LIFE ON THE FRONTLINE 2019
A global survey of the working conditions of rangers
CONTENTS

Forewords 1
Executive Summary 3
The Ranger Survey in Context 5
Methodology 7
Survey Sites by Country 9
Global Overview 11
Global Data 13
Africa 27
South Asia 41
East and Southeast Asia 55
Latin America 69
Further Regional Comparison 83
China-Russia Tiger Landscape Case Study 85
Philippines Case Study 86
Recommendations 87
Myanmar Community Surveys 89
Philippines Community Surveys 95
Global Ranger Nomenclature 103
Study of Ranger Deaths 105
Rangers and International Labour Standards 107
Comparing Ranger and Police Salaries 109
Rangers at World Heritage Sites 111
Ranger Stress Survey Pakistan 113
Ranger Insurance Study 117
Rangers and the Law 121
Acknowledgements 127
Forewords

Sustainable Development Goal 15 aims to “protect, restore and promote sustainable use of terrestrial ecosystems, [and] sustainably manage forests.” When adopting this Goal among the 17 Sustainable Development Goals, the international community recognized that it must take action to protect the ecosystems that are home to more than 80 per cent of the terrestrial species of animals. During the High-level Dialogue of the XIV World Forestry Congress in 2015, the participants declared that “wildlife management can provide benefits for food security, livelihoods, natural heritage, and biodiversity and ecosystem conservation.” They also called for combating the illegal trade in wildlife.

But none of these lofty goals can be realized without wildlife rangers.

Public wildlife rangers are at the forefront of the struggle to preserve uncountable species that are victimized by multiple consequences of human activity. As with all public servants, it is the duty of governments, and indeed of society, to ensure that they have the proper tools and working conditions to carry out their work. Decent work, the heart of the ILO’s mission, requires the protection of workers’ rights, adequate income and social protection. As the ILO Director-General stated in 2016, “decent work is key to reducing poverty, inequality and breaking out of the slow growth trap.” As a result, it is the central feature of SDG 8 on decent work and economic growth.

For that purpose, the international community, gathered in the ILO, has adopted a number of International Labour Standards that cover many areas of work that wildlife rangers care about and are discussed in this report. Among these areas, the ILO has adopted instruments to prepare for and confront climate change and conflicts; housing conditions; welfare facilities like water and sanitation; working hours; protecting wages; freedom to join workers’ organizations; the right to collective bargaining; protecting their civil and political rights and against the termination of employment; and in 2019, violence at harassment in the workplace.

This most recent Convention marked the centenary of the ILO, and highlights a sad but major requirement of today’s world of work that stems from public servants’ interaction with third parties, especially in dealing with sensitive matters such as issuing sanctions and fines, conducting inspections and prosecutions.

In 1998, the ILO adopted a Code of Practice on Safety and Heath in Forestry Work, which applies also to those engaged in the protection of forests. The tripartite ILO sectoral meeting on promoting decent work and safety and heath in forestry in 2019 noted the continuous relevance of this Code, and called for the ILO to initiate preparations for its update to include specific provisions on emerging issues such as climate change, new technologies, migration, and the informal economy, among others. This way it could become even more useful for those working in forests, including rangers.

This groundbreaking report allows us to survey the issues that affect wildlife rangers the most and establish priorities for future action. The reader will have the privilege of witnessing these challenges from the point of view of the rangers themselves, which adds great value as a starting point for such action. The choice of regions is particularly appropriate, since they are home to a wide variety of endangered species which require attention from the governments. This report contributes to the growing realization that those who protect these species and the surrounding natural environment are a crucial element in this effort, and that their ability to play their role requires decent working conditions.

We commend the WWF for this initiative and invite readers and policy-makers to create awareness of the challenges facing these dedicated public servants so member states and workers’ organizations can take positive actions on their behalf.

Carlos R. Carrión-Crespo
Sectoral Specialist for Public Service and Utilities, International Labour Organization

Rangers are unsung heroes. As Aldo Leopold stated for ecologists, rangers “live in a world of wounds…”. Tasked with safeguarding an open resource which is invaluable for mankind and life support system, the frontline cadre of rangers face numerable challenges on their professional and personal fronts. Hardly any comprehensive attempt exists at the global level for understanding the same.

“Life on the Frontline 2019” is perhaps the first of its kind report to document the untold perils of a forest ranger, covering the numerous professional and personal issues which dictate and shape field performance.

In the ongoing Anthropocene epoch, transformation of landscapes and urbanization have become a regular phenomenon and no country is an exception to it. The obvious sequel is loss of forest and extinction of species. The ongoing demand for wildlife body parts and derivatives, timber smuggling, encroachment of forest land, insurgency and extremism, diversion of forest land make the task more complicated. Additionally, imminent threat of climate change requires sustainable forests for adaptations, and the perpetuity of ecosystem services also needs forest. Hence, “guardians” of our forest wealth deserve all support with the state-of-the-art inputs for enhancing professional core competency, complemented by a sensitive welfare portfolio to ensure their personal well-being.

The Global Tiger Forum (GTF) values its partnership in this global effort, and will closely work with tiger range countries and partners to address the findings contained in the instant report.

Rajesh Gopal
Secretary General, Global Tiger Forum
As the world grapples with the poaching and illegal wildlife trade crisis, rangers on the frontline of protecting our wildlife and natural resources are exposed regularly to dangerous and life-threatening situations. I’ve witnessed this personally while working in the parks and protected areas of Africa and Asia.

I remember rangers reporting how they were no match for armed poachers. These poachers, backed by well resourced and sophisticated wildlife trafficking syndicates, have taken a massive toll in terms of injuries, and in increasing frequency, the deaths of rangers. Indeed the official on-the-job death toll has risen yet again in 2019 according to the International Ranger Federation and The Thin Green Line Foundation.

‘Life on the frontline’ reports on the largest and most comprehensive ranger welfare survey ever conducted in Africa and Asia. The report reveals that many rangers are struggling without basic welfare needs such as decent housing, medical care and adequate health insurance.

There are glaring gaps in access to basic training for new rangers and lack of regular training and upgrading of skills, inadequate communication equipment, lack of transport, low wages and ultimately, inability to respond to the ever-evolving tactics deployed by poachers.

The picture revealed by the data and ranger testimonies in this report are not surprising to me, but as disheartening as the results may be – and should – provide incentives for the surveyed countries and others facing similar challenges to take action and address ranger welfare.

There are simple, inexpensive changes that governments can implement immediately. For example, creating work schedules that allow adequate time for travel and home visits for rangers who work far from their families. Other changes – medical coverage, health insurance and access to adequate living facilities, not to mention tools to enhance safety and effectiveness of patrols – require financial investment but we must rally the international community to provide for our heroes who live on the frontline.

My hope is that this report sparks more interaction between countries of Africa, Asia and beyond so that administrative and management challenges can be elevated and resolved globally.

And my wish is that these survey findings influence far greater investment by governments that lead to significant improvements for rangers’ living and working conditions. These are the women and men who protect our natural heritage and deserve our attention, investment and deepest respect.

Dr Margret Kinnaird
Practice Leader, Wildlife, WWF International

We are in the midst of both a global extinction crisis and global poaching crisis that threatens decades of conservation successes as well as the survival of many species. Poaching is one of the greatest current threats to the conservation of species and their homes. Three of the world’s most loved species tigers, elephants and rhinos – are under threat from extinction. Increasingly involving large-scale, transnational organised crime, the current unprecedented spike in illegal wildlife trade poses a growing threat not only to wildlife but to the local communities that depend on these resources.

Rangers are the frontline of conservation. They are responsible for protecting these species and their habitats. Every day, park rangers risk their lives to protect wildlife and wild places from poaching and other threats. Sadly, it’s estimated over 1,038 park rangers have been killed in the line of duty over the past 10 years – a large percentage of these are due to commercial poachers and armed militia groups. Park rangers are generally under-equipped, underpaid, and often under-appreciated. These dedicated men and women need support, appreciation and respect from the world community – be that governments, conservation organizations or the general public.

The International Ranger Federation and The Thin Green Line Foundation have been supporting the cause for the past two decades. We have managed to support the families of 300 fallen rangers and trained thousands of rangers, but a lot still needs to be done for rangers and for their families left behind.

IRF & TGLF welcomes the study and findings. The results shed light on a much-needed aspect of ranger welfare, i.e. health and safety, which was also identified as one of the key gaps in the Estes Park Declaration of the 8th World Ranger Congress held in the USA in 2016. It is my hope that these results will not remain as merely interesting statistics but that they will help governments, conservation organizations, and the world community to both understand the needs of rangers, and know how to support them better, for “conservation without well-equipped and well-trained rangers is just conversation!”

Sean Willmore
President, International Ranger Federation (IRF)
Founder, The Thin Green Line Foundation

Life on the Frontline 2019 | 2
Given their indispensable role in preserving the global biodiversity upon which human well-being and sustainable development gains will depend, one might rightly wonder at the near total absence of information pertaining to ranger work prior to the undertaking of this study. The limited materials that did exist rarely included any feedback from rangers themselves. Things are different in this report, where we hear directly from 7,110 public-sector patrol rangers, surveyed at hundreds of sites across 28 countries.

Although a wide diversity of topics were addressed across the 197 questions contained in each survey, an analysis of results point towards certain themes that require urgent action from the governments that employ these rangers.

For many rangers the problems start early, with approximately one-third indicating that the training they received was inadequate to prepare them for the realities of their job. These findings clearly call for a thorough review and possible modification of training curricula, many of which are likely outdated or otherwise inadequate for the challenges faced by today’s rangers.

Concerningly, a slight majority of rangers believe that existing medical treatment was not adequate. This shows that more must be done to hasten the delivery of rangers to qualified medical professionals when the need arises – something that is worth further exploration by responsible government authorities.

Infectious diseases were also revealed to be a serious threat to ranger well-being, with a surprising 31 per cent contracting malaria within the prior 12 months, and 22 per cent contracting another disease or infection that required treatment. The fact that a majority of rangers indicated that their shelter is inadequate may partially explain this. Relatively low-cost improvements such as ensuring the availability of mosquito nets and clean drinking water at outposts would almost certainly lower infection rates.

Currently only 32 per of those surveyed ‘often’ or ‘always’ had access to mosquito nets at outposts. Clean drinking water access at these locations scored a dismal 51 per cent, and this number sinks even further during active patrolling (43 per cent).

Inadequacy or non-availability of key equipment is another issue that puts rangers at risk. About half of respondents believed that even their most basic equipment (uniform and boots) is insufficient for the job they do – shortcomings that would be magnified given the substantial patrolling distances usually required for the profession.
The fact that 32 per cent of rangers surveyed stated that they never have access to communication devices during patrol should both shock and surprise. The inability to communicate information in real time makes an already dangerous job far riskier.

Especially in light of the many shortcomings outlined above, it is alarming that a considerable majority or rangers have no insurance coverage for either serious injury or on-the-job death. This not only puts rangers at considerable risk, but their families as well. Given the inherent danger of ranger work, anything less than full coverage should be deemed a major failure on the part of government employers.

Major problems around remuneration also appear to exist in the ranger sector, with the majority of survey respondents believing they are not paid a fair wage, and about one-third claiming they were paid late on at least one occasion during the prior twelve-month period. Further research published here also shows the ranger wages (which were roughly 300 USD per month on average) are far below that of police officers, who are likely the most comparable public sector group.

A second set of highly important survey findings begin at page 89 of this publication. They show results from the separate survey of more than 3,000 local peoples living in close proximity to sites where rangers were also surveyed. Overall, their perceptions of rangers were positive, at least in the two countries surveyed (expanding to further countries will be a major priority). The community feedback also revealed an overwhelming preference to be directly included in conservation action and decision-making. These results beg the question as to whether governments are collaborating with these local stakeholders to the appropriate extent, or doing enough to bring rangers and communities together in ways that would reduce future potentials for conflict.

The last section of the publication, starting at page 103, is based on research and analysis rather than survey data, but does much to situate ranger work in the broader context. These pages cover a rather diverse selection of issues and will likely provide different highlights depending upon the reader’s interests.

To close, it is worth acknowledging that the problems communicated to us directly by rangers in this publication will in many cases point us towards the necessary solutions. However, implementing these solutions will require strong political will, financial investment and efficient collaboration with the many organizations that have a stake in rangers, or conservation more generally.

This study gives a strong voice to rangers, and shares with us many of their most pressing challenges and concerns. It now falls on governments and their partners to answer the call.
The Ranger Survey in Context

To determine whether the intensive effort and investments required to produce this study would be worthwhile, WWF first conducted an initial limited-scope pilot study of rangers in the Africa and Asia regions. The results of that effort were later published as *Ranger Perceptions: Asia* and *Ranger Perceptions: Africa*. *Ranger Perceptions: Latin America* will also be released shortly, while *Ranger Perceptions: Central America* was published by a separate coalition of environmental NGOs. These, along with another overview study *Ranger Insurance Report*, provided ample evidence that the day to day realities of ranger work included deeply concerning elements. In many ways, this was consistent to what those working closely with rangers had been hearing anecdotally for years. From this set of early publications, it became clear that a larger and more rigorous study would be required to make the case for change and to galvanize action.

This report should now be viewed as the primary document of reference on the topic of global ranger conditions. It replaces and improves upon last year’s publication *Life on the Frontline 2018: A Global Survey of the Working Conditions of Rangers*. The new elements incorporated into this 2019 report include:

- Thousands of new survey results from 11 new countries (including for the first time the Latin America region).
- A large section on community perceptions of, and experiences with, rangers. This is based on the results of more than 3,000 surveys filled by local community members living in or very near to ranger survey protected areas in Myanmar and the Philippines (see page 89).
- Expanded analysis of ranger work in the context of international legal regimes, including those governing labor standards (page 107) and the preservation of natural and cultural heritage (page 111). A comparative study of national laws that regulate ranger work in seven Asian countries is also included (page 121).
- An important analysis of what appears to be a considerable wage gap between police officers and patrol rangers in the survey countries (page 109).

- An in-depth look at both ranger insurance coverage (page 117) and ranger mortality rates (page 105).
- Other new items, such as an expanded analysis of regional variation in the survey findings (page 83), a case study on survey results from the Philippines (page 86) and the results of a stress survey of Pakistani rangers (page 113).

More analysis needed in the coming years:

Although this report is at present the last foreseeable major global WWF publication on the topic, there is still considerable potential for further analysis derived from the extensive volume of data generated during the course of the survey project. WWF encourages relevant subject matter experts (be they organizational-institutional or academic) to analyze relevant survey data along with the core research team before it becomes dated. The need to accomplish more with the considerable quantity of health-related data is particularly obvious.

National level feedback: WWF will present the national-level survey results to governments in all 28 participating countries throughout 2019 and 2020. Although the main purpose of this is to affect policy change and more efficient use of budgets in those countries, an effort will also be made to get permission to publish the national-level data, which can then be used by the wider conservation and development communities.

This survey should be repeated at regular intervals: It is suggested here that the main survey of ranger working conditions be repeated at five-year intervals, although likely at a reduced scale. This will allow for the tracking of positive and negative trends impacting the sector, as well as providing a good yardstick against which to measure the impact of governmental and NGO interventions made in support of rangers.

The community surveys need to be delivered in more countries: New partners will likely be needed in order to quickly expand the global coverage of this survey addressing community perception of rangers and protected area managers. Doing so for the first time in countries outside of Southeast Asia should be the immediate priority.
Methodology

28 countries surveyed  
465 survey sites  
38 months  
7,110 responses

The survey was delivered to rangers at 465 sites across 28 countries between September 2016 and October 2019, often in collaboration with local organizations. Of the 7,110 surveys that were returned, 6,241 contribute towards the main findings published in this report, and 869 were analyzed separately as regional case studies (85-86). Approximately one in five survey takers were also invited to participate in a short one-on-one interview, during which a survey delivery team member would record notes based on the answers given to set of questions. Some of these responses are included as quotes throughout the regional sections of this report.

The study was guided by the following principles and approaches:

Collaborative development: Although survey design was led by three individuals, dozens of experts were invited to give inputs during its development, which resulted in a number of important additions. In 2015, prior to any data collection, a two-day workshop was held in Cambodia, during which a number of experts (including rangers) met to discuss the draft survey and interview instruments. This enabled the project team to better contextualize both the questions and the logistics required to standardize data collection across numerous countries.

Public-sector and patrol rangers as sole survey targets: Two key criteria were used to determine eligibility for participation in the survey. One was that the rangers should be in the public sector, in the sense that they are paid wages by a government, and their position is characterized by accountability and duties to a government authority. The second prerequisite was that the ranger taking the survey must be involved in patrolling activities on a regular basis. It is also worth noting here that rangers go by multiple designations, with many survey respondents not formally referred to by the term ‘ranger’ in their home country (see page 103 for more on this).

Organizational and geographical representativeness, plus consistency in national sample size selection: In all surveyed countries considerable efforts were made to obtain an accurate estimate of the total number of public sector rangers (these figures can be viewed on pages 9-10). Plans were then designed around the objective of delivering surveys to roughly 20 per cent of rangers in each country, to an upper limit of roughly 750 responses. This was done to ensure that the data collection was; i) manageable for the survey teams; ii) did not interfere with the operations of the agencies involved, and; iii) provided sufficient response numbers for high-confidence statistical analyses. To the extent possible, survey sites were then selected in a manner reflective of the overall geographical and organizational distribution of rangers across that country. Examples of the latter would include distribution of rangers between ministries (e.g. environment vs forestry) or between different levels of government (e.g. federal vs state or provincial). While random sampling is often viewed as the best approach for survey research, the study adopted a convenience sampling strategy due to the fact that random sampling would have been limited by an inability to approach some rangers located at remote outposts.

Questions spanning a 12-month timeframe: Many of the survey questions prompted rangers on events that happened during the preceding 12 months at their workplace. By covered an entire year, this approach minimized the risk of skewing responses to questions influenced by seasonal variations (e.g. malaria infection rate, likelihood of contact with community members, etc.)
High-quality translations: The survey was translated into national or local languages when required, and the quality of each survey was verified by field staff working closely with rangers in each case. In instances in which the survey respondent was illiterate, a member of the survey delivery team would read the questions aloud to that person and assist them in recording their responses.

Training of survey delivery teams: The numerous teams that delivered surveys to rangers at selected ranger work sites were each provided with a comprehensive survey protocols document for reference and trained on those protocols either in person or online by the core project team. These teams would travel across a country to all selected ranger sites. These were almost exclusively individual protected areas, but in rare cases a training center or headquarters. In a few instances multiple regional survey delivery teams were trained, in order to conclude the national surveys in a timelier manner.

Strong privacy protections: Prior to the start of both surveys and interviews, informed consent procedures were followed. Rangers who were offered the opportunity to partake in the survey were informed that their participation was entirely voluntary. As an added layer of anonymity protection for surveys and confidentiality for interviews, verbal consent was provided to ensure that respondents did not have to record or sign their names. Survey and interview takers were provided with an alphanumerical code that corresponded to their submitted response sheets, which they could later reference at any point if they wished to have their response sheet destroyed and removed from any analysis.

To encourage full honesty, respondents were informed that neither individual responses nor site-specific results would be shared directly with their departments or any government officials. This was done in order to protect the safety and job security of both survey respondents and their managers at individual sites. Responses were at all times kept in the possession of survey delivery teams, which in all cases were composed entirely of non-governmental staff.

Additional factors impacting surveys: Although it is hoped that all results are an accurate reflection of ranger opinions, certain factors should be acknowledged when one conducts broad social science surveys of this kind, including:

- Cultural variation when it comes to expressing opinions on matters such as happiness, dissatisfaction, or other topics that can be highly sensitive in some regions (e.g. criticism of superiors, corruption, sexual misconduct, etc.)
- Sample sites selected are unlikely to be perfectly representative of a country as a whole. Financial limitations precluded the option of sampling at every single protected area in which rangers work in these countries.
- Some words or concepts used in the original English-language survey did not have precise counterparts in the language of the translated documents. This may have influenced certain responses for a limited number of questions.

The three issues above were mitigated to the extent possible by seeking advice from individuals familiar with the local organizational, cultural and linguistic contexts at various survey locations.

To reduce respondent fatigue, multiple breaks were also incorporated into the survey. In instances where multiple rangers sat to take the survey at the same time, they were instructed not to discuss its content until after they had concluded and left the survey location.

Community surveys in Myanmar and the Philippines followed similar protocols: Although shorter in length and developed by a smaller team, the community member surveys incorporated near identical protections and safeguards as to those used in the ranger survey.
Survey Sites by Country

Africa | South Asia | East and Southeast Asia | Latin America

Survey sites | Number of surveys | Estimated number of patrol rangers in country

Cameroon
- Survey sites: 109
- Number of surveys: 900
- Estimated number of patrol rangers: 201 (Oct-Nov 2017)
- Country: Central African Republic
- Survey sites: 37
- Number of surveys: 247
- Estimated number of patrol rangers: 1,300 (Jan-Jul 2018)

Uganda
- Survey sites: 610
- Number of surveys: 2,000
- Estimated number of patrol rangers: 409 (Jan-Jul 2018)

Central African Republic
- Survey sites: 88
- Number of surveys: 177
- Estimated number of patrol rangers: 412 (Jan-Jul 2018)

Kenya
- Survey sites: 514
- Number of surveys: 3,000
- Estimated number of patrol rangers: 223 (Jan-Jul 2018)

Tanzania
- Survey sites: 703
- Number of surveys: ~4,000
- Estimated number of patrol rangers: 140 (Oct 2018 – June 2019)

Myanmar
- Survey sites: 105
- Number of surveys: 412
- Estimated number of patrol rangers: 1,408 (Jan-Dec 2017)

Cambodia
- Survey sites: 201
- Number of surveys: 1,300
- Estimated number of patrol rangers: 409 (Oct-Nov 2017)

Malaysia
- Survey sites: 223
- Number of surveys: 1,408
- Estimated number of patrol rangers: 140 (June-Dec 2017)

Vietnam
- Survey sites: 409
- Number of surveys: 5,220
- Estimated number of patrol rangers: 140 (Feb-Aug 2019)

Thailand
- Survey sites: 409
- Number of surveys: 5,220
- Estimated number of patrol rangers: 140 (June-Sep 2019)
WWF does not endorse the borders of any map shown in this publication, nor any political position related to territorial claims.
### Global Overview

<table>
<thead>
<tr>
<th>Average</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>39.0 years old</td>
<td></td>
</tr>
<tr>
<td><strong>Time in current organization</strong></td>
<td>12.7 years</td>
<td></td>
</tr>
<tr>
<td><strong>Work as a ranger</strong></td>
<td>12.2 years</td>
<td></td>
</tr>
<tr>
<td><strong>Work in current conservation area</strong></td>
<td>9.5 years</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender breakdown*</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>♀</strong></td>
<td>462</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>♂</strong></td>
<td>5,669</td>
<td>92.5</td>
</tr>
</tbody>
</table>

*110 respondents did not answer the gender question

**Rangers surveyed (main study)**: 6,241

**Additional surveys delivered at case study sites**: 869

WWF does not endorse the borders of any map shown in this publication, nor any political position related to territorial claims.
Ranger is a collective term used to describe wildlife wardens, forest guards, foresters, scouts, watchers and other frontline staff. They are involved in practical protection and preservation of wild areas, historical and cultural sites. Moreover, they provide recreational opportunities and interpretation of sites, while providing links between local communities and protected areas.
Global Overview

Employment

Benefits from the work that I do

- Overtime compensation: 76.7% Yes, 20.1% No, 3.2% Unsure
- Extra pay for bad/dangerous work conditions: 78.3% Yes, 16.9% No, 4.8% Unsure
- Paid sick leave: 45.4% Yes, 30.7% No, 8.0% Unsure
- Paid annual leave: 63.6% Yes, 5.6% No, 3.2% Unsure

I have access to

- A union, work council or similar committee that represents employees: 38.1% Yes, 46.9% No, 15.0% Unsure
- A union, work council or similar committee that can ‘collectively bargain’ on my behalf: 30.2% Yes, 51.9% No, 17.8% Unsure

Being a ranger is a more difficult job than most people have in my country

- Strongly agree: 26.3%
- Agree: 42.6%
- Disagree: 24.6%
- Strongly disagree: 6.5%

My organization is required to provide notice of termination

- Yes: 61.1%
- No: 17.4%
- Unsure: 21.5%

Life on the Frontline 2019
I am paid this much in my local currency **USD 297.14 monthly**

**I am paid a fair wage**

- Strongly agree: 8.9%
- Agree: 36.0%
- Disagree: 33.1%
- Strongly disagree: 21.9%

**Average total hours I work weekly** Total: **72.3 hours**

**Average hours worked at night weekly** 6 PM-6 AM: **33.4 hours**

**During the last 12 months**

- I was paid late once: 32.8%
- I was paid late ≥ 3 times: 15.6%
- My payment was withheld for ≥ 2 months: 7.2%
- My salary was cancelled: 4.0%

**Type of employment contract**

- Permanent: 73.2%
- Limited duration: 23.4%
- No contract: 3.3%

**I have other paid jobs besides being a ranger** 5.5% have other jobs

---

*In data visualizations the colour orange correlates to the more concerning or ‘negative’ response categories for all non-neutral questions.

*Quotes with no citation are from rangers who were interviewed after completing the survey.*
The equipment provided is sufficient for the work that I do

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>20.1%</td>
<td>36.1%</td>
<td>18.8%</td>
<td>12.1%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Communication devices</td>
<td>13.8%</td>
<td>33.4%</td>
<td>28.7%</td>
<td>15.9%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Basic equipment</td>
<td>14.2%</td>
<td>39.9%</td>
<td>27.3%</td>
<td>15.5%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Shelter</td>
<td>9.7%</td>
<td>34.0%</td>
<td>30.2%</td>
<td>20.6%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Uniforms and boots</td>
<td>10.7%</td>
<td>39.4%</td>
<td>31.7%</td>
<td>16.7%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

I bought the following equipment with my own money

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>7.5%</td>
</tr>
<tr>
<td>Communication devices</td>
<td>31.7%</td>
</tr>
<tr>
<td>Basic equipment</td>
<td>12.2%</td>
</tr>
<tr>
<td>Shelter</td>
<td>43.5%</td>
</tr>
<tr>
<td>Uniforms and boots</td>
<td>61.9%</td>
</tr>
<tr>
<td></td>
<td>37.2%</td>
</tr>
</tbody>
</table>

**IMPACT OF NGO SUPPORT**

In one of the survey countries, all site managers were asked if their rangers received any equipment or training support from non-governmental organizations (NGOs). Interestingly, sites where NGOs provided equipment did not show a correlation with more positive ranger perceptions of their equipment. In fact, the only high-magnitude divergence between the NGO supported vs. non-NGO sites was that rangers at the latter had more frequent access to clean drinking water. Such findings might lead NGOs to consider whether the most basic necessities of ranger work are being adequately addressed, rather than limiting involvement to more technical or sophisticated types of support.

That noted, little here is conclusive, especially given the small survey size (less than 200) and the fact that NGOs in that country might deliberately target sites with greater needs. It does however invite further study as to the NGO impact on ranger welfare.
On patrol, I have access to

Always: 29.9%  
Often: 20.4%  
Rarely: 20.1%  
Never: 29.6%

At outpost/station, I have access to

Always: 26.1%  
Often: 17.9%  
Rarely: 20.3%  
Never: 35.7%

When on patrol overnight
I do not have shelter of any kind

Always: 13.5%  
Often: 23.1%

When I am on patrol overnight away from my main ranger base, I have access to

Building / structure

Always: 11.5%  
Often: 18.4%  
Rarely: 32.4%  
Never: 33.9%

Tent

Always: 19.6%  
Often: 24.8%  
Rarely: 33.9%  
Never: 28.9%

Roughly 3.5% responded ‘not applicable for the above three questions’
Health and Insurance

Global Overview

Diseases and injuries that I experienced over the last 12 months

- **Malaria**: 31.3% Yes, 68.7% No
- **Dengue**: 5.6% Yes, 94.4% No
- **Other serious disease or infection**: 22.2% Yes, 77.8% No
- **Broken bone**: 6.5% Yes, 93.5% No
- **Other serious injury**: 13.1% Yes, 86.9% No
- **Existing health problem made worse by work**: 17.5% Yes, 82.5% No

Average number of rangers who accompany me on patrol: **4.6 rangers**

I often feel exhausted

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically</td>
<td>3.8%</td>
<td>11.1%</td>
<td>48.0%</td>
<td>29.2%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Emotionally</td>
<td>3.3%</td>
<td>9.5%</td>
<td>38.5%</td>
<td>33.8%</td>
<td>14.9%</td>
</tr>
</tbody>
</table>
At outpost/station, I have access to

- Water: 31.0% Always, 24.5% Often, 20.6% Rarely, 23.8% Never
- Toilet: 20.6% Always, 23.8% Often, 30.0% Rarely, 24.3% Never

The basic necessities that I am provided (water, toilet etc.) are adequate

- Water: 10.8% Strongly agree, 42.3% Agree, 30.0% Disagree, 16.9% Strongly disagree
- Toilet: 15.4% Strongly agree, 16.5% Agree, 22.7% Disagree, 45.1% Strongly disagree

On patrol, I have access to

- Water: 16.8% Always, 25.8% Often, 27.8% Rarely, 29.5% Never
- Toilet: 8.9% Always, 12.9% Often, 22.5% Rarely, 55.6% Never

The basic necessities that I am provided (water, toilet etc.) are adequate

- Water: 35.0% Strongly agree, 45.1% Agree, 16.9% Disagree, 10.8% Strongly disagree
- Toilet: 55.6% Strongly agree, 27.8% Agree, 12.9% Disagree, 8.9% Strongly disagree

I think that being a ranger is a dangerous job due to chance of

- Strongly agree: 42.6%, Agree: 42.2%, Disagree: 10.9%, Strongly disagree: 4.4%
- Strongly agree: 32.8%, Agree: 45.4%, Disagree: 15.5%, Strongly disagree: 6.3%

For more information on the dangers of ranger work, see page 105.

The Thin Green Line Foundation (TGLF) protects nature’s protectors by providing vital support to rangers working on the frontline of conservation.

The Fallen Ranger Fund has supported over 100 families in essential areas including education, housing and assistance in establishing business enterprises. TGLF’s end goal is to support 100 per cent of fallen rangers’ families around the world.

Sean Willmore
Founder of TGLF
Health and Insurance

**My employee insurance scheme provides compensation in case of**

- Serious injury on the job: 41.8% Yes, 44.7% No, 13.5% Unsure
- Job-related fatality: 37.7% Yes, 44.7% No, 17.6% Unsure

**I have**

- Spouse: 78.3% Yes, 31.1% No
- Children: 80.1% Yes, 29.9% No

**When needed, the medical treatment that I am provided is adequate**

- Strongly agree: 10.7%
- Agree: 37.5%
- Disagree: 32.9%
- Strongly disagree: 18.9%

“WE ARE MONITORING THE HEALTH AND BEHAVIOUR OF WILD ANIMALS. SOMEONE SHOULD DO THIS FOR US TOO.”

For more information on ranger insurance please see page 117.
Training

**Global Overview**

**The training I received when I first started was sufficient for my job responsibilities**

- Strongly agree: 18.5%
- Agree: 47.0%
- Disagree: 25.9%
- Strongly disagree: 8.5%

**I feel that my organization provides sufficient additional training (such as refresher trainings)**

- Strongly agree: 18.7%
- Agree: 46.8%
- Disagree: 25.4%
- Strongly disagree: 9.1%

**Within the past 12 months, I went to the following types of training to improve my skills**

- First aid & emergency: 24.4%
- Navigation: 28.4%
- Wildlife conflict: 25.4%
- Crime scene investigation: 27.6%
- Firearms: 34.2%
- Tracking: 28.7%
- Ranger-based data collection: 31.9%
- Law and regulation: 36.7%
- Engagement /combat: 20.2%
- Wilderness survival: 23.5%
- Patrol tactic: 35.3%
The organization I work for shows concern for community members’ well-being and quality of life

28.5% 55.7% 11.5% 4.2%

Community members do not see me as an enemy

19.5% 11.4% 43.3% 25.9%

Community members believe that rangers respect the rights of the people they come in contact with

15.5% 3.0% 18.5% 63.0%

I believe community members respect me

12.9% 3.4% 20.6% 63.2%

Community members trust me

14.1% 3.7% 23.8% 59.7%

I believe that part of rangers’ success at their jobs depends on the community providing them with information

15.9% 4.6% 19.8%

For more information on community perceptions of rangers please see page 89.

Rangers from Neighbouring Communities

Survey responses did not show significant difference between rangers from nearby communities and those from more distant areas. This also held true for rangers’ perceptions of local communities and community-ranger relations.

The trust and support of local communities, characterized by a regular and constructive dialogue with rangers, is known to be one of the most critical factors in reducing the likelihood of poaching activities in protected areas. It encourages communities to report illegal incursions, which in turn makes such landscapes less permeable and appealing to organized poaching groups. It also makes ranger work safer and reduces tensions and misunderstandings that can lead to clashes between rangers and local peoples.

I am originally from a neighbouring community (within 20km of the park)

Yes 36.0% No 64.0%
The ranger profession around the world is predominantly male driven. Not surprisingly, this study reflects the disproportionate nature of the global ranger profession by the number of male and female study participants. Although male and female responses throughout the survey were highly similar overall, there were a few notable divergences, the majority of which are captured on this page.

When asked if their efforts were fairly rewarded by their organization, 52 per cent of women responded in the affirmative, compared to 60 per cent for men. Men are also eight per cent more likely to identify as a supervisor. Those numbers, and particularly the considerable gap in average age between male and female respondents, suggest that employers should review whether any form of gender bias (particularly in recognition and promotion) could be contributing factor to women (possibly) leaving the profession at higher rates.

The graph to the right illustrates the age gap between male and female survey takers from all 11 countries in which 15 or more surveys were filled by women. These were Cameroon, Columbia, India, Indonesia, Kenya, Mexico, Mongolia, Nepal, Tanzania, Thailand, and Uganda. Note that these countries are randomly distributed in this graph.

Future studies might benefit by broadening beyond the male-female gender binary that was used in this survey.

<table>
<thead>
<tr>
<th>My efforts are fairly rewarded by my organization</th>
<th>51.9%</th>
<th>60.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am a supervisor</td>
<td>24.4%</td>
<td>32.7%</td>
</tr>
<tr>
<td>Time as a ranger</td>
<td>7.6 years</td>
<td>12.6 years</td>
</tr>
<tr>
<td>While on the job I have been subjected to sexual harassment or violence by co-workers</td>
<td>2.6%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

"LAST YEAR I GOT PREGNANT BUT I HAD TO EXECUTE MY RESPONSIBILITIES, INCLUDING GOING FOR PATROLS. WE USUALLY PATROL FOR 15 DAYS BEFORE COMING BACK TO CAMP. I WAS PART OF THE PATROL UNTIL I WAS SIX-MONTHS PREGNANT. IT WAS AN EXPERIENCE I WISHED I COULD AVOID BUT Couldn’T BECAUSE NOT GOING TO THE PATROLS MEANT NO EXTRA ALLOWANCES WHICH I DESPERATELY NEEDED. MOST FEMALE RANGERS DO THIS, WHICH IS EXTREMELY RISKY FOR BOTH MOTHER AND CHILD."
**Global Overview**

**Misconduct**

Rangers would report their fellow rangers if they witnessed them accepting a bribe or engage in other corrupt and illegal activities

My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)

I would report a ranger if I witnessed them accepting a bribe or engage in other corrupt and illegal activities

I would be concerned for my safety if I reported a fellow ranger who I witnessed accepting a bribe or engage in other corrupt and illegal activities

IT IS FRIGHTENING TO NOTE THAT NEARLY SIX IN TEN SURVEYED WILDLIFE RANGERS FEAR FOR THEIR OWN SAFETY IF EXPOSING CORRUPTION IN WILDLIFE PROTECTION.

*Arne Strand, Director, U4 Anti-corruption Resource Centre, Norway*
Although community members were defined in the survey as ‘those living in or around the conservation area’, it is worth noting that in many cases rangers may have a limited ability to distinguish such locals from others who have entered the area to unlawfully extract or otherwise make use of biological resources. Even so, the results above are worrying and invite further study. For instance, it would be worthwhile to establish how factors such as human-wildlife conflict rates, or even the age of a given protected area, impacts these numbers.

Such findings are of considerable importance given that reduction of conflict and mistrust between rangers and local community members is an essential aspect of protecting the safety of both groups. For more on community perceptions of rangers, see pages 89-100.
## Workplace Dynamics

### Global Overview

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My efforts are satisfactorily rewarded by my organization</td>
<td>10.3%</td>
<td>11.6%</td>
<td>48.0%</td>
<td>30.1%</td>
</tr>
<tr>
<td>I'm proud of the work I do as a ranger</td>
<td>2.6%</td>
<td>1.1%</td>
<td>48.7%</td>
<td>47.5%</td>
</tr>
<tr>
<td>I am satisfied with my chances for promotion and advancement</td>
<td>10.1%</td>
<td>2.3%</td>
<td>35.8%</td>
<td>51.7%</td>
</tr>
<tr>
<td>I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death</td>
<td>10.3%</td>
<td>2.6%</td>
<td>15.1%</td>
<td>43.5%</td>
</tr>
<tr>
<td>My supervisor treats me with respect</td>
<td>23.2%</td>
<td>62.9%</td>
<td>10.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>I feel comfortable sharing my concerns with my supervisor</td>
<td>27.8%</td>
<td>58.2%</td>
<td>11.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>My supervisor’s decisions are equally fair to every ranger</td>
<td>19.8%</td>
<td>56.5%</td>
<td>18.5%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Clear objectives are communicated to me by management</td>
<td>22.2%</td>
<td>62.4%</td>
<td>12.1%</td>
<td>3.3%</td>
</tr>
<tr>
<td>There is good communication between the supervisors and frontline staff</td>
<td>20.1%</td>
<td>59.5%</td>
<td>15.0%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

### I am a supervisor

- **Yes**: 31.3%
Effectiveness of Laws

Global Overview

Rangers are doing a good job of preventing illegal activities in the conservation area

3.4% 0.8% 45.2% 50.6%

Strongly agree Agree Disagree Strongly disagree

The laws and regulations of my conservation area are in line with the moral values of local community members

6.8% 11.8% 25.1% 56.3%

Strongly agree Agree Disagree Strongly disagree

People arrested in the conservation area are treated too lightly by prosecutors

19.6% 40.8% 31.5% 8.1%

Strongly agree Agree Disagree Strongly disagree

People arrested in the conservation area are treated too lightly by judges

19.1% 39.3% 33.4% 8.3%

Strongly agree Agree Disagree Strongly disagree

People who commit crimes in the conservation area are not worried about the potential punishment they may receive if they are arrested

18.4% 40.0% 31.5% 10.1%

Strongly agree Agree Disagree Strongly disagree

I don’t think the law does a good job of deterring people from committing crimes in the conservation area

13.1% 34.5% 39.8% 12.6%

Strongly agree Agree Disagree Strongly disagree

LOW PROSECUTION RATES

The surveys revealed that rangers have limited faith in the ability or willingness of national legal institutions to appropriately punish the individuals that they apprehend during the course of their work. This issue of low prosecution and conviction rates for wildlife crimes is likely underappreciated as a major enabler of criminal involvement in the animal poaching and timber theft that puts rangers’ lives at risk, in that it makes such activities low risk and high reward. Negative impacts on the morale of rangers would also be expected if it becomes commonly believed that their hard work will go to waste due to the inattention or inaction of other institutions.
## Africa

### Average

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>35.6 years old</td>
</tr>
<tr>
<td><strong>Time in current organization</strong></td>
<td>9.7 years</td>
</tr>
<tr>
<td><strong>Work as a ranger</strong></td>
<td>9.4 years</td>
</tr>
<tr>
<td><strong>Work in current conservation area</strong></td>
<td>7.1 years</td>
</tr>
</tbody>
</table>

### Gender breakdown*

<table>
<thead>
<tr>
<th>Gender breakdown*</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>1,777</td>
<td>88.8</td>
</tr>
<tr>
<td>♀</td>
<td>225</td>
<td>11.2</td>
</tr>
</tbody>
</table>

*59 respondents did not indicate their gender

### Rangers surveyed

| Rangers surveyed | 2,061 |

© Greg Armfield / WWF-UK
I am proud to be a forest agent. Mostly to protect the forest so that our child should see the animals in the future.

— Ranger in Central African Republic
Employment

Benefits from the work that I do

- Overtime compensation: 72.6% Yes, 24.7% No, 2.7% Unsure
- Extra pay for bad/dangerous work conditions: 71.3% Yes, 24.6% No, 4.1% Unsure
- Paid sick leave: 60.9% Yes, 28.4% No, 10.7% Unsure
- Paid annual leave: 81.0% Yes, 2.7% No, 16.3% Unsure

I have access to

- A union, work council or similar committee that represents employees: 36.3% Yes, 49.0% No, 14.6% Unsure
- A union, work council or similar committee that can ‘collectively bargain’ on my behalf: 33.2% Yes, 49.3% No, 17.4% Unsure

Being a ranger is a more difficult job than most people have in my country

- Strongly agree: 27.7%
- Agree: 32.3%
- Strongly disagree: 28.6%
- Disagree: 11.4%

My organization is required to provide notice of termination

- Yes: 66.1%
- No: 14.6%
- Unsure: 19.3%
**I am paid this much in my local currency**

USD $249.11 monthly

- Strongly agree: 7.1%
- Agree: 27.8%
- Disagree: 34.5%
- Strongly disagree: 30.6%

**I trust my fellow rangers 100 per cent because I cannot go alone to the forest - and if I am wounded, he will carry me back to the village. We all wear the same uniform, so he is more like my brother.**

**During the last 12 months**

- I was paid late once: 40.7%
- I was paid late ≥ 3 times: 18.9%
- My payment was withheld for ≥ 2 months: 5.0%
- My salary was cancelled: 4.2%

**Type of employment contract**

- Permanent: 32.4%
- Limited duration: 66.8%
- No contract: 0.9%

**Average total hours I work weekly**

Total: 89.7 hours

**Average hours worked at night**

6 PM-6 AM: 52.0 hours

**I have other paid jobs besides being a ranger**

2.6% have other jobs

**I am paid a fair wage**

- Strongly agree: 7.1%
- Agree: 27.8%
- Disagree: 34.5%
- Strongly disagree: 30.6%

*In data visualizations the colour orange correlates to the more concerning or ‘negative’ response categories for all non-neutral questions*

*Quotes with no citation are from rangers who were interviewed after completing the survey*
Regional Overview - Africa

Equipment

The equipment provided is sufficient for the work that I do

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>35.9%</td>
<td></td>
<td>43.9%</td>
<td>11.0%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Communication</td>
<td>21.2%</td>
<td>37.9%</td>
<td>23.0%</td>
<td>13.4%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Basic equipment</td>
<td>16.6%</td>
<td>42.0%</td>
<td>24.9%</td>
<td>13.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Shelter</td>
<td>7.3%</td>
<td>22.4%</td>
<td>34.5%</td>
<td>33.0%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Uniforms and boots</td>
<td>11.8%</td>
<td>37.6%</td>
<td>29.7%</td>
<td>19.6%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

I bought the following equipment with my own money

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>4.9%</td>
<td>95.1%</td>
</tr>
<tr>
<td>Communication</td>
<td>19.4%</td>
<td>80.6%</td>
</tr>
<tr>
<td>Basic equipment</td>
<td>8.4%</td>
<td>91.6%</td>
</tr>
<tr>
<td>Shelter</td>
<td>17.2%</td>
<td>82.8%</td>
</tr>
<tr>
<td>Uniforms and boots</td>
<td>42.6%</td>
<td>57.4%</td>
</tr>
<tr>
<td></td>
<td>46.9%</td>
<td>53.1%</td>
</tr>
</tbody>
</table>
On patrol, I have access to

<table>
<thead>
<tr>
<th>Building / structure</th>
<th>Tent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.6%</td>
<td>18.5%</td>
</tr>
<tr>
<td>30.3%</td>
<td>32.6%</td>
</tr>
<tr>
<td>31.4%</td>
<td>27.1%</td>
</tr>
<tr>
<td>23.6%</td>
<td>18.0%</td>
</tr>
</tbody>
</table>

At outpost/station, I have access to

<table>
<thead>
<tr>
<th>Building / structure</th>
<th>Tent</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.6%</td>
<td>37.7%</td>
</tr>
<tr>
<td>19.3%</td>
<td>21.6%</td>
</tr>
<tr>
<td>11.2%</td>
<td>23.1%</td>
</tr>
<tr>
<td>5.1%</td>
<td>17.7%</td>
</tr>
</tbody>
</table>

The problem faced by rangers during patrol is that we don’t have adequate equipment to perform our work, like boots and raincoats.

When on patrol overnight
I do not have shelter of any kind

Always: 21.6%
Often: 21.1%
**Regional Overview - Africa**

**Training**

**Highest level of education completed**

<table>
<thead>
<tr>
<th>Highest Level of Education Completed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>2.5%</td>
</tr>
<tr>
<td>Elementary school</td>
<td>8.7%</td>
</tr>
<tr>
<td>High School (Secondary)</td>
<td>21.5%</td>
</tr>
<tr>
<td>Pre-tertiary program</td>
<td>42.0%</td>
</tr>
<tr>
<td>University/college</td>
<td>18.3%</td>
</tr>
<tr>
<td>Post-graduate degree</td>
<td>6.8%</td>
</tr>
<tr>
<td>Vocational</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

**The training I received when I first started was sufficient for my job responsibilities**

- Strongly agree: 27.6%
- Agree: 44.9%
- Disagree: 18.1%
- Strongly disagree: 9.5%

**I feel that my organization provides sufficient additional training (such as refresher trainings)**

- Strongly agree: 22%
- Agree: 41.9%
- Disagree: 22.8%
- Strongly disagree: 13.3%

**Within the past 12 months, I went to the following types of training to improve my skills**

- First aid & emergency: 25.7%
- Navigation: 25.4%
- Wildlife conflict: 20.3%
- Crime scene investigation: 21.5%
- Firearms: 36.7%
- Tracking: 26.9%
- Ranger-based data collection: 33.9%
- Law and regulation: 22.9%
- Engagement /combat: 26.4%
- Wilderness survival: 21.5%
- Patrol tactic: 34.1%

**ALL CONSERVATION EFFORTS IN AFRICA WILL AMOUNT TO VERY LITTLE WITHOUT A WELL-LED, WELL-SUPPORTED, WELL-SKILLED, WELL-RESOURCED, DEDICATED AND MOTIVATED FIELD FORCE.**
The organization I work for shows concern for community members’ well-being and quality of life

I believe that part of rangers’ success at their jobs depends on the community providing them with information

I believe community members trust me

Community members do not see me as an enemy

Community members believe that rangers respect the rights of the people they come in contact with

I believe community members respect me

I am originally from a neighbouring community (within 20km of the park)

Yes 26.2 %

No 73.8 %
Regional Overview - Africa

Health and Insurance

Diseases and injuries that I experienced over the last 12 months

- Malaria: 32.4% Yes, 67.6% No
- Dengue: 7.9% Yes, 92.1% No
- Other serious disease or infection: 36.1% Yes, 63.9% No
- Broken bone: 7.8% Yes, 92.2% No
- Other serious injury: 17.8% Yes, 82.2% No
- Existing health problem made worse by work: 21.6% Yes, 78.4% No

I think that being a ranger is a dangerous job due to chance of

When needed, the medical treatment that I am provided is adequate
On patrol, I have access to At outpost/station, I have access to

<table>
<thead>
<tr>
<th>Access</th>
<th>Always</th>
<th>Often</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.1%</td>
<td>14.7%</td>
<td>30.0%</td>
<td>38.3%</td>
<td>13.6%</td>
</tr>
<tr>
<td>13.4%</td>
<td>13.4%</td>
<td>26.2%</td>
<td>46.9%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access</th>
<th>Always</th>
<th>Often</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>38.0%</td>
<td>21.3%</td>
<td>20.8%</td>
<td>20.0%</td>
<td></td>
</tr>
<tr>
<td>21.2%</td>
<td>18.5%</td>
<td>29.6%</td>
<td>30.8%</td>
<td></td>
</tr>
<tr>
<td>18.4%</td>
<td>19.5%</td>
<td>31.9%</td>
<td>30.2%</td>
<td></td>
</tr>
<tr>
<td>21.6%</td>
<td>26.1%</td>
<td>36.2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My employee insurance scheme provides compensation in case of

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious injury on the job</td>
<td>48.9%</td>
<td>37.6%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Job-related fatality</td>
<td>36.7%</td>
<td>45.1%</td>
<td>18.2%</td>
</tr>
</tbody>
</table>

The basic necessities that I am provided (water, toilet etc.) are adequate

<table>
<thead>
<tr>
<th>Agreement Level</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically</td>
<td>9.1%</td>
<td>31.2%</td>
<td>33.1%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Emotionally</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I often feel exhausted

<table>
<thead>
<tr>
<th>Emotional State</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically</td>
<td>7.3%</td>
<td>12.6%</td>
<td>46.1%</td>
<td>28.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Emotionally</td>
<td>5.5%</td>
<td>11.2%</td>
<td>38.8%</td>
<td>32.6%</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

I have

<table>
<thead>
<tr>
<th>Relationship Type</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse</td>
<td>73.7%</td>
<td>36.7%</td>
<td>37.6%</td>
</tr>
<tr>
<td>IF YES, I live with spouse</td>
<td>13.4%</td>
<td>33.1%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Children</td>
<td>81.4%</td>
<td>18.9%</td>
<td>23.3%</td>
</tr>
<tr>
<td>IF YES, I live with children</td>
<td>45.1%</td>
<td>38.8%</td>
<td>32.6%</td>
</tr>
</tbody>
</table>

Average number of rangers who accompany me on patrol

5.2 rangers

Life on the Frontline 2019 | 36
### Misconduct

#### Regional Overview - Africa

<table>
<thead>
<tr>
<th>Category</th>
<th>While on duty</th>
<th>While off duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>20.9%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Co-workers</td>
<td>23.5%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Community members</td>
<td>38.2%</td>
<td>41.6%</td>
</tr>
<tr>
<td>Verbal abuse/bullying/harassment</td>
<td>12.9%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Threats</td>
<td>18.9%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Physical violence</td>
<td>23.5%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Sexual harassment/violence</td>
<td>4.1%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Verbal abuse/bullying/harassment</td>
<td>2.2%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Over the past 12 months, I was subjected to the following...
Some Rangers may participate in corrupt activities for personal gains, other Rangers would report their fellow Rangers if they witnessed them participating in corruption. It is my personal belief that corruption can be minimized by strict punishment, immediate termination from job and imposing heavy penalty on corrupt officials.
Regional Overview - Africa

Workplace Dynamics

My efforts are satisfactorily rewarded by my organization
- Strongly agree: 15.7%
- Agree: 12.6%
- Disagree: 40.3%
- Strongly disagree: 31.4%

I'm proud of the work I do as a ranger
- Agree: 47.3%
- Strongly agree: 3.8%
- Disagree: 2.0%
- Strongly disagree: 47.0%

I am satisfied with my chances for promotion and advancement
- Strongly agree: 27.8%
- Agree: 11.7%
- Disagree: 29.8%
- Strongly disagree: 30.7%

I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death
- Strongly agree: 6.8%
- Agree: 3.4%
- Disagree: 40.9%
- Strongly disagree: 48.9%

I believe that my supervisor treats me with respect
- Strongly agree: 23.1%
- Agree: 55.2%
- Disagree: 14.9%
- Strongly disagree: 6.9%

I feel comfortable sharing my concerns with my supervisor
- Strongly agree: 29.0%
- Agree: 55.4%
- Disagree: 10.4%
- Strongly disagree: 5.3%

My supervisor's decisions are equally fair to every ranger
- Strongly agree: 17.0%
- Agree: 49.4%
- Disagree: 23.9%
- Strongly disagree: 9.7%

Clear objectives are communicated to me by management
- Strongly agree: 19.0%
- Agree: 59.0%
- Disagree: 16.3%
- Strongly disagree: 5.7%

There is good communication between the supervisors and frontline staff
- Strongly agree: 17.5%
- Agree: 51.4%
- Disagree: 19.3%
- Strongly disagree: 11.8%
Effectiveness of Laws

Regional Overview - Africa

Rangers are doing a good job of preventing illegal activities in the conservation area

- Strongly agree: 63.4%
- Agree: 33.5%
- Disagree: 2.0%
- Strongly disagree: 1.1%

The laws and regulations of my conservation area are in line with the moral values of local community members

- Strongly agree: 48.0%
- Agree: 26.4%
- Disagree: 12.2%
- Strongly disagree: 13.4%

People arrested in the conservation area are treated too lightly by prosecutors

- Strongly agree: 25.9%
- Agree: 37.6%
- Disagree: 26.7%
- Strongly disagree: 9.8%

People arrested in the conservation area are treated too lightly by judges

- Strongly agree: 26.4%
- Agree: 38.9%
- Disagree: 25.7%
- Strongly disagree: 9.0%

People who commit crimes in the conservation area are not worried about the potential punishment they may receive if they are arrested

- Strongly agree: 27.2%
- Agree: 38.7%
- Disagree: 10.7%
- Strongly disagree: 10.7%

I don’t think the law does a good job of deterring people from committing crimes in the conservation area

- Strongly agree: 14.0%
- Agree: 31.9%
- Disagree: 38.4%
- Strongly disagree: 15.7%
### South Asia

#### Average

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>40.4 years old</td>
</tr>
<tr>
<td><strong>Time in current organization</strong></td>
<td>15.1 years</td>
</tr>
<tr>
<td><strong>Work as a ranger</strong></td>
<td>14.4 years</td>
</tr>
<tr>
<td><strong>Work in current conservation area</strong></td>
<td>9.2 years</td>
</tr>
</tbody>
</table>

#### Gender breakdown*

<table>
<thead>
<tr>
<th>Gender breakdown*</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>1,706</td>
<td>95.8</td>
</tr>
<tr>
<td>♀</td>
<td>74</td>
<td>4.2</td>
</tr>
</tbody>
</table>

*Three respondents did not indicate their gender

© Ola Jennersten / WWF-Sweden
I feel proud to be a forest guard and I am fortunate enough to carry out this prestigious responsibility for future generations.

— Ranger in India
**Regional Overview - South Asia**

**Employment**

- **Benefits from the work that I do**
  - Overtime compensation: 91.7% Yes, 89.6% Yes, 6.0% Yes
  - Extra pay for bad/dangerous work conditions: 36.0% Yes, 36.9% Yes, 6.3% Yes
  - Paid sick leave: 57.7% Yes, 56.2% Yes, 6.9% Yes
  - Paid annual leave: 6.0% Yes, 91.7% Yes, 2.3% Yes

- **I have access to**
  - A union, work council or similar committee that represents employees: 42.9% Yes, 42.8% Yes, 14.3% Yes
  - A union, work council or similar committee that can ‘collectively bargain’ on my behalf: 27.0% Yes, 56.3% Yes, 16.8% Yes

- **Being a ranger is a more difficult job than most people have in my country**
  - Strongly agree: 37.0%
  - Agree: 43.7%
  - Disagree: 14.4%
  - Strongly disagree: 4.9%

- **My organization is required to provide notice of termination**
  - Yes: 58.0%
  - No: 17.9%
  - Unsure: 24.0%
I am paid this much in my local currency **USD 259.34 monthly**

**I am paid a fair wage**

- Strongly agree: 8.7%
- Agree: 25.9%
- Disagree: 34.7%
- Strongly disagree: 30.7%

**During the last 12 months**

- I was paid late once: 35.8%
- I was paid late ≥ 3 times: 18.8%
- My payment was withheld for ≥ 2 months: 10.4%
- My salary was cancelled: 3.4%

**Average total hours I work weekly**: 76.2 hours

**Average hours worked at night**: 29.4 hours

**Type of employment contract**

- Permanent: 7.4%
- No contract: 6.0%
- Limited duration: 86.6%

**I have other paid jobs besides being a ranger**: 3.0% have other jobs

There are too many tasks assigned for any given job title, and the staff is not paid according to the tasks he completes.
## Regional Overview - South Asia

### Equipment

#### The provided equipment is sufficient for the work that I do

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>13.4%</td>
<td></td>
<td>27.6%</td>
<td>21.0%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Communication devices</td>
<td>10.6%</td>
<td></td>
<td>29.2%</td>
<td>22.2%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Basic equipment (navigation devices, binoculars)</td>
<td>8.6%</td>
<td></td>
<td>31.3%</td>
<td>26.3%</td>
<td>29.9%</td>
</tr>
<tr>
<td>Shelter</td>
<td>9.5%</td>
<td></td>
<td>35.3%</td>
<td>27.4%</td>
<td>20.2%</td>
</tr>
<tr>
<td>Uniforms and boots</td>
<td>7.4%</td>
<td></td>
<td>34.0%</td>
<td>33.6%</td>
<td>23.5%</td>
</tr>
</tbody>
</table>

#### I bought the following equipment with my own money

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>7.0%</td>
<td>93.0%</td>
</tr>
<tr>
<td>Communication devices</td>
<td>36.0%</td>
<td>64.0%</td>
</tr>
<tr>
<td>Basic equipment (navigation devices, binoculars)</td>
<td>10.3%</td>
<td>89.7%</td>
</tr>
<tr>
<td>Shelter</td>
<td>59.1%</td>
<td>40.9%</td>
</tr>
<tr>
<td>Uniforms and boots</td>
<td>75.4%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Shelter</td>
<td>20.2%</td>
<td>79.8%</td>
</tr>
</tbody>
</table>
When on patrol overnight
I do not have shelter of any kind
Always: 14.5%  
Often: 25.7%

When I am on patrol overnight away from my main ranger base, I have access to

TO HAVE THE CONSERVATION WORK DONE PROPERLY, THERE MUST BE SUPPORT FROM THE MANAGEMENT, INCLUDING THE PROPER GEAR THAT IS REQUIRED ON THE GROUND.
**Training**

**Highest level of education completed**
- No formal education or limited elementary school: 6.6%
- Elementary school: 12.4%
- High School (Secondary): 19.3%
- Pre-tertiary program: 23.9%
- University/college: 21.8%
- Post-graduate degree: 9.9%
- Vocational: 4.7%

**The training I received when I first started was sufficient for my job responsibilities**
- Strongly agree: 13.3%
- Agree: 37.8%
- Disagree: 36.1%
- Strongly disagree: 12.8%

**I feel that my organization provides sufficient additional training (such as refresher trainings)**
- Strongly agree: 14.2%
- Agree: 40.7%
- Disagree: 33.7%
- Strongly disagree: 11.4%

**Within the past 12 months, I went to the following types of training to improve my skills**
- First aid & emergency: 11.2%
- Navigation: 9.9%
- Human wildlife conflict: 17.2%
- Crime scene investigation: 24.5%
- Firearms: 11.4%
- Tracking: 16.3%
- Range-based data collection: 12.6%
- Law and regulation: 35.8%
- Engagement / combat: 3.7%
- Wilderness survival: 15.8%
- Patrol: 29.1%
Community Relations

Regional Overview - South Asia

I believe that part of rangers’ success at their jobs depends on the community providing them with information

- Strongly agree: 5.0%
- Agree: 18.2%
- Disagree: 24.2%
- Strongly disagree: 14.8%

I believe community members trust me

- Strongly agree: 3.2%
- Agree: 57.8%
- Disagree: 24.2%
- Strongly disagree: 14.8%

I am originally from a neighbouring community (within 20km of the park)

- Yes: 44.5%
- No: 55.5%

The organization I work for shows concern for community members’ well-being and quality of life

- Strongly agree: 33.1%
- Agree: 48.4%
- Disagree: 12.0%
- Strongly disagree: 6.6%

Community members do not see me as an enemy

- Strongly agree: 22.7%
- Agree: 8.9%
- Disagree: 41.1%
- Strongly disagree: 27.2%

Community members believe that rangers respect the rights of the people they come in contact with

- Strongly agree: 14.9%
- Agree: 21.7%
- Disagree: 61.8%
- Strongly disagree: 58.2%

Community members respect me

- Strongly agree: 2.8%
- Agree: 27.4%
- Disagree: 11.6%
- Strongly disagree: 58.2%

Life on the Frontline 2019 | 48
For South Asia, this number would be higher if surveys returned from locations that fell outside the malaria zone were excluded. South Asia was the only region in the global survey with a significant number of such non-malarial survey locations, most of which were at high elevations.
On patrol, I have access to

- At outpost/station, I have access to

- Always
- Often
- Rarely
- Never

My employee insurance scheme provides compensation in case of

- Serious injury on the job
  - Strongly agree: 37.6%
  - Agree: 45.3%
  - Disagree: 17.1%

- Job-related fatality
  - Strongly agree: 38.4%
  - Agree: 45.9%
  - Disagree: 15.8%

The basic necessities that I am provided (water, toilet etc.) are adequate

- Strongly agree: 11.0%
- Agree: 38.8%
- Disagree: 30.8%
- Strongly disagree: 19.5%

I often feel exhausted

- Always
- Often
- Sometimes
- Rarely
- Never

- Physically
  - Always: 2.0%
  - Often: 8.2%
  - Sometimes: 43.2%
  - Rarely: 32.3%
  - Never: 14.4%

- Emotionally
  - Always: 1.6%
  - Often: 7.0%
  - Sometimes: 33.8%
  - Rarely: 34.3%
  - Never: 23.2%

I have

- Spouse: 84.2%
- IF YES, I live with spouse: 37.3%

- Children: 78.4%
- IF YES, I live with children: 33.9%

Average number of rangers who accompany me on patrol

3.6 rangers
### Regional Overview - South Asia

**Misconduct**

<table>
<thead>
<tr>
<th>Category</th>
<th>While on duty</th>
<th>While off duty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supervisor</strong></td>
<td>10.4%</td>
<td>6.2%</td>
</tr>
<tr>
<td><strong>Co-workers</strong></td>
<td>10.6%</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Community members</strong></td>
<td>28.1%</td>
<td>14.9%</td>
</tr>
<tr>
<td><strong>Verbal abuse/bullying/harassment</strong></td>
<td>7.3%</td>
<td>7.3%</td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td>0.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Physical violence</strong></td>
<td>5.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Sexual harassment/violence</strong></td>
<td>0.6%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Over the past 12 months, I was subjected to the following:

- **Supervisor:** 10.4% While on duty, 6.2% While off duty
- **Co-workers:** 10.6% While on duty, 5.4% While off duty
- **Community members:** 28.1% While on duty, 14.9% While off duty
- **Verbal abuse/bullying/harassment:** 7.3% While on duty, 7.3% While off duty
- **Threats:** 0.9% While on duty, 0.7% While off duty
- **Physical violence:** 5.3% While on duty, 1.3% While off duty
- **Sexual harassment/violence:** 0.6% While on duty, 0.2% While off duty
I feel free in sharing my thoughts on problems regarding forest conservation in my field office and with my supervisor. I trust my supervisor fully.
Regional Overview - South Asia

Workplace Dynamics

- **My efforts are satisfactorily rewarded by my organization**
  - Strongly agree: 10.3%
  - Agree: 43.1%
  - Disagree: 32.7%
  - Strongly disagree: 13.9%

- **I am satisfied with my chances for promotion and advancement**
  - Strongly agree: 21.2%
  - Agree: 36.9%
  - Disagree: 28.7%
  - Strongly disagree: 13.2%

- **I'm proud of the work I do as a ranger**
  - Strongly agree: 3.4%
  - Agree: 51.5%
  - Disagree: 43.8%
  - Strongly disagree: 1.2%

- **I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death**
  - Strongly agree: 12.8%
  - Agree: 36.6%
  - Disagree: 47.6%
  - Strongly disagree: 3%

- **I believe that my supervisor treats me with respect**
  - Strongly agree: 25.8%
  - Agree: 60.4%
  - Disagree: 12.2%
  - Strongly disagree: 1.7%

- **I feel comfortable sharing my concerns with my supervisor**
  - Strongly agree: 31.3%
  - Agree: 56.1%
  - Disagree: 10.3%
  - Strongly disagree: 2.4%

- **My supervisor’s decisions are equally fair to every ranger**
  - Strongly agree: 23.2%
  - Agree: 52.5%
  - Disagree: 19.4%
  - Strongly disagree: 4.9%

- **Clear objectives are communicated to me by management**
  - Strongly agree: 24.5%
  - Agree: 60.1%
  - Disagree: 12.3%
  - Strongly disagree: 3.1%

- **There is good communication between the supervisors and frontline staff**
  - Strongly agree: 22.2%
  - Agree: 58.9%
  - Disagree: 15.6%
  - Strongly disagree: 3.3%
### Effectiveness of Laws

**Rangers are doing a good job of preventing illegal activities in the conservation area**
- **Strongly agree:** 44.6%
- **Agree:** 52.7%
- **Disagree:** 2.3%
- **Strongly disagree:** 0.5%

**People arrested in the conservation area are treated too lightly by prosecutors**
- **Strongly agree:** 34.8%
- **Agree:** 43.3%
- **Disagree:** 15.5%
- **Strongly disagree:** 6.5%

**People arrested in the conservation area are treated too lightly by judges**
- **Strongly agree:** 40.6%
- **Agree:** 37.5%
- **Disagree:** 13.7%
- **Strongly disagree:** 8.2%

**I don’t think the law does a good job of deterring people from committing crimes in the conservation area**
- **Strongly agree:** 14.7%
- **Agree:** 33.4%
- **Disagree:** 38.9%
- **Strongly disagree:** 13.0%

**People who commit crimes in the conservation area are not worried about the potential punishment they may receive if they are arrested**
- **Strongly agree:** 29.8%
- **Agree:** 39.6%
- **Disagree:** 9.8%
- **Strongly disagree:** 20.8%
## East and Southeast Asia

### Average

<table>
<thead>
<tr>
<th>Category</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>41.1 years</td>
</tr>
<tr>
<td>Time in current organization</td>
<td>14.3 years</td>
</tr>
<tr>
<td>Work as a ranger</td>
<td>13.8 years</td>
</tr>
<tr>
<td>Work in current conservation area</td>
<td>12.7 years</td>
</tr>
</tbody>
</table>

### Gender breakdown*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>86</td>
<td>4.2</td>
</tr>
<tr>
<td>Male</td>
<td>1,975</td>
<td>95.8</td>
</tr>
</tbody>
</table>

*35 respondents did not indicate their gender

### Rangers surveyed

2,096
I’ve loved the forest since I was little, and both my parents are also forest rangers.

— Ranger in Indonesia
Employment

Benefits from the work that I do

- Overtime compensation: 64.8% Yes, 30.4% No, 4.8% Unsure
- Extra pay for bad/dangerous work conditions: 72.9% Yes, 20.3% No, 6.8% Unsure
- Paid sick leave: 37.6% Yes, 55.9% No, 6.5% Unsure
- Paid annual leave: 36.1% Yes, 56.9% No, 7.0% Unsure

I have access to

- A union, work council or similar committee that represents employees: 35.9% Yes, 47.1% No, 17.0% Unsure
- A union, work council or similar committee that can ‘collectively bargain’ on my behalf: 30.4% Yes, 49.9% No, 19.7% Unsure

Being a ranger is a more difficult job than most people have in my country

- Strongly agree: 17.2%
- Agree: 52.1%
- Disagree: 27.4%
- Strongly disagree: 3.3%

My organization is required to provide notice of termination

- Yes: 58.6%
- No: 20.5%
- Unsure: 21.0%
THE SIZE OF THE FOREST AREA IS NOT PROPORTIONAL TO THE NUMBER OF FOREST RANGERS.
Regional Overview - East and Southeast Asia

Equipment

The provided equipment is sufficient for the work that I do

- Firearms: 12.2% Strongly agree, 39.7% Agree, 26.7% Disagree, 11.3% Strongly disagree, 10.1% Not applicable
- Communication devices: 9.5% Strongly agree, 34.1% Agree, 39.4% Disagree, 10.7% Strongly disagree, 6.3% Not applicable
- Basic equipment (such as GPS unit, binoculars): 15.7% Strongly agree, 45.8% Agree, 30.5% Disagree, 6.3% Strongly disagree, 1.6% Not applicable
- Shelter: 12.1% Strongly agree, 43.6% Agree, 28.8% Disagree, 10.3% Strongly disagree, 5.2% Not applicable
- Uniforms and boots: 12.3% Strongly agree, 47.3% Agree, 31.3% Disagree, 8.0% Strongly disagree, 1.1% Not applicable

I bought the following equipment with my own money

- Firearms: 89.0% Yes, 11.0% No
- Communication devices: 59.3% Yes, 40.7% No
- Basic equipment (such as GPS unit, binoculars): 82.9% Yes, 17.1% No
- Shelter: 47.1% Yes, 52.9% No
- Uniforms and boots: 32.1% Yes, 67.9% No
- Bags: 41.3% Yes, 58.7% No
On patrol, I have access to

When I am on patrol overnight away from my main ranger base, I have access to

At outpost/station, I have access to

When on patrol overnight
I do not have shelter of any kind

Always: 6.4%
Often: 26.1%

ONE OF THE CHALLENGES I FACE AS A RANGER IS THAT I OFTEN MUST BE FAR FROM MY FAMILY AND I’M CUT OFF FROM THE OUTSIDE WORLD. THIS MAKES MY FAMILY WORRY CONSTANTLY ABOUT ME, BUT THEY ARE NOT ABLE TO CONTACT ME BECAUSE OF LACK OF COMMUNICATION MEANS.
Regional Overview - East and Southeast Asia

Training

Highest level of education completed

- No formal education or limited elementary school: 1.9%
- Elementary school: 6.7%
- High School (Secondary): 14.5%
- Pre-tertiary program: 6.3%
- University/college: 32.3%
- Post-graduate degree: 37.5%
- Vocational: 0.9%

The training I received when I first started was sufficient for my job responsibilities

- Strongly agree: 14.7%
- Agree: 57.4%
- Disagree: 24.2%
- Strongly disagree: 3.7%

I feel that my organization provides sufficient additional training (such as refresher trainings)

- Strongly agree: 20.2%
- Agree: 57.4%
- Disagree: 19.1%
- Strongly disagree: 3.2%

Within the past 12 months, I went to the following types of training to improve my skills

- First aid & emergency: 32.1%
- Navigation: 49.1%
- Human wildlife conflict: 37.0%
- Crime scene investigation: 39.4%
- Firearms: 54.3%
- Tracking: 42.2%
- Ranger-based data collection: 45.6%
- Law and regulation: 51.7%
- Engagement /combat: 29.3%
- Wilderness survival: 33.1%
- Patrol tactic: 44.9%
Community Relations

**I believe that part of rangers’ success at their jobs depends on the community providing them with information**

- Strongly agree: 8.2%
- Agree: 28.5%
- Disagree: 14.0%
- Strongly disagree: 1.2%

**I believe community members trust me**

- Strongly agree: 1.3%
- Agree: 11.7%
- Disagree: 1.2%
- Strongly disagree: 14.0%

The organization I work for shows concern for community members’ well-being and quality of life

- Strongly agree: 18.8%
- Agree: 66.2%
- Disagree: 13.1%
- Strongly disagree: 1.9%

Community members do not see me as an enemy

- Strongly agree: 22.5%
- Agree: 57.1%
- Disagree: 17.1%
- Strongly disagree: 3.2%

Community members believe that rangers respect the rights of the people they come in contact with

- Strongly agree: 0.3%
- Agree: 74.3%
- Disagree: 12.8%
- Strongly disagree: 1.0%

Community members respect me

- Strongly agree: 11.9%
- Agree: 74.3%
- Disagree: 12.8%
- Strongly disagree: 0.3%

I am originally from a neighbouring community (within 20km of the park)

- Yes: 37.9%
- No: 62.1%
When needed, the medical treatment that I am provided is adequate

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.6%</td>
<td>45.1%</td>
<td>34.8%</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

Diseases and injuries that I experienced over the last 12 months

- **Malaria**: 11.3% Yes, 88.7% No
- **Dengue**: 5.8% Yes, 94.2% No
- **Other serious disease or infection**: 9.1% Yes, 90.9% No
- **Broken bone**: 4.6% Yes, 95.4% No
- **Other serious injury**: 12.1% Yes, 87.9% No
- **Existing health problem made worse by work**: 10.2% Yes, 89.8% No

**Malaria cases**

Malaria infection rates were not uniform between or within survey countries. Some were particularly hard hit – for example, 45 per cent of Cambodian rangers stated that they had contracted malaria within the 12 months prior to responding to the survey.
On patrol, I have access to

- At outpost/station, I have access to

- Always
- Often
- Rarely
- Never

Physically

- I often feel exhausted
  - Always
  - Often
  - Sometimes
  - Rarely
  - Never

11.8%
-----
56.2%
26.1%
5.9%

The basic necessities that I am provided (water, toilet etc.) are adequate

- Strongly agree
- Agree
- Disagree
- Strongly disagree

11.8%
56.2%
26.1%
5.9%

Average number of rangers who accompany me on patrol

5.0 rangers

I have

- My employee insurance scheme provides compensation in case of
  - Serious injury on the job
  - Job-related fatality

- I have
  - Spouse
  - Children

- IF YES, I live with spouse
- IF YES, I live with children

80.8%
78.0%
36.4%
33.5%
In the past 12 months, I was subjected to the following:

<table>
<thead>
<tr>
<th>Type of Misconduct</th>
<th>While on Duty</th>
<th>While off Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>10.5%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Co-workers</td>
<td>6.4%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Community members</td>
<td>25.8%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Verbal abuse/bullying/harassment</td>
<td>2.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Threats</td>
<td>7.1%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Physical violence</td>
<td>4.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Sexual harassment/violence</td>
<td>25.3%</td>
<td>15.0%</td>
</tr>
<tr>
<td></td>
<td>1.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td></td>
<td>0.8%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>
RANGERS TAKE BRIBES NOT BECAUSE THEIR SALARIES ARE INADEQUATE, THEY TAKE THEM BECAUSE THEY THINK NO ONE NOTICES. I DON’T KNOW HOW TO REPORT ANONYMOUSLY, BUT IT WOULD BE GOOD TO BE ABLE TO REPORT IN THIS WAY TO HAVE THOSE RESPONSIBLE CHARGED.
### Workplace Dynamics

#### Regional Overview - East and Southeast Asia

**My efforts are satisfactorily rewarded by my organization**
- Strongly agree: 4.1%
- Agree: 9.6%
- Disagree: 61.9%
- Strongly disagree: 24.4%

**I'm proud of the work I do as a ranger**
- Strongly agree: 1.0%
- Agree: 0.2%
- Disagree: 45.2%
- Strongly disagree: 53.6%

**I am satisfied with my chances for promotion and advancement**
- Strongly agree: 13.4%
- Agree: 2.3%
- Disagree: 20.8%
- Strongly disagree: 63.5%

**I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death**
- Strongly agree: 10.9%
- Agree: 0.9%
- Disagree: 30.5%
- Strongly disagree: 57.7%

**I believe that my supervisor treats me with respect**
- Strongly agree: 20.3%
- Agree: 72.8%
- Disagree: 6.4%
- Strongly disagree: 0.5%

**I feel comfortable sharing my concerns with my supervisor**
- Strongly agree: 24.1%
- Agree: 63.0%
- Disagree: 11.8%
- Strongly disagree: 1.1%

**My supervisor’s decisions are equally fair to every ranger**
- Strongly agree: 19.5%
- Agree: 68.6%
- Disagree: 10.9%
- Strongly disagree: 1.0%

**Clear objectives are communicated to me by management**
- Strongly agree: 23.3%
- Agree: 69.3%
- Disagree: 6.4%
- Strongly disagree: 1.2%

**There is good communication between the supervisors and frontline staff**
- Strongly agree: 21.4%
- Agree: 67.8%
- Disagree: 8.7%
- Strongly disagree: 1.2%

---

**I am a supervisor**
- Yes 25.1%
Effectiveness of Laws

Rangers are doing a good job of preventing illegal activities in the conservation area

- Strongly agree: 5.2%
- Agree: 28.0%
- Disagree: 66.2%
- Strongly disagree: 0.6%

The laws and regulations of my conservation area are in line with the moral values of local community members

- Strongly agree: 2.9%
- Agree: 9.1%
- Disagree: 21.0%
- Strongly disagree: 67.0%

People arrested in the conservation area are treated too lightly by prosecutors

- Strongly agree: 14.9%
- Agree: 7.9%
- Disagree: 41.8%
- Strongly disagree: 35.4%

People arrested in the conservation area are treated too lightly by judges

- Strongly agree: 15.5%
- Agree: 7.8%
- Disagree: 41.2%
- Strongly disagree: 35.5%

People who commit crimes in the conservation area are not worried about the potential punishment they may receive if they are arrested

- Strongly agree: 10.9%
- Agree: 9.4%
- Disagree: 41.4%
- Strongly disagree: 38.2%

I don’t think the law does a good job of deterring people from committing crimes in the conservation area

- Strongly agree: 9.6%
- Agree: 37.1%
- Disagree: 43.5%
- Strongly disagree: 9.8%
### Average

<table>
<thead>
<tr>
<th>Age</th>
<th>39.2 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time in current organization</td>
<td>8.8 years</td>
</tr>
<tr>
<td>Work as a ranger</td>
<td>8.5 years</td>
</tr>
<tr>
<td>Work in current conservation area</td>
<td>7.4 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender breakdown*</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>211</td>
<td>73.3</td>
</tr>
<tr>
<td>♀</td>
<td>77</td>
<td>26.7</td>
</tr>
</tbody>
</table>

*13 respondents did not indicate their gender

Rangers surveyed: 301
Many park rangers here face serious illicit activities that impact the environment: illegal logging, mining, poaching, human-caused forest fires, and even drug trafficking.

— Ranger in Colombia
Regional Overview - Latin America

Employment

Benefits from the work that I do

- Overtime compensation: 96.9% Yes, 3.1% No
- Extra pay for bad/dangerous work conditions: 96.6% Yes, 3.4% No
- Paid sick leave: 53.5% Yes, 46.5% No
- Paid annual leave: 62.3% Yes, 37.7% No

I have access to

- A union, work council or similar committee that represents employees: 38.8% Yes, 61.2% No
- A union, work council or similar committee that can ‘collectively bargain’ on my behalf: 33.2% Yes, 66.8% No

Being a ranger is a more difficult job than most people have in my country

- Strongly agree: 15.9%, Agree: 39.5%, Disagree: 37.8%, Strongly disagree: 6.8%

My organization is required to provide notice of termination

- Yes: 58.3%, No: 15.9%, Unsure: 25.7%
WE ARE CLEAR ABOUT THE HIGH RESPONSIBILITY WE HAVE, WHICH IS TO PROTECT OUR NATURAL AND CULTURAL HERITAGE.
Regional Overview - Latin America

Equipment

The provided equipment is sufficient for the work that I do

I bought the following equipment with my own money
When on patrol overnight I do not have shelter of any kind

Always: 8.6%
Often: 11.7%

Many of the park rangers work with a lack of basic equipment such as communication tools and self-defense gear. There are cases of rangers killed from not having basic security equipment.
### Regional Overview - Latin America

#### Training

**Highest level of education completed**

- No formal education or limited elementary school: 4.9%
- Elementary school: 27.5%
- High School (Secondary): 42.3%
- Pre-tertiary program: 9.5%
- University/college: 13.7%
- Post-graduate degree: 1.1%
- Vocational: 1.1%

**The training I received when I first started was sufficient for my job responsibilities**

- Strongly agree: 14.1%
- Agree: 42.8%
- Disagree: 31.6%
- Strongly disagree: 11.4%

**I feel that my organization provides sufficient additional training (such as refresher trainings)**

- Strongly agree: 11.1%
- Agree: 41.2%
- Disagree: 38.5%
- Strongly disagree: 9.1%

**Within the past 12 months, I went to the following types of training to improve my skills**

- 45.7% First aid & emergency
- 17.2% Navigation
- 29.3% Wildlife conflict
- 5.5% Crime scene investigation
- 14.1% Firearms
- 21.3% Tracking
- 40.1% Ranger-based data collection
- 33.5% Law and regulation
- 13.9% Engagement/combat
- 17.4% Wilderness survival
- 14.5% Patrol tactic
Life on the Frontline 2019

Community Relations

The organization I work for shows concern for community members’ well-being and quality of life

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.8%</td>
<td>49.2%</td>
<td>21.0%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

I believe that part of rangers’ success at their jobs depends on the community providing them with information

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.3%</td>
<td>27.2%</td>
<td>9.5%</td>
<td>26.1%</td>
</tr>
</tbody>
</table>

The organization I work for shows concern for community members’ well-being and quality of life

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.8%</td>
<td>49.2%</td>
<td>21.0%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

I believe community members trust me

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.4%</td>
<td>21.4%</td>
<td>6.1%</td>
<td>25.1%</td>
</tr>
</tbody>
</table>

Community members do not see me as an enemy

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>47.5%</td>
<td>21.4%</td>
<td>6.1%</td>
<td>25.1%</td>
</tr>
</tbody>
</table>

Community members believe that rangers respect the rights of the people they come in contact with

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.6%</td>
<td>21.7%</td>
<td>2.0%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

I believe community members respect me

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>66.1%</td>
<td>26.8%</td>
<td>5.4%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

I am originally from a neighbouring community (within 20km of the park)

Yes 38.6%  No 61.4%
When needed, the medical treatment that I am provided is adequate

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.4%</td>
<td>36.9%</td>
<td>30.4%</td>
<td>17.3%</td>
</tr>
</tbody>
</table>

I think that being a ranger is a dangerous job due to chance of

Diseases and injuries that I experienced over the last 12 months

<table>
<thead>
<tr>
<th>Disease/Injury</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>2.1%</td>
<td>97.9%</td>
</tr>
<tr>
<td>Dengue</td>
<td>9.0%</td>
<td>91.0%</td>
</tr>
<tr>
<td>Other serious disease or infection</td>
<td>20.2%</td>
<td>79.8%</td>
</tr>
<tr>
<td>Broken bone</td>
<td>5.2%</td>
<td>94.8%</td>
</tr>
<tr>
<td>Other serious injury</td>
<td>9.3%</td>
<td>90.7%</td>
</tr>
<tr>
<td>Existing health problem made worse by work</td>
<td>19.2%</td>
<td>80.8%</td>
</tr>
</tbody>
</table>

Regional Overview - Latin America

Health and Insurance
Life on the Frontline 2019 | 78

My employee insurance scheme provides compensation in case of Serious injury on the job: 45.3% (Always), 54.7% (Often), 32.3% (Rarely), 67.7% (Never). Job-related fatality: 42.7% (Always), 9.4% (Often), 18.3% (Rarely), 29.6% (Never).

The basic necessities that I am provided with (water, toilet etc.) are adequate: 16.1% (Always), 39.3% (Often), 32.6% (Rarely), 12.0% (Never).

I often feel exhausted:
- Physically: 1.0% (Always), 10.7% (Often), 47.7% (Sometimes), 33.6% (Rarely), 7.0% (Never).
- Emotionally: 2.3% (Always), 13.1% (Often), 41.6% (Sometimes), 31.5% (Rarely), 11.4% (Never).

Average number of rangers who accompany me on patrol: 2.7 rangers.

On patrol, I have access to:
- Toilet: 24.7% (Always), 32.5% (Often), 20.8% (Rarely), 10.6% (Never).
- Water: 14.8% (Always), 62.0% (Often), 10.6% (Rarely), 1.0% (Never).

At outpost/station, I have access to:
- Toilet: 42.7% (Always), 39.7% (Often), 9.4% (Rarely), 18.3% (Never).
- Water: 23.7% (Always), 28.8% (Often), 20.4% (Rarely), 10.6% (Never).

I have:
- Spouse: 44.4% (Yes), 67.0% (No).
- Children: 18.9% (Yes), 19.9% (No).

Yes: 45.3% (Always), 1.0% (Often), 10.7% (Rarely), 47.7% (Never).
No: 54.7% (Always), 33.6% (Often), 7.0% (Rarely), 11.4% (Never).
Over the past 12 months, I was subjected to the following:

<table>
<thead>
<tr>
<th></th>
<th>While on duty</th>
<th>While off duty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supervisor</strong></td>
<td>9.8%</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Co-workers</strong></td>
<td>16.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Community members</strong></td>
<td>28.6%</td>
<td>13.5%</td>
</tr>
<tr>
<td><strong>Verbal abuse/bullying/harassment</strong></td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td>5.1%</td>
<td>2.7%</td>
</tr>
<tr>
<td><strong>Physical violence</strong></td>
<td>7.1%</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>Sexual harassment/violence</strong></td>
<td>0.7%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>
**Rangers would report their fellow rangers if they witnessed them accepting a bribe or engage in other corrupt and illegal activities**

- Strongly agree: 21.4%
- Agree: 51.6%
- Disagree: 21.7%
- Strongly disagree: 5.3%

**I would report a ranger if I witnessed them accepting a bribe or engage in other corrupt and illegal activities**

- Strongly agree: 6.2%
- Agree: 48.1%
- Disagree: 42.9%
- Strongly disagree: 2.8%

---

**My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)**

- Strongly agree: 20.5%
- Agree: 42.0%
- Disagree: 27.6%
- Strongly disagree: 9.9%

**I would be concerned for my safety if I reported a fellow ranger who I witnessed accepting a bribe or engage in other corrupt and illegal activities**

- Strongly agree: 25.7%
- Agree: 40.8%
- Disagree: 26.7%
- Strongly disagree: 6.8%
**Regional Overview - Latin America**

**Workplace Dynamics**

- **My efforts are satisfactorily rewarded by my organization**
  - Strongly agree: 16.3%
  - Agree: 5.0%
  - Disagree: 32.0%
  - Strongly disagree: 46.7%

- **I am satisfied with my chances for promotion and advancement**
  - Strongly agree: 14.5%
  - Agree: 10.1%
  - Disagree: 39.9%
  - Strongly disagree: 35.5%

- **I'm proud of the work I do as a ranger**
  - Strongly agree: 1.3%
  - Agree: 0.7%
  - Disagree: 66.7%
  - Strongly disagree: 31.3%

- **I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death**
  - Strongly agree: 11.7%
  - Agree: 1.7%
  - Disagree: 32.8%
  - Strongly disagree: 53.8%

- **I believe that my supervisor treats me with respect**
  - Strongly agree: 31.1%
  - Agree: 60.2%
  - Disagree: 6.7%
  - Strongly disagree: 2.0%

- **I feel comfortable sharing my concerns with my supervisor**
  - Strongly agree: 24.9%
  - Agree: 57.5%
  - Disagree: 14.0%
  - Strongly disagree: 3.7%

- **My supervisor's decisions are equally fair to every ranger**
  - Strongly agree: 20.1%
  - Agree: 44.1%
  - Disagree: 30.8%
  - Strongly disagree: 5.0%

- **Clear objectives are communicated to me by management**
  - Strongly agree: 23.5%
  - Agree: 50.7%
  - Disagree: 21.8%
  - Strongly disagree: 4.1%

- **There is good communication between the supervisors and frontline staff**
  - Strongly agree: 15.7%
  - Agree: 53.3%
  - Disagree: 27.0%
  - Strongly disagree: 4.0%

---

*Life on the Frontline 2019*
Regional Overview - Latin America

Effectiveness of Laws

Rangers are doing a good job of preventing illegal activities in the conservation area

- Strongly agree: 8.0%
- Agree: 45.3%
- Disagree: 24.3%
- Strongly disagree: 11.3%

The laws and regulations of my conservation area are in line with the moral values of local community members

- Strongly agree: 23.4%
- Agree: 39.2%
- Disagree: 31.6%
- Strongly disagree: 7.6%

People arrested in the conservation area are treated too lightly by prosecutors

- Strongly agree: 40.5%
- Agree: 29.0%
- Disagree: 22.8%
- Strongly disagree: 6.4%

People arrested in the conservation area are treated too lightly by judges

- Strongly agree: 45.0%
- Agree: 23.3%
- Disagree: 31.6%
- Strongly disagree: 12.2%

People who commit crimes in the conservation area are not worried about the potential punishment they may receive if they are arrested

- Strongly agree: 41.5%
- Agree: 23.0%
- Disagree: 12.2%
- Strongly disagree: 21.9%
Although the preceding pages have highlighted the most important results from the ranger survey, in the interest of space, dozens of questions have yet to be addressed to this point. These remaining results have been clustered into seven categories as shown in the table below. The format adopted also provides further insight into the regional differences, with higher scores indicating more positive or optimistic responses.

As can be seen, survey respondents felt negatively about their chances for promotion, recognition and fair reward, particularly in countries outside Southeast Asia. In every region, rangers expressed fairly negative perceptions about the effectiveness of national institutions in properly punishing and deterring those who commit wildlife crimes and endanger their safety.

### Average percentage positive/optimistic response

<table>
<thead>
<tr>
<th>Perception of legal-judicial system</th>
<th>Latin America</th>
<th>Africa</th>
<th>South Asia</th>
<th>East and Southeast Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships with co-workers</td>
<td>73.9 %</td>
<td>77.8 %</td>
<td>75.8 %</td>
<td>75.3 %</td>
</tr>
<tr>
<td>Relationships with managers and supervisors</td>
<td>61.8 %</td>
<td>60.4 %</td>
<td>64.1 %</td>
<td>68.6 %</td>
</tr>
<tr>
<td>Relationship with communities</td>
<td>65.9 %</td>
<td>60.0 %</td>
<td>65.5 %</td>
<td>66.7 %</td>
</tr>
<tr>
<td>Job satisfaction and sense of importance</td>
<td>78.0 %</td>
<td>77.6 %</td>
<td>80.3 %</td>
<td>77.2 %</td>
</tr>
<tr>
<td>Job reward</td>
<td>42.7 %</td>
<td>43.0 %</td>
<td>46.8 %</td>
<td>61.2 %</td>
</tr>
<tr>
<td>Physical and mental stress</td>
<td>65.4 %</td>
<td>62.8 %</td>
<td>68.8 %</td>
<td>66.1 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of survey questions for each theme: (1) four, (2) twelve, (3) fifteen, (4) ten, (5) three, (6) ten, (7) eleven.
When considering the entirety of the data, similarities between regions is the norm for most part. This is positive in so much as it might allow for regional or international approaches or policy innovations to be workable for rangers in a wide variety of locations.

In some cases, a single region did stand out as lagging behind others on a given theme. Notable examples include:

**Ranger health (in Africa)**
- More than two-thirds (68%) of African rangers contracted malaria within the 12 months prior to sitting for the survey (non-Africa average = 13%). The frequency of rangers contracting other serious diseases and infections was also more than double that of the other regions.
- Only 28% of rangers in Africa receive paid sick leave (non-Africa average = 56%).

**Conflict (in Africa)**
- Almost one-third (31%) of African rangers thought that community members did not believe rangers respect the rights of those they come in contact with (non-Africa average = 12%). On a related point, Africa was also the only region in which a majority of rangers thought community members viewed them as an enemy.
- Rates of verbal abuse, threats, and violence experienced by rangers in Africa was significantly higher than in other regions. This held across all sources of such abuse, be they within or external to the workplace.

**Lack of communications devices (in South Asia)**
- About half of rangers in the region never have access to communication devices on patrol (49%) or at outposts (48%). These results compare poorly with the non-South Asia sample (24% and 26% respectively).

**Poor training (in South Asia)**
- 49% of rangers did not believe their initial training adequately prepared them for the job (non-South Asia average = 29%). Rates of refresher trainings were also lower than in other regions.

**Inadequate medical treatment (in South Asia)**
- Nearly three in four rangers (73%) in South Asia indicated that when needed most medical treatment would be inadequate (non-South Asia average = 48%).

**Late pay (in Latin America)**
- 45% of those who sat for surveys in this region were paid late at least one in the last year (non-Latin America average = 32%)

**Lack of communications devices (in Latin America)**
- About one-third (32%) of rangers here agreed when asked if their communication devices were adequate (non-Latin America average = 48%). Access to such devices on patrols and outposts were also lower than global survey averages.

**Small patrol sizes (in Latin America)**
- On average, only 2.7 other rangers accompany Latin American rangers on patrol (non-Latin America average = 4.7 accompanying rangers).

**Excessive work hours (in Africa and South Asia)**
- Whereas respondents in Latin America and East and Southeast Asia both recorded work weeks of roughly 50 hours on average, that number was 76 in South Asia, and nearly 90 in Africa.
Surveys were delivered to 293 rangers at more than 40 sites across Northeastern China and Southeast Russia. These were mainly distributed in Jilin and Heilongjiang provinces (China) and Primorsky Krai (Russia), with a very limited number or surveys filled at sites in Inner Mongolia (China) and Jewish Autonomous Oblast (Russia).

Overall, results were far more positive when compared to the global averages highlighted earlier in this publication. This held across all major survey categories. Given that the vast majority of these sites either currently have tigers or are central to tiger population recovery and expansion, the results should provide some optimism for the future of the world’s northernmost populations of that species.
Although ranger survey results from the Philippines were returned too late in the process to incorporate into the global and regional datasets, this page provides a snapshot of the results from the survey of 576 rangers at eight large conservation areas in that country. This survey was also notable in that a large proportion of surveys were completed by rangers working in marine protected areas.

The provided equipment is sufficient for the work that I do

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearm</td>
<td>5.7%</td>
<td>18.6%</td>
<td>12.3%</td>
<td>21.5%</td>
<td>41.9%</td>
</tr>
<tr>
<td>Communications</td>
<td>13.9%</td>
<td>33.2%</td>
<td>8.9%</td>
<td>18.8%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Housing/shelter</td>
<td>8.6%</td>
<td>28.9%</td>
<td>9.9%</td>
<td>21.0%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Uniform/boots</td>
<td>19.1%</td>
<td>37.4%</td>
<td>14.2%</td>
<td>13.5%</td>
<td>15.8%</td>
</tr>
</tbody>
</table>

I feel I’m paid a fair wage for the work I do

I am satisfied with my chances for promotion and advancement

The training I received when I first started was sufficient for my job responsibilities

I feel that my organization provides sufficient additional training (such as refresher trainings)

Diseases and injuries that I experienced over the last 12 months

- Malaria: 8.5% Yes, 91.5% No
- Dengue: 3.2% Yes, 96.8% No
- Other serious disease or infection: 10.9% Yes, 89.1% No
- Broken bone: 3.7% Yes, 96.3% No
- Other serious injury: 10.2% Yes, 89.8% No
- Existing health problem made worse by work: 10.0% Yes, 90.0% No
Given their critical role in safeguarding valuable natural resources and ecosystem services, rangers should be fully professionalized and supported in a manner commensurate to that of a sector mandated to protect territorial integrity and uphold the rule of law.

In order to accomplish this, governments should:

• Comprehensively analyze survey results from their countries (these will be provided by WWF and its partners), and use them to draft strategies and policies that improve ranger welfare and effectiveness. The findings should also be used to leverage more resources for rangers, and better allocate existing funds.

• Consult with non-governmental organizations in this planning to ensure the most strategic and effective distribution of capacity in support of rangers.

• Initiate new research on rangers and implement a plan for tracking important ranger-related indicators and statistics at regular intervals.

• Comprehensively review and then improve ranger training curricula, with particular attention to training in matters that may impact ranger safety. Organizations with specialized knowledge of best practice training approaches (such as contributors to the publication Anti-Poaching in and Around Protected Areas: Training Guidelines for Field Rangers) should be invited to input into these processes.

• Establish processes that build trust between rangers and the indigenous peoples and local community members they will encounter during the course of their work. Introducing new opportunities for constructive dialogue and interaction between rangers and these groups will be central to this.

• Review ranger remuneration and career advancement policies, to ensure that such employees are fairly rewarded and remain highly motivated.

• Act fast to improve ranger safety, given that the clearest theme to emerge from ranger feedback is that there are considerable gaps that unnecessarily expose them to severe illness, injury or death. Governments must address these gaps as a matter of priority, particularly by:
  > Guaranteeing access to basic necessities, including adequate shelter, boots and clothing, as well as clean drinking water.
  > Improving the availability and quality of emergency medical care and reducing response time in delivering qualified medical attention to injured rangers in the field. Additionally, First Aid training needs to be provided to all rangers, with First Aid certification seen as a prerequisite to undertaking any patrol work.
  > Providing insurance coverage for serious injury or death to all rangers and ensuring that this coverage is to a living wage.
  > Greatly expanding ranger access to communications technology when they patrol. This means guaranteeing that a suitable communication network is in place, and that rangers at all times have access to a communication device that is appropriate to local conditions.
Community Perception Survey Results – Myanmar

Basic information

<table>
<thead>
<tr>
<th>Surveys delivered</th>
<th>Number of survey locations</th>
<th>Gender</th>
<th>Average Age of Survey Taker</th>
<th>Survey taker with friend or family employed as a ranger</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,167</td>
<td>77</td>
<td>Women 19%</td>
<td>Men 81%</td>
<td>46.3 YEARS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22.5%</td>
</tr>
</tbody>
</table>

Survey dates: Aug-Dec 2018

Consultation and collaboration

- **I would attend a community meeting hosted by Park authorities to learn about conservation**
  - Very Unlikely: 0.3%
  - Unlikely: 6.6%
  - Likely: 80.5%
  - Very Likely: 12.7%

- **Have you ever attended a meeting hosted by the Park authorities?**
  - Yes: 51.1%

- **IF YES, did the meeting provide useful information regarding the benefits of the conservation area?**
  - Yes: 91.5%
  - No: 8.5%

- **Most community members know how to contact Park management should they need assistance**
  - Strongly agree: 63.6%
  - Agree: 28.9%
  - Disagree: 2.6%
  - Strongly disagree: 4.8%

- **Communities should be able to provide input for conservation decision making**
  - Strongly agree: 79.5%
  - Agree: 6.3%
  - Disagree: 13.3%
  - Strongly disagree: 0.9%

- **Communities are able to provide input to conservation decision making**
  - Strongly agree: 66.6%
  - Agree: 9.4%
  - Disagree: 23.2%
  - Strongly disagree: 0.8%

- **Communities should be directly involved in decision-making about conservation efforts**
  - Strongly agree: 68.4%
  - Agree: 29.0%
  - Disagree: 2.4%
  - Strongly disagree: 0.2%
Local community members should work alongside Park rangers to reduce poaching.

Park management listens to the needs and concerns of the community.

Park management regularly communicates information about the Park(s) to the communities.

Community members believe that they benefit from conservation.

How satisfied are you with the level of community involvement in Park management?

- Very Unsatisfied: 3.5%
- Unsatisfied: 31.6%
- Satisfied: 59.4%
- Very Satisfied: 5.5%

How likely would you be to…

- Call Park authorities if you saw a person entering the conservation area illegally:
  - Very Unlikely: 0.8%
  - Unlikely: 0.8%
  - Likely: 27.6%
  - Very Likely: 66.2%

- Tell Park rangers if you had information about wildlife crime or suspected offender:
  - Very Unlikely: 0.8%
  - Unlikely: 4.2%
  - Likely: 36.2%
  - Very Likely: 58.8%

From Myanmar Ranger Survey

- Park management can not be effective without the help of the community:
  - Strongly disagree: 25.2%
  - Disagree: 17.1%
  - Agree: 56.3%
  - Strongly agree: 1.1%

- Part of rangers’ success at their jobs depends on the community providing them with information:
  - Strongly disagree: 1.0%
  - Disagree: 2.9%
  - Agree: 49.0%
  - Strongly agree: 47.1%
Community Perception Survey Results – Myanmar (continued)

Perceptions of / experiences with rangers

Most Park rangers do their jobs well

- Strongly disagree: 1.1%
- Disagree: 15.4%
- Agree: 81.2%
- Strongly agree: 2.2%

Park rangers are generally honest

- Strongly disagree: 1.9%
- Disagree: 19.0%
- Agree: 77.2%
- Strongly agree: 2.0%

Park rangers respect the community

- Strongly disagree: 1.3%
- Disagree: 10.8%
- Agree: 85.7%
- Strongly agree: 2.3%

Have you ever had an encounter with a Park ranger?

Yes 30.4%

If yes

- the Park ranger listened to my needs and concerns?
  - Strongly agree: 92.9%
  - Agree: 7.1%

- the Park ranger treated me with respect.
  - Strongly agree: 92.9%
  - Agree: 0.8%

Over last 12 months I’ve been subjected to the following from community members:

VERBAL ABUSE, BULLYING OR HARASSMENT 33.0%

THREATS 21.1%

From ranger survey

- Community members believe that rangers take the time to listen to people
  - Strongly agree: 57.0%
  - Agree: 31.2%

- Community members believe that officers treat those they encounter with politeness and dignity
  - Strongly agree: 74.2%
  - Agree: 13.4%
Opinions on laws and regulations

**Endangered wildlife should be protected**
- Strongly disagree: 0.8%
- Disagree: 55.5%
- Agree: 43.7%
- Strongly agree: 43.7%

**Most community members are familiar with the punishments associated with violating Park laws and regulations**
- Strongly disagree: 3.6%
- Disagree: 33.4%
- Agree: 59.7%
- Strongly agree: 3.3%

**Current laws unfairly restrict access to important resources (e.g. firewood)**
- Strongly disagree: 34.8%
- Disagree: 4.5%
- Agree: 55.6%
- Strongly agree: 5.1%

**Current laws unfairly restrict access to important medicinal resources**
- Strongly disagree: 29.6%
- Disagree: 4.4%
- Agree: 61.1%
- Strongly agree: 5.0%

**Current laws unfairly restrict access to resources important for cultural practices**
- Strongly disagree: 28.7%
- Disagree: 4.0%
- Agree: 61.0%
- Strongly agree: 6.3%

From Myanmar Ranger Survey

**The community respect Park rangers**
- Strongly agree: 0.3%
- Agree: 4.1%
- Strongly disagree: 91.0%
- Disagree: 4.6%

**The community trust the Park rangers**
- Strongly agree: 0.7%
- Agree: 10.4%
- Strongly disagree: 86.0%
- Disagree: 2.9%

**The community and Park rangers generally have the same sense of right and wrong**
- Strongly agree: 1.7%
- Agree: 16.3%
- Strongly disagree: 80.9%
- Disagree: 1.1%

**I believe community members respect me**
- Strongly agree: 4.1%
- Agree: 21.6%
- Strongly disagree: 62.9%
- Disagree: 11.3%

**I believe community members trust me**
- Strongly agree: 3.3%
- Agree: 36.7%
- Strongly disagree: 53.3%
- Disagree: 6.7%

**I feel that I represent the values of the local community**
- Strongly agree: 1.1%
- Agree: 25.3%
- Strongly disagree: 61.5%
- Disagree: 12.1%
Perceptions of Misconduct

Have you ever heard or witnessed Park rangers engaging in...

<table>
<thead>
<tr>
<th>Misbehavior or Misconduct?</th>
<th>Corruption?</th>
<th>A Crime?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES 7.7%</td>
<td>YES 10.1%</td>
<td>YES 0.3%</td>
</tr>
</tbody>
</table>

**From Myanmar Ranger Survey**

Wildlife laws reflect local community values

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6%</td>
<td>39.8%</td>
<td>50.6%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

The laws and regulations of the conservation area are in line with the moral values of local community members.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3%</td>
<td>39.6%</td>
<td>41.7%</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

**From Ranger Survey Subset**

If caught accepting a bribe or gift, rangers would be punished by their supervisors

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1%</td>
<td>36.2%</td>
<td>54.6%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2%</td>
<td>14.4%</td>
<td>55.7%</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

Park rangers would report their fellow rangers to Park management if they were involved in corruption or misconduct.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4%</td>
<td>43.3%</td>
<td>48.6%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

Rangers would report their fellow rangers if they witnessed them accepting a bribe or other corrupt and illegal activity.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2%</td>
<td>26.0%</td>
<td>53.1%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>
Impact of wildlife on community

Park wildlife pose a threat to the physical safety of community members

- Strongly agree: 2.0%
- Agree: 3.5%
- Disagree: 43.0%
- Strongly disagree: 51.5%

Park wildlife post a threat to the livelihoods (e.g. income) of community members

- Strongly agree: 1.4%
- Agree: 4.6%
- Disagree: 50.0%
- Strongly disagree: 44.0%

Have you ever had an encounter with wildlife from the Park? **YES 21.3%**

If yes did you lose livestock in the encounter? **YES 24.3%**

If yes did you lose crops as a result of the encounter? **YES 94.3%**

If yes were you or your family harmed as a result of the encounter? **YES 4.0%**
Community Perception Survey Results - Philippines

Basic Information

- Surveys delivered: 2,099
- Number of survey locations: 4
- Women: 55.4%
- Men: 44.6%
- Average Age of Survey Taker: 41.8 years
- Survey taker with friend or family employed as a ranger: 44.5%

Consultation and Collaboration

- Most community members know how to contact Park management: 48.1%
- Have you ever attended a meeting hosted by the Park authorities? YES: 41.9%
- IF YES, did the meeting provide useful information regarding the benefits of the conservation area?
- Communities should be able to provide input for conservation decision making: 68.1%
- Communities are able to provide input to conservation decision making: 44.5%
- Communities should be directly involved in decision-making about conservation efforts: 66.0%

Values are represented as:

- Strongly disagree
- Disagree
- Agree
- Strongly agree
Local community members should work alongside Park rangers to reduce poaching.

- Strongly disagree: 0.3%
- Disagree: 1.4%
- Agree: 30.7%
- Strongly agree: 67.6%

The local community benefits from local conservation efforts.

- Strongly disagree: 4.6%
- Disagree: 9.0%
- Agree: 38.3%
- Strongly agree: 48.1%

How likely would you be to...

**Report the person to local protected area authorities if s/he had encroached in protected areas?**

- Very unlikely: 10.9%
- Somewhat unlikely: 5.8%
- Unsure: 6.1%
- Somewhat likely: 57.9%
- Very likely: 19.3%

**Report the person to local protected area authorities if s/he had hunted wild animals in protected areas?**

- Very unlikely: 13.0%
- Somewhat unlikely: 6.8%
- Unsure: 6.3%
- Somewhat likely: 52.6%
- Very likely: 21.3%

Protected area authorities can not be effective in conservation efforts without the help of the community.

- Strongly disagree: 1.2%
- Disagree: 4.5%
- Agree: 50.6%
- Strongly agree: 44.0%

From Philippines Ranger Survey

Part of rangers’ success at their jobs depends on the community providing them with information.
Community Perception Survey Results – Philippines (continued)

Perceptions of / experiences with rangers

Most protected areas authorities do their jobs well

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7%</td>
<td>8.9%</td>
<td>41.9%</td>
<td>44.5%</td>
</tr>
</tbody>
</table>

Protected areas authorities are generally honest

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0%</td>
<td>12.8%</td>
<td>40.1%</td>
<td>40.2%</td>
</tr>
</tbody>
</table>

Protected areas authorities respect the community

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4%</td>
<td>5.3%</td>
<td>48.9%</td>
<td>44.4%</td>
</tr>
</tbody>
</table>

Have you ever had an encounter with a Park ranger?

YES 36.9%

If yes

Over last 12 months I’ve been subjected to the following from community members:

VERBAL ABUSE, BULLYING OR HARASSMENT 27.4%

THREATS 31.8%

From ranger survey

Community members believe that rangers take the time to listen to people

Community members believe that officers treat those they encounter with politeness and dignity
Opinions on laws and regulations

### Endangered wildlife should be protected

- **Strongly disagree:** 0.2%
- **Disagree:** 1.1%
- **Strongly agree:** 69.9%
- **Agree:** 28.8%

### Most community members are familiar with the punishments associated with violating Park laws and regulations

- **Strongly disagree:** 4.8%
- **Disagree:** 10.4%
- **Strongly agree:** 51.9%
- **Agree:** 32.7%

### Current laws unfairly restrict access to important resources (e.g. firewood)

- **Strongly disagree:** 39.2%
- **Disagree:** 27.7%
- **Agree:** 6.9%
- **Strongly agree:** 25.6%

### Current laws unfairly restrict access to important medicinal resources

- **Strongly disagree:** 36.4%
- **Disagree:** 30.9%
- **Agree:** 6.9%
- **Strongly agree:** 25.9%

### Current laws unfairly restrict access to resources important for cultural practices

- **Strongly disagree:** 38.4%
- **Disagree:** 29.6%
- **Agree:** 6.9%
- **Strongly agree:** 25.2%
Community Perception Survey Results – Philippines (continued)

Perceptions of Misconduct

Have you ever heard or witnessed Park rangers engaging in corruption? **YES 11.0%**

Impact of wildlife on community

Have you ever had an encounter with wildlife from the Park? **YES 7.0%**

If yes

- did you lose livestock in the encounter? **YES 38.0%**
- did you lose crops as a result of the encounter? **YES 50.0%**
- were you or your family harmed as a result of the encounter? **YES 30.0%**

Wildlife laws reflect local community values

From Philippines Ranger Survey

The laws and regulations of the conservation area are in line with the moral values of local community members.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8%</td>
<td>3.3%</td>
<td>40.6%</td>
<td>55.8%</td>
</tr>
<tr>
<td>1.4%</td>
<td>7.7%</td>
<td>59.8%</td>
<td>31.1%</td>
</tr>
</tbody>
</table>

©Jürgen Freund / WWF
Community Surveys – Recommendations

A community perceptions questionnaire was developed in 2017 as a necessary complement to the ranger survey, and as an important means of avoiding an incomplete (i.e. one-sided) picture of ranger-community relations. With more than 3,000 surveys delivered to residents of communities located in close proximity to protected areas in which rangers were surveyed in the Philippines and Myanmar, this first of its kind study provides information valuable to any agency or organization concerned with maximizing community and conservation co-benefit.

The results shown on the preceding pages include only a portion of total questions asked, but do show those responses most relevant to rangers and their work. Numerous additional questions related to protected area managers, police and other subjects are captured in the full version.

Whereas there are no plans to further distribute ranger perception surveys at this time, it is hoped that this community survey can be expanded into many new countries over the coming months. Any organization that would be interested in introducing this survey in their country is encouraged to contact the project team behind this publication to discuss options for doing so.

Some observations and recommendations based upon the findings from Myanmar and the Philippines are provided here.

Community member perception of rangers was largely positive (more so than rangers in both countries presumed): When asked whether rangers were respected, honest, or good at their jobs, positive responses ranged between 79% and 93%. When rangers and community members were separately asked about the level of trust or degree of respect for rangers in the community, the responses ranged between 79% and 93%. In Myanmar the gap was particularly large, with only 60% of rangers believing they were trusted, and 74% believing they were respected by communities (the actual rates were 89% and 95%). Communities were also overwhelmingly positive in describing encounters they had with rangers. These findings should be encouraging to rangers, and will hopefully reduce any skepticism regarding community willingness to assist rangers in their work (see below).

Communities appear eager to participate – can protected area managers and rangers harness that willingness? When asked if ‘local community members should work alongside rangers to reduce poaching’ community respondents agreed at a rate of 85% in Myanmar and 98% in the Philippines. At the same time 24% in Myanmar and 19% in the Philippines disagreed that the community was currently able to provide input into conservation decision making. Considering this, it is argued here that strategies for deepening collaboration with local peoples should be prioritized over those characterized by broad reach but little scope for material input. Such programs can further incentivize local ownership of protected areas successes and make these areas less vulnerable to wildlife criminals.

Roughly one-third of communities in both Myanmar and the Philippines think legal restrictions associated with protected areas are unfair: Questions focused on three categories (resources, medicinal products, and enjoyment of cultural practices), with ‘unfair’ response scored between 32% and 39% in all cases. Given this finding, decision makers in both countries may want to consider whether certain restrictions can be loosened in a manner that leads to negligible negative impact on conservation outcomes.

The issue of corruption warrants attention: About one in ten community members in both countries had either heard about or witnessed a park ranger engaging in corruption. Protected areas authorities should both put in place and widely communicate strong protections for those who wish to report such incidents or rumors. This is critical as a commonly held perception of corruption can erode confidence not only in rangers, but also the conservation goals and institutions that they serve.

Myanmar-specific considerations: Community members in Myanmar had encounters with wildlife at triple the rate recorded by Filipino respondents (21% vs 7%). As such, the matter of ensuring adequate compensation in cases of human-wildlife conflict (particularly crop damages) should be front and center in this country. It was also notable that about one-third of community members in Myanmar indicated that:

- people would not know how to contact park authorities if needed;
- people there were not familiar with the applicable punishments for violating park rules;
- they would be unlikely to report information they knew about illegal activities that impact the park.

These three items might be targets for awareness-raising in future outreach efforts. On that front Myanmar has been impressive, in that the majority of respondents indicated they had already attended at least one meeting hosted by park authorities.
Global Ranger Nomenclature

As part of a global survey on protected area staffing conducted between 2017-2019, respondents were asked to list the term(s) used in their local context to identify the position that has been defined as ‘ranger’ throughout this publication. They were also asked to list those unique terms used for protected areas staff occupying different positions in their respective workplace hierarchies, as divided into four levels:

- **Level 4.** Executive, meaning leadership level with wide-ranging and important responsibilities.
- **Level 3.** Senior managerial.
- **Level 2.** Technical staff, middle/junior managers and supervisors.
- **Level 1.** Skilled practical workers.

The aim of these questions was to better understand and define global jobs equivalencies in this sector, thus making assessments more consistent and better streamlining capacity building activities in the future. It was also done with an eye towards the development and possible promotion of common standards for job descriptions in this field.

Based on information received from 85 respondents in 51 countries, a summary of what such workers are called is provided in the table below.

Terms were translated into English where a clear equivalent exists. In cases where a precise English equivalent was not available, the best possible English term in listed in inverted commas.

<table>
<thead>
<tr>
<th>Position title</th>
<th>Number of countries</th>
<th>Countries in which term is used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranger*</td>
<td>18</td>
<td>Australia, Belize, Bhutan, Brazil, Canada, France, Gambia, Japan, Kenya, Lesotho, Malawi, Namibia, Nigeria, South Africa, Swaziland, United Kingdom, USA, Vietnam</td>
</tr>
<tr>
<td>Guard</td>
<td>16</td>
<td>Albania, Angola, Benin, Bulgaria, Burundi, Cameroon, Colombia, Czech Republic, Democratic Republic of Congo, El Salvador, Ghana, Guatemala, Honduras, Italy, Philippines, United Arab Emirates</td>
</tr>
<tr>
<td>Officer/Official</td>
<td>5</td>
<td>Canada, Puerto Rico, Saint Lucia, United Arab Emirates, United Kingdom</td>
</tr>
<tr>
<td>Scout</td>
<td>5</td>
<td>Kenya, Malawi, Nigeria, Namibia, Zimbabwe</td>
</tr>
<tr>
<td>Supervisor</td>
<td>3</td>
<td>Angola, Mozambique, Slovenia</td>
</tr>
<tr>
<td>Agent</td>
<td>3</td>
<td>Cote D’Ivoire, France, Madagascar</td>
</tr>
<tr>
<td>Warden</td>
<td>3</td>
<td>Canada, Suriname, United Kingdom</td>
</tr>
<tr>
<td>Inspector**</td>
<td>2</td>
<td>Jordan, Latvia</td>
</tr>
<tr>
<td>‘Vigilante’ (ranger with police powers)</td>
<td>2</td>
<td>Puerto Rico, Spain</td>
</tr>
<tr>
<td>Analyst</td>
<td>1</td>
<td>Brazil</td>
</tr>
<tr>
<td>Guide</td>
<td>1</td>
<td>South Africa</td>
</tr>
<tr>
<td>Manager</td>
<td>1</td>
<td>Belgium</td>
</tr>
<tr>
<td>Proprietor</td>
<td>1</td>
<td>Burkina Faso</td>
</tr>
<tr>
<td>‘Team Member’</td>
<td>1</td>
<td>South Africa</td>
</tr>
<tr>
<td>Chief</td>
<td>1</td>
<td>Burkina Faso</td>
</tr>
</tbody>
</table>

* In some countries (Japan, Albania, Bhutan) ranger has been designated in reference to a similar local language equivalent.

** The term Inspector, although recorded only twice in this survey, is known to be widely used across Eastern Europe and Central Asia, and is particularly common where Slavic languages are spoken.
In many cases further descriptors (adjectives) were applied to the main terms for ranger noted in the above table (e.g. park ranger, guardeparque, and so on). A list of recorded modifying elements included:

Chief, Environmental, Management, Protected Area, Wildlife, Community, Field, Nature, Protection, Conservation, Forest, Park(s), Resources, Countryside, Game, Patrol, Senior, Eco, Head, Project and Surveillance.

As seen above, the two most commonplace terms were ranger and guard (or variant thereof), with both used at a similar rate. When searching for a universal term for the profession, it is suggested here that ranger would seem the more logical choice of the two. This is mainly due to its more neutral connotation which would be more readily adaptable to the numerous non-enforcement and non-protective job requirements played by most. For instance, even the following hypothetical and rather narrow definition (put forward here to stimulate discussion) incorporates elements that would not commonly be associated with the work of guards:

A [ranger] is a field-based operative whose regular work involves surveillance, protection and maintenance of species and ecosystems, as well as the important services they provide for people.

**Functions:**
1. General (multifunctional);
2. Community;
3. Enforcement (law);
4. Tourism;
5. Resource maintenance (wildlife, forest, waters).

However, it must be considered that the word ranger is not familiar in many parts of the world, and even where it is known it might mean different things to different people. This can potentially lead to misunderstandings - for example, between managers and local stakeholders.

The potential to formalize universal definitions and categories for those working in this sector is a matter that might best be considered by organizations with global remit such as the International Ranger Federation (IRF), or perhaps the International Labour Organization (ILO). If practical, such an effort could yield real benefits. Not least among these would be more frequent and more substantive collaboration, communication and capacity building exchanges between similar ‘types’ of rangers across international borders.

*Research and text contributions made by* - Mike Appleton (IUCN World Commission on Protected Areas), Barney Long (Global Wildlife Conservation), Chris Galliers (Game Rangers Association of Africa), and James Slade (Global Wildlife Conservation).
Study of Ranger Deaths

Percentage of recorded ranger deaths by region, 2009-2019*

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>48.36%</td>
</tr>
<tr>
<td>Africa</td>
<td>36.71%</td>
</tr>
<tr>
<td>North America</td>
<td>5.68%</td>
</tr>
<tr>
<td>South America</td>
<td>4.05%</td>
</tr>
<tr>
<td>Europe</td>
<td>2.99%</td>
</tr>
<tr>
<td>Central America</td>
<td>1.35%</td>
</tr>
<tr>
<td>Oceania</td>
<td>0.87%</td>
</tr>
</tbody>
</table>

*Data source: International Ranger Federation (IRF) and Thin Green Line Foundation (TGLF)

- The actual number of ranger deaths on the job is almost certainly higher than the roughly one hundred per year recorded and confirmed by the International Ranger Federation (IRF) during the previous decade. Mechanisms should be adopted to ensure that no ranger death goes unreported, and that all those who die in the line of duty are duly recognized for their sacrifice.

- The figures for on-job causes of death confirm that armed illegal poachers remain the greatest threat to ranger safety, responsible for nearly half of total deaths.

- These numbers put ranger patrol work among the most dangerous careers in the world. This places a moral obligation on ranger employers to ensure full and adequate insurance coverage for cases of serious injury or death.
Reported causes of ranger deaths, 2012-2019*

<table>
<thead>
<tr>
<th>Year</th>
<th>Homicide</th>
<th>Other</th>
<th>Accident</th>
<th>Wildlife attack</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>36</td>
<td>5</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>2013</td>
<td>69</td>
<td>13</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>32</td>
<td>14</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>2015</td>
<td>27</td>
<td>10</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>2016</td>
<td>46</td>
<td>20</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td>2017</td>
<td>48</td>
<td>16</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>2018</td>
<td>59</td>
<td>15</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>2019</td>
<td>45</td>
<td>22</td>
<td>31</td>
<td>51</td>
</tr>
</tbody>
</table>

I think that being a ranger is a dangerous job due to the chances of:

- encountering poachers
  - Strongly agree: 42.6%
  - Agree: 42.2%
  - Disagree: 10.9%
  - Strongly disagree: 4.4%

- encountering wildlife
  - Strongly agree: 32.8%
  - Agree: 45.4%
  - Disagree: 15.5%
  - Strongly disagree: 6.3%

Injuries or health problems that I experienced over the last 12 months:

- Broken bone
  - Yes: 6.5%

- Other serious injury
  - Yes: 13.1%

- Existing health problem made worse by work
  - Yes: 17.5%

*Data source: International Ranger Federation (IRF) and Thin Green Line Foundation (TGLF)
Rangers and International Labour Standards

A total of 190 conventions have been drafted through the International Labour Organization (ILO) in the one hundred years since the first six conventions were put forward for state party signatures in 1919. The table on the opposite page highlights twenty conventions that are of particular relevance to the enjoyment of safe and rewarding work for rangers. It also shows the extent to which these instruments have been ratified – both in ranger survey countries and globally. Ratification is highly meaningful in that it creates a legal obligation to adopt the convention’s provisions into national laws (assuming that the convention in question has already come into force).

Future ILO conventions will continue to be applicable to rangers. This includes the newest convention; Violence and Harassment Convention, 2019 (No. 190), which should be considered by countries in regard to its implications for the ranger sector. Finally, it is worth noting that there already exist ILO conventions specific to certain sectors, such as domestic work, seafaring, nursing and mining. The development of a convention that aims to further define proper working conditions for rangers and related workers might be a worthwhile consideration for ILO member states over the coming years.

Rangers are in constant danger for carrying out their tasks in every continent as is evident from the figures presented on page 105 of this publication. As an example, just weeks before the release of this report, Romanian forest ranger Liviu Pop was shot dead with a hunting rifle when responding to a tip-off about illegal logging – six rangers have now lost their lives in that country in recent years. The unions that cover these employees have called for better protection of rangers and denounced the limited resources and training given to park authorities, even holding a protest outside parliament in Bucharest.

The ILO provides tools to respond to these urgent calls for action. Two of them stand out for their capacity to improve compliance with decent work standards: the Labour Inspection Convention, 1949 (No. 81) and the Convention on Labour Relations in the Public Service, 1978 (No. 151). Together, they have the potential of ensuring that rangers can count on working conditions that are mutually agreed and reliable.

Convention No. 81 seeks to ensure that all workers enjoy the effective protection of the laws, regulations and collective agreements that establish conditions of work. It requires that governments oversee labour inspectors, who should be fully engaged in enforcement and independent from all outside interference.

Convention No. 151, in turn, provides guarantees that wildlife rangers need to exercise their rights to establish and join worker organizations, to have an effective voice in the determination of their working conditions, and to resolve disputes without strikes. The Committee of Experts on the Application of Conventions and Recommendations (CEACR) has been emphatic that wildlife rangers should enjoy these protections, because they are not members of the armed forces or the police:

- ‘While some of the officials mentioned by the Government are obliged to carry a weapon in the course of their duties, this does not mean that they are members of the police or armed forces.’ (CEACR, Morocco, C151, 2017.)
- ‘While members of the armed forces, the police and civil servants in the administration of the State can be excluded from the application of the Convention, all other categories of workers, including prison, fire and wildlife services, as well as civilian personnel in the armed forces, should benefit from the rights granted by it.’ (CEACR, South Sudan, C98, 2019.)

– Carlos R. Carrión-Crespo, Sectoral Specialist for Public Service and Utilities, International Labour Organization.
<table>
<thead>
<tr>
<th>ILO legal instruments most relevant to ranger work</th>
<th>Ratification rate (%) of listed conventions by ranger survey countries</th>
<th>Global ratification average for all ILO members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Latin America</td>
<td>Africa</td>
</tr>
<tr>
<td>Governance conventions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 81 - Labour Inspection Convention (1947); No. 122 - Employment Policy Convention (1964); No. 129 - Labour Inspection (Agriculture) Convention (1969); No. 144 - Tripartite Consultation (International Labour Standards) Convention (1976)</td>
<td>62.5% (15/24)</td>
<td>62.5% (15/24)</td>
</tr>
<tr>
<td>Fundamental conventions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 29 - Forced Labour Convention (1930); No. 87 - Freedom of Association and Protection of the Right to Organise Convention (1948); No. 98 - Right to Organise and Collective Bargaining Convention (1949); No. 100 - Equal Remuneration Convention (1951); No. 105 - Abolition of Forced Labour Convention (1957); No. 111 - Discrimination (Employment and Occupation) Convention (1958); No. 138 - Minimum Age Convention (1973); No. 182 - Worst Forms of Child Labour Convention (1999)</td>
<td>97.9% (47/48)</td>
<td>97.9% (47/48)</td>
</tr>
<tr>
<td>Technical conventions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 47 - Forty-Hour Week Convention (1935); No. 95 - Protection of Wages Convention (1949); No. 102 - Social Security (Minimum Standards) Convention (1952); No. 156 - Workers with Family Responsibilities Convention (1981); No. 171 - Night Work Convention (1990); No. 155 - Occupational Safety and Health Convention (1981); No. 151 - Labour Relations (Public Service) Convention (1978); No. 169 – Indigenous and Tribal Peoples Convention (1989)</td>
<td>45.8% (22/48)</td>
<td>14.6% (7/48)</td>
</tr>
</tbody>
</table>

*Even though the 12 Asian ranger survey countries included in this calculation comprise 6.4 per cent of ILO membership, they account for a mere 1.3 per cent of total ratifications of these important technical conventions – a notable and concerning statistic.

Source: International Labour Organization / NORMLEX.

*Bhutan is excluded from the calculations given that it is not an ILO member state.
Comparing Ranger and Police Salaries

The graph displayed at the bottom of this page quantifies the gap between patrol ranger and police officer salaries in each of the 26 countries where ranger perception surveys were delivered. The wage figures for rangers in each country was calculated by taking the mean of all responses to the survey question ‘on average, how much do you get paid each month in the local currency’. The figures for police salaries from those same countries were taken from two websites\(^1\) that track and frequently update wage estimates for numerous job types worldwide. Those estimates were derived from a combination of market research and direct feedback from those working in various career categories. For those countries where both websites provided an estimate of police salary,\(^2\) an average of the two values was used.

The average ranger salary from these 26 countries was \textbf{345.27 USD per month}.\(^3\) The average police wage from those same 26 countries was \textbf{865.82 USD per month}, and in no country was ranger salary greater than police salary (although in one country the difference was only one half of a percent point). The finding that police earnings more than double that of rangers does much to put ranger compensation in context. It also suggests that even when other important factors such as purchasing power parity are considered, ranger earnings are still likely to be viewed as low (recall that 55\% of rangers surveyed did not believe they were paid a fair wage).

This is problematic, even beyond the negative physical and psychological hazards commonly associated with low earnings. For one, low earning potentials may dissuade talented individuals from pursuing the career, which negatively impacts recruitment goals and depresses the productivity and innovation potentials of staff that are hired. It would also stand to reason that insufficient wages and corresponding financial insecurity may increase the possibility of ranger participation in well-paying poaching activities, be it directly or through the selling of information to other poachers.

Perhaps most importantly, this sizable wage gap between police and rangers furthers a harmful perception that ranger work is not a priority, and that rangers are not fully \textit{professionalized} public servants. This is unfair, given that just like police officers, rangers play an indispensable role in the protection of valuable state resources and ensuring rule of law in the areas where they work. Wages should reflect such similarity of function, and this item needs to be put on the agenda of decision makers in all countries.

---

\(^1\) Salary Expert [ERI Economic Research Institute] (salaryexpert.com) and Salary Explorer (salaryexplorer.com)

\(^2\) Salary Explorer provided an estimate for all 26 countries, while Salary Expert displayed figures for 11 countries.

\(^3\) It is worth clarifying that this is not the mean salary of all rangers who wrote the survey - that figure was 297.14USD.
The World Heritage List, as chosen by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), contains sites deemed to be of outstanding physical or cultural importance to the shared history of humanity. At the time of publication, 1,121 such sites were recognized; 869 of which are labelled as ‘cultural’, 213 ‘natural’ and 39 falling under a ‘mixed’ category. Given their extraordinary status and international legal protections, it is fair to suggest that such sites are generally considered to be of the highest level of priority for preservation.

Pooling survey results from ten countries (five from Africa and five from Asia) the results from surveys submitted by rangers working within UNESCO natural heritage sites (n=480) are compared to those working in non-UNESCO sites (n=2,875) across those same countries. The findings detailed below are surprising in the sense that there is minimal divergence between the two categories, whereas it might have been reasonably assumed that World Heritage site ranger feedback would reflect certain advantages that accrue as a result of the elevated status of their landscapes. Although the World Heritage Site rangers note marginally better facilities and equipment access, they also indicated poorer conditions than other rangers on important health indicators such as paid sick leave, insurance coverage, clean drinking water access and training in wilderness survival.

It should be noted that variation in the proportion of surveys that came from World Heritage sites between the ten countries may have influenced the findings to some degree (see table below). In particular the significant gap between India and Indonesia in this regard (two of the larger pools of survey data) may have biased towards positive results in the non-UNESCO ranger survey sample, given that Southeast Asian rangers generally scored more positively than their South Asia counterparts (see pages 51 to 68 of this report). Even if this effect is present to some degree, the impact would be small to moderate and should not be overstated.

The main conclusion to draw from the findings below is that natural Heritage Sites in these regions are likely at risk to a similar extent as non-listed sites – which is to say they are at considerable risk. Investments and policy interventions will be necessary to ensure that these sites of universal importance will be preserved for future generations, and that those rangers tasked with assuring this have the tools to do so. As it stands, it should certainly not be assumed that World Heritage status confers increased protection against degradation, nor should such a belief cause complacency amongst decision makers in their planning around these sites. Indeed, the threats of poaching, illegal logging and illegal fishing in such areas has already been recognized in recent reports (see for example, Not for Sale: Halting the Illegal Trade in CITES Species from World Heritage Sites).

As a next step, it is suggested that relevant bodies of UNESCO such as the World Heritage Committee and the Site Managers Forum take into consideration the full set of survey results collected at natural heritage sites. This sample would be considerably larger than the one included here, given that all Latin American surveys arrived too late in the process to include in this analysis. The drive to implement solutions that address the shortcomings revealed by these surveys must then be elevated through national and international decision-making bodies over the coming months and years.

### Natural Heritage Site Name [PA name – if different]

<table>
<thead>
<tr>
<th>Surveys Completed</th>
<th>Country (WHS surveys as percentage of country total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Highlands of Sri Lanka [Horton Plains National Park]</td>
<td>8 Sri Lanka (5.5%)</td>
</tr>
<tr>
<td>The Sundarbans [Sundarbans West Wildlife Sanctuary]</td>
<td>32 Bangladesh (22.4%)</td>
</tr>
<tr>
<td>Sagarmatha National Park</td>
<td>3 Nepal (5.5%)</td>
</tr>
<tr>
<td>Western Ghats [Ranni Forest Division]</td>
<td>35 India (25.3%)</td>
</tr>
<tr>
<td>Kaziranga National Park [Kaziranga Tiger Reserve]</td>
<td>159</td>
</tr>
<tr>
<td>Tropical Rainforest Heritage of Sumatra [Gunung Leuser]</td>
<td>15 Indonesia (5.4%)</td>
</tr>
<tr>
<td>Tropical Rainforest Heritage of Sumatra [Kerinci Seblat]</td>
<td>10</td>
</tr>
<tr>
<td>Tropical Rainforest Heritage of Sumatra [Bukit Barisan Selatan]</td>
<td>15</td>
</tr>
<tr>
<td>Sangha Trinational [Lobeke National Park]</td>
<td>16 Cameroon (30.3%)</td>
</tr>
<tr>
<td>Dja Faunal Reserve [Dja Biosphere Reserve]</td>
<td>17</td>
</tr>
<tr>
<td>Sangha Trinational [Dzanga Sangha Protected Area]</td>
<td>37 Central African Republic (100%)</td>
</tr>
<tr>
<td>Sangha Trinational [Nouabale Ndoki National Park]</td>
<td>27 Republic of Congo (40.3%)</td>
</tr>
<tr>
<td>Kenya Lake System in the Great Rift Valley [Nakuru National Park]</td>
<td>32 Kenya (9.7%)</td>
</tr>
<tr>
<td>Mount Kenya National Park/Natural Forest [Lewa Downs Conservancy]</td>
<td>18</td>
</tr>
<tr>
<td>Bwindi Impenetrable National Park [Bwindi Impenetrable Forest National Park]</td>
<td>60 Uganda (12.0%)</td>
</tr>
<tr>
<td>Rwenzori Mountains National Park</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>480 10 counties (14.4%)</strong></td>
</tr>
</tbody>
</table>
### Employment indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overtime compensation</td>
<td>7.9</td>
<td>14.2</td>
</tr>
<tr>
<td>Paid sick leave</td>
<td>37.9</td>
<td>48.1</td>
</tr>
<tr>
<td>Paid annual leave</td>
<td>59.1</td>
<td>62.0</td>
</tr>
<tr>
<td>Extra pay for dangerous work</td>
<td>10.3</td>
<td>13.6</td>
</tr>
<tr>
<td>Salary owed was cancelled</td>
<td>3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Paid late once (last 12 months)</td>
<td>43.2</td>
<td>31.1</td>
</tr>
<tr>
<td>Paid late 3 or more times (last 12 months)</td>
<td>16.9</td>
<td>15.1</td>
</tr>
</tbody>
</table>

### Always or often available at outposts

<table>
<thead>
<tr>
<th>Facility</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toilet facilities</td>
<td>68.1</td>
<td>52</td>
</tr>
<tr>
<td>Running water</td>
<td>47.2</td>
<td>37.2</td>
</tr>
<tr>
<td>Clean drinking water</td>
<td>43.2</td>
<td>51.4</td>
</tr>
<tr>
<td>Mosquito net</td>
<td>43.5</td>
<td>31.3</td>
</tr>
</tbody>
</table>

### Health indicators: Cases of injuries or infections within previous 12 months

<table>
<thead>
<tr>
<th>Disease</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>28.2</td>
<td>32.7</td>
</tr>
<tr>
<td>Dengue</td>
<td>3.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Broken bone during work</td>
<td>7.1</td>
<td>6.4</td>
</tr>
<tr>
<td>Other serious disease requiring medication/treatment</td>
<td>30.7</td>
<td>24.5</td>
</tr>
<tr>
<td>Existing health problems made worse by work</td>
<td>23.0</td>
<td>16.5</td>
</tr>
<tr>
<td>Other serious injury</td>
<td>13.7</td>
<td>13.0</td>
</tr>
</tbody>
</table>

### Adequacy of equipment (% agree)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>66.5</td>
<td>54.2</td>
</tr>
<tr>
<td>Communication devices</td>
<td>54.5</td>
<td>40.2</td>
</tr>
<tr>
<td>Navigation equipment</td>
<td>50</td>
<td>46.3</td>
</tr>
<tr>
<td>Shelter</td>
<td>43.4</td>
<td>42.2</td>
</tr>
<tr>
<td>Uniform and boots</td>
<td>45.8</td>
<td>47.7</td>
</tr>
</tbody>
</table>

### I ‘often’ or ‘always’ have access to these things while on patrol

<table>
<thead>
<tr>
<th>Equipment</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearms</td>
<td>73.4</td>
<td>67.0</td>
</tr>
<tr>
<td>Communication devices</td>
<td>62.2</td>
<td>38.2</td>
</tr>
</tbody>
</table>

### Verbal abuse or bullying within the previous 12 months (at work)

<table>
<thead>
<tr>
<th>Source</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>From a supervisor</td>
<td>13.1</td>
<td>12.7</td>
</tr>
<tr>
<td>From co-workers</td>
<td>14.3</td>
<td>14.7</td>
</tr>
<tr>
<td>From community members</td>
<td>29.8</td>
<td>31.3</td>
</tr>
</tbody>
</table>

### Health and Insurance

<table>
<thead>
<tr>
<th>Service</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical treatment provided is adequate</td>
<td>30.7</td>
<td>42.5</td>
</tr>
<tr>
<td>My employee insurance covers serious job injury</td>
<td>29.6</td>
<td>41.5</td>
</tr>
<tr>
<td>My employee insurance scheme covers serious job fatality (compensation to family)</td>
<td>33.7</td>
<td>37.5</td>
</tr>
<tr>
<td>I have access to shelter when I patrol overnight (I do not sleep in the open)</td>
<td>66.0</td>
<td>57.7</td>
</tr>
</tbody>
</table>

### Training in last 12 months (% yes)

<table>
<thead>
<tr>
<th>Training</th>
<th>World Heritage Site</th>
<th>Non World Heritage Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrol tactics</td>
<td>27.5</td>
<td>33.1</td>
</tr>
<tr>
<td>Wilderness survival</td>
<td>10.1</td>
<td>19.4</td>
</tr>
<tr>
<td>First aid</td>
<td>17.1</td>
<td>19.3</td>
</tr>
<tr>
<td>Ranger-based data collection</td>
<td>32.1</td>
<td>26.5</td>
</tr>
<tr>
<td>Crime-scene investigation</td>
<td>17.5</td>
<td>26.7</td>
</tr>
</tbody>
</table>
Ranger Stress Survey Pakistan

The following section shows the results of a survey designed to record incidence rates of certain symptoms that are commonly linked to elevated stress levels. The survey was designed by Dr. Anila Amber Malik, at the Department of Psychology, University of Karachi, and delivered to 58 patrol rangers at seven sites across Pakistan between April and August of 2019. These were the Indus Dolphin Game Reserve (24 surveys), Kirthar National Park (15), Nara Game Reserve (6), Nara Wildlife Sanctuary (5), Chitral Gol National Park (4), Margalla Hills National Park (2) and Takkar Wildlife Sanctuary (2).

The survey was envisioned as an initial research contribution to a topic that has received scant attention to this point, although much more will need to be done to adequately understand the degree to which stress impacts those working as rangers. As a start, these results should be compared to findings from other job sectors within Pakistan. Similar feedback might be sought from rangers from other countries. Controlled interviews should be designed to gain more insight into the causes of certain stresses experienced by rangers. This is something the current results cannot speak to, and it is plausible that many of the stresses experienced by these individuals may be entirely non-work-related.

The issue of post-traumatic stress disorder (PTSD) likely warrants specific attention, given that this condition is well studied in regards to its impact on individuals working in other sectors such as the military. Given that many rangers work under high stress conditions, and are sometimes present at distressing or violent incidents that can lead to trauma, it would be reasonable to expect PTSD is a reality for many rangers. The PTSD Assessment Instruments made available through the American Psychological Association contains a good repository of instruments that might be incorporated in to future ranger studies on PTSD.
During the last year, I have experienced the following:

**Cognitive Symptoms**

- **Forgetfulness**: 48% Never, 29% Always, 3% Occasional
- **Difficulty concentrating**: 67% Never, 3% Always, 2% Occasional
- **Difficulty in making decisions**: 59% Never, 2% Always, 3% Occasional
- **Difficulty in finding solutions to problems**: 64% Never, 7% Always, 3% Occasional
- **Racing thoughts**: 64% Never, 7% Always, 3% Occasional
- **Unusual thinking**: 45% Never, 16% Always, 3% Occasional
- **Negative thoughts**: 57% Never, 9% Always, 3% Occasional
- **Difficulties with trust**: 52% Never, 9% Always, 3% Occasional
- **Suspiciousness**: 60% Never, 9% Always, 3% Occasional

**Physical Symptoms**

- **Grinding teeth in sleep**: 74% Never, 0% Always, 26% Occasional
- **Breathing problems**: 72% Never, 0% Always, 28% Occasional
- **Chest pain**: 76% Never, 0% Always, 24% Occasional
During the last month, I have experienced the following:

- **Burnout**: 40% Always, 59% Never, 5% Occasional
- **Feelings of helplessness**: 53% Always, 47% Never, 0% Occasional
- **Low motivation**: 33% Always, 66% Never, 2% Occasional
- **A tendency to delay important work**: 26% Always, 71% Never, 3% Occasional
- **Discomfort around people**: 40% Always, 55% Never, 5% Occasional
- **Anxiety in interacting with people**: 34% Always, 62% Never, 3% Occasional
- **Loss of confidence**: 47% Always, 53% Never, 0% Occasional
- **Sadness**: 29% Always, 66% Never, 2% Occasional
- **Violent thoughts**: 21% Always, 78% Never, 0% Occasional
- **Disturbing thoughts**: 36% Always, 64% Never, 0% Occasional
- **Suicidal thoughts**: 21% Always, 79% Never, 0% Occasional
- **Sleeplessness**: 72% Always, 26% Never, 2% Occasional
- **Nightmares**: 38% Always, 59% Never, 3% Occasional
- **Lack of sleep**: 59% Always, 26% Never, 9% Occasional
During the last month I have used:

- **Cigarettes**
  - Always: 5%
  - Never: 55%
  - Occasional: 40%

- **Alcohol**
  - Always: 19%
  - Never: 81%
  - Occasional: 0%

- **Drugs**
  - Always: 34%
  - Never: 66%
  - Occasional: 0%

During the last month, I have experienced:

- **Agitation**
  - Always: 47%
  - Never: 40%
  - Occasional: 5%

- **Frustration**
  - Always: 59%
  - Never: 22%
  - Occasional: 2%

- **Moodiness**
  - Always: 45%
  - Never: 55%
  - Occasional: 0%

- **Irritation**
  - Always: 48%
  - Never: 48%
  - Occasional: 3%

- **Anger**
  - Always: 36%
  - Never: 33%
  - Occasional: 31%

- **Shortness of temper**
  - Always: 67%
  - Never: 24%
  - Occasional: 9%

- **Verbal conflicts**
  - Always: 76%
  - Never: 28%
  - Occasional: 6%

- **Impatience**
  - Always: 69%
  - Never: 28%
  - Occasional: 3%

- **Physical conflicts**
  - Always: 0%
  - Never: 76%
  - Occasional: 24%

- **Arguments with family members**
  - Always: 0%
  - Never: 67%
  - Occasional: 33%

- **Arguments with close friends**
  - Always: 0%
  - Never: 67%
  - Occasional: 33%

**Survey design and delivery leads:**
Hamera Aisha, WWF Pakistan and Dr Anila Amber Malik, University of Karachi
Ranger Insurance Study

The research summarized in this section was commissioned by WWF as a response to a number of concerning findings revealed in a 2016 survey, as summarized in the publication Ranger Insurance Report. Whereas that previous report was a broad level assessment of ranger insurance coverage across numerous countries (40 in total), the findings reproduced here come from in-depth case studies undertaken in seven countries: Cameroon, Kenya, India, Thailand, Nepal, Bhutan and Rwanda. As a subject-matter specialist, commercial insurance firm K.M. Dastur was appointed to conduct this study, during which they employed both desk-based and in-field research approaches. In addition to analyzing the various insurance coverage frameworks available to rangers in all seven countries (see the below table), they also sought to define the key characteristics of effective ranger insurance models. Furthermore, they estimated potentials for developing commercially viable insurance products tailored to the ranger sector. This learning will be put into action in future partnership-building and advocacy efforts, with the goal of eventually providing full insurance coverage to rangers wherever they may work.

The full report by K.M. Dastur forwarded a number of recommendations. Three of these, that are not addressed in significant detail in the table below, are noted here:

---

The full report above conducted by Ayandev Saha, K.M. Dastur

---

<table>
<thead>
<tr>
<th>Insurance product</th>
<th>Kenya</th>
<th>Cameroon</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>KWS Rangers</td>
<td>County Rangers and Community Rangers</td>
<td>Rangers¹</td>
<td>Rangers²</td>
</tr>
<tr>
<td>Life Insurance</td>
<td>Will vary based on current salary and number of months worked.</td>
<td></td>
<td>Grant fund survivor receives 5 months wages (if contributions were made for 10+ years), or 1.5 months wage (3-9 years contributions). Funeral grant of 40,000 THB.</td>
</tr>
<tr>
<td>Health/Medical Insurance</td>
<td>Health Insurance: National Hospital Insurance Fund (NHIF) coverage (comprehensive). Monthly premium is dependant on salary. Medical Insurance: Funded by KWS. Inpatient benefit = 600,000 KSH; outpatient benefit = 45,000 KSH.</td>
<td></td>
<td>Health Insurance: Medical treatment costs covered. Cash benefit for 50% of wages lost during illness up to certain thresholds; 180 days per year, and no more than 365 days total in case of chronic illness.</td>
</tr>
<tr>
<td>Accident Insurance</td>
<td>Lump sum benefit against accidental death and permanent disability. Sum insured = 200,000 KSH.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability Insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funeral Insurance</td>
<td>200 KSH deducted per month from wages. Benefit = 85,000 KSH (ranger); 50,000 KSH (spouse); 30,000</td>
<td></td>
<td>10,000 THB towards funeral expenses.</td>
</tr>
<tr>
<td>Critical Illness</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Contribution paid by rangers for the below insurance is 7% of covered payroll (coverage is under the National Social Insurance Fund).
² Employees contribute 1.5% of their salary as statutory deduction for the below benefits. There is no unique insurance scheme for rangers, and as such permanent rangers are provided with similar benefits as other civil servants.
³ For medical coverage rangers will pay 7.5% of their basic salary; a contribution that is matched by the employer. This is managed by the Rwandan Social Security Board.
⁴ No insurance scheme specific to rangers, although permanent rangers receive similar benefits as other civil servants (see below).
Insurance provided to temporary or casual rangers is highly inadequate, with most lacking any form of coverage. This is especially problematic when considering that most casual rangers do not have the requisite income or savings to buy insurance products on their own. Governments should quantify, and then address the coverage gap for this vulnerable group. One means to accomplish this would be through direct premium subsidies. Alternatively, the government could negotiate new plans or lower premiums for temporary staff with private companies. Their negotiating position will be strengthened by mobilizing and centralizing this large group of potential insurance holders. To compliment these efforts, governments should also reach out to external NGOs, trusts and associations for contributions or cost sharing arrangements. Of the countries studied, the need to address this issue was particularly urgent in India.

In the case of Kenya, it was recommended that the recently established Kenya Wildlife Conservation Association (KWCA) adopt the role of gatekeeper between an insurance company and that subset of rangers that work for conservancy members. By increasing the pool of those potentially insured both prices and the chance of any coverage exclusion (e.g. preexisting medical condition) would be dramatically reduced. The report also suggested that ranger associations in Cameroon are best positioned to play a role similar to that suggested for KWCA in Kenya.

In most countries, governments need to do a better job increasing awareness about existing insurance schemes and mandatory benefits. NGOs that work with rangers should also consider efforts to increase awareness about existing or optional insurance policies available to those in this profession.

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>Rwanda</th>
<th>Bhutan</th>
<th>Nepal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corbett TR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rangers Permanent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death compensation due to wildlife attack = 300,000 INR (government compensation) + 200,000 INR (Corbett Tiger Foundation). Death due to other causes = 250,000 INR.</td>
<td>Health Insurance: Fully reimbursed for expenses related to illness.</td>
<td>For any injury or illness, full pay for first year of medical leave, and half pay for second year of such leave.</td>
<td>Compensation entitlement in case of wildlife attack: 100,000 INR (partial disability); 200,000 INR (total disability).</td>
<td></td>
</tr>
<tr>
<td>Rangers Temporary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death compensation due to wildlife attack = 300,000 Indian rupees (government compensation) + 200,000 INR (Corbett Tiger Foundation). Death due to other causes = no compensation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Valmiki TR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rangers Permanent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death compensation due to wildlife attack = 300,000 INR (government compensation). All other insurance coverage must be exclusively self funded by rangers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rangers Temporary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death compensation due to wildlife attack = 300,000 INR (government compensation). All other insurance coverage must be exclusively self funded by rangers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Life Insurance: The Insurer promises to pay a designated beneficiary a sum of money (the benefit) in exchange for a premium, upon the death of an insured person. Medical Insurance: The insurer pays for medical and surgical expenses incurred by the insured (can reimburse the insured for the expenses incurred or pay the care provider directly). Accident Insurance: Similar coverage to medical insurance but provided by the state rather than private companies. Critical Illness: The insurer pays a lump sum cash benefit if the policyholder is diagnosed with one of the specific illnesses on a predetermined list as part of an insurance policy.
## Ranger Insurance Study

### Accessibility and adequacy of ranger insurance in Kenya and Cameroon

<table>
<thead>
<tr>
<th>Product Appropriateness</th>
<th>KWS Rangers (Kenya)</th>
<th>Non KWS Rangers (Kenya)</th>
<th>Cameroon Govt. Rangers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covers appropriate risks from a client perspective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrates appropriate riders to main cover</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offers simple cover without many exclusions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum insured in relation to cost of risk (pays adequate amount in relation to cost of risk)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusive, does not exclude groups of people</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value-added services (offers non-insurance benefits, preventive health services)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access &amp; Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offers choices in benefit levels or additional riders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple enrolment process (not much documentation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information and understanding in relation to the insurance scheme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium payment method</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity - points of service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offers close network of health care providers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium in relation to client income (affordable access)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost structure and controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim processing procedures (cashless access to health services)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy administration and tangibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has mechanisms to collect feedback from clients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides access to call center / helpline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has a systematic approach to build trust over time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establishes a clear grievance mechanism</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- Poor: ineffective and not appropriate to the needs of the Rangers
- Below Average: effective but needs substantial improvement
- Average: effective but has room for improvement
- Strong: effective with limited or no room for improvement age

### Risk mapping exercise for Kenya and Cameroon

<table>
<thead>
<tr>
<th>Risk</th>
<th>Kenya</th>
<th>Cameroon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Frequency</td>
<td>Severity</td>
</tr>
<tr>
<td>Trans-border / border based challenges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegal loggers and poachers / militants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attack from wild animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural calamities (e.g. swelling rivers and streams)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest fire</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Illnesses / diseases spread by mosquitoes/insects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterborne diseases caused by micro-organisms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- Low
- Medium
- High
Focus group meetings were held in both Kenya and Cameroon – where 26 and 42 rangers participated respectively (see table on previous page). This was done in order to get a better sense of rangers’ feelings towards existing insurance coverage, and also their likely willingness to enroll in a variety of possible insurance schemes. In Kenya the focus group consisted of Kenya Wildlife Service (KWS) rangers, county rangers and community rangers. In that group no ranger stated that they were ‘fully satisfied’ with their existing coverage, with 12% ‘satisfied’, 50% ‘somewhat satisfied’ and 38% ‘not satisfied at all’. In Cameroon, only 12% of the focus group indicated they had any form of insurance coverage. Although 95% of respondents said that they would be interested in signing up for insurance that would provide payments to their families if they were to die or become permanent disabled, only 41% indicated they would be open to salary deductions to provide such coverage.

### My employee insurance scheme provides compensation in case of:

<table>
<thead>
<tr>
<th></th>
<th>Latin America</th>
<th>Africa</th>
<th>South Asia</th>
<th>East and Southeast Asia</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious injury on the job</td>
<td>45.3%</td>
<td>48.9%</td>
<td>37.6%</td>
<td>41.1%</td>
<td>41.8%</td>
</tr>
<tr>
<td>Job-related fatality</td>
<td>32.3%</td>
<td>36.7%</td>
<td>38.4%</td>
<td>40.0%</td>
<td>37.7%</td>
</tr>
</tbody>
</table>

### 2016 Ranger Insurance Case Study

Commissioned by WWF and the Ranger Federation of Asia (RFA) with support from Global Wildlife Conservation (GWC), International Ranger Federation (IRF), Global Tiger Forum (GTF) and Thin Green Line Foundation (TGLF), the Ranger Insurance Report surveyed a number of experts to learn more about the source of various types of insurance coverage held by rangers. This 2016 report incorporated feedback from 40 countries, a large proportion of which are not included in the ranger survey project - for instance many North American, European and Oceania countries figure in the numbers below.

<table>
<thead>
<tr>
<th>Source of Insurance</th>
<th>Government insurance</th>
<th>Private company on behalf of government</th>
<th>Insurance purchased by Ranger</th>
<th>Nonprofit/NGO Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health insurance provider</td>
<td>47%</td>
<td>27%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Life insurance provider</td>
<td>37%</td>
<td>22%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Long-term disability insurance provider</td>
<td>32%</td>
<td>20%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>
The below tables detail the scope and legal source of certain powers, rights and obligations that would be of considerable relevance to rangers during their career. The inclusion of seven Asian countries provides an interesting opportunity for comparative purposes, at least by way of broad top-level overview. The information also serves to expand our scope of understanding on the topic of compensation available to rangers under certain scenarios, thus building upon the findings shared in the insurance study in the previous section. Other interesting laws are summarized, including those stipulating the mandatory retirement age for rangers in three countries (these are 56, 58 and 60 years of age).

The laws described below also invite deeper investigation of some important issues. For one, the wording of the laws provides only a partial understanding of the extent to which rangers might face legal liability for actions undertaken during the course of their duties. In particular, what would or would not fall under the categories of good faith, use of necessary force or minimum necessary force, would be highly important to the ranger profession. Determining the boundaries of these concepts in each of the countries would likely require an analysis of related administrative-disciplinary procedures. Such an exercise would be of obvious value and would allow decision makers to more directly consider whether the current balance is the best possible for protecting both rangers and suspected wildlife offenders from unjust outcomes.

The striking similarity of laws across countries also becomes apparent when considering the information below. In a significant proportion of cases this similarity is not limited only to identical statutory text, but extends to identical provision (or article) numbers for the controlling legislation. For the countries in question this is a consequence of either a shared British colonial past, or the direct influence of those colonial legal systems. For example, in India and Bangladesh a statute from 1927 (now the respective Forest Acts of those countries) still serves to expand our scope of understanding on the topic of compensation available to rangers under certain scenarios, thus building upon the findings shared in the insurance study in the previous section. Other interesting laws are summarized, including those stipulating the mandatory retirement age for rangers in three countries (these are 56, 58 and 60 years of age).

The laws described below also invite deeper investigation of some important issues. For one, the wording of the laws provides only a partial understanding of the extent to which rangers might face legal liability for actions undertaken during the course of their duties. In particular, what would or would not fall under the categories of good faith, use of necessary force or minimum necessary force, would be highly important to the ranger profession. Determining the boundaries of these concepts in each of the countries would likely require an analysis of related administrative-disciplinary procedures. Such an exercise would be of obvious value and would allow decision makers to more directly consider whether the current balance is the best possible for protecting both rangers and suspected wildlife offenders from unjust outcomes.

The striking similarity of laws across countries also becomes apparent when considering the information below. In a significant proportion of cases this similarity is not limited only to identical statutory text, but extends to identical provision (or article) numbers for the controlling legislation. For the countries in question this is a consequence of either a shared British colonial past, or the direct influence of those colonial legal systems. For example, in India and Bangladesh a statute from 1927 (now the respective Forest Acts of those countries) still serves to expand our scope of understanding on the topic of compensation available to rangers under certain scenarios, thus building upon the findings shared in the insurance study in the previous section. Other interesting laws are summarized, including those stipulating the mandatory retirement age for rangers in three countries (these are 56, 58 and 60 years of age).

The laws described below also invite deeper investigation of some important issues. For one, the wording of the laws provides only a partial understanding of the extent to which rangers might face legal liability for actions undertaken during the course of their duties. In particular, what would or would not fall under the categories of good faith, use of necessary force or minimum necessary force, would be highly important to the ranger profession. Determining the boundaries of these concepts in each of the countries would likely require an analysis of related administrative-disciplinary procedures. Such an exercise would be of obvious value and would allow decision makers to more directly consider whether the current balance is the best possible for protecting both rangers and suspected wildlife offenders from unjust outcomes.

The striking similarity of laws across countries also becomes apparent when considering the information below. In a significant proportion of cases this similarity is not limited only to identical statutory text, but extends to identical provision (or article) numbers for the controlling legislation. For the countries in question this is a consequence of either a shared British colonial past, or the direct influence of those colonial legal systems. For example, in India and Bangladesh a statute from 1927 (now the respective Forest Acts of those countries) still serves to expand our scope of understanding on the topic of compensation available to rangers under certain scenarios, thus building upon the findings shared in the insurance study in the previous section. Other interesting laws are summarized, including those stipulating the mandatory retirement age for rangers in three countries (these are 56, 58 and 60 years of age).

The laws described below also invite deeper investigation of some important issues. For one, the wording of the laws provides only a partial understanding of the extent to which rangers might face legal liability for actions undertaken during the course of their duties. In particular, what would or would not fall under the categories of good faith, use of necessary force or minimum necessary force, would be highly important to the ranger profession. Determining the boundaries of these concepts in each of the countries would likely require an analysis of related administrative-disciplinary procedures. Such an exercise would be of obvious value and would allow decision makers to more directly consider whether the current balance is the best possible for protecting both rangers and suspected wildlife offenders from unjust outcomes.

The striking similarity of laws across countries also becomes apparent when considering the information below. In a significant proportion of cases this similarity is not limited only to identical statutory text, but extends to identical provision (or article) numbers for the controlling legislation. For the countries in question this is a consequence of either a shared British colonial past, or the direct influence of those colonial legal systems. For example, in India and Bangladesh a statute from 1927 (now the respective Forest Acts of those countries) still serves to expand our scope of understanding on the topic of compensation available to rangers under certain scenarios, thus building upon the findings shared in the insurance study in the previous section. Other interesting laws are summarized, including those stipulating the mandatory retirement age for rangers in three countries (these are 56, 58 and 60 years of age).

The laws described below also invite deeper investigation of some important issues. For one, the wording of the laws provides only a partial understanding of the extent to which rangers might face legal liability for actions undertaken during the course of their duties. In particular, what would or would not fall under the categories of good faith, use of necessary force or minimum necessary force, would be highly important to the ranger profession. Determining the boundaries of these concepts in each of the countries would likely require an analysis of related administrative-disciplinary procedures. Such an exercise would be of obvious value and would allow decision makers to more directly consider whether the current balance is the best possible for protecting both rangers and suspected wildlife offenders from unjust outcomes.

The striking similarity of laws across countries also becomes apparent when considering the information below. In a significant proportion of cases this similarity is not limited only to identical statutory text, but extends to identical provision (or article) numbers for the controlling legislation. For the countries in question this is a consequence of either a shared British colonial past, or the direct influence of those colonial legal systems. For example, in India and Bangladesh a statute from 1927 (now the respective Forest Acts of those countries) still serves to expand our scope of understanding on the topic of compensation available to rangers under certain scenarios, thus building upon the findings shared in the insurance study in the previous section. Other interesting laws are summarized, including those stipulating the mandatory retirement age for rangers in three countries (these are 56, 58 and 60 years of age).
Fifteen international laws governing aspects of this employment sector – nearly one hundred years after entering into force.

In fact, many of the laws reviewed in the table below were drafted in an era in which the role of a ranger was decidedly different. At the time, these ‘forest officers’ were principally tasked with managing timber resources for purpose of supporting the economic expansion of that sector. This role was a distant bell from the far more complex job requirements of the modern ranger, who has to balance a diverse array of stakeholder interests and is tasked with protecting wide-ranging animals that have become increasingly valuable in illicit international markets.

Furthermore, the prior copy-and-paste style of colonial lawmaking shortcomings when it comes to addressing the unique political, social and economic challenges faced across a heterogeneous grouping of countries. To this point, it would be interesting to better understand the extent to which the modernization of similar legislation in other former colonial countries has impacted ranger work or ranger welfare there.

On many elements of their work the rangers of this region are also governed under umbrella legislation that covers all civil employees. Given the considerable differences between ranger responsibilities and those of most civil servants (such as the sizable proportion with desk-based jobs) it seems probable that many of those provisions could be insufficient when applied to ranger work.

In reference to the considerations above, a review of adequacy of such legislation towards governance of the ranger sector should be undertaken as a matter of priority by all countries included in this study. Furthermore, the impact (positive and negative) of laws that regulate ranger work should be studied more broadly, so that more effective legislative solutions can be brought forward during future periods of legislative amendment.

<table>
<thead>
<tr>
<th>NEPAL</th>
<th>MALAYSIA</th>
<th>BHUTAN</th>
<th>MYANMAR</th>
</tr>
</thead>
</table>

**Section 59:** Any Forest Officer may arrest without a warrant if there is a likelihood of escape of the culprit.

*The arrest must be carried out in the presence of at least two persons as witnesses. The Forest Ranger shall not enter a residential home from the moment of sunset till sunrise.*

**Section 93:** Any Forest Officer may arrest without a warrant any person whom he reasonably believes has committed or is attempting to commit an offence.

**Section 8:** A Forest Officer may carry and use firearms in his exercise of powers and duties under this Act.

**Section 55, 56, 57:** Forest Officer may take all necessary actions including the use of necessary force if a person is suspected of attempting to commit any offence liable to punishment under this Act. The Forest officer may shoot the offender under the knee.

**Section 55:** If a person is suspected of attempting to commit any offence the Forest Official shall take measures to prevent such offence from being committed and for this purpose he/she may take all necessary actions including the use of necessary force.

**Section 82:** A Forest Officer shall have all the powers to detect and investigate the commission of any offence or suspected offence under this Act.

**Section 32:** An authorized Forest Officer may require any person to answer any questions and provide any information relating to this Act.

**Section 32:** Any Forest Officer may arrest, stop, search and arrest any person whom he suspects of having committed an offence under this act.

**Forest Officers are not permitted to use firearms in Myanmar.**

Table below prepared by Samraansh Sharma, Centre for Environmental Law (WWF-India)

---

Life on the Frontline 2019 | 122
<table>
<thead>
<tr>
<th>POWER TO SEIZE. IMPRISON AND CONFISCATE</th>
<th>POWER TO DEMAND AND RECEIVE AID AND ASSISTANCE</th>
<th>PERSONAL LIABILITY IMMUNITY FROM PROSECUTION</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDIA</strong></td>
<td><strong>SRILANKA</strong></td>
<td><strong>BANGLADESH</strong></td>
<td></td>
</tr>
<tr>
<td>Section 52(1) &amp; 53: All Forest Officers are empowered to seize forest produce and confiscate property, which includes all tools, boats, carts etc. used in the offence.</td>
<td>Section 27: Forest Officers shall have the power to stop, search, inspect and detain a vehicle being used to transport or remove any timber or forest produce. The Forest Officer has the right to use force to stop the vehicle and detain it.</td>
<td>Section 52. (1): When there is reason to believe that a forest-offence has been committed in respect of any forest-produce, such produce, together with all tools, vessels, vehicles or cattle used in committing any such offence, may be seized by any Forest Officer or Police Officer</td>
<td></td>
</tr>
<tr>
<td>Section 70: Forest Officers are empowered to seize cattle.</td>
<td>Section 37: any Forest Officer may seize and detain timber or forest produce, together with all tools, vehicles and cattle.</td>
<td>Section 70: Any forest officer can seize and impound trespassing cattle.</td>
<td></td>
</tr>
<tr>
<td>Section 79: All Forest Officers are vested with the authority of demanding and receiving aid and assistance from any right-holder or permit-holder in a protected or reserved forest with regard to any information about the commission of, or intent to commit, any forest offence.</td>
<td>Section 29: In case of any accident or emergency involving danger to any property a forest officer may demand aid and any person employed in such vicinity whether by state or private entity must provide the aid.</td>
<td>Section 44: Every person will be liable to provide aid to a forest officer demanding his aid in averting danger or securing property from damage or loss.</td>
<td></td>
</tr>
<tr>
<td>Section 74: All Forest Officers are given immunity for acts done in good faith. No suit shall lie against any public servant for anything done by him in good faith under this Act.</td>
<td>Section 61: No suit or criminal prosecution shall lie against any public servant for anything done in good faith or omitted by him in good faith under this ordinance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PERSONAL LIABILITY IMMUNITY FROM PROSECUTION**

**INDIA**

Section 3: Employers Liability to pay compensation

- Employers Liability to pay compensation - The employer is liable to pay compensation in case of any accident or disease arising out of the course of employment.

**SRILANKA**

Section 6: Amount of compensation – the amount of compensation is listed in Schedule IV and ranges from approximately USD 1,000 (181,000 SNR) to USD 3000 (550,000 SNR).

**BANGLADESH**

Section 3 - Payment of Gratuity: Gratuity shall be paid on completion of a least 5 years of service or on death of a civil employee.

**COMPENSATION FOR INJURY**

**INDIA**

Employees Compensation Act

Section 3, Section 4: An employer is liable to pay compensation in cases of occupational disease, death or injury arising out of employment.

Section 13: Invalid Gratuity or Pension - If a Forest Officer is suffering from a contagious disease or physical or mental disability which prevents him from discharging his duties.

**SRILANKA**

Payment of Gratuity act 1983

**BANGLADESH**

Section 2 (k): `Gratuity’ shall be payable on termination of employment of a worker. The amount shall be equivalent to thirty days’ wages for every completed year of service. The first initial six months of employment shall be included in this calculation.

**GRATUITY**

- Not Applicable
- Applicable
- Data Not Found

---

4 Many field workers in India are not part of the national cadre, but are recruited free-lance labourers. To such individuals the All India Service Rules do not apply. They are governed by the Workmen Compensation Act, which regulates wages and other benefits applicable to labourers.
Section 58: Any Forest Officer may impound forest products, tools, boats, and other such property connected with the offence.

Section 94: Any Forest Officer may carry out Search and seizure with a warrant from a Magistrate. In certain scenarios, if the Forest Office feels that obtaining a warrant would delay the enforcement, the Forest Officer may enter the premises without a warrant.

Section 32: A Forest Officer shall oh his/ her own discretion the power to seize any item, livestock, tools or weapons which were used as a part of the offence.

Section 100(1): The Director may, if he suspects that an offence under this Act or any of its subsidiary legislation has been committed, give directions to any enforcement officer to get the assistance of the police to set up or place an obstruction or roadblock on any public road or highway or any public place, for the purpose of stopping any vehicle for examination.

Section 71: No Forest Official shall be held liable personally for any acts performed by him/her in good-faith while discharging his/her duties under this Act.

Section 128: No action of prosecution shall be brought against a forest officer if the act was done in good faith.

Section 35 (a): No Forest Officer shall be liable for anything done by him in good faith for purposes of enforcing this Act or otherwise acting in the course of duty.

Section 36 Gratuity: If any civil employee, who has served for Five years or more.

Death of Employee – Section 39: If any civil employee dies while in service or prior to completion of seven years after he/ she started to receive pension, a gratuity or pension as provided for in Section 36 or 37 shall be provided to his/her family.

Festivals expenses and other facilities-Section 32 bonus: A civil employee shall receive an amount equivalent to the salary of one month being earned by him/her as the festival expenses each year to celebrate festival as per his/her religion, culture and custom.

Labour and Employment act of Bhutan 2007

Section 96: An employer shall compensate all his or her employees against death due to work accident or occupational diseases, total permanent disablement, temporary partial disablement. The compensation received ranges form 2700 USD to 6700 USD.

Malaysia Public ruling 9/2016

When an employment ceases, the employer may make a lump sum payment in accordance with individual terms and conditions of the contract of service. The lump sum payment may be described by the employer as compensation for loss of employment, ex-gratia, contractual payment, retrenchment payments, gratuity, etc.

Bhutan Civil Service Rules 2018

Rule 5.12.4.1: Forest Officers are entitled to Gratuity as one month's last basic pay for every year of satisfactory completion of service.
<table>
<thead>
<tr>
<th>INDIA</th>
<th>SRILANKA</th>
<th>BANGLADESH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RETIREMENT</strong></td>
<td><strong>Employees Provident Fund Act</strong></td>
<td><strong>The Public Servants (Retirement) Act.</strong></td>
</tr>
<tr>
<td>Rule 18: The amount of pension shall be 50% of emoluments or average emoluments, whichever is more beneficial.</td>
<td>Section 23: Forest Officers are eligible for old age benefit (pension) when they reach the age of 55 years.</td>
<td></td>
</tr>
<tr>
<td>Rule 16: Superannuation Gratuity or Pension: Members of service will mandatory retire at the age of 60 and can voluntary retire after giving 3 months notice on reaching the age of 50 or completing 30 years of service.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule 19: Retirement or death Gratuity: In case of death of an employee the gratuity shall be given to the employees family at various rates depending on service.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule 7: Compulsory Retirement as a measure of penalty - A member of the service who has compulsorily retired as a measure of penalty by the Central Government in accordance with the provisions may be granted retirements benefits on basis of his qualifying service. The government may reduce the benefits up to a maximum of two thirds of entitled benefits.</td>
<td>Public service commission of, the democratic socialist republic of Sri Lanka procedural rules</td>
<td>Section 22: A worker may be discharged from service for reasons of physical or mental incapacity or continued ill-health.</td>
</tr>
<tr>
<td>Rule 15: Voluntary Retirement - A person who has attained the age of 55 years may apply for optional retirement.</td>
<td>Section 54: The Appointing Authority may terminate the appointment of a government officer a without notice.</td>
<td>Section 23: A worker may be dismissed without prior notice or pay in lieu thereof if he is- (a) convicted for any criminal offence; or (b) he is found guilty of misconduct.</td>
</tr>
<tr>
<td>Rule 12: Optional Retirement: A Forest Ranger may retire any civil employee from service if the government is unable to serve regularly owing to a physical or mental disease, if a civil employee is unable to serve regularly owing to a physical or mental disease, or if a civil employee is unable to serve regularly owing to a physical or mental disease.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule 19: Retirement or death Gratuity: In case of death of an employee the gratuity shall be given to the employees family at various rates depending on service.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TERMINATION</strong></td>
<td><strong>Section 11 - Compulsory retirement:</strong></td>
<td><strong>Section 9 - Optional Retirement:</strong></td>
</tr>
<tr>
<td>A worker may be dismissed without prior notice or pay in lieu thereof if he is- (a) convicted for any criminal offence; or (b) he is found guilty of misconduct.</td>
<td>A Forest Ranger may retire voluntarily after 25 years of service. However the Ranger will not be entitled to retirement benefits if She/ he has any judicial proceedings against them.</td>
<td></td>
</tr>
<tr>
<td>A worker may be discharged from service for reasons of physical or mental incapacity or continued ill-health.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A worker may be dismissed without prior notice or pay in lieu thereof if he is- (a) convicted for any criminal offence; or (b) he is found guilty of misconduct.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Forest Ranger may retire voluntarily after 25 years of service. However the Ranger will not be entitled to retirement benefits if She/ he has any judicial proceedings against them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WORKING HOURS</strong></td>
<td><strong>Rule 20.3 - Early Retirement Scheme:</strong></td>
<td></td>
</tr>
<tr>
<td>Forest Rangers shall be entitled to sick leave, maternity leave, hospital leave, quarantine leave, special disability leave and study leave.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LEAVE</strong></td>
<td><strong>Rule 20.4 - pension:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PARTICIPATION IN TRADE UNIONS</strong></td>
<td><strong>Rule 20.5 - Provision fund Rules and Regulations:</strong></td>
<td></td>
</tr>
<tr>
<td>All the activities carried on by the departments of the Central Government, including domestic services which include Forest Officers, are barred from forming trade unions, it is a general consensus by the judiciary (case law) that civil servants shall not be permitted to form Trade Unions.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

8 Tamil Nadu NGO's Union v. Registrar of Trade Unions - AIR 1962, Mad. 2341.
**NEPAL**

<table>
<thead>
<tr>
<th>Compulsory retirement Section 33:</th>
<th>Any civil employee who has reached the age of 58 years or completed a specified tenure shall retire from civil service.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary retirement: Section 35:</td>
<td>Any civil employee who is eligible to receive pension and has completed the age limit of Fifty years may voluntarily retire</td>
</tr>
<tr>
<td>Section 34A Retirement due to disease:</td>
<td>If a civil employee is unable to serve regularly owing to a physical or mental disease, Government of Nepal may retire that employee adding a maximum of seven years to his/her service period.</td>
</tr>
<tr>
<td>Pension Section 37:</td>
<td>A civil employee who has been in government service for a period of twenty years or more shall be entitled to a monthly pension.</td>
</tr>
<tr>
<td>Section 34 Power to award retirement:</td>
<td>Government of Nepal may retire any civil employee from service if the government is of the opinion that the civil employee acted against the interests of the Government.</td>
</tr>
</tbody>
</table>

**MALAYSIA**

<table>
<thead>
<tr>
<th>Public Service Pension Scheme (Act 227)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 12 – Optional Retirement: A person who has attained the age of 40 years may apply for optional retirement.</td>
</tr>
</tbody>
</table>

**BHUTAN**

<table>
<thead>
<tr>
<th>Rule 20.2.1 Retirement age:</th>
<th>A Forest Ranger shall retire from service upon completion of 56 years.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule 20.3 Early Retirement Scheme:</td>
<td>A forest Officer may apply for a voluntary retirement after the age of 51.</td>
</tr>
<tr>
<td>Rule 20.4.2 Pension:</td>
<td>Forest Rangers are entitled to pension as per the National Pension and provision fund Rules and Regulations.</td>
</tr>
</tbody>
</table>

**Nepal Civil Service Rules 2050 (1993)**

<table>
<thead>
<tr>
<th>Section 55A -The office hours of the government offices shall be as determined by the Government of Nepal by publishing a notice in the Nepal Gazette.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(The mentioned notification was not found in secondary sources)</td>
</tr>
<tr>
<td>Leaves - Section 71: The Civil employee will be entitled to prescribed leaves such has casual and festive leave, home leave, sick leave, maternity leave, study leave, and extraordinary leave.</td>
</tr>
<tr>
<td>Section 60 - Hours of work &amp; leaves: Each employee shall work a maximum of 8 hours of work each day.</td>
</tr>
<tr>
<td>Section 59 - Rest day: Each Employee shall be given one rest day a week.</td>
</tr>
</tbody>
</table>

**Malaysia Employments Act, 1955**

| Section 11 - Compulsory retirement: A Forest Ranger, being a civil servant may be compulsorily retired on grounds of national interest or due to persistent health problems. |
| Section 6-15: Each contract shall have a termination clause. In the absence of such clause the notice period will be of a minimum of 4 weeks. The Forest Officer is entitled to a month’s wages in case of absence of notice. |

**Trade Unions Act 1959**

| Section 27: No Forest Officer shall join or be a member of any trade union or shall be accepted as a member of any trade union. |

**Civil Service act 2010**

| Not eligible for Unionization - Section 38: A Civil Servant shall not be permitted to participate in a strike. |
| Forest Officers do not have a legal right to form any workers association to represent their interests. |
Acknowledgements

**Partner in survey design, methodology and data analysis**

**University of Central Florida**
The University of Central Florida is a thriving preeminent research university located in metropolitan Orlando, U.S. With more than 67,000 students, UCF is one of the largest universities in the country.

The Department of Criminal Justice at UCF provides excellence in teaching, research and service. Dedicated to its students, the faculty delivers outstanding instruction at the undergraduate and graduate levels, incorporating learning, service and inquiry. The department also conducts quality research and pursues local, state and federal funding to advance knowledge in our discipline. By actively developing meaningful partnerships, it provides exemplary service to the university and the broader professional and academic community.

[www.ucf.edu](http://www.ucf.edu)

**Partners in survey delivery**

**Global Tiger Forum**
Global Tiger Forum (GTF) is an inter-governmental and international body established with members from willing countries to embark on a worldwide campaign, common approach, promotion of appropriate programmes and controls to save the remaining five sub-species of tigers in the wild distributed over 14 tiger range countries of the world.

[www.globaltigerforum.com](http://www.globaltigerforum.com)

**Global Wildlife Conservation**
Global Wildlife Conservation (GWC) protects endangered species and habitats through science-based field action. GWC is dedicated to ensuring that species on the verge of extinction aren’t lost, but prosper well into the future. GWC’s three key goals are to: create and manage parks in the most irreplaceable sites worldwide, develop and implement wildlife recovery plans for key threatened species, and engage and empower current and future conservation leaders worldwide. Through these key goals GWC brings together scientists, conservationists, policy makers, industry leaders and civil society to ensure a truly collaborative approach to species conservation.

[www.globalwildlife.org](http://www.globalwildlife.org)

**KEHATI**
Yayasan Keanekaragaman Hayati Indonesia (KEHATI), otherwise known as the Indonesian Biodiversity Foundation, is a non-profit, grant-making foundation. The organization was created to mobilize and manage resources to be channeled to other parties in the form of grants, facilitation, consultations, and other assistance to support various programmes in biodiversity conservation and utilization in a fair and sustainable manner.

[www.kehati.or.id](http://www.kehati.or.id)

**The University of Karachi**
The University of Karachi is a public university located in Karachi, Sindh, Pakistan. It is one of the oldest universities in Pakistan being established as a federal university in 1951. The department of Psychology came into existence in 1954 under the Chairmanship of Professor Dr. Qazi Aslam. Dr Anila Malik, form the Department of Psychology lead the research work.

[www.uok.edu.pk](http://www.uok.edu.pk)

**ELOMOTION**
Elemotion Foundation is a U.S.-registered, non-profit organization working for the welfare and conservation of Asian elephants in Sri Lanka, and the people connected to them.

[www.elemotion.org](http://www.elemotion.org)
Additional thanks to all government officials who have approved the undertaking of this research in their countries.
28 COUNTRIES
in which surveys delivered

11 CONSERVATION PARTNERS
participated in survey deliveries

7,110 RESPONSES
with each survey containing 197 questions

465 CONSERVATION SITES
at which rangers filled surveys