

RESEARCH REPORT

Kokoda Track Foundation

December 2019



EDUCATION, HEALTH AND WELLBEING:

Experiences of people and communities
along and around the Kokoda Track





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1. EXECUTIVE SUMMARY

This research was commissioned and undertaken by the Kokoda Track Foundation (KTF) to provide an insight into the changes in education, health and outcomes of the communities along and around the Kokoda Track and to identify their future needs. The report is intended to provide a summary of the voices of the teachers, health workers, community leaders and members across the region who have identified both positive changes across a range of outcomes as well as their areas of need and future change.

The research investigated changes in communities and the progress towards outcomes across a range of areas where project interventions have been delivered by KTF. However, the research framed its approach and analysis within a broader context of ‘consortia’ and ‘partnerships’ and endeavored to explore a range of stakeholders’ initiatives including those



with KTF involvement and those carried out independently by other entities. However, KTF personnel conducted the research data collection and undertook the analysis; hence the reader must interpret the report findings in the context of this lens.¹

¹ It was also not possible to interview representatives from every single community in the Kokoda Track corridor; and as such the projects and initiatives from some organisations were not targeted.

The high-level findings of this research include:



EDUCATION FINDINGS

- The operations of schools along and around the Kokoda Track are a result of collaborative efforts by numerous stakeholders.
- Teachers would be exited from the profession without the support of KTF.
- There has been an improvement in the quality of teaching and learning delivered in the Kokoda Track region.
- Professional development opportunities have been provided to teachers across the catchment region; but there is a need for ongoing investment in PD and learning opportunities for teachers.
- Teachers are concerned about the pending transition to 1-6-6 schooling.
- Teachers are dedicated, resourceful and willing to step outside of normal roles.
- Despite significant investment in education across the region, there are still some gaps in infrastructure, resourcing and staffing.
- KTF / KTA scholarships significantly eased the financial burdens of parents and families.
- Scholarships funding enabled schools to meet infrastructure and operating targets.
- There is a strong desire for a continuation of the scholarship program in 2020 and for the type of scholarships supported to be broadened to include high school and tertiary scholarships.



HEALTH FINDINGS:

- The health of communities along and around the Track has improved over the past 5 years.
- There have been health-related behavioural changes in communities.
- Health facilities across the region treat a wide range of issues.
- Health facilities are supported by a consortium of partners.
- Transiting porters are accessing healthcare in aid posts along and around the Track.
- Professional development and training is being provided across the region; but skills gaps still exist.

- Despite advances in healthcare and education, some communities still require additional community health outreach and awareness.
- Health Worker's commitment to the profession is strong and rural focused.
- Despite many positive improvements in health services over the past 5 years, there are still funding, resourcing, and infrastructure gaps.



WELLBEING AND LIVELIHOODS FINDINGS:

- KTF's Village Connect project had a significant impact on livelihoods, education and wellbeing outcomes.
- There was general consensus amongst community members and leaders, teachers and health workers that life along and around the Track had improved over the past 5 years.

In addition to the many changes that community members have experienced over the past 5 years, respondents also identified a number of gaps and areas where they would like to see future investment and improvements. These included:

- There is a strong desire for permanent and/or improved housing solutions to be provided for all communities along and around the Track.
- Communities want better solutions for accessing clean water.
- Transportation in and out of the remote areas of the Track and catchment region is difficult for communities.
- Further investment in human resourcing is critical for the remote regions of the Track and catchment area.
- Youth and leadership issues to be addressed in communities.



2. INTRODUCTION

2.1 CONTEXT

The Kokoda Track, or Trail, is a thoroughfare that runs across the Owen Stanley Ranges, traversing the Oro and Central Provinces and connecting Owers Corner to the East of Port Moresby with the station and village of Kokoda. In 1942, the Kokoda Track was the scene of a series of intense battles between the Japanese and Australian forces during the Kokoda Campaign of World War II.

Today, there are 14 villages² located along the walking route that receive regular visits by trekkers. These villages are inhabited and have populations ranging from less than 50 people to more than 300 people. In addition to the villages that receive regular tourists, there are a series of campsites that also have houses for landowners and their families that trekkers pass through on their expeditions. There are also more than 20 additional villages in the immediate catchment region of the Track that have substantial community populations but do not receive as many trekkers as they are “off-track”.

The broader catchment area of the Track extends beyond the region between Owers Corner and Kokoda and encompasses the region between Kokoda and Popondetta (e.g. Gorari, Kebara, Eiwo etc) as well as the communities located along the Northern Beaches (including Buna, Gona, Sanananda and Doboduru). This entire catchment region comprises a population of over 50,000 people.

² These 14 villages are: Iorabaiwa, Naoro 1, Agulogo, Manari, Efogi 1, Efogi 2 (Launumu), Naduri, Kagi, Alola, Abuari, Isurava, Abuari, Hoi and Kovello.



2.2 Background to KTF

Kokoda Track Foundation (KTF) is an international aid organisation working in Papua New Guinea. Because of our shared history, the legacy of World War II, and the support Australia received during the Kokoda campaign, KTF supports communities in PNG overcome some of the tremendous challenges they face today. From a lack of adequate health care, to the half a million children who are unable to attend school because of the lack of teachers, resources, infrastructure and government capacity, KTF aims to make a tangible impact in the lives of the most vulnerable.

KTF runs programs in the vital areas of education, health, and livelihoods across 16 of PNG's 22 Provinces. These programs aim to train high quality teachers and community health workers, provide these professionals with mentoring and professional development opportunities, build educational and health infrastructure, fund the ongoing maintenance and resourcing of schools and aid posts, and provide remuneration to teachers and health workers across rural regions. Our livelihoods program aims to generate sustainable income-generating opportunities for women in remote areas via investment in state-of-the-art solar technology, agriculture and women's sanitary and health products.

KTF has also delivered a national leadership program for the past 9 years with final year tertiary students from across PNG, finding and fostering the next generation of leaders.

Prior to expanding beyond the Oro and Central Provinces, KTF concentrated its community development initiatives in the Kokoda Track catchment region. KTF defines this region as the broader area comprising the Northern Beaches, the region between Popondetta and Kokoda, and the wider Track catchment region including communities dotted either side of the walking path, such as Bodinumu, and Naoro 2.

KTF has delivered a series of education, health and livelihoods projects in this region since 2012 when it transformed from being a traditional Foundation that supported educational scholarships, to a holistic development organisation, working to improve the education, health and livelihoods opportunities in remote communities. The projects that KTF delivers in the Track catchment region are:

- **PNG Schools Project** - supports the operations of 50 elementary and primary schools across the corridor of the Kokoda Track. This support involves the posting and salaries of teachers, classroom infrastructure, solar lighting, energy, clean water and sanitation, and an ongoing supply of high-quality educational resources.
- **Healthy Communities Project** – supports the operations of 12 health facilities across the corridor of the Kokoda Track. This support involves the postings and salaries of community health workers and health assistants (the cornerstone of rural PNG healthcare system), infrastructure and maintenance of health facilities, and the provision of a regular supply of drugs and medical supplies for reliable operations.
- **Village Connect Project** – supports the installation and training of women and men in household solar lighting and energy systems that illuminate entire homes and facilities. This project illuminates one village at a time, enhancing livelihoods opportunities for local communities. Training in installation and maintenance is key to the ongoing sustainability of the solar infrastructure. To date, 1,000 households and 60 schools, aid posts, churches and community centres have received systems and training.



- **Kokoda College Project** – this project is preparing a cohort of committed students for a long-term career in elementary or primary teaching. With new minimum entry qualifications of tertiary education, the College offers PNG's Flexible & Open Distance Education course, upgrading Grade 10 school leavers to Grade 12. Our graduates will train as teachers and are committed to teaching in remote schools. Kokoda College enrolled 125 students in 2019.
- **Eye See PNG / Bebi na Mama Projects** – these projects provide specialised professional development and upskilling in eye health training and child and maternal health for community health workers, village health volunteers and village birth



attendants. Our training focuses on building knowledge and skills around a wide range of eye health and child and maternal health issues, and we provide practical solutions including vision testing technology and resuscitation equipment and birthing kits.

- **Light Up PNG Project** – Our partnership with Australian charity, SolarBuddy, supports the distribution of thousands of solar lights to children across PNG. We have distributed the handheld devices to every child living along and around the Kokoda Track. To date, we have distributed 32,000 lights across the country.
- **Teach for Tomorrow I & II Projects** – these projects train and upskill thousands of elementary teachers across PNG. To date, we have trained 3,685 elementary teachers from 14 Provinces, including 330 from Oro and 110 from Central. Our current focus is on working with the PNG Government to support the transition to 1-6-6 schooling including the necessary teacher upskilling for elementary teachers.

2.3 Partners & Stakeholders

There are a range of stakeholders working towards improving the lives and livelihoods of the communities living along and around the Kokoda Track. These include:

- **Communities** – the principal and most important stakeholder, communities are organised and are represented by Ward Development Committees. Leaders, members and women representatives sit on school and health facilities Boards of Management and many formal structures exist including fellowship groups and women’s associations.





- **Kokoda Track Authority** – is a Papua New Guinea Special Purpose Authority, commissioned to promote and manage the Kokoda Track for tourists, while improving the way of life for communities living along the track, through funding and development programs. Community consultation identifies best opportunities for KTA to support and build capacity across the Kokoda community, and KTA partners with other Track stakeholders to deliver outcomes e.g., 2019 Scholarship project for primary schools partnered with KTF for delivery.
- **PNG Government (Local, District, Provincial, National)** - PNG Government provides the regulatory, judicial and legislative framework for the operations, with each level having distinct responsibilities across various service delivery and community development structures. The two Provincial Governors for Oro and Central are Governors Gary Juffa and Robert Agarobe. Both Governors are strong advocates for the wellbeing of their people Government engagement is key for successful operations by all other stakeholders in the region.
- **Kokoda Initiative** - is a partnership between the Governments of Papua New Guinea and Australia to sustainably develop and protect the Kokoda Track and the surrounding Owen Stanley Ranges. The Kokoda Initiative reflects the strong commitment of both governments to continue to enhance the quality of life of communities living along the track, to protect the environment, cultural values and to keep the track open and well managed.
- **Trek operators** – Motivated by keeping the spirit of Kokoda alive, the trekking industry is the major generator of employment opportunities and income for communities directly along the Kokoda Track, escorting c.3,500 trekkers per year across the historic Kokoda Track. Individually and collectively (as the Kokoda Trek Operators Association) trek operators desire to see real, short and long term benefits to the Kokoda Track communities, landowners, guides and other PNG stakeholders.



- **Trekkers** – A motivated and intrepid group of experiential travellers, trekkers take on the physical, mental and emotional challenge of crossing the Owen Stanley ranges for a variety of reasons, from personal challenge to historic WWII ties. Engaging with guides and communities along the 96km crossing, trekkers forge enduring bonds with the region and its people, motivated to contribute to the local community via local expenditure and contributions to NGOs and other track stakeholders e.g., Trekker licence fees are paid to KTA to achieve their strategic objectives, donations to NGOs working in the region.

- **NGOs** – International NGOs play a pivotal role in augmenting vital Government services in the remote communities along the Track, particularly in the areas of health, education, livelihoods, WASH and child protection. Programs are developed in close community consultation to address key needs and issues and are designed for long-term impact and sustainability for the community. Key to success is partnership with Track stakeholders from Community,

Leaders, Government and the Church. NGOs include KTF, No Roads Foundation, ADRA, Network Kokoda and Rotary.

- **Churches** – With a strong missionary history, 96% of Papua New Guineans identify themselves as members of a Christian Church. Today, the Church and associated faith based organisations are an integral part of Kokoda community, particularly the Anglican and Seventh Day Adventist Churches, playing a leadership role whilst also delivering vital health and education services alongside Government and NGOs.



3. METHODOLOGY

3.1 Evaluation Approach and Method

This research was conducted in 16 villages from the Track catchment region across the Oro and Central Provinces. The primary evaluation method was semi-structured, face-to-face interviews and focus groups with teachers, community health workers, and community members including leaders and representatives from women's groups. The list of villages where research was undertaken were:

- Manari
- Efogi 1
- Efogi 2 (Launumu)
- Naduri
- Alola
- Abuari
- Isurava
- Hoi
- Kokoda
- Kou Kou
- Sengi
- Kebara
- Gorari
- Kebara
- Buna
- Sanananda
- Bagou

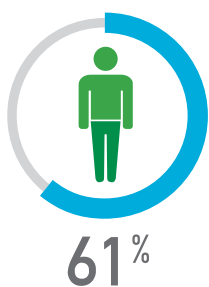
The following diagram shows (artistically) where each of these villages are located across the region:



The interviews were conducted by a research team that comprised three members of KTF staff. This same research team collected the data across all locations.

Content analysis was utilised to analyse the data which involved identifying key themes that emerged, grouping together ideas, and gathering a detailed picture and analysis of each theme.

3.2 Participant Demographics



A total of 44 people participated in the research interviews and focus groups (61% male, 39% female). This sample comprised: 11 community health workers (64% male, 36% female), 12 elementary and primary teachers (42% male, 58% female), and 21 community leaders and members (71% male, 29% female). 27% of the overall sample reported having a disability with the most commonly reported disabilities being vision-related.



The ages of participants ranged from 22 to 58 years and the average age of males interviewed was 40 years whilst the average age of females interviewed was 35 years.

Table 1. Participant Demographics

	Males	Females	Males with Disability	Females with Disability
Community Health Workers	7	4	2	1
Teachers	5	7	2	2
Community Members	15	6	3	2

4. FINDINGS

The research explored participants' experiences with education, health, livelihoods, solar and various other initiatives implemented by Kokoda Track partners. Key themes across these main categories emerged across the discussions. As a result, the findings will be presented within each of these categories followed by a presentation of findings about participants' overarching views on whether life has improved in the region.

4.1 Education

Elementary and/or primary schools were operating in the large majority of villages interviewed. In two villages along the Track, the community did not have an operating school due to the fact that the population size of the villages is too low to meet Government registration requirements for accredited schools. In one other case, the school was not operating as the sole teacher was in Port Moresby; and another school was experiencing delays with their teachers returning from term breaks.

A number of key themes emerged from the research about the improvements to the delivery of education services across the region over the past 5 years. Areas for improvement and current challenges also emerged.

Finding 4.1.1 – The operations of schools along and around the Kokoda Track are a result of collaborative efforts by numerous stakeholders. The critical stakeholders for the delivery and improvement of education across the region were the PNG Government (national and provincial), the Kokoda Initiative, KTF and SDA Church. The KTA were also identified as a key partner in the provision of the 2019 school scholarships program.

There are a range of schools and operating structures along and around the Track, ranging from schools entirely supported by the PNG Government, to those that have had interventions in infrastructure and training from other partners, such as KTF and the Kokoda Initiative, to those that are solely run by a Church and/or KTF and not supported by (or in some cases registered with) the PNG Government.

In many cases, teachers spoke of the critical support provided through partnerships; and that the support from a single source alone is not enough in order for the school to operate effectively:

“ The most we get is from the KTF, the KI and the PNG Government. KTF gives us our salaries and teaching and learning resources. KI they also provide us with teaching and learning resources and also with a double classroom that they built. The PNG Government gives us our TFF funding and TFF supplies; but the TFF funding we received this year was only K6,000 for 189 students enrolled. It is not enough to run the school alone.

(Teacher, Gorari Elementary School)

Trek companies and trekkers also play a critical role in providing resources to schools; however this support is often ad hoc and teachers cannot predict when supplies will arrive or direct what type of supplies they will receive.

“ Currently we have the department of education supplying beginning of the year. They supply exercise books which don't last the year. In addition to that we have No Roads trekking and Foundation who give some stationery; and we have Adventure Kokoda and Back Track Adventures when they come across. And Kokoda Initiative have been helping very much in a very big way by putting up two houses and a classroom and toilets and things. All the teachers are Government funded.

_____ (Teacher, Naduri Primary School)

Some schools are solely supported by NGOs including KTF. Of the 12 teachers interviewed, 5 of them were running schools where KTF is the only ongoing contributor to the school's operations.

“ Just KTF is supporting the school. Previously a trek company gave some solar and the KI supported the renovations on the classroom; but now only KTF is supporting the school. Aron is a good teacher; he's working very very hard... He's a very good teacher and he's all the time faithful and teaching the children. No absence this year. His performance is very good.

_____ (Community Member, Alola Elementary School)

Finding 4.1.2 – Teachers would be exited from the profession without the support of KTF.

A number of teachers interviewed discussed the fact that without the support of KTF, they would not be teaching. The main reasons for this are KTF's support of postings and salaries, and KTF's teacher training intervention, Teach for Tomorrow.

In some cases, the teachers stated that if KTF withdrew their support, they would have to volunteer. Others are in the process of getting their schools registered; and others are waiting for their certification to be received from the National Department of Education after participating in KTF's Teach for Tomorrow initiative.

“ If KTF didn't support my teaching position, I would still run the school but would have to work as a volunteer. KTF has been supporting me for 9 years. KTF is supporting with my payments to help my family; it's important because I'm still waiting for the government to put me on the pay after training. Without KTF I would lose my job.

_____ (Teacher, Alola Elementary School)

In some cases, KTF's support enabled schools to bring on additional teachers in order to ease the burden on Government funded teachers in the wake of increased enrollment numbers that came with the introduction of Tuition Fee Free Policy in 2012:

“ Our schools would have only one teacher to deliver Preparatory up to Elementary Grade 2. Our total number of enrolments since Free Education Policy is huge. KTF's are supporting us with the salaries and teaching materials and also supporting the volunteer teachers.

_____ (Teacher, Gorari Elementary School)

In another case, a school was established and continues to be supported by KTF so that children can access schooling within their home village, rather than undertaking an arduous daily trek to the next nearest school:

“ If KTF didn't support the students wouldn't be learning properly – they would be going up and down to Efogi 1 for their learning; it's good that KTF is supporting so we have our own school in the village. It's a long walk from Efogi 2 to Efogi 1.

_____ (Teacher, Efogi 2 Elementary School)

In other cases, teachers admit that their school would close and they would abandon the profession without the intervention of KTF. One teacher commented that the community was not especially supportive of the operations of the school:

“ If KTF didn't support my school, it would close. It's important by looking at the students I am just by myself teaching. There is no support from the parents because they are doing their own things; working within the gardens. But it's important that KTF is supporting me because the Government is not doing anything.

_____ (Teacher, Hoi Elementary School)

Other challenges that are eased by KTF's support of postings and salaries are the long delays that the National Department of Education have taken in certifying teachers after competing teacher training over the course of the past 5 years. KTF delivered its Teach for Tomorrow initiative in Oro in 2016 and Central in 2017, training a total of 440 across the two provinces. Some of these teachers in the Track catchment region are also supported on KTF's PNG Schools project and are waiting for the Government to send their certification and accreditation documents so that they can be transferred off the KTF payroll onto the Government payroll.³

³ More information can be found about KTF's Teach for Tomorrow initiative including an interim evaluation at: ktf.ngo/me-reporting.

“ I completed my SIU training with KTF and PNGEI. That was very good and it has improved me and my understanding and level. My teaching has been improved. When I first did the training at Kou Kou I was panicking; but when I did more reading and training, I got more ideas and my training has been very good; sponsored by the KTF. But I am still waiting for my certificates.

(Teacher, Alola Elementary School)

Finding 4.1.3 – There has been an improvement in the quality of teaching and learning delivered in the Kokoda Track region. All teachers interviewed described the improvements in the quality of schooling in the catchment region over the past 5 years. This was a result of improvements in teachers’ skills and knowledge, in having access to ongoing training and professional development, and better supported and resourced classrooms.

A number of teachers discussed the improvements in student literacy levels via improved English and phonics instruction strategies taught to them through training or professional development.

“ Since I’ve been the teacher in my community, Petra taught us very well in phonics and how to read fluently; so when I’m teaching [my students] how to read and sound the words out, my children are really up to date in their learning and reading and sounding words in English. The parents are really happy. Every day they use some English words in the class and from last year there were more students from my elementary that were dux of the year when they went to grade 3 and 4. My children are one of them because I teach English at home and English became their mother language.

(Teacher, Sengi Elementary School)

Another theme that emerged from discussions with the teachers was their increased utilisation of natural environments for teaching and learning. This is a skill that was focused on in all teacher training programs delivered by KTF and the teachers confirmed that they implement the skills and knowledge on a daily basis in their delivery of schooling.

“ With KTF I was taught how to create materials from natural environments; in school we got them in groups and taught how to model and some other phonics and sounds and children enjoyed; so my teaching inside and outside the classroom improved. Especially in the class over the years that I [have been] teaching, I have impacted a lot of children in the class using the environment. Using sticks, stones for numeracy skills, memorising numbers, using tracks and fingers in maths for how to do timetables.

(Teacher, Sanananda Elementary School)

Teachers also reflected on improvements that they have been observing and monitoring in literacy and numeracy outcomes among their students:

“ In my school, my students are improving with their knowledge in literacy and numeracy. So by using their own materials in counting and some are now independent readers; they can read on their own. When I teach phonics, phonics sounds, they can say them and blend the words

_____ (Teacher, Efogi 2 Elementary School).

Finding 4.1.4 – Professional development opportunities have been provided to teachers across the catchment region; but there is a need for ongoing investment in PD and learning opportunities for teachers.

The teachers discussed the various sources of professional learning opportunities including those that have been provided by the PNG Government as well as partners such as KTF, KI and volunteer professionals.

Many teachers had received the Government’s professional development and orientation to the new Standards Based Curriculum; as well as Christian education training from the Provincial or District Departments of Education. Many teachers had also participated in short courses delivered by KTF, KI or other volunteer teachers which were aimed at a variety of topics including child protection, gender equity, inclusive education and phonics, literacy and numeracy.

These teachers discussed the variety of professional training they have received across a number of sources:

“ I had the KTF diploma in elementary teaching; and I attended the government’s standards based curriculum at Illimo. And also Trish Davies delivered reading and phonics at Mamba; and the KI board of management at Kebara. And just last week, we did the CCV Government training at Kokoda station.

_____ (Teacher, Sengi Elementary School)

“ I had training with KTF mostly. The last training that we got was elementary teacher diploma that we did here. After that we had the self-assessment with KI about phonics and music. And also we had SBC course at Illimo with the Government. That really helped us to come up to the standards where we are now; with the lack of skills and knowledge that we implement and then we teach.

_____ (Teacher, Gorari Elementary School)

Other teachers in more remote locations teaching at schools with minimal external support, were not able to access as many training opportunities:

“ I only completed the 2012 KTF training at Kokoda – did the training with Petra. The training there is really nice, I enjoy working together, sharing and caring reading together, make activities together with the teachers. The training makes me a better teacher, but I’ve had no other training from any other partners. No training from the government.

(Teacher, Efogi 2 Elementary School)

Finding 4.1.5 – Teachers are concerned about the pending transition to 1-6-6 schooling.

Teachers hold a number of concerns about the pending transition to 1-6-6 structure of schooling, including whether they will be able to access new mandatory in-service training and whether the Government will proceed with requirements for all teachers to hold Grade 12 minimum schooling qualifications. Under the previous structure of schooling, elementary teachers only needed to hold Grade 10 certificates; however the National Department of Education and PNG Education Institute are currently debating whether to increase the minimum qualifications to Grade 12, requiring all elementary teachers to undertake FODE studies.

FODE centres across the country are under-resourced; and enrollment and tuition fees are expensive and often out of the reach of elementary teachers. Every teacher interviewed expressed a desire to undertake their FODE studies at the Kokoda College; and of the 11 teachers interviewed, 6 had enrolled in 2019 and were one year into completing their matriculation pathways.

“ My main need is I want to help to upgrade my qualifications through FODE. I wasn’t [able] to do my Grade 10, 11 & 12 and I want to become a junior primary teacher. I need to finish my FODE, by upgrading and I want to become a junior primary teacher. FODE at the Kokoda College is important because many of us we have no finance for school fees. But KTF’s FODE is good so that we can stay in our homes and we do FODE in our homes; it doesn’t cost money because KTF is sponsoring it.

(Teacher, Efogi 1 Elementary School)

This teacher made the point that there is still limited clarity around whether matriculating will be a requirement for teachers under 1-6-6 schooling.

“ I am interested in doing FODE at Kokoda College next year but I’m unsure if this is still the requirement. The main gaps for my professional development are the trainings required for the 1-6-6 transition. I believe I might have to do FODE. My plan when I finish my FODE and I’m thinking to go to primary school and teach – Grade 3 & 4 – if they introduce it into elementary schools, I will teach here in Alola; if not I will go to Abuari or Kokoda.

(Teacher, Alola Elementary School)

KTF's recent interim evaluation of its Teach for Tomorrow project explored this theme in more detail with elementary teachers across PNG who had recently completed their training. There is widespread anxiety among teachers about the transition to 1-6-6 schooling.⁴ Appendix A outlines more information about KTF's FODE program and the Kokoda College and separate research findings specifically related to this program.

Finding 4.1.6 – Teachers are dedicated, resourceful and willing to step outside of normal roles. Teachers spoke often of their commitment to the profession and the view that they see themselves as teachers for life.

“ I am committed my whole life; I want to be a teacher until I die.
_____ (Teacher, Efogi 1 Elementary School)

Many discussed that because of the multi-grade nature of elementary teaching that was taught to them through their training, they are always willing to step into teaching other grades including junior primary grades. Some teachers even reported having experience already teaching across the junior primary grades, putting them in a strong position for the transition to 1-6-6 schooling:

“ I have had many great challenges in teaching in elementary school; I was appointed to teach primary school when I first graduated. This year when we had a shortage of teachers at primary, the head teacher told me to teach primary again. I taught for the first term; and then another teacher came in and I went back to elementary. I am happy to work at all levels.
_____ (Teacher, Gorari Elementary School)

Others spoke of the challenges that come from overcrowded classrooms and that sometimes, due to teacher shortages, they have to teach very large class sizes across multiple grade levels.

“ As soon as I finished from the College I was a teacher in my community. There was only one mother from the government but she's growing old; I face the challenge of taking her class and both my classes... Sometimes I teach all three classes, where the number of students is 117; and we only have two classrooms... My husband has been supporting me to teach all these years and he was very proud. Always encouraged me to use the talents and teaching that Petra gave to me and utilise it in the school and we will see the outcomes of all the students.
_____ (Teacher, Sengi Elementary School)

⁴ See <https://static1.squarespace.com/static/5bea4ca150a54fcc72890ee8/t/5d5e195236483e0001c9cda1/1566447966868/KTF+Evaluation+Report+T4T2016-2018-compressed.pdf> for more information.



Finding 4.1.7 – Despite significant investment in education across the region, there are still some gaps in infrastructure, resourcing and staffing. Teachers described the significant investment by a consortium of parties in improving the delivery of education services over the past 5 years, including investing in school classrooms, teachers houses and water and sanitation, teacher training and the postings of teaching staff into schools, and the ongoing resourcing of schools. However, some gaps are still evident in schools along and around the Track; although schools on the Track fare better than schools off the track in the catchment region.

A number of teachers spoke about their school’s increased infrastructure needs due to the high enrollment numbers that emanated from the introduction of Tuition Fee Free Policy (Free Education); but also other influences including the teachers’ own push to have parents send their students to school at an earlier (age-appropriate) age and growing population numbers in some villages (especially the Northern Beaches region in Oro Province):

“ Gorari Elementary School: We need another classroom to be built. At the moment Wari is taking 60 Prep students in one class. We need another classroom and another teacher. We are taking the students about the age of 6; we encourage parents to bring their students at the early age of 6. When we don’t encourage that, when they grow up, those are the ones who become bullies in the schools. So we encourage them to come at age 6 we teach and mould them to become good citizens of PNG. So our need is a classroom and teacher.

“ Buna Elementary School: We have more than 70 Preparatory children without a classroom and only 1 KTF funded teacher. Our village population is getting bigger. We have a lovely new KI classroom for the Grades 1 and 2 but our Preparatory children are taught under the mango tree. We urgently need a new classroom.

A full list of the educational gaps identified throughout the current research are outlined in Appendix B.

Finding 4.1.8 – KTF / KTA scholarships significantly eased the financial burdens of parents and families. In 2019, KTF administered a scholarship scheme for KTA that supported the project fees of all primary students in the KTA catchment region. The scholarship scheme supported 1,846 scholarships across 12 primary schools in the Oro and Central provinces. This research also explored the impact of the scholarship program in interviews with teachers and parents. One of the key findings was that the scholarships significantly eased the financial burdens of parents and families across the region.

On average, the project fees were K200 per student across the region; for many families who have multiple children at school, this is beyond the reach of affordability and causes, in many cases, financial stress.

“ At Efogi 1 and Efogi 2 the parents are happy; some parents are poverty stricken and they struggle to pay fees; so when the KTF and KTA paid the funds all of them are very happy. We want more next year and onwards.
_____ (Head Teacher, Efogi 2 Elementary School)

Some parents spoke about the difficulties of spending their savings on children enrolled in secondary or tertiary institutions and the burdens that this creates to support all their children at primary school:

“ I am very happy to receive this support because I exhausted all my savings on my older child's fees attending tertiary institution and this scholarship support has really eased my burden for my two younger children's fees at Efogi Primary School.
_____ (Parent, Efogi 1 Village)

Scholarships were administered in a fair and equitable manner where the large majority of people along and around the Track benefitted. Parents and teachers discussed the fact that the large majority of people within their communities benefitted from the scholarships program due to the large number of families with young children residing in the Track communities. Interviewees including parents, community leaders and teachers stated that scholarships were administered fairly and transparently and everyone had heard of the processes involved in scholarship administration undertaken by KTF.

Off-track schools noted that they are often over-looked for these types of programs and were grateful to have been included and recognised in the KTA catchment region and allocated the 2019 scholarships:

“ We are so happy to be chosen as recipients of this program. We are off the track and most times our school is over-looked. The funds will go toward purchasing a much needed mower as well as text books for teachers and students to improve our teaching programs. We are so happy.
_____ (Head Teacher, Bodinumu Primary School)

Finding 4.1.9 – Scholarships funding enabled schools to meet infrastructure and operating targets. The scholarships were utilised by schools to implement pre-determined and approved projects for the improvement of school infrastructure and operations. A wide variety of projects were implemented by schools across the region with their scholarships funding including new classrooms and teachers houses, water and sanitation projects, resourcing and equipment, and teacher training and development.

Many teachers discussed the impact that the scholarships had in being applied equally and in full to all students attending the school:

“ This is the first time for such funding to be given to our whole school. The parents and teachers are very happy and will help children to concentrate on their school work. The funds are being used to purchase a chainsaw which will be used to mill timber and build a permanent house and support a volunteer teacher who is not been paid for some time.

_____ (Head Teacher, Manari Primary School)

Some of the teachers also discussed the fact that since the introduction of Tuition Fee Free Policy, schools have struggled with depleted operating budgets due to the fact that they are not receiving their full allocation of Government subsidies and parents being unable to pay the full level of their project fees:

“ I am so thankful to KTA and KTF for their support. This is a lot of money to ease our burdens. Since the introduction of TFF, schooling has been halted on so many occasions because of no funds. We cannot operate without funds from parents and now you have eased their major burden. We will push on with all our projects immediately to coincide their opening with the school's 70th anniversary this year.

_____ (Head Teacher, Kokoda Primary School)

This teacher discussed the impact that the scholarships had on the value that parents and students place on education:

“ Thank you, that was so impressive to the parents. It truly helped the parents. The funding that was paid by the scholarships it was paid to all grades. Previous years it was done to the bright students and the selected students in each classes. But this year, KTF with KTA paid all grades 3 up to 8. That was an extraordinary thing that was done to the parents. It also made the parents to stand on their toes too and encourage their children to value education as a better road for their life in future.

_____ (Head Teacher, Gorari Primary School)

Finding 4.1.10 – There is a strong desire for a continuation of the scholarship program in 2020 and for the type of scholarships supported to be broadened to include high school and tertiary scholarships. Many parents and community leaders discussed the positive impact the scholarships had on their children’s education and in easing their own financial burdens; and expressed a strong desire for the scholarships to be continued in 2020.

This parent described the difficulties facing many villagers who are not receiving an income from the trekking industry; and that the scholarship program is a way that all families can receive some benefit from the trekking industry:

“ When school starts, most of the parents are looking for ways to pay for school fees. Not everybody is able to go on the trekking – just a couple of the young [men]. For the older parents, it’s hard for us to find the funds to pay for the school fees. So the scholarships lessen the burdens of the parents in the village and share the trekking money around to everybody. K200 is a lot of money especially for some of those people who cannot afford – to them it’s a lot of money. It’s a good thing it has helped a lot and we’d want it again next year. Parents will be looking forward to it continuing again.

(Community Leader, Efogi 2)

There is also a strong desire among parents to see scholarships provided in future years for other years of schooling including elementary, secondary and tertiary education. In the communities with lower populations in the mountains along the Owen Stanley ranges, there are relatively low numbers of students at high school or tertiary level studies who require support. The numbers in the catchment region, especially in the more populated areas of Gorari, Kebara and Kokoda, however, increase.

“ Our village would like the scholarship program to continue again next year; for primary and high school. Roughly we have 4 children at high schools; one at Baregi, two at Kokoda and 1 in Port Moresby (Laloki). Scholarships are important and they ease the burden of families in the remote areas.

(Community Member, Alola Village)

“ This year they take only primary scholarships; in future need to include elementary. In 2019 we charged K100 project fees per student. Only some parents have been able to pay this; some not. Elementary parents complained that they should include primary and elementary.

(Teacher, Efogi 1 Elementary School)



4.2 Teacher Case Study – Aron, Alola

Aron is from Alola village, three-quarters of the way along the Kokoda Track when travelling south to north, in the Oro Province. Aron trained as a teacher with KTF in 2012 via a program delivered at the Kou Kou Community hall with 60 participants from the region. Aron then enrolled in the PNG Education Institute’s mixed-mode, multi-grade SIU certificate of elementary teaching which he completed with KTF under the 2016 Teach for Tomorrow project in Popondetta.

After graduating from the KTF training in 2012, Aron was employed as a full-time teacher by KTF to deliver schooling in Alola. At the time, the village had no permanent classroom; but Aron was one of 3 teachers to deliver elementary schooling supported by KTF.

Over the following years, the population of Alola decreased as some families relocated to Kokoda or Port Moresby to pursue opportunities related to trekking. Aron’s peer teachers also left the village, leaving Aron as the sole teacher for the community. Aron had to immediately apply his multi-grade training to his work and deliver schooling across all three elementary grades – Preparatory, Grade 1 and Grade 2.

In 2014, KTF built a classroom in Alola which KI renovated in 2017. Solar infrastructure was installed on the classroom by Executive Excellence, a former trek operator which ceased operations in the region in 2016. KTF also introduced its SolarBuddy and Village Connect projects to the community and the school and students all received solar infrastructure on their homes and portable solar units for study after dark.

Aron is an extremely dedicated teacher and is recognised and supported by his community to continue in his role. He wants to undertake FODE studies at KTF’s Kokoda College in 2020 whilst continuing to deliver schooling in the community and will be able to pursue both paths simultaneously due to the flexible nature of the FODE program delivered at Kokoda.

As a result of Aron’s commitment to the teaching profession, over 150 children have graduated from Alola Elementary School and pursued their primary studies at nearby Abuari Community School, or at Kokoda Primary School. Aron is looking forward to the introduction of 1-6-6 schooling and having the skills and opportunity to deliver Grades 3 and 4 at Alola School so that children don’t have to move to Abuari or Kokoda at these early ages.



4.3 Health

Health services have significantly improved in recent years in communities along the Track; however the broader catchment region, with its larger population, has less consistent access to affordable and accessible healthcare year-round. Significant investment in the Track communities' health facilities has been the priority of a number of stakeholders over the past 5 years including KI, KTA, SDA Church and NGOs, KTF and No Roads to Health (No Roads Foundation).

A number of key themes emerged from the research about the improvements to the delivery of health in the Track communities as well as areas for improvement and pressing gaps.

Finding 4.3.1 – The health of communities along and around the Track has improved over the past 5 years. Interviews with community leaders, members and health workers along and around the Track confirmed that the health of communities in the region has improved over recent years. The main reason for this improvement is the establishment of new facilities and the opening of facilities that had previously closed due to the non-attendance or removal of health workers, or the fact that facilities and their workers have become resourced via a range of partners.

A number of community members discussed the improvements that have come due to having access to health services within their village; previously having had to commute by foot to the nearest service:

“ It's been a big change in the village; before when there was no aid post at Manari we used to travel to Efogi and we would have difficulties when there was no health worker. It would then be up to us to travel to Sogeri or Port Moresby and when a patient got a big cut or a pregnant women needed to deliver her baby, it's really hard for them when there's no health worker nearby. Before we have a big problem with this; but now we have our own doctor [health worker] in the village so there's no issues with that. When people see the health worker they know that they are ok; but when there's no health worker it's a problem to them. I've seen lives saved.

(Community Leader, Manari Village)

These examples were apparent on both sides of the Track, including the Mt Koiari communities serviced by aid posts in Manari, Efogi 1 and Naduri and the Oro communities who can access the service at Abuari.

“ The health of our community has improved because we normally [would have to] go to Kokoda but now there’s a service there in Abuari. It’s good and people are happy about it because sometimes they can’t walk to Kokoda so the people living in the village are happy to have the hospital and Guy [Community Health Worker].
(Community Member, Abuari Village)

Health workers and community members also spoke about the changes that have been brought to people’s lives as a result of being able to now access life-saving primary healthcare, immunisations, pre and post natal care and other health services in their homes; rather than having to travel long distances.

“ It’s a very great thing to now have health care in the village; to all the community because it helps people to get their medicine here instead of going to Port Moresby or getting their sick patients to Port Moresby. This year we only had one major case that needed to be referred to Port Moresby by the health worker; but most are done here. It’s helped a lot.
(Community Leader, Efogi 1 Village)

Skilled child and maternal health nurses have meant that babies are able to be delivered in the villages along the Track and that mostly emergency cases need to be transferred to Port Moresby. Health workers commented, however, that it is essential that mothers come to the health facilities for pre and post natal care and the delivery of their babies.

“ The most important change is that mothers can deliver their babies safely. We are looking at saving two lives – the mother and the infant. In most life threatening cases, they used to be sent to Port Moresby. But the people are subsistence farmers and often cannot afford to make their way to Port Moresby. But thanks to KTF, since we came here, Ruth is now doing her work to save lives here so that mums and babies can stay in the village, be looked after, and be healthy.
(Community Health Worker, Naduri Aid Post)

“ Our health it has improved. The change is that the health workers are right here; any emergency they attend to them very quickly compared to the previous years.
(Community Leader, Efogi 2 Village)

Finding 4.3.2 – There have been health-related behavioural changes in communities.

Community Health Workers operating facilities across the catchment region spoke of behavioural changes within communities that were brought about via community health education and awareness. Behavioural changes included improved personal health and hygiene, pregnant women accessing pre-natal healthcare within posts, increased breastfeeding rates, and changes to nutrition and diets.

This community health worker spoke of the behavioural changes that he had urged in his community to adopt concerning personal hygiene and the resulting reductions in skin infections amongst community members:

“ Some of the cases that we see have changed since we came in is skin infections. Most of the people [didn't] properly wash and they go out and do their gardening and then go straight to bed and go to sleep. But since we came in, we show by example and community awareness, by boiling water, washing children and telling community the importance of doing what we are doing. Many are now doing this. The first time we came to the post we saw big sores and ulcers and tinea; but now they are all subsiding. Boils used to be a problem and now we are cutting down on these cases. *(Community Health Worker, Naduri Aid Post)*

Another health worker discussed the benefits of the education program that she delivers to surrounding communities whilst on patrols, especially trying to reach pregnant women and new mothers:

“ The first week I got here I've seen almost 50 patients in one week. But then from that time onwards I don't see that many patients anymore from the surrounding local areas, because I continuously do health awareness, health education. I am always talking about breastfeeding policy and the benefits for babies in the first 2 years of their lives and now I don't see too many problems from babies especially like previously when I first got here. Now it's much better and the number of patients I see a week has reduced. *(Community Health Worker, Kou Kou Aid Post)*

This health worker discussed the changes that she has seen since the opening of the health facility and posting of her as a maternal health worker, in the behaviours and practices of pregnant women and new mothers from the surrounding catchment region, in coming into the health facility to access her services:

“ Since the establishment of this facility a lot of patients are coming in from every corner. The mothers used to never come in for delivery, but now because of the awareness we have been doing in the communities, now they come in [to the health centre] for delivery. Previously the only options mums would have to go for clinic is up at Popondetta; but since this facility was established they now come for clinic here. This is safer for the mums and also sometimes travelling from here up to town they have financial problems and they don't go; but from here they always come. It's cheaper and they walk less. They have water supply here and light and comfortable mattresses. They can give birth safely in the health centre which is in the village.

(Community Health Worker, Buna Health Centre)

Finding 4.3.3 – Health facilities across the region treat a wide range of issues. Discussions with health workers uncovered a wide range of health issues being treated in rural aid posts, with some diseases and issues more prevalent in certain regions. Centres and health workers provide immunisations, inpatient and outpatient care, STI and HIV/AIDS testing & counselling (not in all locations interviewed), antenatal and postnatal support, health awareness and education and community health outreach services.

Malaria and skin diseases were particularly prevalent in the northern beaches and Kokoda regions; whilst communities along the Track present with tuberculosis, sexually-transmitted diseases, knife wounds and other injuries from gardening, and coughs, aches and pains. This health worker discussed the malaria endemic in the northern beaches region:

“ Most cases that I see are malaria – malaria is endemic in Hariko. As well as upper respiratory illnesses, infections, pneumonia, and tuberculosis is becoming an outbreak so I have referred two patients, one with TB meningitis; and been admitted to hospital. Other cases like injuries are also prevalent but malaria is the biggest problem.

(Community Health Worker, Hariko Aid Post)

A full list of the main illnesses addressed by aid post interviewed is outlined in Appendix C. The aid posts across the region also see varying numbers of patients, with extremely high numbers in the Kokoda and Northern Beaches region where village populations are higher; and lower numbers in the Track communities.

The health facilities in Buna, Sanananda and Bagou each saw over 300 patients during the month prior to the research data collection. In the case of Sanananda and Bagou there is only a single health worker operating the post.

In addition to the physical illnesses outlined in Appendix C, health workers also reported high numbers of patients seeking support for mental health issues including anxiety and depression and violence related injuries and emotional abuse. This health worker spoke of the struggles she has in reporting cases to the police and the lack of follow up and support for victims of violence:

“ I treat lacerations from violence, men inflicting violence on women mainly. Domestic Violence. When they come with lacerations, I suture them, I talk to them and I get the story. I write up two histories [and] I give them one and I take one up to the police station. But nothing really then gets done by police. They never call. Out of fear the women don't go to the station and report. I see it a lot. Every second day.

_____ (Community Health Worker, Kou Kou Aid Post)

Finding 4.3.4 – Health facilities are supported by a consortium of partners. Support for the operations of health facilities across the region is a result of a consortium of partners including Government, NGOs, and trek operators. Health workers discussed the support provided by KTF in the operations of 12 health facilities across the region. In five health facilities, KTF is the sole contributor to the post's operations; in 7 cases, KTF partners with the PNG Government or Churches to support the operations. Health workers and community members also acknowledged the significant support from KI for aid post infrastructure and maintenance, and some support for human resources. Trek operators provide some drugs to posts but it is ad hoc and health workers are unable to place specific orders for their supplies.

Health workers and community members discussed the challenges they have experienced in the past with the closure of posts due to the lack of human resourcing and operating challenges such as limited drugs supplies:

“ If KTF didn't support the aid post, we would be in big trouble because all of the support is coming from KTF and the Government does not supply any of the supplies. KTF is doing fine providing all the basic medications for people in the rural areas. We are truly reliant on KTF.

_____ (Community Health Worker, Buna Health Centre)

“ If KTF is not operating in this village, if services are not funded or programmed, if my wife and I were not sent up here, it would be a great problem and many lives would be lost. KTF is doing tremendous job in keeping this post open.

_____ (Community Health Worker, Naduri Aid Post)

In other locations, KTF works with partners including the PNG Government and SDA Health Service and this support fills the gaps when they arise:

“ If KTF didn't support my aid post, it would be a little bit harder because some of the basic drugs the government do not supply – these are the basic drugs that elderly people need – for joint aches and arthritis. So KTF fills the gaps. Paracetamol. Basic drugs. Things would be harder without KTF.

_____ (Community Health Worker, Manari Aid Post)

In some locations, KTF-supported posts are the only operating facilities across a wide catchment region. Health workers discussed the fact that people are travelling long distances to access KTF healthcare facilities:

“ Many people are accessing this post from outside. We give free health care for the Kou Kou community but we must charge outsiders K1 for medicine. Malaria is the main one and another major one every day is body aches and pain, headache, back joint, coughs, big accidents or when they fight. Asthmatic patients come here too and get very good healthcare. Sometimes if we run out of medicine because of the huge patient numbers, people will go back up to the hospital; but when they hear that medicine is coming, people rush back to the Kokoda College. People even with sickness, they wait until the drugs arrive. We have patients coming from as far away as north of Gorari.

(Community Leader, Kou Kou Village)

In some cases, a model of partnership has emerged between KTF, the PNG Government and the Kokoda Initiative, whereby the KI supports initial investment in infrastructure (aid post facility, staff housing, water and sanitation), PNG Government supports the drugs and resources, and KTF supports the human resourcing of the post.

“ This post was originally built by the KI and the Government supplies some drugs for the operations. But the post was closed for so many years until KTF posted two health workers in and provided additional drugs and resources so that we can serve the people in the community and go on regular patrols up in the mountains to the remote communities. It is a good partnership that is working.

(Community Health Worker, Naduri Aid Post)

No Roads Foundation, an Australian NGO associated with No Roads Trekking Company also partners with KTF and KI to deliver regular professional development to health workers and health volunteers across the catchment region. They have also invested in infrastructure in Buna and Tufi and support the ongoing upskilling of health workers across the region.

Whilst partners have worked together to substantially increase access to primary healthcare across the region, some facilities still struggle with not having access to enough drugs; and some posts in the region have drug shortages due to patients accessing the facilities from outside of the immediate catchment.

“ Most of our drugs are being supported by KTF; we receive nothing from the PNG government or Anglican health services – nothing. Last time I went and called them to assist me with a few drugs, but the Government said there were no drugs, they were out.

(Community Health Worker, Hariko Aid Post)

In some locations, trekking companies are filling the gaps by donating medical supplies – either left over supplies from treks or donated supplies from the company or its trekkers. These supplies however are ad hoc and the health worker has limited control over what they receive.

“ We get our supplies from the Government, KTF, SDA Health services and also from other tour companies – Kokoda Escape & Adventure Kokoda. Largest supplier is KTF, Adventist health and Government where we can order basic drugs like amoxicillin, Panadol, chlorophenol, flucloxacillin, dressing for wounds, doxycycline, basic antibiotics. The drugs from the trekkers help too but we only get what they have in their kits and can't order the major drugs that we need in treating diseases like malaria, tuberculosis.

(Community Health Worker, Efogi 1 Health Centre)

Finding 4.3.5 – Transiting porters are accessing healthcare in aid posts along and around the Track. Most health workers discussed the fact porters are accessing health services in their health facilities during their crossings with trekking parties. Sometimes this is a strain on the posts resources as operating planning only takes into account the community and catchment communities' needs; however many are seeing large numbers of porters during the trekking season.

One of the key services that is being accessed by porters is the treatment of sexually-transmitted diseases.

“ Many, many patients are coming after dark. A lot of porters are coming in after dark. They come whenever at any time. They mainly present with infections, STIs, gonorrhoea is the main one that I am treating. We need more training on STIs. A lot of porters are also accessing this health centre and I am checking for malaria, headache, diarrhoea and minor injuries from the trekking.

(Community Health Worker, Efogi 1 health Centre)

Other 'off-track' health facilities are also treating a lot of porters when they return home to their communities after a trek.

“ A lot of both porters and community members accessing healthcare here. When they return from their trekking they often need attention. We also see a lot porters needing treatment for STIs.

(Community Health Worker, Buna Health Centre)

Finding 4.3.6 – Professional development and training is being provided across the region; but skills gaps still exist.

Again, a consortium of partners has provided various professional development and skills development opportunities to community health workers, village health volunteers and village birth attendants across the region. Key PD partners that emerged from discussions with the interview participants were KI, KTF, and No Roads Foundation.

Focus areas of professional development that have been delivered by partners include child and maternal health, vision and eye testing, HIV testing and training, and family planning.

This health worker reflected on KTF's Bebi na Mama training that was delivered in August 2019 and how it changed practices that the health worker has been taught many years prior:

“ I gained so much knowledge there to help the people in the remote communities. Another thing, during childbirth, we were taught to turn the baby upside down and tap the bum and make the baby cry – we thought this was normal way to do. But recently at the training we learnt that this was not right; instead, rub the baby at the back and stimulate it to cry. I was also taught the importance of the suction. In remote areas, most mothers give birth at home and the babies inhale the mothers waste. In these places it's very, very hard. I was given and taught how to use the penguin flask to suck the inhaled blood and mucus content and how to resuscitate the baby. I believe I am well equipped with the knowledge that was gained at KTF's training to save the life of babies. It is so difficult for us to transfer patients from Naduri down to Port Moresby – it's very expensive. But now I have the skills so that anytime I have such incidents, I believe that we will do the best we can do to save the mother and the child.

(Community Health Worker, Naduri Aid Post)

Health workers agreed that the training that has been delivered to date has been targeted to their needs and to filling the gaps in knowledge and skills that they didn't receive during their formal undergraduate training.

“ I was at Abuari and I attended HIV training run by KDP (KI) at Kokoda Hospital. I recently attended child and maternal health at Kokoda delivered by KTF. It was very good; some of the skills that I didn't study at the nursing school, KDP and KTF have taught me and my VHVs. That program was very good, excellent.

(Community Health Worker, Hariko Aid Post, previously Abuari Health Centre)

Health workers have been supported to access as many training and upskilling programs delivered by partners across the region as possible. The result has been a wide array of skills and practices health workers reported putting into practice.

“ I did the eye care training with KTF and it did improve my skills and knowledge – greatly in terms of eye care and how to diagnose patients with eye problems. Now I need to further upskill that knowledge.

I also completed training from Kokoda Initiative; I did the Marie Stopes family planning how to do implants. I have been doing implants and have done 15 since I completed the training; plus maybe 5 or 6 removals. Everyone is happy with the process. Some are still waiting for implants. And most recently I did KTF’s Bebi na Mama training. It was really good. Next time can you please cover emergency care of baby and mother because it’s a complicated process in delivery. I learnt the new penguin technique how to extract mucus when a baby is choking. Haven’t used it yet. Roughly 3 mothers have given birth; 2 with complications and 1 was evacuated down to Port Moresby.

_____ (Community Health Worker, Manari Aid Post)

This health worker spoke about how as a result of his training, behaviours and practices by community members have changed and they seek him out for specialist care:

“ I did the No Roads to Health maternal training and I learnt how to attend to mothers and have trained up my village health volunteers and birth attendants. It was good training. Now that I’ve had the training, the mothers come to me for delivery and complications. Prior to the training, they just gave birth at home.

_____ (Community Health Worker, Sanananda Aid Post)

Another health worker reflected on the fact that their pre-service training doesn’t dive deep into a range of skills and practices; and that professional development is critical for this broadened skills base.

“ I completed KTF’s Bebi na Mama and Eye See PNG training. Back in Colleges we learn just general nursing and we don’t go deeper in those areas; so when I went to KTF training we went into deeper understanding of how to take care of patients – especially the maternal and child training. I learnt a lot. One of the part of the training was how to suck baby mucus out and keep him alive. In the eye training I learnt different types of diseases of the eye and how to manage diseases; when I come back to village I can help the elderly people who come with this problem.

_____ (Community Health Worker, Efogi 1 Health Centre)

Health workers however also identified a number of areas where professional development and training is still required in order to complete skills and knowledge gaps. Many health workers expressed a desire for upskilling in dental health, STI and HIV testing and counselling, and snake bites management.

“ We need more training to keep us going. We need training that focuses on dental health. Most people have dental problems. Dental training should focus on extractions, antibiotics and local anaesthetic. I think it is possible to perform extractions in the village. Also how to identify emergencies for pregnant women and what to do in obstetric emergencies. Bebi na Mama was great but in future we need an additional day to focus on postpartum hemorrhage. Efoji lost a mother but she had been bleeding for a week and didn't come to the health centre until she was very bad. We also need HIV testing and counselling training. We don't do this in this aid post but I have many porters who come through and are asking for testing. Also need training in snake bites. We have no anti venom and no training in how to administer antivenom. We need this training.

_____ (Community Health Worker, Efoji Health Centre)

Finding 4.3.7 – Despite advances in healthcare and education, some communities still require additional community health outreach and awareness.

Some health workers discussed the ongoing challenges they have with changing community behaviours and attitudes and discussed the need for ongoing investment in community education campaigns. This was especially related to behaviours around ceasing medications for tuberculosis treatment; and awareness and education around STI transmission, identification, treatment and safe sex practices.

This health worker spoke about his ongoing struggles with tuberculosis treatment especially for people living away from the health facility in remote communities:

“ The health of the community has improved greatly since I arrived. But since the beginning of this year there are a lot of tuberculosis cases. Why? Because of defaulter cases; people who haven't completed their treatment. My response to this is that I will have to do more awareness in the community around the different types of tuberculosis; because there's different types, different treatment cycles and we need to do more awareness.

_____ (Community Health Worker, Manari Aid Post)

Another health worker spoke about the positive impact his community education and awareness activities are having but that he is doing it without any resourcing which would make it more effective:

“ The general health of the community is improving and I am often out on education and health awareness patrols. The health facility is there and it has minimised sickness and helped the community. Their costs have been significantly cut down from going from here up to Popondetta. But I still see a lot of need regarding illnesses and those cases that most come into. I am trying to give more health education about what services peoples can access in the aid post if they come in; but I don't have proper resources to educate them, especially posters, about diseases that they are coming in with. I'm just giving verbal awareness at the moment.

(Community Health Worker, Hariko Aid Post)

Many health workers also expressed a desire for further formal studies including entering KTF's FODE program at the Kokoda College to upgrade their marks and matriculate and undertake further studies in nursing. Two health workers currently working in aid posts along the Track commenced their FODE studies with KTF in 2019 and the others are eligible for enrolment in 2020.

Finding 4.3.8 – Health Workers' commitment to the profession is strong and rural focused. KTF's strategy in training and posting health workers has been focused on building a workforce of dedicated health workers, from the region or committed to serving in the region for a period of time. Interviews with health workers indicated that whilst the cohort of available and committed health workers still needs to be built, there are signs of strong commitment to the profession and to the region by the existing health workers.

The health workers who expressed this commitment were a combination of KTF, KI, Government and Church supported health workers:

“ I want to promote health to my community; most of the community they don't understand about health. So my interest is to provide and promote health to the community.

(Community Health Worker, Buna Health Centre)

That is my trade and this is my community and I'm really pleased to work in that field. I will still be in Sanananda in 5 years' time. *(Community Health Worker, Sanananda Aid Post)*

I want to provide high quality health services under the umbrella of KTF because the government of PNG doesn't care and I want to see expansion of the health services provided to this community. *(Community Health Worker, Buna Health Centre)*

There's so many problems in the rural areas. My wife and I would like to stay in Efogi for another 10 years because there is so many problems that we can help.

(Community Health Worker, Efogi Health Centre)

In one case, a health worker expressed that he wanted to undertake further training in health management in order to support supply chain issues to remote and rural health services:

“ In 5 years’ time I would like to get into health management and try to address the issues that I’m facing right now, like delivery of drugs, providing a facelift of health facilities, upgrading and renovation of facilities. *(Community Health Worker, Manari Aid Post)* ”

Finding 4.3.9 – Despite many positive improvements in health services over the past 5 years, there are still funding, resourcing, and infrastructure gaps. Health workers across all locations expressed that they have ongoing challenges and gaps related to resourcing and the increasing need being presented to them in their posts. A full list of the gaps of health facilities interviewed is outlined in Appendix D.

4.4 Health Worker Case Study – Maggie, Buna

Maggie is one of three full-time Community Health Workers at Buna Health Centre on the Northern Beaches of Oro Province. She is engaged by KTF and has worked in the health centre since early 2019. Maggie’s engagement was a welcome addition to the KTF team and Buna community who, to date, had never had access to a female community health worker. The two other health workers have been supported by KTF for the past 8 years.



Maggie specialises in child and maternal health and midwifery services. She provides pre and post natal care to new mothers, delivers babies, provides family planning services and other health care for women and girls in the community.

Thanks to the service provided by Maggie, women report feeling more comfortable coming to the health centre for health care. There has been an increase in the number of births taking place at the health centre thanks to Maggie’s appointment, with 20 babies born and delivered by Maggie at the health centre in the first 9 months of 2019.

In mid 2019, Maggie and her husband Thomas moved into a newly renovated staff house in Buna (the old aid post that KTF had built was converted into comfortable housing by KI). The previous aid post was replaced by a new health centre by the No Roads Foundation.



Thomas is currently being supported by KTF to complete his studies at St Margaret’s School of Nursing to become a Community Health Worker and will join Maggie on the KTF payroll in Buna in 2020. From early 2020, there will be a team of 4 full-time community health workers (Maggie, Thomas, Rodney and Colin) serving the Buna Health Centre which sees over 80 patients per week.

Maggie and her colleagues at Buna, as well as numerous other CHWs in the region, have had the opportunity to attend professional development and learning opportunities delivered by KTF, No Roads Foundation and KI. Maggie completed the eye health training program at the Kokoda College and now feels comfortable treating basic eye conditions and referring more serious problems to the provincial capital.

4.5 Wellbeing and Livelihoods

The research also investigated changes in community wellbeing and livelihoods as a result of the trekking industry and various interventions in communities by stakeholders over the past 5 years. This included KTF’s Village Connect project which was implemented in partnership with the Kokoda Initiative and various trek operators, KTF’s Light Up PNG project in partnership with Australian charity, SolarBuddy, and a number of partner projects including infrastructure improvements in schools, health facilities and communities.

Finding 4.5.1 – **KTF’s Village Connect project had a significant impact on livelihoods, education and wellbeing outcomes.** In partnership with KI, PNG Solar Solutions, philanthropists, and two trek operators (On Track Expeditions and Back Track Adventures), KTF’s Village Connect project installed 1,000 household solar lighting and energy systems onto every household along the Track and in the immediate catchment region as well as the Buna community on the Northern Beaches. The project also installed 60 facilities systems onto schools, aid posts, churches and community centres across the region.



Whilst a recent evaluation demonstrated significant qualitative outcomes from the project, including a 92% reduction in reliance on kerosene and a 141% increase in student study time, this research explored the qualitative narratives from teachers, health workers, and community leaders and members around the life-changing impact of the solar intervention. A number of sub-themes emerged.

IMPACT ON EDUCATION OUTCOMES

Teachers discussed the positive impact of the Village Connect project on their ability to prepare lesson plans and undertake student marking and grading after dark; as well as the impact on student outcomes (including study time and educational outcomes) as a result of having solar lighting in their households.

“ The project has had a big impact on both my school and my home. It’s been a good thing because it’s improved my life especially my lesson plans at home. And at school, the solar system here and the batteries and the inverter, I now have a printer and can operate a laptop. It’s very easy for me to print out instead of writing a lot of the time and I can also take home work. So the solar system has improved my life and my teaching. *(Teacher, Aloia Elementary School)* ”

“ In the past years, without solar, I’ve been using torches to do my planning and programming. Sometimes when my battery is down I just stop everything or use small solar. By the time the real solar came that’s when I’m relaxing. It’s a big change I can sit down overnight and do my work. *(Teacher, Isurava Elementary School)* ”

Teachers also discussed using the televisions provided as part of the school solar lighting and energy packages and the fact that they can show learning programs to students on the TV in the classroom.

“ The TV for the school means we can watch rhymes and songs – kids songs. We use the TV to teach the children. We play the phonics sounds, songs, on the TV. The solar has helped our learning. And students, they can watch tv in the village and see what is happening in the outside world.

(Teacher, Efogi 1 Elementary School)

Teachers and community members discussed the impact the solar technology has had on creating an environment within homes that has encouraged children to study and read after the sun goes down; creating more learning time in already very busy schedules. Many children are required to help their parents in the garden or the village in the hours immediately following school; and sometimes their only opportunity to study and complete homework is after the sun goes down.

“ Solar it's better for the children too. For our children like those doing their schooling in night-time, they use the solar light to do their study and it's good that they use the solar light to do their study and help them complete their work, assignment and studies. Before there was no time to complete their study after dark.

(Teacher, Hoi Elementary School)

IMPACT ON HEALTH OUTCOMES

The introduction of solar into the Track communities has reduced the amount of smoke inside households as well as people's reliance on toxic kerosene.

“ There is no more smoke in the house. People are cooking outside since we received the solar systems. Manari - It make a really big difference. Since the time of our grandfathers and parents we make fires during the night and we buy torches; but now we have a solar light and it make a big difference and we don't need to [buy] kerosene anymore. After dark – kids are reading books it's really helpful for the kids and the parents; before when they go to church they used to study the bible in the dark; and now it's really helpful for the church pastors. And especially helpful for the school teachers.

(Community Leader, Manari Village)

Health workers commented that since the introduction of the solar systems they are now able to tend to patients including delivering babies at nighttime under the protection of light.

“ It has really helped us because when we move between the staff house and the health facility, now we have lights. [Previously] we were having difficulty attending to patients in the night. I remember this case when a pregnant mother came in and we used torch light to deliver the baby. Now that we have the solar lights we can save many many lives and deliver after hours care. Many many patients coming after dark. A lot of porters coming in after dark. They come whenever at any time.

_____ (Community Health Worker, Efogi Health Centre)

As well as the larger household and facilities solar systems, KTF's Light Up PNG project has distributed over 4,000 SolarBuddy lights across the Track corridor, giving handheld solar lights to students, teachers and health workers. This health worker discussed the critical role that these lights have also played:

“ The small SolarBuddy lights, I've even used that one to deliver a baby to a teenage mum. Because the lighting in the labour ward was playing up. So I gave the small gift to the mothers who came and they flashed the light and I did the delivery – it's a very helpful thing to me.

_____ (Community Health Worker, Naduri Aid Post)

IMPROVED LIVELIHOODS

The introduction of solar has created opportunities for people to work on small businesses after dark. Community members spoke of the increased opportunities that women now have to work on sewing bilums and other handicrafts that they previously had to undertake sitting around the fire.

“ It's been a big change. A big and good change. Students study in the night using the solar; mothers make bilum bags; it makes us safer and happier. It's good. Everyone is happy because all these past years they have been in the dark; but now when you supply the solar everyone is in the light. When night comes no one is in the dark – everyone is in the light.

_____ (Community Member, Alola Village)



The introduction of solar technology has also reduced expenditure on kerosene, torches and batteries and enabled families to save money or spend money in other areas. Many community members discussed the fact that the solar project had significantly eased their financial burden as well as brought a number of positive education and health outcomes to their community:

“ I don't spend money on kerosene anymore. Kerosene no more, I don't use them no more. Before solar lights we had to use kerosene and use torch light and now that the light has come we forget about the torch. It has saved me a lot of money.

(Community Member, Efogi 1 Village)

Before we were spending money on expensive batteries and kerosene; now we are budgeting our money well because we do not have to spend any money on the batteries and kerosene lamps. The solar is so helpful.

(Community Member, Hoi Village)

It has cut all our expense on torches and batteries. Previously we were using torches and batteries which is another expense. Solar has cut down the expense.

(Community Member, Launumu)

IMPROVED WELLBEING AND SECURITY

Community members also discussed the positive impact that the solar lights have had on improved wellbeing and sense of security in communities. Many spoke of the increase to fellowship and social gatherings due to the reduced workload of collecting firewood.

“ People are now enjoying their solars in the community. In the past, they go do their gardening and come back late at night and would have to make fire. But now they are happy to have solar lights on already in their houses. It allows people to have fellowship and some gatherings, death ceremonies.

(Community Member, Manari Village)

This community member described the increase in her sense of security and the fact that the light keeps the bad people or ‘mosquitoes’ out:

“ The people are more than happy now. They have not had light for a long time and now they are happy and delighted and it helps with security purposes. We now have less security concerns. Now we have the light the “mosquitoes – bad people” are out!”
(Community Member, Efogi 2 Village)

ACCESS TO POWER

Community members also discussed the impact that having access to the power charging stations have made to their lives. Prior to the KTF’s Village Connect project, KI had installed village-level solar power charging base stations in the larger villages located along the Track. The Village Connect project expanded this initiative and gave each household their own USB charging station which were reported to be used by community members to charge mobile phones, radios, boom boxes, fans and other small devices.

“ We use that to charge our mobile phones and boom box radios. Most of the kids play games on the phones and some watch videos on the phone. We also use it to record church music.
(Community Member, Manari Village)

Prior to having these household charging units, people would often have to pay for access to power to charge phones and other devices, for example, to an individual who owned a generator or a trade store in Kokoda. The household power systems have also saved people and families money.

“ They use the USB to charge phones so that make it easier for them now; previously they come to me and they pay K2 to charge their phone. Now it’s easier for them to charge at home. So everything is very easy now at the village level. They use them to hear music or they have some applications for bible they look through it. Network coverage – text messages to friends so they can text messages out.
(Community Member, Alola)

Mobile phones are in wide use across the Track region, including in villages where connectivity is sporadic. People reported using their phones to conduct trekking-related business, school activities, and general communication. Only some people, mainly teachers, reported using their phones for mobile banking; however a desire was expressed by people to receive training in and the resources to utilize mobile banking.

“ We don’t have any mobile banking. It would be really useful for porters and guides to communicate with the tour operators.
_____ (Community Leader, Manari Village)

“ We use the power units to charge our phones. We use them to communication with families around the place. Some people also use phones for mobile banking.
_____ (Teacher, Hoi Elementary School)

For many people, the introduction of the Village Connect project was the most significant change that had been brought to their lives over the past 5 years.

“ Life has improved. Compared to the previous years, our village and the area we live in. We normally live in dark. But now we have light! Sometimes we put the lights on for security reasons and kids play in the night. With solar, people are starting to change, our life has gotten better.
_____ (Community Member, Efogi 2 Village)

Finding 4.5.2 – There was general consensus amongst community members and leaders, teachers and health workers that life along and around the Track had improved over the past 5 years. Each interviewee was asked to reflect on the past 5 years and state whether they think life in their community had improved. Overwhelmingly, the response was positive. Improvements centered around the influence of investment by a range of partners in education and health infrastructure and service delivery, the introduction of solar lighting and energy solutions to every household and facility, and the benefits that have been brought by the trekking industry in creating local employment.

Commentary around the solar lighting initiative was again strong and positive, with most pointing to this intervention as having being life-changing:

“ Has life improved? That’s right it has improved very much. Before 2010 and backwards, life was very hard. Because people buy kerosene and torch light and carry them up the mountains. Now that we have solar lights, solar systems and all this comes in, it changes the lives of the people.
_____ (Community Leader, Alola Village)

Teachers particularly commented on the many improvements they have seen in the construction and delivery of education services. This teacher commented on the changes that this has brought to the perspectives of community members:

“ Looking at the community that I live in, a good number of years ago people were not in a standard where they thought education was important to them. They were in the dark, there were no services reaching the community level. When I came to study at Kokoda with the KTF and then when I went back home I started helping the community in teaching. I am one of the leaders in the community and represent the youths in the community. It encouraged a lot of the youths. Some of the students doing Grade 10 now at FODE at Kokoda College, I encouraged them to follow my footpath. I got their names and brought them in. It has helped a lot of the community to live in a standard where they have a better standard of living. I influence people and people encourage me to keep on striving for change.

_____ (Teacher, Gorari Elementary School)

Another teacher described the changes that have happened in her community and how parents are now actively engaged in schooling in the community:

“ In previous years there was no support towards to education in the school. Parents were ignoring the school and there was no classroom. Since I went for my training, the parents started building small shelters for me to teach students and this year we built two classrooms. Parents are really helpful now. Now they understand that education is the root of their life and they are supportive. They come in and assist their own children and they always praise that I am one of the KTF teachers. They always keep themselves busy, keep the area clean. We are right in the bush up in the mountains; they really supporting me and they are improving, everywhere they are saying English is here so we must teach our own children English.

_____ (Teacher, Sengi Elementary School)

Another teacher discussed the changes across a number of areas that she has seen brought to her community through partnerships between Government and non-government stakeholders:

“ Now we see that we have solar light, Efogi is changing. It's changed the people in Efogi community. That's better because, for example, when my school or students are sick, we get them and go to the clinic or health centre in our village and the doctors treat them and that's better. The next day the child goes to school again. So solar and health is better with education. The partners are KTF, KTA and KI.

_____ (Teacher, Efogi 1 Elementary School)

A community leader reflected on similar improvements in his village across education, health, and access to solar lighting and power, but continued to comment on the positive impact of the trekking industry in creating employment and agency:

“ What has improved? The school is improving; the clinic is improving. The whole village, when they have these lights they are all happy and it’s a service which they appreciate. We are lucky because we have the Kokoda Track and the Track is a resource for the communities and landowners. Tour operators are employing porters, many people along the track are benefitting from the Track. Those who go to school come and work in Port Moresby. Those who don’t go to school are employed by the tour operators.

_____ (Community Leader, Manari Village)

4.6 Desire for Future Change

Finally, the research investigated what future changes interviewees would like to see in their communities in the next 5 years. Overwhelmingly, respondents stated that communities want permanent housing and clean and reliable water sources to their houses. A range of other areas for change and access to resources and infrastructure were also outlined by interviewees.

Finding 4.6.1 – There is a strong desire for permanent and/or improved housing solutions to be provided for all communities along and around the Track. The large majority of people interviewed stated that their community’s top priority for change and investment over the next 5 years is permanent housing. Community members urgently want iron roofing and improved structural components of housing to ease the burden of house maintenance during and after wet seasons and to give their houses more comfort and longevity.

“ We are happy with life the way it is; but we need iron roofing to help the communities. We need iron roof to make a difference. We don’t want to live in bush materials all our life; we want now iron roof so the community will change.

_____ (Community Member, Efogi 2 Village)

“ I want the village, each individual life in the village, to be changed and that change is roofing materials for houses. It would be a big change for each of the villages along the Track.

_____ (Community Leader, Manari Village)



Community members discussed the need for investment in chainsaws and walkabout sawmills in communities that can benefit everybody; but were also conscious of not damaging their natural environments.

“ I think for the next 5 or 10 years time we want all the villages, everyone to live in a permanent or semi-permanent house. People will build them; but we need materials. We need to preserve the environment, not cut everything down, and instead we need proper housing roofings.

(Community Member, Efogi 1 Village)

“ We need a housing scheme. We need a community walkabout sawmill to change the houses to permanent house with iron roof. We will build a new staff house at the school too. The local people, there's only Kunai grass and bamboo leaves for houses; so we need some changes we want roofing iron, we need permanent houses for the local people so that they can then put the solar lights on. That's the plan for us. We want KTF or KI or KTA to help as well as the trekking companies are supposed to do more.

(Community Leader, Isurava Village)

Community members commented on ongoing attempts to secure support from PNG Government for household improvements but across the board this support had not been forthcoming:

“ We want the setting of the village to change. We are going into a new era where people are changing – we need to catch up to other people in the world. Houses that we build, we want modern materials. Iron roofing, proper timber for houses. The PNG Government have said that they will put better housing in and lights, but never delivered. Villagers now talk about getting a chainsaw to rip our own timbers and improve houses; but we still need roofing iron and water tanks.

(Community Leader, Efogi 1)

All communities also expressed an interest in receiving street solar lighting infrastructure for their communities; with some having received pilot models already.

Finding 4.6.2 – Communities want better solutions for accessing clean water. The next most pressing issue raised by interviewees was the need for improved solutions in accessing clean water. People expressed the need for these water solutions to be available directly to their households and kitchens; rather than having to travel to a communal source. Whilst some investment in water has occurred over the past decade including some sophisticated water systems in the Mt Koiari communities, and the presence of many water tanks, systems have not always been maintained, and there is not universal access to clean water across the region.

“ We want good water supply; into the houses. Tank water – straight to the house
_____ (Community Member, Alola)

“ We want proper certified engineers to come and inspect our water system. Proper engineering as sometimes we get the water sometimes we don't. We need a professional to set it up like in Naduri. Every time we have heavy rain we have to go and check and there is a blockage. We want a professional to come and check and put up a proper water supply for the community.
_____ (Community Leader, Efogi 1 Village)

Many villages continue to rely on access to streams and rivers for their water and have stated that they need a solution that brings the water directly to households.

“ Our water supply too. Our water has been damaged somewhere by flooding and landslides, so it's difficult for the communities to walk down to rivers to have a bath and do their washing and laundry. We need water to come directly to the houses into the kitchens.
_____ (Community Member, Hoi Village)

Community health facilities at times also struggle with access to clean water which significantly hampers their efforts to provide healthcare:

“ Water supply is sometimes a big problem because this affects the operations of the health centre. The water runs out and we can't deliver proper care especially for mothers and deliveries. We need permanent main supply for the water. We want tanks for rain water to be connected permanently to the aid post and to village houses.
_____ (Community Health Worker, Naduri Aid Post)

Finding 4.6.3 – Transportation in and out of the remote areas of the Track and catchment region is difficult for communities. The remoteness of the Track, off-Track and catchment region communities and lack of reliable transportation continues to present challenges to communities. During the trekking season, there is an increase in the movement of people and cargo in and out of villages, but spots on charter flights are often full and when they are available, they are expensive.

Interviewees especially commented on the transportation challenges in the context of medical emergencies and evacuations for people in the remote areas. This respondent spoke about the challenges his community members face because they have to walk across the valley to access the operating health centre in Abuari ⁵:

“ When someone in the village gets sick; if it’s just like headache, they can walk slowly to Kokoda. Sometimes they go to Abuari if it’s fine weather, but when it’s rainy season the river floods. So for the big illnesses, we make a special bed and carry the people down to Kokoda or across to Abuari. It’s very hard. The posts are always open, the CHW is there he is present to do his duties every day. But it’s possible for Havutava and Abuari; but harder for Isuarva and Alola when it’s bad weather.

_____ (Community Member, Isurava Village)

Another community member spoke about the challenges to fly emergency obstetric cases to Port Moresby:

“ We don’t usually face big illnesses like malaria and other illnesses. But the only problem we have is for pregnant women in emergencies. One lady was struggling and it’s because of the charter flight and she travelled to POM and had her baby in PoM. Sometimes our mothers are not so lucky.

_____ (Community Leader, Manari Vilage).

⁵ At the time of writing, KTF had completed the construction of a health shelter in Alola village which will provide easier to access health services to the communities of Alola and Isurava. It is due to open in early 2020.

The difficulties with transportation also extend to teachers during school holidays who need to access Port Moresby or other major centres in order to stock up on their supplies. Often, they find themselves unable to return to their school communities due to lack of transportation.

“ The challenges also apply to school teachers. When they go for their holidays, or to pick up their supplies, or to sort out their pay, they don't come early on time. Two of our teachers are Efogi people for elementary and 4 of our primary teachers are from Efogi but we still have about three outsiders. Everybody goes for holidays and they are delayed coming back. We need to overcome the transportation challenges this is a very important thing. We can have farmers, we can have teachers, we can have health workers, but as long as we have this transportation problem, we will have issues with teachers accessing PoM and health workers getting medical supplies.
(Teacher, Efogi 1 Elementary School)

Another community member commented on the difficulties that the lack of transportation creates for villagers:

“ We need better roads for carrying stuff up from the mountain. It is very hard for the community. Life is good but infrastructure, transportation is very hard for Abuari and Isurava. Everything has to be carried from Kokoda up. Every day life is hard.
(Community Member, Abuari Village)

Finding 4.6.4 – Further investment in human resourcing is critical for the remote regions of the Track and catchment area. Community members recognised that there is a pressing need for more local community members to be trained as teachers, health workers and other professionals so that they will remain committed to the remote regions in which they live. Whilst some progress towards this aim has been made in recent years by communities and partners, there is a need to create more education, training and employment pathways for local people to take up professional careers in communities.

Many people discussed the need to create opportunities for early school leavers to enroll in FODE programs and there was a high interest among community members in KTF's FODE program that operates out of the Kokoda College:

“ As a councillor here, one of the things that always comes to my mind is that the children, when they finish from Grade 10 and Grade 11, if someone could come in and help them to go for further studies. There's also lots of Grade 6 and Grade 8 drop outs. If we can help them to go through FODE. If some of the elementary teachers, who is good enough and qualified, I suggest that if some of these ones could be sponsored through teachers college. I really worry about the school at Abuari and making sure we local teachers in there who are dedicated for a long career in teaching.
(Community Leader, Isurava Village)

This community member spoke about the need to have local teachers operating schools and local health workers staffing aid posts in order to protect children and to give parents confidence that their children are being properly looked after whilst they were out in the gardens or trekking:

“ It is very important that we have locals teaching in our village. It takes burdens away from the parents, most parents are doing the trekking or in the garden and whilst they know that local teachers are here, they are like family looking after the children. And the parents support the teachers to live and eat too.

(Community Member, Efogi 1 Village)

The process for creating these pathways for early school leavers to re-engage with their education, matriculate and pursue further studies in teaching and health work has commenced at the Kokoda College; but this is a long-term strategy and community leaders recognise both its importance and that it will take some time:

“ Kokoda Initiative are building a lot of expensive buildings along the Track and spending a lot of money. But some of the schools you won't find teachers or aid posts you won't find health workers – therefore waste of time. Human Resources is very important. What KTF is doing e.g., running FODE at the Kokoda College is really good so that we can have community health workers and teachers and so that they can fill up the buildings KI is building. Better communication is needed. Talk properly with the communities and come down to the level of the locals.

(Community Leader, Manari Village)

Finding 4.6.5 – Youth and leadership issues to be addressed in communities. The final major theme that emerged from the research was the desire for issues related to youth disenfranchisement and leadership problems to be addressed. People spoke about issues with youths in communities participating in antisocial behavior, disrespecting leaders and disengaging with school.

“ We are living along the Track so everything is fine; but we want the behaviour of the youths to change. At the moment sometimes when their leaders come, they never respect them; they just go on their own and do things on their own. They drop out of school or don't attend properly

(Community Member, Efogi 1 Village)

Suggestions for addressing this problem were to provide opportunities to re-engage young people in education and to give them pathways into employment or other meaningful paths to pursue:

“ Over the next 5 to 10 years, the change that I want to see in the community is I want people to be in the standard where they can understand each other and live as a community with a leader, especially the youths. In previous years, young people in the village live as if they have no leaders. We have problems with the youths. Young people don't respect the leaders in the community. But when the community in the village appointed me to be the leader of the youth, some of them I encouraged to come to the FODE college to upgrade their marks and I encouraged them to come next year again. This will help the young people not to be in the village. Give them purpose.

_____ *(Community Leader, Gorari Village)*

Finally, a number of porters expressed an interest to pursue FODE studies at the Kokoda College with some even suggesting that by pursuing portering, they had disengaged from their education which they now wish to return to.

“ We want some of our porters to go back to school. Trekking is good but it's very hard and we spoil ourselves carrying bags all the time. Some boys dropped out of school and lost their chance to get an education and become something in the future. So I think there are some boys who will enrol in Kokoda College FODE in 2020.

_____ *(Community Member, Abuari Village)*



5. CONCLUSION AND RECOMMENDATIONS

CONCLUSIONS

1. There have been improvements in a range of education, health, infrastructure and livelihoods outcomes for the communities along and around the Track over the past 5 years.
2. Improvements in education, health, infrastructure and livelihoods outcomes have come about as a result of a consortium of partners including the PNG and Australian Governments, in particular the Kokoda Initiative, NGOs, in particular KTF and No Roads Foundation, Churches and community partnerships. The trekking industry has also played a role especially in improving livelihoods as well as a role in contributing to education and health outcomes. Many trek operators including members of the Kokoda Tour Operators Association are also key funders and contributors to KTF. They provide critical resourcing to KTF's operations across the region.
3. In education, there is an ongoing need to invest in teacher training (pre-service and in-service) and ongoing development, foster a local workforce, support second-chance education pathways, and fill the gaps in infrastructure and maintenance across the region. This must be done in close partnership with the PNG Government and must account for pending structural changes to the schooling system.
4. In health, there is a need for more community education and awareness, ongoing upskilling and professional development of health workers, and continued collaboration among partners including PNG and Australian Governments, NGOs, and Churches.

5. The intervention that had the biggest impact across all respondents was the Village Connect project, whereby solar lighting and energy systems were installed onto 1,000 houses and 60 facilities across the region. This project had positive impacts on kerosene usage, study time, livelihoods, wellbeing and sense of security.

RECOMMENDATIONS

1. Continue to invest in and support the improvements across the region in education, health, livelihoods and wellbeing outcomes via consortia partnerships with communities, Governments, NGOs, Churches and the trekking industry.

2. Explore opportunities to respond to community desires to see the following changes in their villages:

- Permanent housing
- Clean and reliable water to households
- Transportation challenges
- Second chance education, human resourcing and employment pathways
- Youth issues

3. Renew the KTA scholarships program in 2020 and expand to other levels of schooling where resourcing allows.

4. Continue to review the gaps and needs of the communities across the region, especially human resourcing requirements in teaching and health worker positions in close consultation with the PNG Government.

5. Develop a sustainable maintenance plan for previous infrastructure investment and upskill and equip communities with the skills and resources they need to undertake maintenance themselves.

APPENDIX A: Summary & Research Findings; KTF's Kokoda College FODE Program

Summary of Kokoda College FODE

The Kokoda College is KTF's secondary and tertiary institution located adjacent to the rural community of Kou Kou Village in the Oro Province. Kokoda College was built by KTF with philanthropic funding between 2014 – 2016 and has been operating via a slow scale-up since the infrastructure was completed. The College currently comprises a FODE centre and in-service centre and will soon open a tertiary School of Education and School of Health for pre-service teaching and health work. The College campus onsite facilities include dormitories, mess hall, improved water and sanitation facilities and a training aid post.

Kokoda College became a registered FODE Training Centre in Oro Province in 2017. Due to changes in the PNG Government's minimum entry qualifications for tertiary training for teaching and health work, it became necessary for KTF to offer the FODE program prior to commencing its pre-service teacher and health worker training. KTF is working with DHERST in 2020 to register the campus to deliver these programs from 2021.

The College has been upgrading students' qualifications from Grade 10 to Grade 12 which is the new minimum entry requirement for elementary teaching and community health work. Only students who are committed to long-term career pathways in teaching and health work or nursing are accepted into the College. Tuition and boarding fees are fully subsidised through KTF's partnership with corporate, philanthropic and Government partners, including the Kokoda Initiative and DFAT's ANCP program.

Throughout 2019, FODE students participated in lectures and tutorials delivered by our academic principal, Mr Enosh Ben, as well as a group of subject-specialist tutors.

Students study at a self-determined pace and complete as many modules as their skills enable them to. We also have student support officers with special skills in gender and inclusive education on campus to support the students during their candidature.

The FODE Centre utilises a digitised version of the FODE curriculum; and all students are given a tablet in order to support their studies. Students rotate between face-to-face group lectures, one-on-one tutoring, and self-directed study at home. They share their time between campus and home every term.

In 2019, KTF enrolled 127 students at the Kokoda College:

- 76 x Grade 10 students
- 27 x Grade 11 students
- 24 x Grade 12 students

Critical partners of KTF's FODE program include DFAT's ANCP program, the Kokoda Initiative, Bank South Pacific, Lions Club of Park Orchards and donors via general fundraising.

Research Findings

As well as the research findings presented in the main report, the current research also undertook discussions with staff, students and community members at the Kokoda College. Key findings were:

FODE is a Second Chance Education Pathway: Staff and students commented on the fact that FODE is a second chance education pathway for them and that KTF's FODE program became available when they felt that all other options were lost.

This staff member explained that people from remote and rural areas often struggle to get the grades required for entry into further tertiary studies, and that FODE is a critical second chance pathway:

“ The view of FODE is that people see it as a second chance and opportunity. They think the conventional pathway is where all the A+ students go and that FODE is the second chance pathway. The access of people to services makes it hard to get good grades in the remote areas. Also, the lack of availability of the resources at other FODE centres, some students travel all the way to Popondetta town and the materials are not printed and the PMV fares cost and then they come to us because they have exhausted all their options.

(Staff member, Kokoda College)



Another staff member highlighted the opportunities available to people from the catchment region through pursuing FODE and then additional training with KTF:

“ It’s a second chance for them to pursue what they missed out on. They are able to go back and try again. Through FODE they are able to study at their own pace. People don’t have this opportunity and they’ve seen that this is the opportunity here at the Kokoda College and that’s why our numbers have increased.

One reason why it is so hard for people in the remote areas to get to Grade 12 is the environment, it’s their mindset that has shaped them and they think “I am in the village, I might as well become a village person”. I think they need more exposure and the more we keep exposing them to such things such as this FODE training that is happening at the Kokoda College they will think wider. I’ve spoken to some CHWs, that to be a health worker is not limited to being a CHW. You can go beyond that and become a nurse or doctor or health extension officer and therefore you need to upgrade and go for further studies.

(Staff member, Kokoda College)

FODE enables students to balance professional / personal commitments: The flexible nature of FODE enables a range of students to enrol including teachers and health workers who are currently engaged in employment positions operating schools and aid posts; as well as community members with family commitments in the village.

“ People often do not have enough time in the remote places to go to a formal upgrading program. So FODE makes it easy because it’s flexible and they can still do their work. In Kokoda it’s a good location and makes it easy for them to travel all the way to Popondetta or PoM if they need to go there too. Flexibility is key for people in remote areas as well as our teachers and health workers who need to keep working at the same time as doing their upgrading.

(Staff Member, Kokoda College)

FODE students overcome difficult circumstances to pursue their education: Another key theme that emerged from discussions with staff and students at the Kokoda College was the enormous odds and challenging circumstances that students must overcome in order to pursue their upgrading studies. This includes extremely difficult transportation, challenges in personal circumstances, and very busy lives with multiple commitments.

“ I think it’s something that they have been looking for. It’s a wish for them, but due to so many factors and their backgrounds they think ‘that’s it’. They couldn’t find an opportunity and they had been thinking about it and now someone has put this in front of them, that’s why they’re giving their best. We have more than 50% of our students who have lost at least one parent or both. We have single parents, unsupportive partners, so many challenges but the students are so dedicated to their studies.

(Staff Member, Kokoda College)

Discussions also concentrated on the physical challenges that many of the students must overcome in making their way to and from the College each term. Students come from along the Kokoda Track to as far away as the Tufi region and must travel by foot, dinghy, and PMV to access the College each term. In most cases, this does not deter their commitment.

“ Those coming from Tufi, they have to travel by dinghy for hours and pay boat fares and that was very difficult (before KTF came in to support their travel). Those walking from Manari and Efogi – it’s very tough! One student slept under the roots of the tree because it was dark. We had students from Kanga they swim rivers and they walk about 6 – 7 hours to come and they hold their tablets up above their heads and then swim to cross two rivers. The commitment is extraordinary. *(Staff Member, Kokoda College)*

Tuition fee subsidies at the Kokoda College make it possible for people from the remote areas to attend: Tuition fees for Kokoda College’s FODE program are fully subsidised by KTF. This is made possible thanks to a consortium of donors including DFAT’s ANCP program, the Kokoda Initiative, BSP, trek operators, Lions Club and general donors. The only fees that students are required to pay are a refundable deposit for their tablets. This is in stark contrast to students accessing other FODE centres around the country who have to pay expensive tuition fees per subject.

“ Other FODE centres are out of reach for most FODE students enrolled at Kokoda College. If they had to go to the Popondetta FODE office, they have to pay a registration fee, they have to overnight, extra expenses for tutorials and the fees per subject are very expensive. The FODE College in Popondetta is too expensive for the people from the remote and rural regions and the subjects have no tablets; they only have classes every Tuesday and Thursday. *(Staff Member, Kokoda College)*

Neighbouring and partner communities benefit from the Kokoda College operations:

The final main theme to emerge from conversations about the Kokoda College is that the surrounding communities of Kou Kou 1 and Kou Kou 2 benefit from the College operations. This is further explored in a formative evaluation of the Kokoda College available on KTF’s website; but neighbouring communities play a critical partner role in the College’s operations and also benefit from employment and other services support, such as the operating aid post on campus which is available to surrounding communities.

“ I feel that my community is benefiting here especially through employment in cooking and security, portering, logistics and helping with the orders. It’s a lot of money KTF is paying at the end of every month to workers; most of the community say that it’s a lot of money. It’s very very good. Every person in the community; I give them a turn at security and cooking. Everybody has their turn. No body brings complaints. The College is bringing finance and doing very well. *(Community Leader, Kou Kou 1 Village)*

Additional information can be found about KTF’s Kokoda College project on the KTF website.



APPENDIX B: Gaps in Educational Services

The following table outlines the main gaps in educational infrastructure, resourcing and staffing in schools and communities that participated in the research. This list is not a comprehensive list for the entire region.

- **Gorari Elementary School** – we need another classroom to be built. At the moment our Prep teacher is taking 60 Preparatory students in one class. We need another classroom and another teacher.
- **Sengi Elementary School** – we have a lot of need. I'm taking Elementary 1 and Elementary 2 at the same time. I have 20 x E1s and 22 x E2s. It's very challenging for me. I have only one classroom and it's crowded doubling both groups in the one class. I need another classroom and another teacher.
- **Efogi 2 Elementary School** – my need is that we have only one classroom. I need an office so that I can cater for my stationeries and resources because we have only one and all the children go in it. The classroom also needs an upgrade. KTF built that one and it's a bit run down now.
- **Sanananda Elementary School** – KTF built one of the classrooms; my need is children's learning materials. We need lots of books; mainly reading books.
- **Buna Elementary School** – we have more than 70 Preparatory children without a classroom and only 1 KTF funded teacher. Our village population is getting bigger. We have a lovely new KI classroom for the Grades 1 and 2 but our Preparatory children are taught under the mango tree. We urgently need a new classroom.

- **Efogi 1 Elementary School** – we need another classroom so that we can have another teacher; we have only one classroom so we didn't have any new intake of students this year.
- **Hoi Elementary School** – our main needs here are chairs and tables for the children and for the office to be completed. We need some minor building materials. Need a new blackboard too.
- **Abuari Elementary and Community Schools** – the elementary school has no proper classroom; we need a permanent double classroom. There are about 20 children enrolled at elementary. We want a new teacher and a new classroom. And a new teacher's house; will have to post someone in from outside for a while. Community school has two teachers, a head teacher and another teacher. There are about 50 – 60 children enrolled. The classroom built by KI is ok; but the old one is rotten – so it needs maintenance or a new one.
- **Manari High school** – since 2006 not many of our children go to high schools. Children can get their primary schooling in their home village and then they go to Mt Diamond high school. We are planning to build the high school in Manari – the big aim – the big plan – we are planning with headmaster; they gave us the land to build the high school (landowners are from Agulogo); land for high school. So that we can offer Grades 9 & 10 at Manari and then Grades 11 & 12 at Mt Diamond. This will really help the parents.



APPENDIX C: Main illnesses

The following table outlines the main illnesses treated across the region:

Most common illnesses treated in aid posts and health centres across the region:

- **Naduri:** General body ache, toothaches, arthritis, sores and ulcers, respiratory tract infection, malaria, accidents & injuries, diarrhoea, child and maternal health
- **Bagou:** Malaria, simple cough, pertussis, skin disease, YAWS
- **Buna:** Malaria, upper respiratory tract infections, pneumonia, simple cough, diarrhoea, abdominal pain, skin diseases, STIs, child and maternal health, stress and anxiety
- **Hariko:** malaria, upper repository infections, pneumonia, TB, injuries
- **Manari:** TB and malaria
- **Efogi:** Simple cough, general body aches, knife wounds from gardening, STIs
- **Sanananda:** Skin diseases, respiratory diseases, malaria, lacerations, minor cases, aches & pains, diarrhoea, STIs, pneumonia
- **Kou Kou:** Respiratory issues, malaria, skin diseases, YAWS, lacerations from violence, STIs, body aches and pain, headache, back joint, coughs, big accidents, asthmatic patients

APPENDIX D: Gaps in Health Services

The following table outlines the main gaps in health infrastructure, resourcing and staffing in health facilities that participated in the research. This list is not a comprehensive list for the entire region.

- **Kou Kou:** BP machine (manual); oroscope (torch in the ear); glucometer due to lots of people who have diabetes.
- **Bagou:** Increased supply of drugs; this aid post gets patients from a large region – from Killerton to Parahe to Humbuata to Soputa – large catchment region. Equipment needs include thermometer, tape measure (for antenatal), mattress and linen for bed.
- **Naduri:** Grasscutter; maintenance on aid post
- **Sanananda:** New aid post facility; Antibiotics, antimalarials. Need a permanent post; and a staff house. Need BP machine, glucometer, oroscope. Training needs – obstetrics and emergency, health admin & computing basics. Need solar infrastructure (KTF has since delivered)
- **Buna:** fridge, STI, HIV testing, Drugs: common drugs – amoxicillin, Panadol, chloroform, doxycycline or malarone. Sterile equipment; linens, curtains to close the windows for privacy, lawn mower to clean the area, incinerator, a laptop
- **Hariko:** Need suturing, kidney dish, forceps. Desperately needs solar; the aid post is bush materials – so need a permanent post; need drugs storage. Aid post needs all the equipment especially stethoscope, thermometer, oroscope, fetoscope, Hariko is having a problem with water – need to buy a new tank for the facility. Also need a laptop to send reports.
- **Transport needs on Northern Beaches:** Patients – referrals – transport & picking up drugs – it's becoming a problem. Need an ambulance.
- **Manari:** Clinic needs to be renovated, painted. Need another staff member. Solar for aid post & staff house.
- **Efogi:** Challenges – transport! And during emergencies it's hard to refer patients.



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