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2017 Key Achievements

**LIUWA PLAIN:**
- 1st well installed in Sibemi Village, providing easily accessible and safe drinking water
- Enrollment in grade 7 at Munde School increased from 18 students in 2016 to 32 students in 2017

**SOUTH LUANGWA:**
- 100% of Grade 7 girls in the Yosefe Girls Club passed to Grade 8, scoring an average mark of 83% on their final exams
- 88% of sponsored students can correctly describe how conservation leads to sponsorship through tourism
- 31 volunteers in the home-based education programme received 63 hours of specialised training and devoted more than 1,364 hours to supporting 40 disabled children

**LOWER ZAMBEZI:**
- 86% of theatre students describe themselves as having high levels of self-confidence compared to only 26% of non-theatre students
- 96% of students in the environmental education programme feel confident disseminating conservation messages

**NOSY ANKAO:**
- 5 Crowned Lemurs were translocated to Nosy Ankao
- 2 Community Rangers spent 231 hours monitoring lemurs in Bekaraoka Forest
- 14 members of the health committee received over 82 hours of training and held 3 health festivals, reaching over 100 residents on the island
How to preserve the great wild spaces and allow the people who live there to progress? It is one of the world’s great wicked problems. The Time + Tide Foundation doesn’t pretend to have all the answers, but we are passionate in our belief that eco-tourism is the best way to help achieve both of these objectives.

Our challenge is to show how conservation and tourism can better lives by the provision of tangible and sustainable social and economic benefits. We want to, in a slow and measured way, weave threads of connection between the resorts and their local communities.

The Board feels the Foundation is doing an incredible job of making progress with the successful delivery of numerous community based initiatives. These are as diverse as supporting sustainable seaweed farming off the Madagascar coast, translocation of Crowned Lemurs into a Nosy Ankao sanctuary, funding of a home-based education programme for disabled children in the South Luangwa region, and a number of Zambian education programmes that have successfully increased student retention, performance and opportunities.

Thank you to our Foundation Team, the Time + Time lodges and our generous donors – we are very proud of our association.

Sincerely,

Mark Carnegie
Trustee
Time + Tide Foundation
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In partnership with the Time + Tide tourism brand, our objective is to relieve protected African habitats from the human pressures that compromise biodiversity. We achieve this by investing in social and economic projects that residents identify as important for community enrichment and that harmonise with conservation priorities. Simultaneously, we emphasise that these benefits are only available because of tourism and measure how residents’ perceptions change as they consider the advantages of conservation over unregulated, often illegal resource harvesting. Moreover, we propose that residents actively participate in conservation efforts to increase the profitability of the protected areas, ensuring that these natural assets will be able to generate indefinite ecological, economic and aesthetic value.

The Time + Tide Foundation Philosophy

The Time + Tide Foundation promotes non-consumptive tourism as the most effective way for local communities and their natural environments to prosper symbiotically.
LIUWA PLAIN

Found in the upper Zambezi floodplains of Zambia’s Western Province, the remote and little known Liuwa Plain National Park spans an area of 3,660 km². The former King of Barotseland (as Western Province was previously known), King Lewanika, allowed his people to reside within the reserve to protect the wildlife. As a result of this tradition, today Liuwa Plain is the only Zambian national park that accommodates permanent residents, schools, clinics, and subsistence farming. In 2017, the plains flooded for the first time in 3 years, with an inundation of 1,079 mL of rain from November to April. Despite the logistical setbacks of the floods, Norman Carr Safaris opened the stunning King Lewanika Lodge in March 2017 – the first and only permanent lodge in Liuwa.

MUNDE SPONSORSHIP PROGRAMME

Munde Basic School has faced many challenges over recent years, including the unexpected departure of several heads of the school and abandoned development projects. In 2017 however, the school was assigned a new Head Teacher, Mrs. Mandiyana-Kalimono, who arrived with the determination to improve the academic quality at Munde. Since joining the school in January 2017, Martha has motivated the Munde Parent Teacher Association to conduct regular maintenance on the classrooms and to become more involved with school activities.
The Time + Tide Foundation continued its sponsorship programme for Munde students, accepting an additional 5 pupils to attend grade 8 at Kalabo Boarding School, with 2 of the sponsored students from 2016 continuing to grade 9. We found that the difficult transition from Munde Basic School to Kalabo Boarding School was causing students to fall behind in their classes, so in May 2017 we arranged for extra lessons for the students after school. Chinyama Mukinda, one of the first students sponsored by the Foundation, passed the government exam at the end of 2017 with the 4th highest score in his class.

In October 2017, 86% of grade 7 students at Munde sat for the exam and 84% qualified for grade 8. The top 5 Munde students scored an average of 85% this year, an improvement from an average score of 79% in 2016, which demonstrates the positive effect of this sponsorship opportunity on students’ performance.

As a result of this support to students in Liuwa, residents have become more cooperative with African Parks, the national park management authority. According to Kakoma Chinyawezhi, Liuwa Environmental Education Programme Officer, the reception to park officials has greatly improved over the past year, which he believes is due to residents in Munde and Sibemi having now experienced the tangible benefits of conservation and tourism through the Time + Tide Foundation.

SIBEMI COMMUNITY SCHOOL

Sibemi Village is located a few kilometres from King Lewanika Lodge, approximately 40 km from the nearest town of Kalabo. In 2010, the residents of Sibemi began a community primary school with a grade 1 class and have continued to add a class each year until the school reached full primary status (grades 1 – 7) in 2017. The school is managed by the Parent Teacher Association (PTA), which elected its first female Chairperson this year. At the end of term 3, 78% of the registered grade 7 students wrote their government exams and 78% of the students who took the exam qualified to grade 8. These are impressively high percentages for the first grade 7 class at this community school, which has received minimal support from the Ministry of Education over its seven years of operation.

The Time + Tide Foundation also invests in the long-term capacity of the school by sending motivated and qualified Sibemi residents to teaching college. Namuchana Mwangala was the first recipient of this sponsorship opportunity, and in 2017 he completed his second year at Solwezi Falls College with an average exam mark of 85% and the honour of being elected School President. Thanks to generous support from guests at King Lewanika Lodge, this year a well with a hand pump was installed in Sibemi Village, providing the first source of reliable, clean water for residents. The guests also donated 40 new desks to Sibemi Community School, which were delivered at the start of the 2018 academic year.

The residents of Sibemi have expressed their clear understanding of the interconnectedness between conservation, tourism and direct personal benefits. Moreover, they have taken an active role in protecting the national park by ensuring that no one from Sibemi engages in poaching activities, with 100% of PTA members claiming that wildlife poaching by Sibemi residents has ceased. African Parks corroborated this report by verifying that no apprehended poachers in 2017 originated from Sibemi and no confiscated snares were traced back to this village.

LOWER ZAMBEZI

Downstream from Victoria Falls and across the river from Mana Pools in Zimbabwe, the Lower Zambezi National Park stretches over 4,000 km², from the Chongwe River in the west to the Luangwa River in the east. For over twenty years Chongwe River Camp has hosted guests on the banks of the Zambezi, exemplifying their conservation philosophy through low impact infrastructure and activities. The Lower Zambezi National Park is bordered by three Game Management Areas (GMAs), which are home to an estimated 12,000 people. The Eastern Chiawa GMA is positioned adjacent to the national park entrance and contains the highest density of safari lodges. The Time + Tide Foundation supports educational projects in both the Eastern and Western regions of the Chiawa GMA, and we reached over 1000 pupils in 2017, through environmental clubs and courses as well as conservation-focused theatre.

Support to the school

More stable and conducive learning environment

- Increased Learner Performance
- Increased Learner Attendance
- Improved Lesson Quality

Source of community pride and appreciation for the benefits of conservation and tourism

“We explain to others by showing them the infrastructure and explaining that it is only because we are not engaging in poaching that we have these new buildings.”

Zero-tolerance attitude towards poaching
CHITENDE SECONDARY SCHOOL

While many of the tourism operators in the Lower Zambezi choose to sponsor schools closest to the park entrance, the Time + Tide Foundation extends its support to both the Eastern and Western GMAs in order to share the benefits of tourism widely. Since 2016, the Foundation has facilitated a theatre and performing arts society at Chitende School, with oversight from the talented actors at Barefeet Theatre, a theatre-for-development organisation based in Lusaka. In 2017, we combined conservation education with theatre, holding lessons out of doors and themed around the unique wildlife and habitats of the Lower Zambezi. The students adapted quickly to this redefined focus, with 91% reporting a tangible shift towards conservation-based theatre.

The students put on two plays at the school over the course of the year and performed twice at conservation functions in Kabwadu Village: once in July for a full day conservation event and again in September for an Inter-Schools Conservation Quiz. Their play for these functions was entitled “One Tree, One Life” and contained strong messages about the pressures from deforestation and the ecological impacts of the charcoal industry.

The theatre students continue to feel confident using English, with 100% stating they feel comfortable with public speaking compared with 74% of their non-theatre peers. According to surveys conducted over the course of 2017, theatre students are 37% more confident in their English writing abilities and 48% more confident in their ability to speak English than those students not in the theatre programme. Furthermore, theatre students reported a strong positive affiliation to studying in a conservation area, with 45% associating life in the Chiawa GMA with a sense of “adventure” and “fun,” while 0% of non-theatre students expressed the same sentiments.

For the second year in a row, the Time + Tide Foundation coordinated Youth Day at Chitende School in partnership with the Zambian National Men’s Network (ZNMN). Over the holiday, ZNMIN facilitators led afternoon and evening activities at the school, which included workshops on effective communication skills and how to manage challenging social environments. They also emphasised to students the role of tourism in enriching the learning environment at Chitende by providing extracurricular opportunities that would otherwise be unavailable in this remote area.

Positive Attitudes Towards Chitende School

<table>
<thead>
<tr>
<th>Theatre Students</th>
<th>Control Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenic Location and Exposure to Wildlife</td>
<td>91%</td>
</tr>
<tr>
<td>Conducive Studying Environment</td>
<td>64%</td>
</tr>
<tr>
<td>Sense of Adventure</td>
<td>45%</td>
</tr>
</tbody>
</table>

Theatre Students  Control Students
ENVIRONMENTAL EDUCATION

With support from the Time + Tide Foundation, in 2017 Conservation Lower Zambezi (CLZ), a non-profit organisation focused on anti-poaching and environmental education, hosted school visits from both the Eastern and Western areas of the Chiawa GMA and conducted outreach to 10 schools, working with over 380 students. Forty-eight top conservation club students from 5 different schools were hosted at the CLZ base camp during 4-day long fieldtrips, where they attended classes on animal behaviour, ecosystem webs, sustainable fishing, and wildlife tracking in between game drives, boat cruises, films, and conservation projects. Through outreach to schools, a wider variety of students were taught about the responsibilities of conservation organisations and the illegal activities in the Lower Zambezi such as poaching, over-fishing and habitat loss. Additionally, each school received lesson plans and student activity books to be used in their conservation club lessons throughout the year.

Because of the support from the Time + Tide Foundation, this year the environmental education programme incorporated lessons on tourism and its economic and social value to Lower Zambezi residents. During the school fieldtrips, Time + Tide Foundation Programme Officer Mwaka Mwitangiti visited the students to explain how they, often unknowingly, benefit from the presence of tourism through school programmes such as conservation clubs and the special excursions to the CLZ base camp.

SOUTH LUANGWA

The South Luangwa National Park is the second largest of Zambia's parks and the most prominent wildlife destination in the country. The park occupies 9,050 km² of the mid-Luangwa Valley and is bounded by the Mchinga Escarpment on the western side and by the Luangwa River on the east. Norman Carr Safaris (NCS) has been operating in the South Luangwa since the 1950s, making it the first and oldest safari company in Zambia. Since the onset of formal philanthropy in the late 1980s, NCS has donated over $1,000,000 USD to community and conservation projects in the South Luangwa.

FIELD-BASED EDUCATION CENTRE

As soon as the rains subside and the road through the Lupande GMA becomes passable, the Field-based Education Centre opens to students across 7 schools in Mfuwe as a fun, educational fieldtrip destination. Over terms two and three of 2017, the centre hosted 700 student visits for full day activities and quizzes, with pupils spending over 4,200 hours learning about local ecology in the interactive classroom and museum. The centre is managed by the non-profit Chipembele Wildlife Education Trust, and each year Chipembele educators design an academic curriculum that highlights the natural history of the area, with the 2017 topics focused on world wildlife, animal defenses, caring for animals, and predators. The students who participate in these fieldtrips are members of their schools’ conservation clubs, and together the experiences in the clubs and at the centre are meant to inspire students to become young environmental ambassadors.

Through questionnaires administered in 2017, we identified conservation club students as possessing a rich understanding of animal behavior, the region’s geography and sustainable natural resource use - knowledge that is integral in shaping conservation-friendly sentiments and livelihoods. Additionally, these students demonstrated a proactive approach to conservation, taking regular action to help the environment such as picking up litter, planting trees and campaigning against poaching and cruelty to animals. By contrast, the majority of students who did not participate in conservation clubs gave generic or passive answers as to how they partake in conservation, with the most popular responses being “I don’t kill animals” or “I tell people to conserve”. This comparison indicates the superior education of conservation club students as well as their specific, informed actions to conserve biodiversity.
application of physiotherapy for children with disabilities as well as the common causes of spina bifida, down syndrome, muscular dystrophy, cerebral palsy, bowed legs, and Erb’s palsy. Following Violet’s recommendations, we procured 7 standing frames and 5 special chairs for children in the programme with cerebral palsy to improve their posture, digestion, hip stability, and cardio fitness.

Towards the end of the year, Mikala returned to hold a workshop for the caregivers focused on autism, specifically how early brain development can lead to autism. There is currently one child in the programme with autism; however, now that the caregivers have improved knowledge on the disorder, they are in a better position to seek out other autistic children and offer support. One hundred percent of caregivers asserted that they enjoy their work through the home-based programme because they find it rewarding (50%) and empowering (50%).

In May 2017, at the We Are Africa tourism trade show, Time + Tide received the Engage Africa innovation award for its commitment to disabled children in the South Luangwa.

KAPANI SCHOOL PROJECT

In 2017, the Kapani School Project registered 92 students in the sponsorship programme, with 30 newly admitted pupils, for a total of 43 girls and 49 boys. These students were sponsored across 9 primary and secondary schools in the Eastern Province and 15 tertiary institutions across the country. Five college students graduated over the course of 2017, 4 with teaching degrees and 1 with a degree in agriculture. Additionally, 6 students graduated from secondary school after completing their final government exams in November.

HOME-BASED EDUCATION PROGRAMME

Over the second year of the home-based education programme, we recruited an additional 10 children, increasing the enrollment to 40, with 31 volunteer caregivers offering support on a weekly basis. From February through December 2017, the caregivers visited the assigned children and their families on average once per week, with the programme coordinators monitoring the progress of the children and the effectiveness of the caregivers on a monthly basis. In early 2017, the caregivers elected a new female vice-coordinator and female secretary to lead the programme, both of whom travelled to Lusaka in December to represent our project at the national meeting of home-based caregivers.

In February 2017, Mikala Mbewe and Robam Mwaba, the director and chairman of the Bauleni Special Needs Project, returned to Mfuwe to conduct a three-day workshop for parents and guardians of handicapped children. Through this workshop, Mikala and Robam explained the origins of the children’s disabilities and the daily responsibilities of guardians to help their children improve and develop. Over the three days, the guardians shared their experiences of raising handicapped children in a community that is traditionally suspicious and afraid of disabilities. They also discussed ways to support each other in the absence of specialised schools and government services.

In May 2017, we welcomed back Mikala Mbewe, this time with Violet Sitwala, an Education Programme Officer at the Archie Hinchcliffe Disability Intervention in Lusaka. Violet led a two-day workshop for the home-based volunteers on the theory and practical
In September 2017, we introduced a computer-based English language programme to Yosefe Primary School called Learn English Now, which is designed to help students improve their English vocabulary, pronunciation and comprehension. Over 70 primary students benefitted from this programme as part of their English and Computer Science courses, with plans for expansion in 2018.

Thanks to support from Global Sojourns Giving Circle, in 2017 the Time + Tide Foundation enhanced the activities in the Yosefe Girls Club. Over the course of the year, 21 girls devoted 61 hours to Girls Club activities through club sessions and fieldtrips. The club followed the Adolescent Girls Empowerment Programme (AGEP) health and life skills curriculum, specifically the courses on informed decision-making, open communication, gender roles, and gender stereotypes. Underlying all club lessons was a complementary English language component, written and verbal, that ensured the girls were consistently using English while simultaneously learning how to maintain happy and healthy lifestyles.

EMMANUEL BANDA, 8 YEARS OLD
CONDITION: SPINA BIFIDA AND HYDROCEPHALUS

Emmanuel is paralysed from the waist down and confined to a wheelchair. Prior to the home-based programme, he spent most of his time at home as it was a challenge for him to travel to school each day. With the onset of caregiver support, Emmanuel became more conversant and the caregiver started teaching him how to count and read. Through this interaction, Emmanuel’s mother observed the natural inquisitiveness and intelligence of her son and began taking him to school. In 2017, Emmanuel was the top performing student in his grade 1 class, a position he is determined to maintain for 2018. The head teacher at his school reported that his attendance record last year was impeccable and he arrived each day with a bright, contagious smile. Emmanuel’s favourite subject is Mathematics and he aspires to become a Mathematics teacher.

<table>
<thead>
<tr>
<th>Ability Level</th>
<th>Before intervention</th>
<th>Mar 2017</th>
<th>Nov 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responding</td>
<td>100%</td>
<td>80%</td>
<td>100%</td>
</tr>
<tr>
<td>Sitting</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Standing</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Walking with assistance</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Walking</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Feeding self</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Dressing self</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Child understands volume</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Volunteer understands child</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Remembering</td>
<td>0%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Grasping objects</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Playing</td>
<td>0%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Speaking</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Where 100% indicates full capability and 0% indicates incapability
Weekly club lessons were interspersed with fun activities such as a visit to one of the top girls boarding schools, a theatre workshop, cooking lessons, picnics, parents’ day, mentorship sessions with female entrepreneurs in Mfuwe, and of course the end of term celebratory parties.

Towards the end of the school year, we administered a second round of the Functional Literacy Assessment Tool (FLAT) to measure the girls’ English literacy levels. We conducted the same assessment at the beginning of term 2 and re-tested in term 3 to track changes in the girls’ reading abilities over the past 6 months. Impressively, every single girl showed improvement in her reading ability, with 86% of girls scoring as functionally literate, an improvement from 73% in term two.

One hundred percent of grade 7 girls in the club passed to grade 8 and one hundred percent of the girls who took their grade 9 government exams passed to grade 10.

**JACKLINE SOKO**

Jackline Soko has been accepted to Katete Secondary School for Grade 8, one of the top girls boarding schools in the Eastern Province. This accomplishment was well deserved as she worked diligently in both school and the Girls Club over 2017, achieving an average of 88% in her English class. Her results and determination led to Jackline being selected for sponsorship under the Kapani School Project. As the eldest of 7 children with unemployed parents, she would have been otherwise unable to afford the expensive fees for this boarding school.

She shared the following with us this year: “Before [girls club] I was failing to answer questions in class and I did not understand when the teacher was speaking. Now I feel very good about myself… I am Jackline and I want to finish school and become a doctor.”
At 360 hectares, Nosy Ankao is the largest island within the protected Levens Archipelago, the marine portion of the greater Loky-Manambato Protected Area. Over the past 5 years, the development team has been working to restore the island by planting endemic Madagascan vegetation, with an additional 28,000 trees planted in 2017, bringing the total reforestation effort to over 78,000 trees. Miavana Resort formally opened in April 2017, offering permanent employment to 78% of Nosy Ankao residents and hundreds of temporary jobs to local construction employees. In addition to the eco-resort, the island acts as a sanctuary for endangered species, with a full-time environmental team monitoring the island’s wildlife and collecting data for regional scientists.

CROWNED LEMUR CONSERVATION

In July 2016, 62 Crowned Lemurs (Eulemur coronatus) from the Bobankora Forest in the Loky-Manambato Protected Area were poisoned and dried. The meat was en route to the local restaurant industry when rangers intercepted. These endangered lemur were to be sold at the equivalent of $1.64 USD each in the city of Sambava. As a result of this poaching incident, only 3 Crowned Lemurs remained in the Bobankora Forest as of October 2016.

This tragic incident inspired a collaborative conservation project between the Time + Tide Foundation, the Madagascar Biodiversity Partnership, the Ministère de l’Environnement, the University of Antsiranana, and Miavana. Through further research, we identified the Bekaraoka Forest, which is located within the same protected area, as containing several family groups of Crowned Lemurs. With funding from Zoos Victoria, we approached the community adjacent to Bekaraoka Forest, the Amparihirano Community, to seek their permission for a long-term project of economic and social support with immediate actions to safeguard Crowned Lemurs.

Starting in April 2017, we hired two full-time rangers to conduct regular sensitisation on habitat degradation, poaching and the benefits of conservation and tourism. Additionally, we facilitated 22 visits from a medical doctor to Amparihirano, devoted more than 15 hours to training community members on horticulture and nursery management and signed an agreement for a multi-year translocation effort of Crowned Lemurs from Bekaraoka to Nosy Ankao. The objective of the translocation is to offer fragmented family groups a safe location in which to breed. The lemurs born on Nosy Ankao will eventually be moved back to Bekaraoka Forest in order to boost Crowned Lemur population numbers on mainland Madagascar.

At the start of the project, 96% of surveyed Amparihirano residents reported their income to be insufficient. Accordingly, Miavana developed guest excursions to the Bekaraoka Forest, with 27 trips over the course of 2017 and more than $2,300 USD spent on local goods and services, proving to Amparihirano residents that conservation of lemurs is far more valuable than poaching.

In September of 2017, the Madagascar Biodiversity Partnership radio collared the first four individuals to be translocated – 2 males and 2 females – and trained a Biology Master’s student from the University of Antsiranana, Odilon Assany Feno, on how to track the animals and collect data on their location, behaviour, diet, and interactions with other lemurs. Odilon spent more than 2 months in Bekaraoka Forest, until the capture team returned in mid-November. Remarkably, one of the collared females gave birth the day before the scheduled translocation, so we had the delightful addition of a fifth lemur to move to Nosy Ankao. Once on the island, the lemurs dispersed into the forest, where Odilon and the environmental team tracked them intensively for 4 weeks until Odilon returned to the university for final exams. Now, the environmental team monitors the lemurs daily, continuing to record data on their locations and diet.
The environmental team conducted turtle monitoring for 343 days of the year, recording 192 sightings of marine turtles and 60 active nests on Nosy Ankao and the neighbouring island of Nosy Manampaho. In December 2017, we hosted Dr. Faravavy Rasoamanendrika, a marine turtle specialist and lecturer at the University of Antsiranana, to reinforce the capacity of the environmental team. Dr. Faravavy reviewed species identification by tracks and introduced nocturnal monitoring to enable the team to confirm species by visual sightings. In addition to the environmental team, Dr. Faravavy held workshops for the Nosy Ankao primary school students and 3 departments at Miavana, spending the most time with the island’s security personnel who patrol the beaches daily. This workshop included the protocol for spotting sea turtles on the island and what to do when nests are laid in areas of severe erosion.

In March 2017 the environmental team participated in a feasibility assessment by Association Vahatra and Island Conservation for rat eradication in the Nosy Ankao archipelago. Rats that are introduced to islands can decimate endemic wildlife populations and irreparably alter the biodiversity of these isolated and fragile ecosystems. The team visited four of the islands within the archipelago and discussed the benefits of eradication with local residents, all of whom would need to play an active role in a post-eradication biosecurity plan by agreeing to limit boat movements. Most fishermen travel to these islands to collect water, so in 2018 the Time + Tide Foundation will explore installing a well on the mainland, where the drinking water is more potable and easily accessible to the archipelago residents.

The students from the University of Anstiranana returned to Nosy Ankao for the second round of coral reef monitoring in August 2017, thanks to continued support from the Marine Conservation Action Fund. Through questionnaires administered to the students at the start of the project and again in July, we have seen significant improvements in their knowledge of coral biodiversity, the major anthropogenic threats to coral reefs and the effects of climate change on marine life, with 100% of students now able to explain these effects as opposed to only 20% at the start of the project. Equipped with the coral reef data,
Professor Amelie Landy, the students’ supervisor, was accepted to present a poster at the Western Indian Ocean Marine Science Association’s (WIOMSA) 2017 symposium. In late October, she travelled to Dar es Salaam, Tanzania where she was the only scientist from northern Madagascar and the first professor from the University of Antsiranana to attend.

Dr. Steve Goodman, a conservation biologist working at Association Vahatra, returned to Nosy Ankao in September 2017 to strategise with the environmental team on more effective tern monitoring on the island of Nosy Manampaho. Annually, as many as 75,000 nesting pairs of Sooty and Crowned terns reside on Nosy Manampaho between the months of June and September, making this island one of the most important seabird colonies in the Western Indian Ocean. Starting in 2018, we will enhance our monitoring of tern population numbers and breeding success with a combination of aerial and ground-truth surveys.

HEALTH LITERACY

In early October, we welcomed back the Malagasy non-profit YES-TaFiTa for another workshop with the Nosy Ankao health committee and to lead a public health campaign on the importance of sanitation and hygiene. Over the course of 9 days, the facilitators trained 14 community health leaders on behavior change communication techniques and certified the leaders as water, sanitation and hygiene (WASH) advocates. This qualification has empowered the health committee to address sanitation issues within their communities through daylong WASH exhibitions held once each month on Nosy Ankao.

Beginning in September, we were fortunate enough to include Dr. José Randrianampy as part of the Miavana and Time + Tide Foundation teams. Dr. José brings 17 years of experience as a medical doctor in Madagascar and mainland Africa and is responsible for overseeing all medical matters on the island, including supervision of the health committee.
In 2018, the health committee will begin public health outreach to the communities within the archipelago, bringing tangible and direct support to protected area residents. In remote places of Madagascar, diarrhea, dehydration, typhoid, dysentery, bilharzia, and cholera can arise from poor sanitation and hygiene, especially in places without healthcare personnel or support. By equipping community health leaders with the knowledge to educate their families and peers, the Time + Tide Foundation plans to provide practical solutions to some of the common ailments in Madagascar.

Through the expertise of the health committee, we wish to engage archipelago residents on the linkages between community health and conservation concerns. As a member of the Planetary Health Alliance – a consortium of organisations, academic institutions and individuals that are committed to global environmental change and human health – the Time + Tide Foundation collaborates with local communities to ensure residents have access to healthcare support as well as sufficient, sustainable marine resources.

**SEAWEED FARMING**

The seaweed farmers in Ampasimadera increased their cultivation of the species *Eucheuma spinosum*, their primary seaweed crop, exporting a total of 200 tonnes of dried seaweed to the American company Food Machinery Corporation in 2017. Different species of red seaweed contain various types of carrageenan, a common food additive. *Spinosaum* is specifically harvested for iota-carrageenan, which is used as a thickening, binding and gelling agent.

In September, we facilitated training for teachers at the Ampasimadera and Nosy Ankao primary schools, with the objective of augmenting confidence and efficiency levels for the teachers before the final term of the year. Due to the remote location of the school, teachers in Ampasimadera do not receive regular support from the Ministry of Education, nor are they adequately informed on the latest developments in the national primary school curricula. Working with the Antsiranana office of Alliance Française, an organisation devoted to promoting and sharing the French language and cultural diversity, the training resulted in a 30% increase in the teachers’ confidence in preparing class material and 20% increase in teachers’ confidence in managing their classroom environments.

By becoming economically independent from the fishing industry, seaweed farmers help to reduce the exploitation of the limited fish stocks within the archipelago. In support of this conservation-friendly enterprise, the Time + Tide Foundation provides educational and healthcare benefits to seaweed farmers and their families. In 2018, we will strengthen this partnership by exploring the socio-ecological characteristics of the seaweed farming communities. Specifically, we have an interest in how Miavana and the Time + Tide Foundation can encourage additional economic activities that, like aquaculture, are both profitable and aid in the conservation of vulnerable marine resources.
2017 Financial Overview

* All figures in US Dollars and based on preliminary analysis. Audited accounts will be available upon request from September 2018.
Funders + Partners

The Time + Tide properties generously support all administrative and operational costs for the Time + Tide Foundation, as well as numerous in-kind contributions at the respective lodges.

Funding for our projects is provided through private donations and grants, with 100% of raised funds allocated to our projects on the ground. We wish to thank the below companies, organisations and individuals for their commitment to conservation and sustainable resource use in these four remarkable protected areas.

MAJOR PRIVATE DONORS

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- Greg and Mary Moga
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