

NICOLAS

Nicolas International College Of Learning And Science

Mekele, Tigray, Ethiopia

Business Plan

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Index

Executive Summary 3

1. Background..... 5

3. Development of NICOLAS by R4C..... 7

3.1 Market Needs..... 7

3.2 Current offer 8

3.3 The NICOLAS TVTC concept..... 8

3.4 Development Plan, Proof of Concept (Youth and Adult Learning Center) 9

3.5 Next Steps (from the Center to the full NICOLAS TVTC)..... 10

4. Strategic process in developing dVET 11

5. Implementation phases and milestones..... 12

6. Financial Plan..... 15

7.1 Financing requirements 16

7. Sponsoring Invitation..... 19

8. Appendix 20

9.1 Glossary of abbreviations and terms..... 20

Executive Summary

“I am Sara and my daughter, Eleni, 16, has Down’s syndrome. As I am old, I worry about her future. Our culture hides children with disabilities. There are no training facilities in the region for children like Eleni. With training she will be able to earn an income, be independent and avoid begging on the streets or worse. Many girls who cannot earn a living are forced into early marriages. Luckily, my daughter goes to a wonderful school, the Nicholas Robinson School (NRS). She has reached her academic limit but I hope that she will stay on at NRS as they open a new Centre for students like her.”

Rainbows4Children Stiftung (R4C) has a 12-year track record of successful development and implementation in education, in Mekele, Tigray, northern Ethiopia. R4C has built the Nicolas Robinson School (NRS) over a 10-year period, and this school now educates 1370 students from kindergarten to grade 12 (pre-university). Leveraging this success, R4C has agreed with its local partner and beneficiary, the Tigray Disabled Veterans Association (TDVA) and the Mekele Departments of Education and Technical and Vocational Training, that it will implement technical and vocational training of a similar high standard over the course of the next 10 years (2016-2026).

To this end, R4C has formed partnerships with partnerships with technical training experts from Europe and Arup (architects and construction engineers) and it continues to establish co-operations in Ethiopia and outside to establish NICOLAS (the Nicolas International College Of Learning And Science) as a best in class centre in technical training.

The vision of R4C is that both the college and the school will become self-sustaining and best in class examples which can be handed over to local experts and used as models throughout Ethiopia and eventually Africa.

Our research has shown that the rapid industrialization of the region has increased the demand for skilled personnel in the local business community.

NICOLAS will implement the concept of dual vocational education and training (dVET). The dVET introduction will be advised by European experts and it will be supported by local corporations, the local authorities and the University of Mekele. Corporations will form industry associations to manage their input and collaborate on the curriculum development and course evaluation. Courses have been identified which are relevant to the community and to the needs of the local industry. NICOLAS will also provide services to the participating companies, such as strategy development seminars, training programmes, etc.

NICOLAS will be open to all young people, with an emphasis on those from disadvantaged backgrounds, of all genders, religions or races. It will specifically seek to generate employment opportunities for young people with disabilities.

As with the NRS, R4C will carefully pace the building program and curriculum development of NICOLAS, which will be implemented in two phases:

PHASE 1 will focus on the establishment of THE Nicolas Youth and Adult Learning Center graduating up to 1800 students by 2021 at the existing NRS campus. PHASE 1 is critical because it will act as a pilot for NICOLAS, the full-fledged TVTC. It will allow us to test study modules, develop partnerships with local businesses and external trainers, while leveraging the current NRS infrastructure.

PHASE 2 will leverage the success of PHASE 1 and result in the opening of NICOLAS, a full TVTC offering further study options and longer courses for up to 600 students per year. The successful completion of the Youth and Adult Learning Center will enable it to be leveraged to this much larger scale. It will also demonstrate to potential donors and the local business community the relevance and quality of our concept and of our graduates. The larger project will add more relevant subjects needed by the community and will build on the experience and learning gained.

R4C and TDVA will lead the Project Management until the project completion, but each phase will be handed over to local managers once it is established.

Construction and engineering advice will be provided by project partners Arup.

The funds required for this project between 2015 and 2023, after which it will become financially sustainable, can be split as follows:

Phase 1 – Nicolas Youth and Adult Learning Center – 2015-2021

. Funds required: CHF 680,000, split between CHF 290,000 for investments and CHF 390,000 in operating costs, equivalent to CHF 220 per student;

. CHF 346,000 has been donated, and R4C expects to raise CHF 220,000 in tuition and revenue from services;

. This leaves a funding gap of CHF 114,000.

Phase 2 – NICOLAS TVTC – 2015-2023

. Funds required: CHF 6,670,000, split between CHF 5,140,000 for investments and CHF 1,530,000 in operating costs, equivalent to CHF 383 for each of the 4,000 students attending the TVTC during that period;

. CHF 645,000 has been donated, and R4C expects to raise CHF 1,370,000 in tuition and revenue from services;

. This leaves a funding gap for the Phase 2 of CHF 4,650,000.

The legal owner of the NRS, the Youth and Adult Learning Center and eventually the TVTC, is the local NGO, Tigray Disabled Veterans' Association, and they will continue to run the school once the concept is established.

I. Background

Rainbows4Children (R4C) is an independent Swiss foundation whose mission is to break the cycle of poverty by giving children of the poorest families in Ethiopia access to top quality education. The focus is to educate disadvantaged children – mainly the children of disabled veterans of the civil war whose disabilities such as loss of limbs and blindness have held their families in extreme poverty due to limited or no ability to work. There is no state support for persons with disabilities apart from war veterans and even for them it amounts to only US\$ 14 per month. With such low incomes, even government schools are unaffordable because parents still need to pay for school uniforms, transport and writing materials.

To achieve its mission, R4C has partnered with the Tigray Disabled Veterans' Association (TDVA) which has been integral in helping R4C establish its first project, the Nicolas Robinson School (NRS).

R4C aims to create a model system of education for children in Ethiopia which is self-sustaining financially and which can be reproduced in other parts of the country and eventually throughout Africa. The NRS, founded in 2005 in memory of Nicolas Robinson, the son of the co-founder, provides top quality education to the poorest families in Mekele, the capital city of the Tigray region in Northern Ethiopia.

Specifically, the NRS

- Provides education for 1375 children aged 4-18 (Kindergarten-grade 12)
- Gives equal opportunities to boys and girls, of all religions. Student gender ratio is 50/50.
- Helps children who have special learning difficulties
- Employs only Ethiopian teachers and staff
- Gives 100% of donations to the project. This is made possible because all the administration work and faculty training is carried out entirely by unpaid volunteers.
- Provides in-house training to faculty
- Employs sustainable eco-friendly building methods with local materials
- Utilizes environmentally friendly services such as dry latrines, water harvesting from roofs, solar panels
- Hosts school volunteers/trainers
- Offers both a student and teacher sponsorship program for donors
- Achieves transparency by providing regular progress reports, video clips and website updates to donors and by inviting donors to volunteer at the school.

Since 2005, the NRS has improved the lives of over one thousand children by providing best-in-class school facilities for children in the city of Mekele. The NRS is already assessed as the best quality school in Tigray by the regional education bureau, and is among the best schools in Ethiopia according to the Federal Education Ministry. The most recent milestone was in July 2016 when the first High School grade 12 students graduated. 100% of the students, a total of 90, passed their entrance exam for university education. This was as a result of the dedication of the teachers and the quality of the school.

R4C has expanded its focus to include those students and young adults who cannot go to university, and to students whose skills are well-suited to vocational careers as well as to those who have a learning disability. R4C wants to give these young people the opportunity to acquire the knowledge and skills they will need to enter the workplace as employees or as entrepreneurs. The need is huge; it is estimated that over 50% of the population in Mekele is less than 25 years of age which currently amounts to more than 200,000 young people. However, the current private and public technical training centers can only provide 20,000 positions when 48,000 would be required (Tigray-TVET-March 2015).

R4C is building on the trusted partnership established in 2003 with the TDVA and is working closely with local industries to identify the skills that the community needs most. Their research has shown that the rapid industrialization of the region has increased the demand for skilled personnel in the hotel and catering, textile, optometry, water and sanitation, and maintenance sectors. Additionally, there is a need for technical schools to deliver the required training.

The long term project is to set up NICOLAS, the Nicolas International College Of Learning And Science, a technical & vocational training college (TVTC) that when operating at capacity of 2,400 registered students, studying on courses of 4 years duration, will graduate 600 students per year. Our objective is to establish the leading TVTC in Ethiopia as measured by Swiss vocational training standards and employment of the graduating students. We will adhere to the same proven implementation strategy employed with the NRS: partner locally with the TDVA, source teacher-trainers from Western countries and implement a “train-the-trainer” concept, and hire and train local Ethiopian staff to establish a sustainable model in technical training in tune with local needs.

A 40,000m² plot of land has been donated by the Mekele municipality. With the technical support of European experts, NICOLAS will offer a technical training concept similar to the Swiss Apprenticeship system – said to be amongst the best in the world - based on the collaboration between industry and schools. Local businesses have already volunteered to support the classroom teaching with on the job experience by providing internships and supporting apprentice programs.

As with the NRS, we will carefully pace the building program and curriculum development of the TVTC.

Phase I centres on the establishment in 2017 of a Youth and Adult Learning Center (the Center) to serve as a pilot project for the full NICOLAS TVTC and which will train 1800 students between 2017 and 2021 at the existing NRS campus. The Center will focus on teenagers with learning or physical disabilities. Several students at the NRS have Down’s syndrome and the Center will support their adaptation to the work place. It is urgent to address the needs of this youth group as no institution in Mekele caters to them. This Center is critical because it will allow us to test study modules, develop partnerships with local businesses and external trainers, while leveraging the current NRS infrastructure.

Some progress has already been made. With a grant from the Symphasis Foundation (managed by Credit Suisse), four classrooms for 40 students each have been constructed at the NRS to teach technical skills for the Garment and Hotel/Catering industries.

Phase 2 of the project will leverage the success of the Center and result in the opening of NICOLAS, a full TVTC offering further study options and longer courses for up to 2,400 students.

Key project stakeholders and project location

R4C is registered as a Swiss foundation in the Register of Commerce no: CHE-111.732.734.

R4C is registered in the UK with The Charity Commission (no.1116387).

The Tigray Disabled Veterans’ Association is an Ethiopian registered (Charity and Societies Agency) charity, registration number 1420

Mekele is the capital city of the state of Tigray, Ethiopia. Due to its position only 100 km from the border with Eritrea it experiences the effect of a swelling population due to migration from Eritrea as well as from farmers moving away from the countryside. Many of these political and economic migrants are lacking a tertiary education and are unable to be employed until they have learned a skill.

Ethiopia is making enormous efforts in furthering education, and they have invested in many new state-owned Universities in the last 10 years. The country is also making efforts to develop technical education but is finding this more difficult. There is high interest of the regulatory bodies within the government in different methods and systems of vocational education, such as the dual method of Switzerland and other European countries, and they are already being assisted at a national level by the German Gesellschaft für Internationale Zusammenarbeit ("GIZ").

On the other hand, Swiss authorities have started to internationally promote the Swiss model of dual vocational education. International companies are aware of the benefits of high quality vocational education as sustainable basis of valuable human resources. In particular the Swiss development cooperation strategy has put a focus on Ethiopia last year, in particular to support water projects and forestry.

2. Concept and need for dVET

Ethiopia has a growing Technical and Vocational Training System (TVET), however it is purely theoretical and although the curriculum calls for practical experience in college and workplace placements, this is rarely practised in reality.

The main obstacle to the introduction and development of dVET systems is that, in many countries, companies are not used to hiring and educating apprentices. Companies hesitate to invest in the education of young people, as skilled professionals are in high demand in the labour market and it is felt that they often leave the company after graduation from college. Therefore, the key to a functioning dVET system is to convince industry of the common benefits to the companies participating in vocational education. A common effort can effectively ease the skills shortage problem to the benefit of the whole industry, and, in addition, the involvement of the companies in vocational education ensures that such education is meeting their actual needs and requirements.

3. Development of NICOLAS by R4C

3.1 Market Needs

Mekele, in Tigray, Ethiopia is a fast growing city. In the period 2003-2016 the population has grown from 80,000 to 500,000. Most of this increase has occurred through migration of people from the surrounding rural areas in search of work and further economic migration from Eritrea which is only 150 km away and has the same language. It is well served by a regional airport, having regular flights to the capital city of Addis Ababa of only one hour in duration. There is a well-established university in the town with a student population of over 20,000.

Our research has shown that the rapid industrialization of the region has increased the demand for skilled personnel, among local enterprises such as (listed in no order of priority or assessment of opportunity nor engagement):

- Mesfin engineering (metal work, vehicle assembly)
- Mesebo cement
- A large garment factory (MAA) owned by the Midroc group of companies
- Bruh Tesfa, a manufacturer of plastic pipes and systems for irrigation
- Addis Pharmaceutical Factory (manufacturers of generic pharmaceuticals, based in Adigrat)
- A fast developing hotel and hospitality industry is developing in the town, 22 new hotels, including a Hilton Hotel, are under construction. Mekele has become a large conference centre for the country and the region, as well as supporting the fast growing tourist industry.
- The increasing number of new enterprises in the region such as Velocity Garment factory, BDL Garments, Calzedonia which will eventually employ 15-20,000.
- The development of an industrial park for garment manufacturers, funded by the Ethiopian Investment Commission, EIC, (a government body).

Furthermore, the large infrastructure projects conducted for instance by the Mekele regional water bureau, and by Ashegoda Wind Farm, which was constructed by Vergnet and Alstom, are in need of local qualified technical personnel.

3.2 Current offer

The Ethiopian government has introduced a technical and vocational training curriculum with which they have been supported by GIZ (previously GTZ), the German state organisation for development cooperation in the recent past.

However, in Mekele, there are only two multi-discipline technical and vocational training colleges:

1. A government run “Polytechnic” which provides training in construction, electrical and mechanical engineering, cooking and secretarial skills. It is under-funded, poorly equipped, most of the teachers have second or third jobs and are often absent.
2. A college run by the Don Bosco organisation. Their capacity is to train about 40 students per subject per year. They focus primarily on automotive and heavy engineering skills.

The existing two colleges in Mekele train students in certain technical skills, but the students are not provided with business training including selling and marketing skills which would help them establish a small enterprise.

Gaps in supply

The capacity of these two technical colleges is wholly inadequate to cope with the local economy’s increasing demand for qualified personnel, and to meet the rapidly increasing needs of a young local population for access to training facilities. It is estimated that approximately 200,000 – 250,000 in Mekele are less than 25 years of age. The current private and public technical training centers can only provide 20,000 positions when 48,000 would be required (Tigray-TVET-March 2015)

Furthermore, the number of disciplines currently taught is limited, and it is not responding to the needs of this growing and modernising town.

In an interview, the manager of Mesfin Engineering expressed his frustration at hiring and training welders – only to lose them within a short time period as they left to set up their own businesses. He expressed the importance of future employees having access to a college which could train welders to an adequate skill level prior to being hired by local employers.

The regional water bureau, which is partly funded by the World Bank, has been tasked to install hand pumps and equipment throughout Tigray, and to train farmers in the most efficient management of water in this semi-desert region. The bureau head stated to us that he has insufficient qualified personnel to deploy and no training facility.

3.3 The NICOLAS TVTC concept

The NICOLAS concept for a TVTC has been developed with the support and input from the local community whose representatives are serving on our Advisory Board. They include public stakeholders and large private employers:

- Tigray Disabled Veterans Association (TDVA), R4C’s local partners
- Mekele University (technical support)
- Tigray Region Bureau of Science and Technology
- Mekele TVET (Technical & Vocational Education & Training) Bureau (content and curriculum)
- Tigray Regional Education Bureau
- GIZ (when available in Mekele) (external advice)
- EFFORT (owner of many Tigray businesses including Mesebo Cement and Mesfin Engineering)
- Tigray Water Bureau (local employer)
- Mekele Hotel Managers Association

- MAA Garment
- New Garment manufacturers, including Velocity (India), Calzedonia (Italy)
- Ethiopian Investment Commission

The proposed project has four principal objectives:

[1] Provide best-in-class training in those skills required for the development of the local economy for young people – especially for students (age approx. 16 – 25) having parents with disabilities.

[2] Provide an opportunity for best-in-class training and subsequent employment for students with special needs, both academic and physical.

[3] Deploy technology suitable for sustainable development in Africa – primarily in the areas of solar and wind power, clean water supply and water management, and agriculture. This technology will be used to provide NICOLAS with its own power and water, avoiding dependence on the overstretched municipal services.

[4] Provide a unit at NICOLAS to “incubate” start-up businesses based on the technology taught and developed at the College. This will include micro-finance support.

Further integration steps are planned to be realised through (i) Internship Programmes, whereby NICOLAS students are sent to industry companies for practical training, and which is of primary interest to the companies as it gives "access" to potential future high-skilled professionals, and (ii) through an Apprenticeship Program wherein NICOLAS will source out the production based part of the training to the industry partners. The companies hire the apprentices and take care of the practical education, and they contribute to the costs of the theoretical education provided by NICOLAS. This will constitute the beginning of the realization of a dVET system comparable to Switzerland and other EU countries in Ethiopia.

Once established, NICOLAS will also provide the participating companies with a series of services, such as strategy development seminars and training programmes.

3.4 Development Plan, Proof of Concept (Youth and Adult Learning Center)

The project will be conducted in two phases. The first phase, the Center, will be implemented in training facilities which have been recently constructed at NRS to teach two technical specialties.

These facilities will have the capacity for 40 students per classroom that will attend our technical training pilot study, and will participate in an internship/apprenticeship program with local employers. The facilities will be used to trial the dVET system with local employers and provide short training or „taster“ experiences for the young students and their employers in the new system of training. It will provide an opportunity to test and trial the courses and their concept, and educate local employers in the dVET system. We will also be able to adjust/fine tune the business model if this is required.

We have engaged in dialogue with local employers to gain their support for the implementation of this new concept in Ethiopia. It has been met with interest and engagement.

The Center will run for a period of two to five years and will be evaluated against:

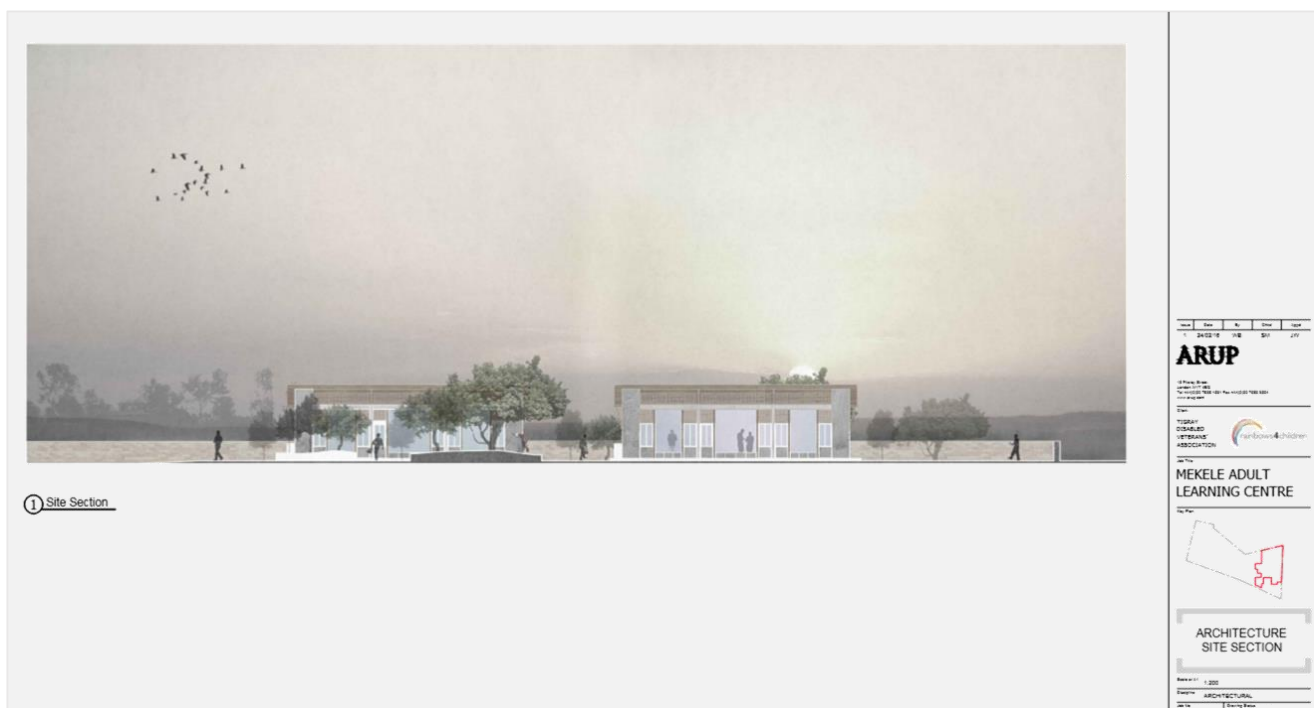
- The commitment of the local community to our concept as measured by its technical and financial support
- The employability of our students in technical positions as evidenced by their ability to obtain internships and full-time job commitments

3.5 Next Steps (from the Center to the full NICOLAS TVTC)

- Implementation of the Center at the NRS in January 2017 at an estimated cost of CHF 680,000 whereof CHF 326,000 (48%) are already funded. CHF 134,000 are still sought to cover the cost of workshops for initially teaching 2 vocational skills, the cost of instructors and school operations, and the pertaining VET development cost. Market research shows that the hotel industry and the garment industry are the 2 highest priority areas;
- As the concept is proven, we will expand our Technical College in stages as funding becomes available;
- NICOLAS will be built on a 40,000 m² (approx. 4 hectare) plot of land on the perimeter of the town of Mekele. The land has been donated by Mekele municipality to our partner organisation, the TDVA, and a perimeter wall has been constructed.

NICOLAS will train students in disciplines addressing market needs. The current list has been developed based on market research conducted by R4C and the TDVA in 2014. It is divided into 3 subject groups:

- **Upgrading local technical capabilities**
 - Hospitality industry
 - Building and Construction technology
 - Information and Computing Technology (ICT)
 - Garment manufacture
 - Maintenance engineering
 - Mechanical Engineering
- **Sustainable development**
 - Water management / Sanitation
 - Agriculture/Forestry/Soil
 - New technologies (Solar, Wind, Medical)
- **Business management skills**



The students and teaching staff will be supported by the following infrastructure:

- Computer facilities and library – all supported by broad band internet to facilitate development support from external partners.
- Sustainable resource infrastructure including solar and wind power. Water will be supplied using on-site collection facilities in conjunction with solar-powered pumps. Recycling / cleaning technology will be extensively deployed to ensure maximum water conservation. This technology has already been successfully piloted at the NRS.
- An agricultural test station to provide training and development of improved methods for growing plants and trees using relevant technology including drip irrigation.
- Facilities to develop novel and relevant technologies for water purification, solar ovens etc.
- A business park providing facilities for small businesses to establish themselves. A partnership with a micro-finance organisation will be established to support this activity.

4. Strategic process in developing dVET

How can industry companies be brought to participate in a vocational education system?

- First, NICOLAS will offer educational services *needed by the local industry*
- NICOLAS will train young people to make them *fit for employment*
- NICOLAS will *train the trainers* to (a) teach students in NICOLAS in a school environment and to (b) become *trainers in a working environment*, whether it is in manufacturing or in the hospitality industry or other.

We will seek partnerships with businesses responsive to our concept and looking for innovation.

At the time of preparing this plan, the most likely order of introduction will be courses for:

- Hospitality industry (Center & NICOLAS Phase 1)
- Garment industry (Center & NICOLAS Phase 1)
- Construction (NICOLAS Phase 2)
- Agriculture (NICOLAS Phase 2)
- Information and Computer Technology (NICOLAS Phase 2)
- Maintenance & Repair engineering (NICOLAS Phase 3)
- Water industries (NICOLAS Phase 3)
- New Technologies; Solar, Wind, Medical (NICOLAS Phase 3)
- Mechanical Engineering, Polymechanics (NICOLAS Phase 3)

All courses at NICOLAS will follow the Swiss dVET model, with a grounding year 1 followed by 3 years of training, during which 70-80% of the time will be spent in the workplace and the rest in college. Course content and training schemes will be developed in close cooperation with the local business community (via the industry associations).

Finally courses will be offered to help students set up their own businesses, with microcredit available from a local bank. Dedebit, a local bank, has already expressed its interest in cooperating.

The course curriculum will be based on the Ethiopian TVET curriculum which has been produced after extensive consultation from GIZ, however the course will be implemented actively in the Swiss/German/Dutch model incorporating extensive practical training in the College, on-site, as well as placement in the relevant industry to experience working environments and the application of the newly-learned skills. This will also enhance the intensive content on getting young people fit for work, enhancing the understanding of the demands of the employer and how to collaborate and work in teams.



5. Implementation phases and milestones

NICOLAS will provide:

- Training facilities and equipment for up to 2,400 students.
- Living accommodation and infrastructure for a staff of 20 visiting trainers.
- Experimental stations with supporting facilities for evaluation of new technologies.

The project will be built in stages; the implementation and the sequencing of the different phases of the project will depend on our fundraising capabilities, our ability to recruit trainers, on the demand from the local youth and from the business community for this type of technical and vocational training. As with the NRS, we intend to follow a modular approach to this project, which will align our commitments to our resources. Specifically, we will focus on the PILOT and then implement NICOLAS by phases by illustrated below.

The funds required for this project between 2015 and 2023, after which it will become financially sustainable, can be split as follows:

Phase 1 – Nicolas Youth and Adult Learning Center (the Center) – 2015-2021

. Funds required: CHF 680,000, split between CHF 290,000 for investments and CHF 390,000 in operating costs, equivalent to CHF 220 per student;

. CHF 346,000 has been donated, and R4C expects to raise CHF 220,000 in tuition and revenue from services;

. This leaves a funding gap for the Center of CHF 114,000.

Phase 2 – NICOLAS TVTC – 2015-2023

. Funds required: CHF 6,670,000, split between CHF 5,140,000 for investments and CHF 1,530,000 in operating costs, equivalent to CHF 383 for each of the 4,000 students attending the TVTC during that period;

. CHF 645,000 has been donated, and R4C expects to raise CHF 1,370,000 in tuition and revenue from services;

. This leaves a funding gap for the Phase 2 of CHF 4,650,000.

The overall project (PILOT and NICOLAS) will require a cumulated funding of CHF 7,350,000 between 2015 and 2023. This will cover CHF 5,430,000 in investments (in land, building and equipment), and CHF 1,920,000 in operating costs.

R4C has already benefitted from CHF 970,000 in donations, and is expected to raise over the period CHF 1,600,000 in income, from tuition and services.

NICOLAS faces therefore a financing gap of CHF 4,800,000 during the period 2015 to 2023 which will partially be recouped by fees and income generating schemes during the next years.

Project outline plan – SUMMARY

Year	Pilot phase	Full project phase 1	Full project phase 2	Full project phase 3	Full project phase 4
2015	Construction	Design work by Arup	Design work by Arup	Design work by Arup	Design work by Arup
2016	Identification and purchasing of materials for the project				
2017	first short courses implemented. Priorities are hospitality, garment	Arup complete outline design. Electrical and water design to be done by University.			
2017		Submit phase 1 to planning bureau			
2017	Agree course structure, content with hotel association and garment industry. Start collaboration using pilot phase facility for small group of students (5-10)				
2017-8	Introduce 2 more training modules	Construct phase 1 – 2 workshops and admin			
2018	Pilot phase established for short courses and support for special needs as well as school clubs and training for students and teachers	Mid 2018 start training courses in hospitality and garment production			
2019		Continue training courses, possibly add agriculture	Start construction phase 2		
2019		Complete landscape phase 1	Add 2 new courses eg construction, agriculture		
2019			Complete landscape phase 2	Start construction phase 3 including IGS hospitality unit	
2020	Consolidation year				
2021				Add 2 new courses	
2021				Complete landscape phase 3	Start construction phase 4
2022					Completion of construction phase 4
2023					Add 2 new courses
2024	Completion of outstanding construction and landscaping				
2025	Implementation of all courses				
2025	College completion, evaluation and evaluation of response to need.				

The NICOLAS business plan covers 4 phases of this project:

- **The Youth and Adult Learning Center (the Center): (2015/2017 - 2021).**

The Center, dedicated to vocational training, will graduate 1800 students on short courses during the first 5 years. These students are looking for a technical skills-based future due to less academic inclination or having special needs of some kind. The Center will be based on the NRS site and provide equal opportunity to 16-18 year old girls and boys, regardless of religion or politics and especially for those with learning or physical disabilities for whom no other institution in Mekele caters.

Training facilities consisting of four classrooms have been constructed. Courses will be run in 3-6 month units. Feedback from market research and local enterprises has identified the Garment and Hotel / Catering industries as high priority as there are many new employment opportunities in these sectors. It is clear from discussions and feedback with local businesses that most young people are totally unprepared for the discipline of a working environment. As well as basic English and arithmetic skills that will be taught, the main focus will be on personal discipline, interpersonal relations and respect for employers and colleagues.

Learning these skills will ensure our young people not only get jobs but can retain them. Throughout the whole process the Swiss/German/Dutch dVET system will be used. Students will participate in internship/apprenticeship programs with local employers to complement their education and to gain practical training and self-confidence.

Funding is sought to cover the costs of salaries for local teachers and staff, development and presentation of tailor-made course material and the purchase and maintenance of equipment. A large part of the program will be to train the trainers so that local (Ethiopian) talent can take the project forward.

We are pursuing several fundraising opportunities. The level of interest of the local business community in our Center leads us to expect that some companies may donate equipment or support the training of our teachers. We will launch a sponsoring program to help students finance their school fees. This scheme has been very successful with the NRS. We have been in contact with several European philanthropic organizations about this project and we update them with regular progress reports. We are approaching investors in Mekele and organizations such as the German government funded GTZ, which supports technical training in Ethiopia, and matches donations from companies with offices in the EU.

Liquidity Plan		2015	2016	2017	2018	2019	2020	2021	Total
1	Funding Requirement	222,000	3,730	159,627	125,952	53,101	57,200	58,880	680,490
	Investments	222,000	0	56,430	11,930	5	5	5	290,375
	Buildings (2 classrooms, 2 workshops)	210,000	0	0	0	0	0	0	210,000
	Furniture, machinery and equipment	12,000	0	10,430	11,430	5	5	5	33,875
	External development support (SITECO)	0	0	45,000	0	0	0	0	45,000
	Landscaping, finishing, water tanks	0	0	1,000	500	0	0	0	1,500
	Operating costs	0	3,730	103,197	114,022	53,096	57,195	58,875	390,115
	Personnel/staff	0	3,730	28,147	30,472	31,996	33,595	35,275	163,215
	School development	0	0	73,000	76,000	11,000	11,000	11,000	182,000
	Running costs	0	0	2,050	7,550	10,100	12,600	12,600	44,900
2	Funding Available/Planned	216,000	10,000	130,952	26,640	49,960	66,160	66,360	566,072
2.1	Income	0	0	10,952	26,640	49,960	66,160	66,360	220,072
	Tuition fees	0	0	10,560	24,000	43,200	57,600	57,600	192,960
	Services	0	0	392	2,640	6,760	8,560	8,760	27,112
2.2	Donations	216,000	10,000	120,000	0	0	0	0	346,000
	Symphasis - building	210,000	0	0	0	0	0	0	210,000
	Rotary Club Au	6,000	10,000	0	0	0	0	0	16,000
	Calleva Foundation			120,000					120,000
2.3	Grants	0	0	0	0	0	0	0	0
3	Funding Gap (as of January 2017)	-6,000	6,270	-28,675	-99,312	-3,141	8,960	7,480	-114,418

- **Full NICOLAS TVTC**

- **Full TVTC, Phase I (2017-2019).** Based on the experience of the Center, NICOLAS will start construction on a 4 hectare site at Sarawat in Mekele. This is about 3 km from the NRS. During Phase I, a Hospitality training unit and a Garment training unit will be set up, as well as amenities and an administration centre. The course curricula will be developed and the staff recruited and trained. At the end of this time, NICOLAS will be fully functional with dVET courses and training in the Hospitality and Garment industries.
- **Full TVTC, Phase II (2018-2020).** This new phase will build upon the experience garnered from Phase I. We anticipate that Phase II will likely focus on training students in construction and agriculture or in the information technology. Monitoring the local economy and the on-going dialogue with our industrial partners and with the local authorities will help us define the focus of this and subsequent phases of NICOLAS.
- **Full TVTC, Phase III (2021-2023).** Based on the experience of the earlier Phases, training in 2 new industries will be offered. Potential industries include water management, maintenance engineering.

During the subsequent years, business training courses will be developed and we would expect to have a full package to support potential entrepreneurs. The hotel (lodge) will be in operation and earning income for the school. Consultancy will also become an income generating scheme.

6. Financial Plan

The attached Financial Plan and its assumptions are at this stage preliminary and certainly subject to changes; the major uncertainties surrounding this plan include

- . fundraising to support the implementation of the Center and the several phases of NICOLAS;
- . securing external trainers to train our local trainers;
- . gaining the support of the local business community for the implementation of the dVET concept;
- . generating the expected level of income from tuition and services.

Towards the end of the project, the income generating services will be reinvested. In order to retain the tax exempt status of a charity institution (not-for-profit), any excess funds generated must be invested back in the college courses and infrastructure within the year or alternatively be invested in NRS (sister project).

Currency and inflation

The plan currency is CHF. Inflation in Ethiopia runs between 10% and 30% per year, but most of this is due to currency weakening against “hard” currencies.

The financial plan assumes an exchange rate of 21ETB = 1CHF = 1USD. Over a longer period, we assume that the average Ethiopian Birr (ETB) inflation will be neutralised by the depreciation of ETB.

Depreciation will be included in the commercial liquidity plan to cover maintenance and replacement/renewal of equipment.

7.1 Financing requirements

Funding:

Funding will be in the form of donations for capital costs, gifts in kind for much of the training materials/machines/specialist equipment. Fees charged to students should cover the local running costs. The students should pay, either through their industry sponsorship or through micro-loans which they will pay back upon graduation. School fees will be set at an affordable level, for the students and the beneficiary companies who will be cooperating in the training process. There will also be a train the trainer programme which will be of benefit to the trainers and the employers.

Income will be generated from services to the local industry, such as consulting and training, and in the later years, from a lodge and guest accommodation.

Construction estimates from Arup, based on current construction costs, amount to USD 3 million for the fully completed NICOLAS TVTC. The project is designed so that it can be implemented in 3 phases, and each phase in training modules.

Key Investments:

- Land: donated by the regional government for use for the college;
- Architecture: time of Arup architects and engineers donated by Arup Cause and individuals from the company. Mekele University will be donating the time and expertise of some of senior students and lecturers;
- Boundary wall: already constructed using the funds from a donation;
- Construction: NICOLAS is a green field project and will require a substantial investment in buildings;
- Infrastructure: the project in its first years will depend on the local supply of water and electricity. Over time, NICOLAS will rely on energy from solar panels and water from its own boreholes;
- Equipment: we expect that part of the equipment will be donated by the local business community or by international donors, local, international and interested supporting companies.

Operating Costs:

- Trainers: will be compensated at market rates. They will benefit from further training via the “train the trainers” programme;

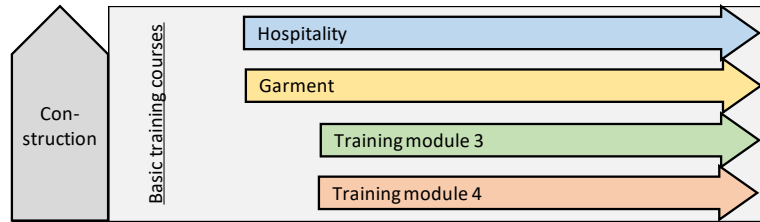
The summaries on the next pages are also available as separate excel spreadsheets

PILOT PROJECT Financial Overview

Overview Pilot NICOLAS

1. Summary (CHF)

Milestones



Liquidity Plan		2015	2016	2017	2018	2019	2020	2021	Total
1	Funding Requirement	222,000	3,730	159,627	125,952	53,101	57,200	58,880	680,490
	Investments	222,000	0	56,430	11,930	5	5	5	290,375
	Buildings (2 classrooms, 2 workshops)	210,000	0	0	0	0	0	0	210,000
	Furniture, machinery and equipment	12,000	0	10,430	11,430	5	5	5	33,875
	External development support (SITECO)	0	0	45,000	0	0	0	0	45,000
	Landscaping, finishing, water tanks	0	0	1,000	500	0	0	0	1,500
	Operating costs	0	3,730	103,197	114,022	53,096	57,195	58,875	390,115
	Personnel/staff	0	3,730	28,147	30,472	31,996	33,595	35,275	163,215
	School development	0	0	73,000	76,000	11,000	11,000	11,000	182,000
	Running costs	0	0	2,050	7,550	10,100	12,600	12,600	44,900
2	Funding Available/Planned	216,000	10,000	130,952	26,640	49,960	66,160	66,360	566,072
2.1	Income	0	0	10,952	26,640	49,960	66,160	66,360	220,072
	Tuition fees	0	0	10,560	24,000	43,200	57,600	57,600	192,960
	Services	0	0	392	2,640	6,760	8,560	8,760	27,112
2.2	Donations	216,000	10,000	120,000	0	0	0	0	346,000
	Symphasis - building	210,000	0	0	0	0	0	0	210,000
	Rotary Club Au	6,000	10,000	0	0	0	0	0	16,000
	Private UK Foundation			120,000					120,000
2.3	Grants	0	0	0	0	0	0	0	0
3	Funding Gap (as of January 2017)	-6,000	6,270	-28,675	-99,312	-3,141	8,960	7,480	-114,418

NICOLAS TVTC Full Project Financial Overview

Overview Main Project NICOLAS

2. Summary (tCHF)

Milestones	Education lines	Hospitality														
		Garment														
		Agriculture														
		Construction														
		Water														
		Maintenance														
Liquidity Plan		Construction	Phase 1	Phase 2	Phase 3		Phase 4/1	Phase 4/2							Total	Total to 2023
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026			
1	Funding Requirement	65'000	381'000	1'510'607	1'084'634	1'174'245	551'558	658'761	701'239	545'428	366'989	391'304	403'919	7'834'684	6'672'472	
	Investments	65'000	370'000	1'432'100	941'000	1'002'000	300'000	389'450	389'450	250'000	25'000	25'000	25'000	5'214'000	5'139'000	
	Land and farmer compensation		300'000	0	0	0	0	0	0	0	0	0	0			
	Arup Architectural Work (in kind)		70'000	50'000	50'000	50'000	50'000	50'000	50'000	0	0	0	0			
	Local Architect Work	0	0	32'100	21'000	27'000	0	9'450	9'450	0	0	0	0			
	Buildings (construction phases 1 - 4)	65'000	0	1'070'000	700'000	900'000	0	315'000	315'000	0	0	0	0			
	Furniture, machinery and equipment		0	200'000	20'000	20'000	100'000	10'000	10'000	100'000	20'000	20'000	20'000			
	Finishing (Water, Solar)		0	80'000	150'000	5'000	150'000	5'000	5'000	150'000	5'000	5'000	5'000			
	Operating costs	0	11'000	78'507	143'634	172'245	251'558	269'311	311'789	295'428	341'989	366'304	378'919	2'620'684	1'533'472	
	Personnel/staff		0	33'007	84'734	108'245	142'558	160'311	172'789	181'428	227'989	252'304	264'919			
	School development		0	25'000	25'000	25'000	25'000	25'000	25'000	25'000	25'000	25'000	25'000			
	Running costs		11'000	20'500	33'900	39'000	84'000	84'000	114'000	89'000	89'000	89'000	89'000			
2	Funding Available/Planned	65'000	370'000	80'000	50'000	73'150	137'900	261'300	457'500	523'500	603'900	675'900	747'900	4'046'050	2'018'350	
2.1	Income		0	0	0	23'150	127'900	251'300	447'500	523'500	603'900	675'900	747'900	3'401'050	1'373'350	
	Tuition fees		0	0	0	20'000	120'000	240'000	432'000	504'000	576'000	648'000	720'000	3'260'000	1'316'000	
	Services		0	0	0	3'150	7'900	11'300	15'500	19'500	27'900	27'900	27'900	141'050	57'350	
2.2	Donations	65'000	370'000	80'000	50'000	50'000	10'000	10'000	10'000	0	0	0	0	645'000	645'000	
	Mekele Municipality for land		300'000											300'000	300'000	
	Arup Architectural work	0	70'000	50'000	50'000	50'000	10'000	10'000	10'000					250'000	250'000	
	TDVA for local plan development			30'000										30'000	30'000	
	Legacy (JWL)	65'000												65'000	65'000	
2.3	Grants													0	0	
3	Funding Gap (as of January 2017)	0	-11'000	-1'430'607	-1'034'634	-1'101'095	-413'658	-397'461	-243'739	-21'928	236'911	284'596	343'981	-3'788'634	-4'654'122	

7. Sponsoring Invitation

As per present planning documents, the following funding is required:

Youth and Adult Learning Center: CHF 680,000, whereof CHF 346,000 (51%) are already funded. CHF 114,000 are sought for training, curriculum development and equipment.

Main NICOLAS Project: CHF 6,670,000, whereof CHF 645,000 (10%) in cash and in kind has already been donated from the local municipality (land), Arup and Arup Cause for architecture and engineering work.

CHF 4,654,000 is sought before 2023, mainly for construction, training and curriculum development as well as donations in kind for voluntary work undertaken by professionals.

Fees and income generating schemes are expected to raise CHF 1,370,000 by 2023. After 2013, NICOLAS will become self-financing

Contributions in kind will be sought from local employers in Mekele and the Tigray region, from international investors in Ethiopia and industrial benefactors from overseas.

Mekele municipality and Mekele University have already made contributions.

At the end of this planning period, there will be 2,400 students registered at the college in 6 different departments who will be in at different stages of their 4-year courses. By the end of 2026 academic year, 1,000 students will have graduated from the college.

Rainbows4Children Foundation Board, Lachen, 27th January 2017

Richard Max Robinson, President and co-founder

Kathryn Robinson, Secretary and co-founder

Jean-Paul Rigaudeau, Trustee

8. Appendix

9.1 Glossary of abbreviations and terms

Arup:	Arup UK – Consulting engineers and architects
dVET:	dual Vocational Education and Training (Swiss Model)
ETB:	Ethiopian Birr (national currency)
GIZ:	Gesellschaft für Internationale Zusammenarbeit, Germany
NICOLAS:	Nicolas International College Of Learning And Science
NRS:	Nicolas Robinson School
R4C:	Rainbows4Children Stiftung/Foundation
TDVA:	Tigray Disabled Veterans' Association
TVTC:	Technical & Vocational Training College