and Giel Hendriks (Eijkelkamp Foundation)Student:Laddaporn Milk Ruangan (Thailand) – MSc HydroinformaticsModerator:Nel Sangers (RC Zeist)Reporter:Hans Gehrels (RC Zeist)

Theses Chris Engelsman:

- in our project "The Waterentrepreneur", 40 local managers with a background in water and entrepreneurial skills are being recruited. Persons with an education at the UNESCO-IHE Institute of Water Education could be good candidates.
- 2. Rotary Clubs in the Netherlands could make use of the Alumni Network of the UNESCO-IHE Institute of Water Education for identification of local water projects to be sponsored by Rotary.
- 3. Rotary Clubs in the Netherlands could also make use of the Alumni Network of the UNESCO-IHE Institute of Water Education for support during implementation of local water projects sponsored by Rotary.
- 4. Persons with an education at the UNESCO-IHE Institute of Water Education could also be good members of the local Rotaract Club or Rotary Club and be the Water Contact Person in their Club, promoting the water theme.

<u>Report:</u>

The project in a nutshell

The session started with an introduction to the project by Chris Engelsman and Giel Hendriks. The objective of the project is first of all to create a sustainable water supply to the rural population in Northern Benin. This is achieved by training and coaching 40 young water professionals to become so-called 'water entrepreneurs'. As water entrepreneurs, they will be involved in building 320 small water systems after which they will be supported to manage, operate and maintain these installations. The targets are to create in this way 40 water companies that operate 320 water access points.

The project has been developed by various partners: Institute National d'Eau Benin, Le Pont Foundation, GAiN and Royal Eijkelkamp. The financing is achieved from Fonds Duurzaam Water (60%), Private parties and persons, Vox Impuls, and Rotary Club op Seyst. There is still a need for additional financing from other donors. This project intends to reach out to 100.000 beneficiaries in Northern Benin over the period of 2014 to 2021, by means of 40 water financially sound enterprises, with a limited risk of unaccounted water use. It aims to provide a base of income for 40 young water professionals with reinvestment of surplus income. So far, the first water access point has been successfully completed

Discussion

The central thesis that provoked much of the discussion was formulated as:

"Sustainability of water and sanitation projects in developing countries is best served by sound entrepreneurship and management."

Chris Engelsman stated that the presented governance model of this project is innovative and clearly different from the more traditional approach in which usually the government is responsible for the water supply rather than private entrepreneurs.

In the discussion that followed, several questions were raised to explore how well this entrepreneurial approach could be successful, such as:

- Who is responsible for the water supply?
- Who is the owner of the installations?
- Don't you create a monopoly?
- What is the role of the government?
- How do you assure that the surplus income is directed to revolved investment?
- How do you select the entrepreneurs?
- How do you deal with theft?
- Are people willing to pay for water?
- Why not make it a public service like water supply for free?
- How to include sanitation?

Conclusion

The project demonstrates an innovative approach to sustainably arranging local water supply, with entrepreneurship as a central element. In the discussion, many questions were raised about critical factors of this governance model. While the project is still running, some of these questions could be answered and others may only become clear in due time. As such, the project has shown to be useful already by providing us with experience on entrepreneurship in local water supply.

Breakout session 3: 'Community Led Total Sanitation'

Presenter:	Sandra van Soelen (NGO Simavi)
Student:	Moses Nyakana (Uganda) – MSc Sanitary Engineering
Moderator:	Roel Linn (RC Amersfoort Regio)
Reporter:	Albert Thiadens (RC Utrecht)

Theses Sandra van Soelen:

- 1. CLTS will only lead to sustainable behavior change concerning sanitation practices in the community!
- 2. Everybody in the community should be part of the CLTS program also if they cannot afford it!
- 3. CLTS also contains making the next step on the sanitation ladder!
- 4. CLTS can't work without support of the local government!
- 4. CLTS should only focus on villages achieving the open defocation free status!

5. Is CLTS enough to stimulate access to sanitation or should we move to a CLTS + approach? How would that look like?

<u>Report</u>

Presentation:

Community Led Sanitation is an approach developed in 2000 by Kamal Kar (from India) by mobilising communities to completely eliminate open defecation (OD). Communities are facilitated to conduct their own appraisal and analysis of open defecation (OD) and take their own action to become ODF (open defecation free).

Earlier approaches to sanitation prescribed high initial standards and offered subsidies as an incentive. But this often led to uneven adoption, problems with long-term sustainability and only partial use. It also created a culture of dependence on subsidies. Open defecation and the cycle of fecal–oral contamination continued to spread disease.

CLTS focuses on the behavioural change needed to ensure real and sustainable improvements – investing in community mobilisation instead of hardware, and shifting the focus from toilet construction for individual households to the creation of open defecation-free villages. By raising awareness that as long as even a minority continues to defecate in the open everyone is at risk of disease, CLTS triggers the community's desire for collective change, propels people into action and encourages innovation, mutual support and appropriate local solutions, thus leading to greater ownership and sustainability.

Discussion:

The group agrees that CLTS could be a very succesful aproach but it should be seen as a first step towards improved sanitaion and behaviour. Critical succesfactors are:

- The entire community should be involved
- Local Government should fully support these activities
- Requires a a well respected Community leader (champion) who can spread the message
- CLTS to be introduced by expreiences lcal NGOs

Issues:

- What to do if Government is not suporting CLTS?
- How sustainable are the self made simple latrines?
- CLTS may not be suitable for slum areas (e.g. lack of land to dig latrines)
- CLTS in competition with other developing aid projects. Local leaders may be more intersted in donor driven aid projects; "What's in for me"

Breakout session 4: 'Cultural sustainability in Water managemant', Case Water project Bertoua in Cameroun

Breakout session 4: *Cultural sustainability in Water managemant'* Case Water project Bertoua in Cameroun

Presenter:Tamme van der WalStudent:Ismael Hernandez (Brasil)Moderator:Gerrit VerweijReporter:Ewoud Mijnlieff

Presentation:

Prize winning project of last year's (2016) seminar was by Tamme van der Wal. Water project in Bertoua (Cameroun). Start of the project: 150.000 inhabitants, now: 250.000. Originally, only 10% inhabitants had drinking water at their disposal. Collaboration with several Dutch Rotary Clubs, a.o. Rhenen-Veenendaal, Cordaid as well as Royal Haskoning. There's enough water in Bertoua, the problem is that it s to be found 10 mtrs below the surface. Natural outflow in concrete building, 65 of these have been realised. Water is being sold to consumers and shops in the city centre. The normal situation is: there are dirty pools, people still try to attract others to the pools.

The pumps are being made in the Netherlands. They are broken once in a while, with dangerous situations as a result: instead, buckets have to be used. Washing facilities are quite far away from the well, so the water won't become filthy. Important aspects of the projects are:

- 1. Social mobilising;
- 2. Water user groups;
- **3.** Local commitment;
- 4. Maintenance and management;
- 5. Education;

<u>Approach:</u>

- 1. Rotary Club Bertoua;
- 2. Local engineer and contractor, to avoid an early breaking down;
- 3. Mutcare;
- 4. Water groups;
- 5. Government

The main issue is not how to establish more wells, but how to integrate them into the local community.

The Swiss have an alternative approach: 1.531 pumps, 4 permanent Swiss project members in Cameroun; \in 2mio p.a., 50 pumps, 50 in maintenance, 4 teams in the field. We on the other hand try to give the system to the local people, much less money is needed for the projects and above all, they are locally rooted.

Current state:

- Last phase: repairs, renovate, replacements;
- Awards for best WP;
- WUGs: contributions, legalisation, focal point.

Results after 15 years of presence:

- More clean drinking water;
- Observed reduction in diseases;
- Improved local awareness of relevance of organisation, planning and education;
- Empowerment local population;
- Economic spin off: water traders;
- For Cordaid: show case project.

Future: 3 T's: Technology, Training, Transformation. Lessons learned: 'If you think for us, if you pay for us, if you build for us and if you organise it for us: we learn <u>you</u> are better than we are...'

Theses Tamme van der Wal

- 1. Sustainable development is a process of mutual understanding.
- 2. Development needs ownership. Do you want to own your development?
- 3. Projects are like a hike in the mountains: the way up is terrible, but the view is terrific!
- 4. Without challenge no change.
- 5. Development starts after you (we) let go.

Student comment on introduction and theses Ismael Hernandes. Ismael enjoys a Rotary scholarship for 18 months and is to graduate next month. He comments that with Unesco IHE Delft, technology is not the solution for the problems. Understanding of the local community is of prime importance. Alignment between students and Rotary is also important: the quality of the project is good, but after a few years the system doesn't work anymore. The technical aspect cannot be overlooked, but above all IHE students can help their countries to improve the connection with the local communities

Conclusions

The original theses were not explicitly followed in the discussion. Out of the presentation by Tamme van der Wal and the comment by Ismael Hernandes several questions arose and a few remarks came, which can be put into six observations.

- Highest level of teaching is learning others to do it themselves;
- A strong sense of the community is necessary, the sense of ownership of the problem is of vital importance, not just the technicalities of bringing water from A to B, but also the sense of ownership and being responsible.
- Government intervention is of importance in Brazil as well as India and Cameroun, albeit that their role should be different, be it for communication (Brazil), taking the water problem seriously at all (India) and bringing awareness to the people (Cameroun)
- Position of the media is important, which became apparent in the intervention by Ismael from Brazil. Both radio networks and the internet should be used more
- Decentralisation in Cameroun is working well, in Brazil this is the same. There are more irregular connections in larger communications. There, the approach should be different.
- We ended with a question, although I must stress that it was put differently: has IHE thrown away the education part of their work?

Breakout session 5: 'Storing water by building sand dams in Etheopia'

Presenter:Theo van 't Klooster (R.C. Baarn-Soest)Student:Chris Lashley (Barbados) Msc Coastal engineering & Port developmentModerator:Tanny Augustinus (RC Delft Koningsveld)Reporter:Kees de Groot (RC Voorburg-Vliet)

Theses Theo van't Klooster:

Sanddams en Subsurface Dams

- 1. In arid regions the potential to transform millions of lives
- 2. Women will get a better life
- 3. Reliable sources of clean water close to home
- 4. Farmers are not getting the water they want.
- 5. Waterfootprint is too high

6. Subsurface Dams are better than Sanddams

Report:

The subject of this session required a good explanation, as it was unknown to most attendees. The discussion in our session focussed on the actual method and project and its long term potential. We spent little time specifically on the theses, but most subjects were touched upon. .

Theo explained how these dams are used to make water available year round to local communities in arid regions. The sand dam has been known and used for 9000 years. Today it is a reinforced concrete wall (or other solid rock) in a sandy wadi (a river that only flows during rainy periods). The dam has to be based on the bedrock, and contained by rocky river shores. It sticks out of the sandy bed by one to five meters. When the river is full of fast flowing water, most water spills over the dam, to provide water further downstream. Behind the dam sand transported by the river accumulates to the dam level. The sand remains water filled after the rains stop. By inserting drain pipes connected to a durable hand pump, water can be extracted during the dry season. A typical sand dam can provide potable water for some 2000 people year round.

Another variation is the subsurface dam, which is a concrete structure buried in the sand of the river. It achieves a fairly long-lasting high groundwater level behind it. Water extraction can be by pumping or digging small holes where the water flows in. (the latter is the technique often used by local people where there are no dams, just after the rains have stopped.

Rotary clubs in the region Eemland/t Gooi have been involved in making and operating at least 2 dams in South Ethiopia, where the conditions are good for dams, but technology has not been applied due to lack of materials. They cooperate successfully with local contractors, a development aid NGO and a Dutch firm Meta Meta and *of course the local villages*. The dams are positioned within 1 or 2 km. from local communities lacking sufficient water.

The local people here are very much attached to their area and therefore are commited to stay and improve their living conditions.

The project has successfully raised sufficient funds for several dams.

More info: contact Theo van 't Klooster

Also: Wikipedia sand dam