

IngOG⁺

Annual Report

2018

**Engineers Without Borders
Switzerland (IngOG+)**



Impressum

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Purpose

"Our purpose is to enable isolated or disadvantaged communities to sustainably meet their basic needs."

Engineers without Borders Switzerland (IngOG+) is a non-governmental organization delivering engineering-based solutions to humanitarian issues. We aim to improve the daily lives of communities which are politically, economically or geographically isolated by enabling them to meet their basic needs. Intensive participation of the local communities allows our projects to target the priorities of the beneficiaries and promotes development of appropriate local solutions. IngOG+ applies a holistic approach to problem solving, ensuring that our projects deliver sustainable long-term benefits for their beneficiaries.

Our areas of activity within Switzerland and abroad include engagement with local communities and partners regarding technical issues in the planning, implementation and maintenance of infrastructure projects, as well as facilitating knowledge transfer and supporting other organizations when specific engineering knowledge is required.

And all this since 10 years! Happy Birthday IngOG+!



Figure 1: Social accommodation in Bosnia (Dec 2018)

Projects 2018

Gradačac, Bosnia and Herzegovina (BIH001)

Purpose: **Providing accommodation to widows of the civil war during 1992 until 1995**

Location: Gradačac, Bosnia Herzegovina

Since: May 2016

IngOG+ is planning and building a social accommodation for elder women in need of beneficial and social residence, who can still live independently, in the Bosnian village of Gradačac in the Tuzla-Province. The project was initiated by Hazima Smajlović, a former Bosnian refugee living in Basel. IngOG+ is supporting the project initiator, coordinates all the involved actors and finances the construction of the building itself. The architectural design is done by a group of architects around the TEN-group and by a Serbian architect. The house will be operated by a project specific association or foundation. In 2018, we fixed the requirements and the dimensions of the house and we finished the preliminary design with our team of



Figure 2: Miniature Model

architects. In summer, we delivered the first design package to the Municipality of Gradačac in order to obtain the first of the two needed permits – the location permit. A modified preliminary design with some adjustments in the dimensions of the house was delivered to the Municipality by end of 2018. The approval of the location permit is expected by beginning of 2019. The first talks with potential contractors already took place in December 2018.

The first idea was to found a Swiss association with a local branch in Bosnia in order to organize the operation of the house. After getting in touch with a Tuzla-based lawyer, new possibilities have been put on the table. These new possible legal solutions were discussed during a meeting in Tuzla with IngOG+ representatives in December. At the moment, the two possible solutions to run the social accommodation are the creation of a Swiss association with a local Bosnian branch (original solution) or the creation of a Bosnian based foundation. In 2018, IngOG+ raised nearly 85% of the needed funds, thanks specially to a big donation of the Swiss association “Baslerinnen for Bosnierinnen”, so that the construction can start in 2019.

IngOG+ Team: Nora Mühlberger, Christian Vögeli, Dominik Burkhardt, Eric Carrera

Architects Team: Nemanja Zimonjic, Ognjen Krašna, Celine Bessire, Matthias Winter, Lukas Burkhardt

Projects 2018

Paraguay (PRY001)

Purpose: **Drinking water provision**

Location: Hugua Chini, Paraguay

Since: Dec 2015

After having installed three biosandfilters and two rainwater harvesting systems in Hugua Chini in 2017, this year we evaluated this pilot project in summer 2018.

Three team members travelled to Paraguay in September 2018. In Asunción we met Ana Lucia, a well-positioned and competent contact, who offered us to take over the local project coordination for our project in Paraguay. She has good contacts to the national university, other NGOs and has experience in project management.

In Hugua Chini we found, that the installed filters functioning if being used, but they did not meet the expectations of the community any more. For different reasons, their needs shifted towards steadily flowing tap water that water doesn't have to be carried from the river manually. This changed our activities in Hugua Chini towards supporting the community to get such a system from the government. Still, the biosandfilters found interest in other communities, organisations and the University in Asunción, which lead us to realign the project in three different pillars:

- Support the community of Hugua Chini in the submission of an application to the Paraguayan government for the construction of a pipe network for water provision.
- Partnership with the Universidad Nacional de Asunción (UNA) in order to facilitate student projects with support of IngOG+.
- Cooperation with the Rotary Club of Concepción to conduct workshops on biosandfilters.

We already organized a workshop at the UNA with lecturers and students of the Faculty of Agricultural Sciences. In this workshop, we showed how to build biosandfilters with simple means. In November and December 2018, the participants, together with the local Rotary Club, repeated the workshop with a village community near Concepción. We look back on an eventful year and are curious to tackle the upcoming challenges of our three pillars!

IngOG+ Team: Lukas Allemann, Carina Doll, Lukas Dössegger, Michael End, Dorothee Kunz, Philipp Meyer, Katharina Schulthess, Carmen Steinmann

Team Paraguay: Ana Lucia Giménez, Federico Varas Lehner, Citnhia Fleitas



Figure 3: Biosandfilter Workshop

Projects 2018

Nepal

Purpose: **Construction of a community center for Paravati women**
Location: Dhawa, Nepal
Since: June 2018

In collaboration with *Architects Without Borders Sweden* and architects of the design group *Rangi Changi*, IngOG+ plans the construction of a community center for the Parvati women cooperative in the village Dhawa in Nepal. Parvati is a women's cooperative registered as an NGO with the regional municipal administration.



Figure 4: Members of the Paravati Cooperative

Parvati grants micro-credits to its members, but also places special emphasis on empowering women and fighting the stigma of the lowest caste. It is accessible for all women of the village. Parvati is currently the only active cooperative in Dhawa and the fact that it has existed for 12 years confirms its reliability and acceptance in the community. Parvati aims to strengthen the local economy by training women in the community in crafts and agriculture and to contribute to the economic independence of the community by introducing new sources of income. Since the severe earthquakes in April 2015, Parvati lacks suitable sheltered space to carry out its activities. In a first phase of the project, the construction of an earthquake-resistant community center in Dhawa aims to create the basis for further development of the cooperative. In a second phase, Rangi Changi plans to support Parvati with regular funds for several years so that the cooperative can grow and become economically independent. The project will be carried out in close cooperation with Parvati and the local community and will focus on a participatory process, earthquake-resistant design, sustainable use of building materials and respect for the local context. The new building will make Parvati a visible part of the village, which in turn will provide a solid basis for them to extend their work further into the community and will create possibility for organizing courses, cooperative meetings and all kind of occasional village trainings and events. The sustainable strengthening of Parvati should have a positive impact on the local economy, first for Parvati members and women attending courses, then for their families and finally for the community as a whole.

IngOG+ Team: Christian Vögeli, Emmanuelle Sallin, Max Kastinger

Projects 2018

Nepal

Purpose: **Construction of earthquake safe schools**
Location: Sano Bhorle, Nepal
Since: October 2017

Hundreds of small primary schools, so called "Feeder Schools", were destroyed in the Nepali earthquakes in April 2015 - almost none of which have yet been rebuilt. Feeder Schools are found in small, most often very poor or inaccessible villages and they teach the smallest children who are considered too weak to walk to the next "proper" school. The schools are mostly community funded, but these communities have little influence or visibility at a national level - and therefore remain at the back of the queue when it comes to priorities for reconstruction.

IngOG+ assists the NGO Learning Planet to adapt their modular school system to the needs of Feeder Schools and to improve their seismic safety. The goal is to implement an affordable and seismically safe solution for the reconstruction of Feeder Schools in different locations. The construction of the first prototype in the village Sano Bhorle, north of the capital Kathmandu, is going well ahead. The walls and the ring-beam are finished and currently the construction of the bamboo roof is in the final stage.



Figure 5: Construction of the first prototype in Sano Bhorle, Nepal (2018)

IngOG+ Team: Christian Vögeli

Projects in assessment

Lebanon (LBN001)

The continuous civil war in Syria has been ongoing now for almost 7 years, forcing hundreds of thousands of people to leave for the neighboring countries. The Bekaa Valley has received the highest number of Syrian refugees in Lebanon. Regarding the need for winterized so called Non Food Items, surveys and on-site data collection clearly show that there is a high demand for fuel and stoves. Clearly, refugees lacked the items necessary to heat up their shelters, hence the “fuel” and “stoves” were ranked as their top priority needs.

In collaboration with the The Center for Civic Engagement and Community Services at the American University of Beirut (AUB-CCCES) and Engineers without Borders Lebanon (EWB), IngOG+ is currently evaluating possible solutions focusing on the provision in these informal settlements.

IngOG+ Team: Diego Sanchez

Nepal

In the most beautiful areas of the Kathmandu area in southern Nepal, a large part of the population lives without access to medical care in the field of women's and children's medicine.

In order to counteract the negative effects, the project Ratnanager - Hospital extension for women's and children's medicine was launched by the Spital Limmattal association. The aim of the project is to create a competence center for women's and children's medicine at the current hospital in the Ratnanager.

IngOG+ has accompanied the association since 2019 and will support the planning and construction, technically and financially. In a workshop procedure, the wishes are put together, which are determined with the local partner and the physician on the spot. The goal is to complete the planning and start the construction in 2020. The planning of a solar system with the technical support of IngOG+ is also planned for the future.

IngOG+ Team: Andreas Wende, Diego Sanchez

Projects in assessment

Kenya

Biovision contacted us with a project idea in the Mbita region at Lake Victoria, Kenya. The roads are bad and accessibility of the communities on overland routes is very bad. Thus, people rely highly on boat traffic for personal mobility and goods transportation. The problem starts with missing or bad ship docking stations – it is nearly impossible with medium sized ships to dock on the shore, which results in beached ships, less traffic for people and goods transport. IngOG+ is eager to support local communities in improving their transportation system on the lake – with the construction of robust and appropriate docking stations that can handle big level variations of the lake and receive the amount of weight and usage needed,

On the site of the ICIPE, the only insect research institute in Africa, was a frequently used docking station used by the institute, local communities and NGOs. This place is the starting place to build a first, new docking station. From this pilot station, it is planned to develop a manual for construction and to spread the idea in the surrounding communities and support them if needed.

IngOG+ Team: Michael Meili, Marco Lolli, Katharina Schulthess

Iraque

On August 3, 2014, the Islamic State Terror Militia (IS) invaded the main settlements of the Yazidi in Sinjar (northern Iraq) and committed genocide against the population. More than 5,000 men and boys were murdered and more than 7,000 women and children were abducted. In the course of the attack, more than 200'000 Yazidi were forced to flee their homes, many of them managed to get into Syria. About 50,000 Yazidis fled into the Sinjar Mountains, where they were trapped without food, water or medical care.

Even after the liberation of the region from the IS, many of the Yazidi hesitate to return to their original territories. The city of Sinjar and the surrounding villages have been completely destroyed and reconstruction is progressing very slowly. Numerous Yazidi still live under precarious conditions in the camps in the Sinjar Mountains. Especially the drinking water situation is critical. Although the distribution of drinking water with trucks is being organized by the regional government, there is a lack of reliable drinking water sources, a hygienic distribution chain and the possibility of safe storage of drinking water.

IngOG+ supported the organization NOVIA and representatives of the Yazidi Diaspora in Germany and Switzerland in the more detailed evaluation of the local situation with technical support in the field of drinking water hygiene. A small team of NOVIA employees has been equipped with the

Projects in assessment

necessary materials and guidelines to perform water quality tests on site as well as detailed checklists for the evaluation of the local drinking water problem and the local context.

An initial survey mission by the team of NOIVA was successfully carried out in summer 2018 and the organization is working to establish a permanent local presence. IngOG+ will continue to provide technical support but will not be involved more actively in the project.

IngOG+ Team: Katharina Schulthess, Christian Vögeli

Financial Report 2018

Organisational changes

Due to our growth in project size, turn over and diverse income sources we changed our way of bookkeeping and introduced a new payment channel.

So far, we did **bookkeeping** based on an MS Excel sheet which was located in our document repository. The limiting factors of such a solution are accessibility, tracing of changes and simplicity in reporting. In order to overcome this the complete bookkeeping of IngOG+ has been transferred to CashCtrl (<http://www.cashctrl.com>). This solution allows control of access, ease of booking and monthly reporting, to name a few. It is a full-grown accounting solution which follows the requirements of the Swiss tax office.

Our **payment channels** in the second half of 2018 was extended by PayPal (<http://donate.ingog.ch>). This payment channel allows an easy transfer of donations and event charges by PayPal account and credit cards (also without PayPal account). This payment channel was successfully used in our 10 year anniversary event as means to purchase event tickets.

Assets

As of end of 2018 we have total funds of 103'035.74 CHF, which are distributed to our three cash accounts at Postfinance, PayPal and the cash box.

Assets	2017	2018
liquidity cashbox	538.25 CHF	183.00 CHF
liquidity Postfinance	28'198.44 CHF	99'387.13 CHF
liquidity PayPal	- CHF	3'465.61 CHF
Total Assets	28'736.69 CHF	103'035.74 CHF

Income

Main income in 2018 is due to the tremendous success of the fundraising team. The team raised 75 out of 90 kCHF as donations to projects (specific and unspecific). Our largest contributors with 1'000 CHF and above were:

- Baslerinnen fuer Bosnierinnen
- Rapp Management AG
- CSD Management SA
- Lush Switzerland AG
- Lombardi SA
- Stiftung Carl und Elise Elsner Gut
- Cassina+Partner AG
- Fabiana & Eric Carrera-Henke
- F. Preisig AG
- Baechtold Moor AG
- Gruner AG
- Ev. Re. Kirchengemeinde INS
- MWV Bauingenieure AG

Financial Report 2018

Income	2018
donations	
unspecific donations	32'230.18 CHF
donations for project BIH001	44'310.00 CHF
donations for project LBN001	300.00 CHF
revenue of 10-year event	7'796.00 CHF
membership fees	6'063.37 CHF
Total Income	90'699.55 CHF

Income from membership fees was increased by 50% due to the increase of membership fees from 60 CHF to 100 CHF in 2017 (effective from 1.1.2018). The target of 7'500 CHF set out last year for 2018 was not met. Yet memberships fees are at an all-time high and provide for the basic running cost of the association.

Expenses

Expenses in 2018 are at a low level mainly due to the projects all being in fundraising and planning phases. While the Hugua Chini project (PRY001) had its technology revisit in 2018, the Gradačac project (BIH001) is currently in its planning and detail engineering phase. These phases are typically comparatively low in cost. For 2019 the building phase with higher costs lies ahead. Evaluation costs are low due to very few evaluations on site. The administrative cost is practically the same as in 2017 (2'735.88 CHF). This corresponds to around 17% of the total annual expenses in 2018. This seems high, yet is due to the mentioned low expense phases of the current projects.

Expenses	2018
project expenses	
project expenses BIH001	3'664.45 CHF
project expenses PRY001	6'005.81 CHF
project expenses LBN001	695.65 CHF
internal project expenses 10-year event	3'000.70 CHF
other internal projects, evaluations and activities	543.60 CHF
administration cost	2'880.29 CHF
Total Expenses	16'790.50 CHF

(a) expenses for making cups to resell, x-mas event and similar

Financial Report 2018

Profit/Loss

In total, all project expenses in 2018 could be covered. Since fundraising for the Gradačac project (BIH001) was quite project specific it could cover all expenses directly out of the project funds. The Hugua Chini project also received donations, yet they were project unspecific and thus are appointed out of the project unspecific profit. The Beeka Valley project (LBN001) incurred evaluation costs without fundraising having started. It will also receive compensating funds from the project unspecific donations.

In 2018 IngOG+ celebrated its 10-year anniversary in form of an evening event featuring a podium discussion. It was also financially a huge success. It was the first of its kind and provided almost 5 kCHF additional funds to the Gradačac project. These funds will be needed in 2019 when the building phase starts. Also, this kind of event has a positive financial impact while increasing the visibility of problematic topics and geographic areas.

Profit / Loss	2017	2018
Total profit/loss		73'909.05 CHF
<i>10-year event profit</i>		<i>(4'795.30 CHF)</i>
Project BIH001	5'920.12 CHF	40'645.55 CHF
Project PRY001	8'363.64 CHF	- 6'005.81 CHF
Project LBN001		- 395.65 CHF
project unspecific profit/loss^(a)	13'992.93 CHF	39'664.96 CHF

(a) donations and membership fees

Use of profits

According to the board decision on Jan 9th 2019 the 2018 profits will be used as follows:

- Gradačac project (BIH001) receives 18 kCHF plus the 10-year event profit
- Hugua Chini project (PRY001) receives 7 kCHF for the next project phase
- Beeka Valley project (LBN001) receives the exact loss, since it is not yet out of its detail evaluation phase

The remainder will stay in the non-dedicated reserve and will serve to secure cash flow, finance evaluations and help out with project losses. The amount of 23 kCHF as a reserve fullfills the target which was anticipated. The general rules of project financing assume that a maximum of 10% loss per project must be possible to cover by the reserve. Any loss exceeding this limit must initiate another round of fundraising in the project to cover those expenses.

Financial Report 2018

The total allocation matches the project unspecific profit/loss (see above table) and is therefore correct. The starting budget matches the current assets at the end of 2018 (see previous table) and is therefore correct.

Funds allocation & starting budget for 2019	allocation	starting budget 2019
Project BIH001 ^(a)	22'795.30 CHF	69'360.97 CHF
Project PRY001	7'000.00 CHF	9'357.83 CHF
Project LBN001 ^(b)	395.65 CHF	- CHF
non-dedicated reserve	9'474.01 CHF	23'466.94 CHF
retained earnings membership fees for 2019 ^(c)		850.00 CHF
Totals	39'664.96 CHF	103'035.74 CHF

(a) 18 kCHF + revenue of 10-year event

(b) only compensation loss, since project is not yet out of detail evaluation phase

(c) membership fees of 2019 already received in 2018

Organization 2018

The year 2018 started with a board of nine people. It was agreed upon several issues that IngOG+ was facing: we get many project proposals, we have too little capacity, and thus we need to grow! A lot of expectations in a more professional and bigger IngOG+ were seeded. Together with the consultancy of Innovage, we restructured the organization and created two different organs: a strategic board and a management team for the operational part. By this, we could avoid long strategic discussions hindering the daily, operational business. The other consequence was the overloading of individuals with many goals, tasks and double-roles, which resulted in demotivation and detachment inside the board, reaching out to the active members.

In parallel, a new way of working together and share project experiences was intended by organizing monthly Open Platforms, while simultaneously presenting IngOG+ to newcomers and get them involved directly. The mode of these platforms was adapted several times in order to reach the intended outcome of connecting active members, co-working on the projects and involving newcomers. It became clear, that the combination of all three intentions is difficult to successfully achieve such that everyone is satisfied.

In 2018, we could arrange two highly interesting and valuable cooperations: Rapp will be mentoring us, including support in technical questions, reports review etc. and also with financial contribution. And Mobimo is supporting our activities for the upcoming three years financialwise.

It was a year of up and downs, while the learning output was immense: organizational changes, huge fundraising effort leading to CHF 90'000 of raised funds, new ways of co-working, new partnerships and great anniversary events. Especially the 10-year celebration gave really good momentum to the whole organization for new projects and initiatives.

We can also look back to a year with lots of improvements on the organizational part like financial tools or cleaning membership data, and many more. In addition, the foundation was laid for a new group in IngOG+, the Project Group (PG), which includes all active members in projects, events, fundraising, etc. in order to increase exchange of knowledge, involving more people into decisions and thus relieving as well the board from accumulating work load.

Events 2018

This year we have organized several events for our members as well as some advertising platforms to promote our work. At the beginning of the year, we held a lunch seminar at the university of applied sciences in Biel and a discussion round at the university of applied sciences in Winterthur and at the Lucerne University of Applied Sciences and Arts (HSLU) we held a lecture about sustainability of development cooperation projects. The events at the universities were really well attended and we were able to make exciting new contacts. We also had an information stand at the Höggerberg (KTH) contact meeting, the company trade fair for engineering and architecture professions in the construction industry, and were able to talk to many interested students and tell them about our projects.

The main focus of this year's events was on our anniversary. It quickly became clear to us that we would like to organize an event for our members, but at the same time we would also like to use the anniversary as an event for a larger appeal for donations and a higher level of attention for our association. We therefore decided to make the annual summer barbecue a little bigger than usual and to celebrate 10 years IngOG+ together with our members. The bad weather, date collisions and problems finding the right space unfortunately didn't stop us from having a great time. Fortunately, we all had a talent for improvisation and we took the bus and van to transport all the material and the guests to Katharina's home at short notice. There we were able to reminisce about IngOG+ and the world in a comfortable group, to measure ourselves in riddles and to exchange our thoughts over coffee and cake or beer and vegetable pan.

In October, the big 10-year event took place. Nora, Katharina, Diego and Andreas have organized a great event in the "Wirtschaft zum Transit" in Zurich Altstetten. Exciting guests came to the panel discussion with the topic "Plastic – how much recycling do we want to afford?" and we were able to talk with old and new companions about the past and future of IngOG+ with delicious food and a beer or two. The event was a complete success and we could book many donations for Bosnia and the association.



Figure 6: 10-year event in October 2018

Outlook 2019

2019 is the year of our project in Bosnia and we are excited to start construction soon! Also, the Paraguay project group is excited to work out new strategies and new ways to increase impacts with the biosandfilters. The new projects in Kenya and Nepal are at the starting gates and we are eager to give exciting updates soon.

The events team is happy to present roughly the yearly program of 2019:

14 th of March	Lunch-Seminar at ETH Zürich together with IKRK
15th of March	Stand promotion at Polyterrasse, ETH Zürich together with Young Swiss Engineers for the first Engineering Day (www.tagderingenieure.ch)
April	Workshop with WASH-expert from Eawag-Sandec: how to make effective short videos clips to communicate your project or for explanatory purposes.
September	Summer hike
October	Joint workshop with Young Swiss Engineers about earthquake safe construction
December	Christmas dinner and christmas market stand in Zurich
January 2020	Igloo building contest

If you are interested and want to get more details, please contact communications@ingog.ch.

On the organizational side of IngOG+, a lot of effort will be put into a stable working Project Group (PG). The board will try to do its best to enable this new group, but the PG will eventually live from the active members itself, their contributions and engagements. Thus, we aim to expand this uniqueness of IngOG+ from the board towards all active members: doing engineering work, having a great group to exchange and share experiences, being part of decision processes and this all on a voluntary basis.

Acknowledgements

A cordial THANK YOU goes to all the donors and supporters of IngOG+. With your contributions and believe in IngOG+ you make our work and projects possible. And we do our best to allocate means and funds properly and effectively. A special THANK YOU in this section goes to Rapp and Mobimo for your trust also in the future of IngOG+. Also, CSD and HunzikerBetatech have been already longer-term supporters of our Paraguay project, and we want to emphasize our appreciation. Another highlighted THANK YOU we express to the big supporters of our project in Bosnia, “Baslerinnen für Bosnierinnen”.

Another big THANK YOU goes to all external experts and supportive people that helped us in one or the other way, either content wise for projects, or for finding new locations for meetings, finding important contacts, new ideas for giving seminars etc.

THANK YOU Innovage for strategic support, Wirtschaft zum Transit for hosting our anniversary, Kanuclub for hosting our Open Platforms!

The biggest and warmest THANK YOU goes to all active members, giving their free time, energy and soul into IngOG+. To spend time with you, having discussions, learning from each other, sharing experiences, is very inspiring and giving a lot of motivation! No matter what you’re doing in IngOG+, it is all helping to improve our chapter and it is great to see how it is evolving from year to year. We are looking forward to another IngOG+ year together with you!

Sincerely in the name of the board,
Katharina Schulthess
President

Zurich, 11th of March 2019,

