

General Information Nepal

Nepal ranks 145 of 188 rated countries in the UN Human Development Index (2015). It is still one of the poorest countries where one quarter of the 30 million people live on less than CHF 1.25 per day. Around 50% of the Nepalese are considered working poor with an income of less than CHF 2.00 per day. Child labour (age 5 to 14) accounts for about 34%. Close to 30% of the country's GDP comes from foreign remittances. Around 1'500 to 2'000 Nepali men and women leave the country on a daily basis to work abroad for years (South Korea, Middle East, South East Asia), which represents a brain drain, causing a lack of valuable workforce within the country.

At the beginning of March, an investment summit took place resulting in a pledge by foreign countries to invest a total of USD 13.5 billion during fiscal year 2017/18. China committed to invest USD 8.3 billion or 60% of the total, reflecting their gaining influence and power in the region. India, which is the dominating country for Nepal for a long time, committed USD 317 million only. It will be interesting to see how that plays out over time for Nepal, being in the middle of two giants. The Foreign Direct Investments should go into different sectors, such as infrastructure (e.g. roads), agriculture, forestry, and tourism.

Water in Nepal

Every year around 10'000 children still die from waterborne diseases. According to Government, Nepal has reached the UN goals and states that around 85% of households have access to water. This is confirmed by the observations of Helvetas Nepal. Our unqualified observation in these two weeks is also that water availability is not the main issue. As it is true for so many topics in Nepal, there is a big gap between theory and practice. A good impression can be gained by reading some Nepalese newspapers either "The Himalayan Times" or "The Kathmandu Post". Almost on a daily basis, you are able to read something water related in these papers. In combination with the conversations with locals, the project visits, personal observations, and literature (not only water related), you can get a good feeling about the gaps to reality. In the case of water, quality of water and distribution is still a major issue. As Juerg Merz from Helvetas Nepal points out "quality is not yet a topic in Nepal", referring to any kind of topic, be it water, organic vegetables, or anything else to improve health and quality of life. Price is the determining factor. A sign to where the evolution of the country stands. It will take generations to achieve sustainable impact, as we can see in the schools working with the children on safe water.

Saturday, 25th Feb. 2017

Arrival on time with Qatar Airways. Beautiful view on the Himalaya range from the airplane, flying in over the Western mountains. From the air you could see many dry riverbeds (which will be filled in Monsoon season) and some rivers that carry water. Landslides from the hills due to road construction, tree burning for agricultural usage, were well visible, which is one of the issues the communities face every year.

The driver "Debu" drove me to the Hotel Himalaya. He seemed to know a lot about the water issues since on a regular basis, he drove an Italian NGO worker around, who was involved in a long-term project of the Government and Asian Development Bank <http://www.melamchiwater.gov.np>. Debu mentioned that there is a lot of construction along the roads because this year, Government will finish a new large water pipeline, which will provide the people of Kathmandu with clean water. The water comes from the big river "Melamchi". He believes that it won't be necessary any longer for the people to buy expensive water from the water tankers once the pipeline is finished. He buys 20 litre water jars at a price of USD 2 per jar. That makes about US cents 10 or CHF 0.10 per litre. Bottled water is sold around NPR 25 / litre, which equals CHF 0.23. He says that there is a need for about 100 million litres of water per day in Kathmandu.

Nexus Centre, Wednesday 01st March – Friday 03rd March 2017

Gochhada, Wednesday 01st March 2017

<http://weconnex.org/nexus-projects/nepal-asia/gochhada-nawalparasi-in-nepal-asia/>

Morning flight of a half-hour with Buddha Air to Bharatpur, west of Kathmandu. After lunch at the Garden Resort Hotel, we drove to Gochhada, the first Nexus Centre.

This centre is in operation since September 2016 (5-6 months) and is operated by Muna Mahato, a 20 year young woman who is generating the income for the family. It is not break-even yet. It sells around 12-13 jars per day. The business case requires about 100 jars daily. The end-price levels are NPR 20-25 / 1 litre bottle water (CHF 0.19-0.23) and wholesale price NPR 120-125 for a pack of 12 bottles (CHF 1.12 – CHF 1.17), which makes only NPR 10-12 per bottle (half the price). Two out of the four rooms are rented to schools, which hold evening classes. The location is very rural and outside of the town centre. It is fairly close to the hotels and restaurants that are close to the jungle and touristic area. The households around the Nexus Centre are all farmers, who all get the water out of the ground via hand-pump. The Nexus-Centre's primary goal is to become profitable as fast as possible and for the operator to generate an income to feed the family. Awareness building for safe water and convincing the households to change from taking the contaminated water to safe water is second priority. As Jürg Merz from Helvetas Nepal said at a meeting the following week: "Quality is not yet an issue for the Nepalese, they still go for the price".

The following youtube video from the latest crowdfunding campaign explains how a Nexus Centre works in general.

<https://www.youtube.com/watch?v=onEykdZlrQ8>

Sauraha, Thursday morning 02nd March 2017

<http://weconnex.org/nexus-projects/nepal-asia/madi-chitwan/>

The second Nexus Centre we visited is the most successful one up to date. It was opened in November 2016 (3-4 months of operation). The location is close to a touristic area. Two of the main reasons why this centre is already making profit are the quality of the operator and the partnership with a distributor, who is delivering the water to the local restaurants and households.

Basantapur, Thursday afternoon 02nd March 2017

<http://weconnex.org/nexus-projects/nepal-asia/basantapur-chitwan-in-nepal-asia/>

Basantapur is the main town in Madi. This municipality is the fifth biggest in Chitwan district with a population of around 50.000 people. Basantapur is a village surrounded by jungles located close to the Indian border. This Nexus-Centre was opened in September 2016 (5-6 months of operation). For a bit more than one month, the centre is operated by Rajkumari Mahato, a thirty three years old mother of two kids, married to a teacher in the village. The previous operator had to be laid off, since there were issues of cheating and mistrust. Rajkumari has had a successful start. She showed a lot of initiative in the accounting (developed a sales record in MS Word and in English, together with her husband, who is a teacher, only one month after having been trained on a computer for the first time) or is delivering jars to private homes (20 litres jar carried on her head) to generate more sales. In her second month of operation, she was able to earn around CHF 100, compared to the average income of CHF 60-65 in the country.

We did not yet receive the financials of these centres so that we could compare and analyse them. We should receive them within the next month.

Key learnings:

- Nexus has a 100% quality approach when it comes to water safety. The filtration technology used and the rigorous cleaning process of the jars are exemplary although economically, it is very challenging to get paid for that high standard.
- We got a positive impression of the business model, implementation, management overall, and ability to adapt from lessons learned. The visits have shown the ability of the Weconnex team to learn fast and implement the necessary changes for the things that do not work, including the change of the operator if needed.
- Economical pressure is high (price competition, cost of distribution).
- Similar learnings as in safe water regarding behavioural change and entrepreneurial understanding of local parties involved.
- Local managing director is exceptionally well educated in this field of expertise and has an excellent network. Today, Weconnex is actively involved in coaching and supporting the local management, in particular for sales management. Recruitment of a Commercial Director is in process in order to complement management strength locally.
- Entrance by NEXUS Centres into competition with bottled water explained as necessary to complement jar business; approach of Nexus to sell real “mineral water” vs. competition, which sell bottled water without minerals (reverse osmosis treatments removes all necessary minerals). In the remaining days, we paid attention to the different kinds of mineral water. Most of the bottled water we drank had also minerals, and were labelled as a combination of reverse osmosis and other filtration technologies (note: as soon as reverse osmosis is used, 99% of minerals are removed).
- The success of each Nexus Centre depends on a few key aspects:
 - Quality of Operator (entrepreneurial understanding, creativity, ability to develop own initiative, learning, reliability)
 - Distribution channel; for the time being forced to work with dealers / distributors who bring water to the homes, restaurants and hotels. It is crucial to have a close eye on the relationship with the dealer and the end-customers
 - Seeking and finding value added services
- Improvement areas we found are still in the area of visual management, standardization of reporting, visit reports by Guneshwar (unclear how and whether it is done), teaching of the operators and exchange of learnings between the individual Nexus Centres (big advantage of business model). Some of these things are now being implemented by the intern Simon Stauss (Economics, St. Gallen).
- For dropforlife, in spite of being convinced of Weconnex business, it is important to pay attention to the purpose of bringing safe water to the people in need vs. pure commercial approach.
- Individual Nexus Centres still in start-up phase, too early to assess financial viability (except Sauhara, which is working well already).
- The Nexus-Centre approach has potential to become a distribution hub for other products in the long-term.

Actions and Recommendations:

- Work more with Operators in the area of social mobilizing (education, awareness building), possibly work with ECCA and learn how they do it.
- dropforlife: Financials to be reviewed and compared between the three centres, possibly all seven put in place by Weconnex.
- Expansion possibilities into waste management and sanitation should be looked into as an additional business opportunity.
- Reconsider the acquisition of a WATA Device from ECCA in order to produce own chlorine solution centrally for all NEXUS centre jar cleaning services.

Visit Helvetas Nepal, Monday 6th March 2017

<https://nepal.helvetas.org/en/>

Meeting with Mr. Bharat Pokharei, Country Director of Helvetas Nepal, Mr. Juerg Merz, International Program Advisor (during 19 years in Nepal and transferring to Mozambique in two months), and Mr. Madan Bhatta, the responsible program manager for the Water Resource Management program.

The purpose of the visit was to learn what Helvetas is doing, what their main challenges are, and to inform them about dropforlife and their activities in Nepal. According to Bharat and also Prachet, meetings have taken place between ECCA and Helvetas. Juerg mentioned that there are still some WATA devices at Helvetas that have never been used. In spite of good intentions, there was never a follow-up to really work together, without bad intentions. Bharat expressed an interest in meeting again with ECCA.

Helvetas lists 43 active projects and an annual budget of CHF 12 Mio. Most of the funding comes from Helvetas Switzerland. It remains a challenge to get funding especially since the projects are long-term oriented and do basically not match the timing of the grants received. The projects have been bundled under the strategy 2016-2020 into six chapters:

1. Food Security & Nutrition
2. Integrated Water Resources Management
3. Economic Growth & Decent Employment
4. Gender Equality & Social Inclusions
5. Climate Change & Disaster Risk Management
6. Good Governance

Helvetas Nepal is mainly active in the very poor areas of the country (West, South West, South East, Central East). The water related projects are all in the West and South West, far away from dropforlife's current activities. It does not have any projects at all in the Kathmandu area or even Chitwan area, which is one of the richest in the Terai region. Some of the programs sound interesting and it even seems that Helvetas is willing to move more towards entrepreneurial thinking and creating more independence of the beneficiaries. Juerg mentioned however, that the entire culture of the donors of Helvetas do not allow for such a change! When we explained the Nexus Center approach, Juerg Merz expressed an interest to meet with Lars Willi.

Possible points of contacts / interest:

- Exchange experience and info on the Nexus-Centre approach; establish contact to explore mutual interest.
- ECCA: exchange awareness building approach in schools for Safe Water Program and what Helvetas is doing in the Climate Change Adaption program in their schools. There is also a "Blue School" project to raise awareness in WASH (Water, Sanitation, Hygiene) and create environmental friendly schools.

Actions:

- Introductory e-mail to Helvetas Nepal and ECCA (re-vive contact) and Weconnex / Nexus (new)



Fig. 1: Helvetas Nepal

Picture Gallery and Explanations
Nexus Centre Project Visit 01st – 03rd March 2017

Gochhada



Fig. 1: Location of Nexus Centre Gochhada, about a one-hour drive from Bharatpur



Fig. 2: Conversation with Guneshwar, Managing Director of Nexus Technology Nepal, Muna, and Simon (Weconnex intern)



Fig. 3: Muna Mahato, 20 years old, Operator Gochhada



Fig. 4: Process is well explained and visualized

Water filtration steps – how Nexus-Centre works



Fig. 5: 5'000 litre tank where water is collected / stored (sand & sediment elimination)



Fig. 6: Step 1: filtration of iron
 Step 2: filtration of arsenic
 Step 3: softening of water



Fig. 7: Step 4: UV filtration
 Removal of bacteria and viruses while maintaining important minerals



Fig. 8: Step 5: Water goes to first 500 litre tank after initial filtration, then through UV filtration (Trunz technology), and then to final tank, from which 20 litre jars are filled.



Fig. 9: clean 20 litre jars



Fig. 10: selling a jar to a local



Fig. 11: rooms are rented to local school, evening class is taking place



Fig. 12: standard water supply from ground water via hand-pump. More work needs to be done in the awareness building on safe water



Fig. 13: Area of Nexus Centre, outside Gochhada



Fig. 14: Marketing



Fig. 15: The bottled water is produced centrally and shipped to the Nexus Centres



Fig. 16: Sanitation installation to produce Biogas is standard in Nexus Centres (under construction)

Sauraha



Fig. 17: Sauraha lies about half hour south east of Bharatpur. The drive to the second location was going through the jungle. Unfortunately, we did not see any tigers or rhinos. Many deer could be seen and beautiful landscape.



Fig. 18: The most successful centre to date



Fig. 19: One of the tenants: tattoo shop



Fig. 20: A simple construction to make work easier



Fig. 21: Cleaning up to 100 jars each day is heavy work



Fig. 22: On-site support is crucial
For the time being (Simon Stauss,
Intern of Weconnex for three months)



Fig. 23: Biogas installation under construction



Fig. 24: A drink at lunch time for refreshment



Fig. 25: It seems more natural to be close to animals...

Basantapur



Fig. 26: The team is checking the numbers



Fig. 27: The front of the building is rented to a plumber and to a cosmetics store



Fig. 28: Major construction failure – re-do!



Fig. 29: Marketing competition – not an easy task to keep things under control, every time something new to correct



Fig. 30: Construction not yet finished



Fig. 31: dropforlife wrist band – may be she wears it after playing around



Fig. 32: Rajkumari, everyone is happy having found her



Fig. 33: Group photo