



LIFE ON THE FRONTLINE 2019



A global survey of the working conditions of rangers



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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 Health 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 health 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 they can – 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

Executive Summary

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

THE SINGLE MOST OBVIOUS THREAD THAT RUNS THROUGH THE SURVEY COMPLETED BY PATROL RANGERS AT NEARLY 500 SITES IN 28 COUNTRIES IS THAT RANGERS ARE FACING EXCESSIVE SAFETY AND HEALTH RISKS THAT COULD BE SIGNIFICANTLY REDUCED WITH THE APPROPRIATE INTERVENTIONS.

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 of 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. 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

📄 109 👤 900
 (Jan-Jul 2018)



Uganda

📄 610 👤 2,000
 (Jan-Jul 2018)



Central African Republic

📄 37 👤 247
 (Jan-Jul 2018)



Republic of Congo

📄 88 👤 177
 (Jan-Jul 2018)



Kenya

📄 514 👤 3,000
 (Jan-Jul 2018)



Tanzania

📄 703 👤 ~4,000
 (Oct 2018 – June 2019)



Myanmar

📄 105 👤 412
 (Jan-Dec 2017)



Cambodia

📄 201 👤 1,300
 (Oct-Nov 2017)



Malaysia

📄 223 👤 1,408
 (June-Dec 2017)



Vietnam

📄 140 👤 ~5,000
 (Feb-Aug 2019)



Thailand

📄 409 👤 5,220
 (June-Sep 2019)



Indonesia

📄 742 🧑 5,604
(Jan-Feb 2018)



Mongolia

📄 276 🧑 1,200
(Mar-Apr 2019)



Pakistan

📄 474 🧑 1,500
(Jan-Apr 2018)



India

📄 767 🧑 60,000
(Nov 2016 – Jan 2018)



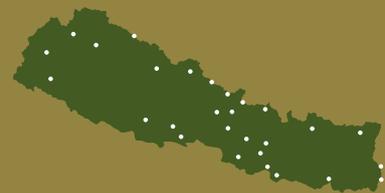
Sri Lanka

📄 145 🧑 614
(Sep-Dec 2016)



Nepal

📄 200 🧑 2,262
(Aug-Nov 2017)



Bhutan

📄 54 🧑 1,500
(Jan-June 2018)



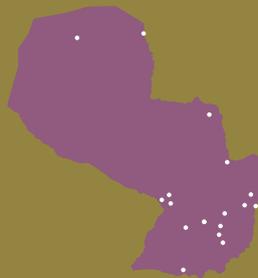
Bangladesh

📄 143 🧑 820
(Feb-Mar 2017)



Paraguay

📄 35 🧑 115
(Sep-Oct 2019)



Guyana

📄 20 🧑 30
(Aug-Sep 2019)



Mexico

📄 72 🧑 1,800
(May-July 2019)



Colombia

📄 100 🧑 1,178
(Feb-Sep 2019)



Peru

📄 37 🧑 400
(Sep-Oct 2019)



Brazil

📄 37 🧑 1,600
(July-Aug 2019)



Global Overview



	<i>Average</i>		Frequency	Percent
<i>Age</i>	39.0 years old	<i>Gender breakdown*</i>	♀ 462	7.5
<i>Time in current organization</i>	12.7 years		♂ 5,669	92.5
<i>Work as a ranger</i>	12.2 years	*110 respondents did not answer the gender question		
<i>Work in current conservation area</i>	9.5 years	<i>Rangers surveyed (main study)</i>		6,241
		<i>Additional surveys delivered at case study sites</i>		869

WWF does not endorse the borders of any map shown in this publication, nor any political position related to territorial claims.



What is a ranger?

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.

Employment



Overtime compensation



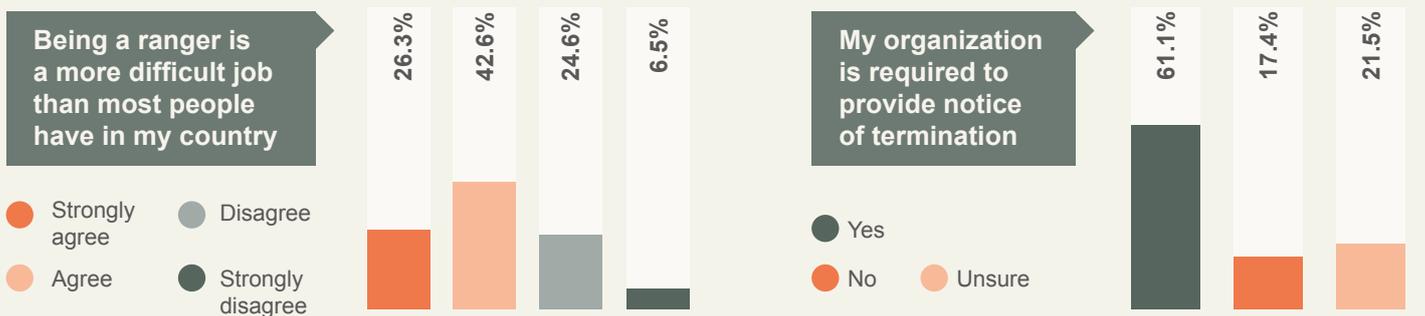
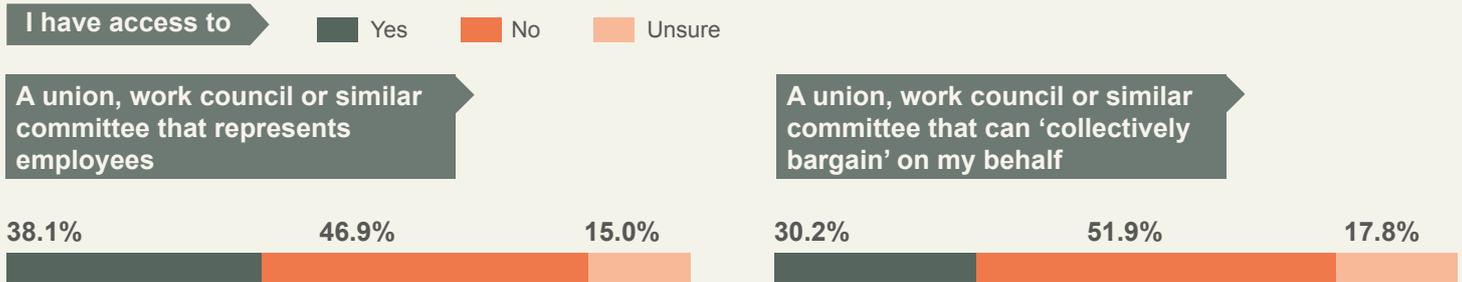
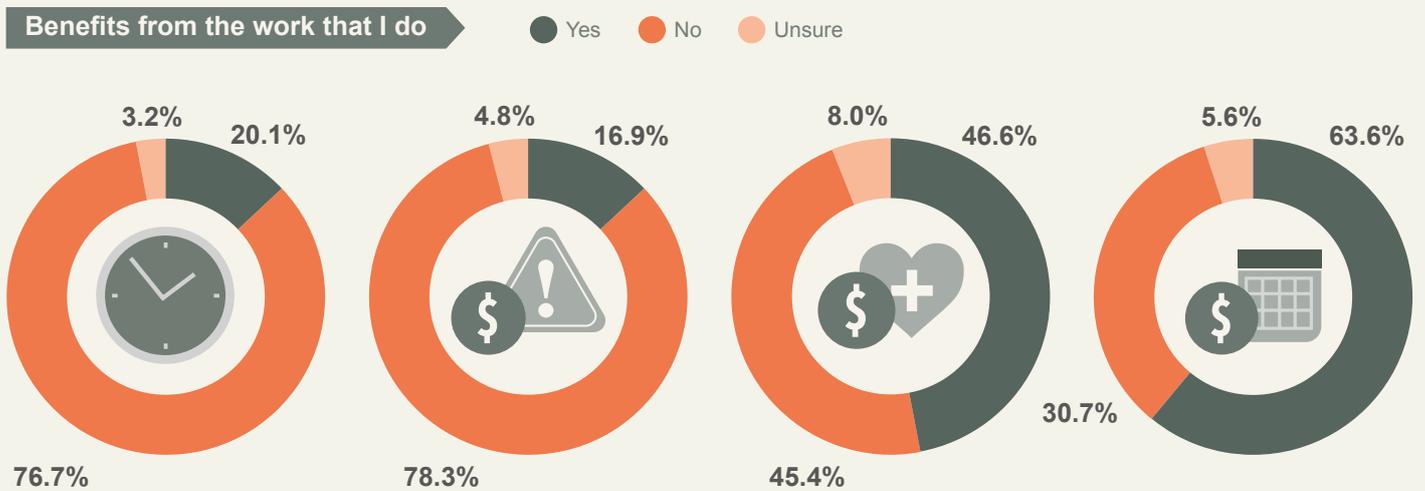
Extra pay for bad/dangerous work conditions



Paid sick leave



Paid annual leave

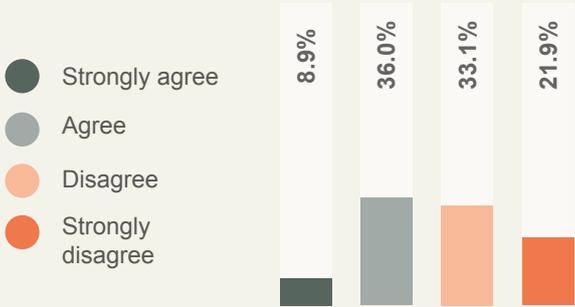


*In data visualizations the colour orange correlates to the more concerning or 'negative' response categories for all non-neutral questions
 *Quotes with no citation are from rangers who were interviewed after completing the survey



I am paid this much in my local currency **USD 297.14** monthly

I am paid a fair wage



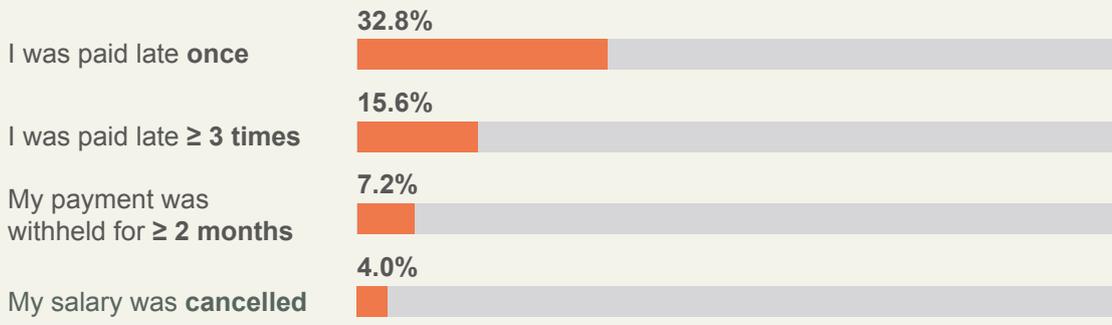
Average total hours I work weekly **72.3** hours



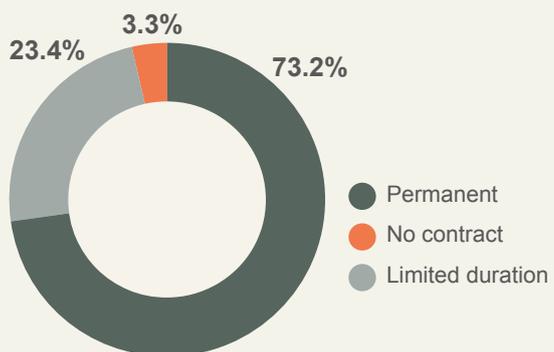
Average hours worked at night weekly **33.4** hours (6 PM-6 AM)

During the last 12 months

Yes



Type of employment contract

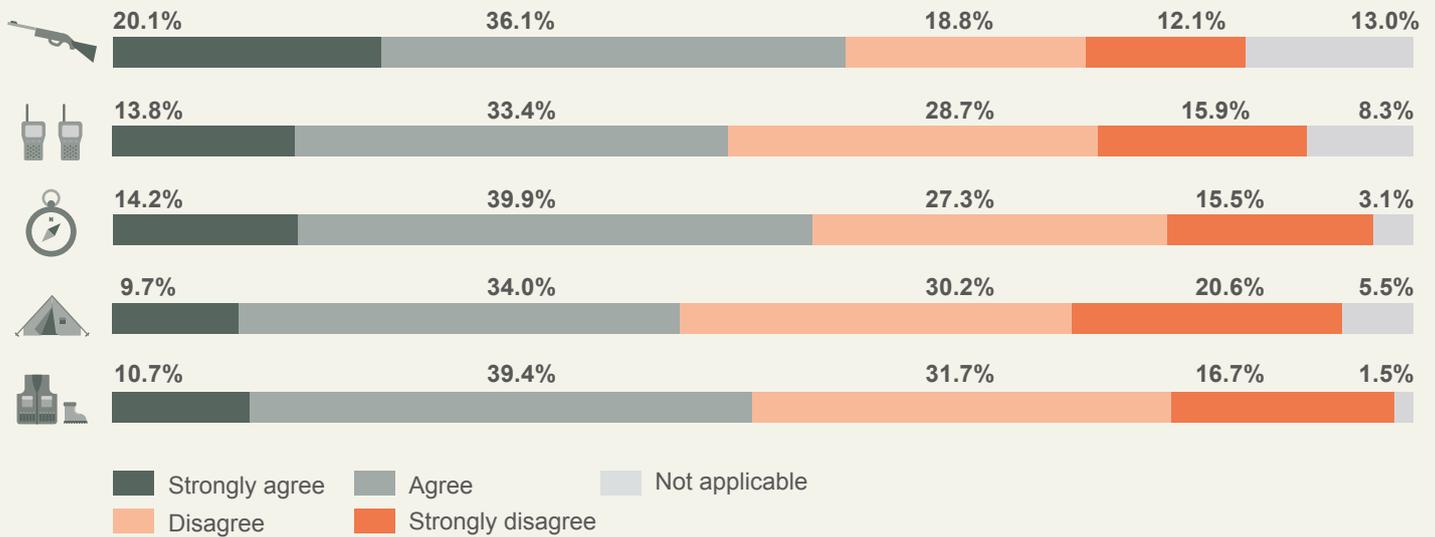


I have other paid jobs besides being a ranger **5.5%** have other jobs

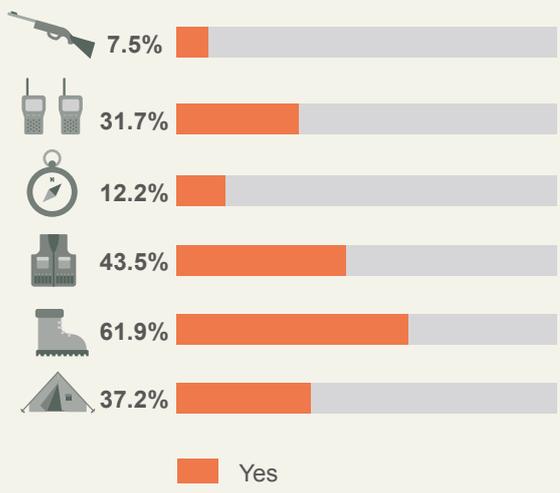
Equipment



The equipment provided is sufficient for the work that I do



I bought the following equipment with my own money



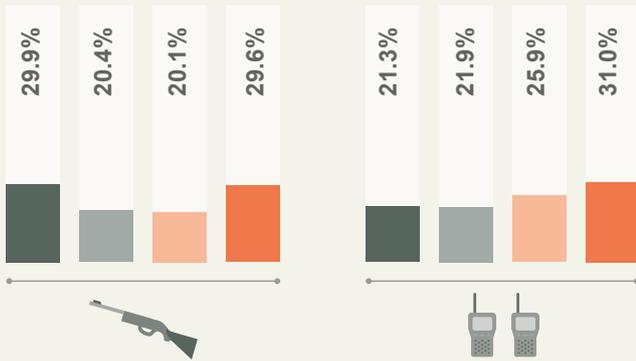
IMPACT OF NGO SUPPORT

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.

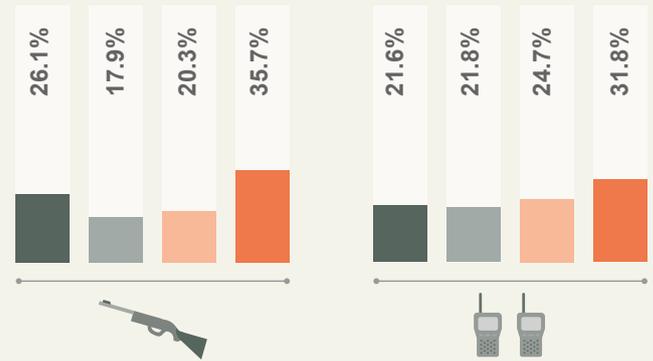
That noted, little here is conclusive, especially given the small survey size (less than 200) and the fact that NGOs in that country might deliberately target sites with greater needs. It does however invite further study as to the NGO impact on ranger welfare.

● Always ● Often ● Rarely ● Never

On patrol, I have access to



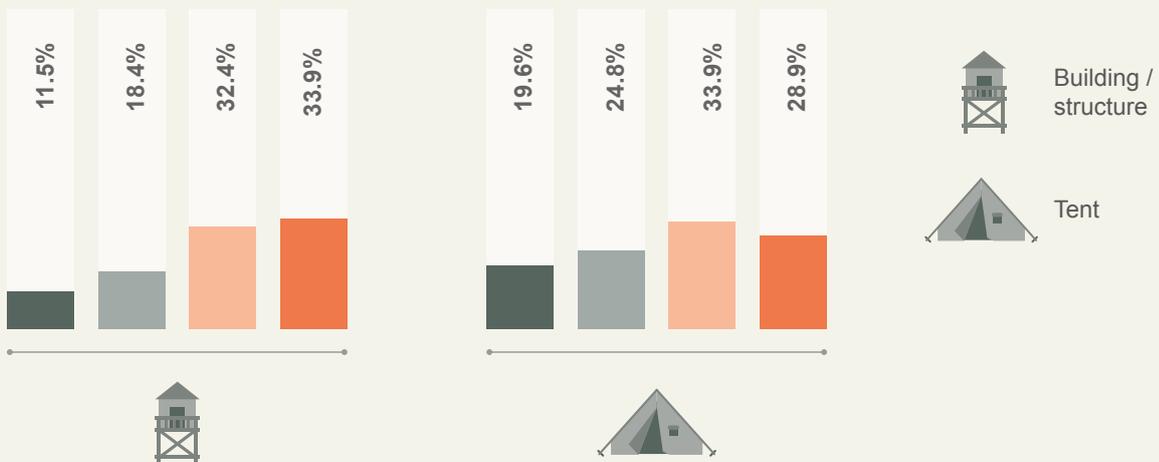
At outpost/station, I have access to



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



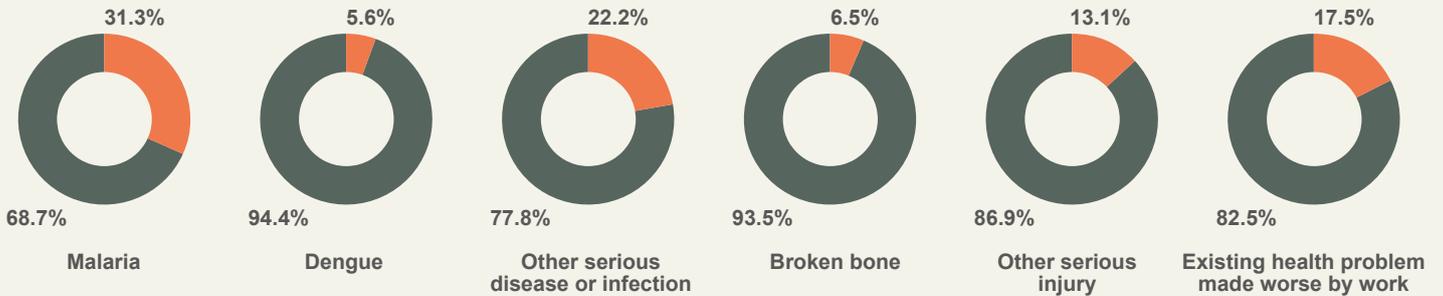
Roughly 3.5% responded 'not applicable for the above three questions'

Health and Insurance



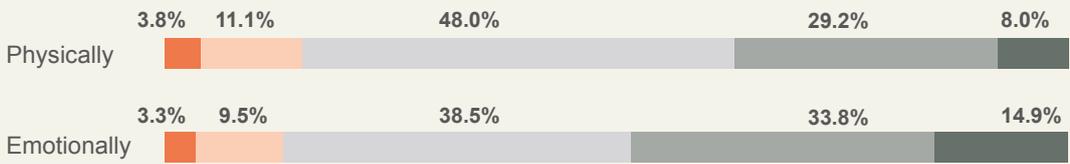
Diseases and injuries that I experienced over the last 12 months

● Yes ● No



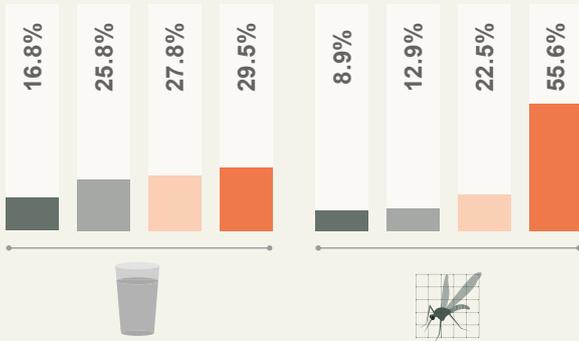
- Always
- Often
- Sometimes
- Rarely
- Never

I often feel exhausted



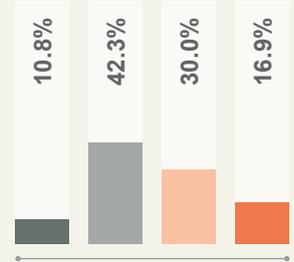
● Always ● Often ● Rarely ● Never

On patrol, I have access to

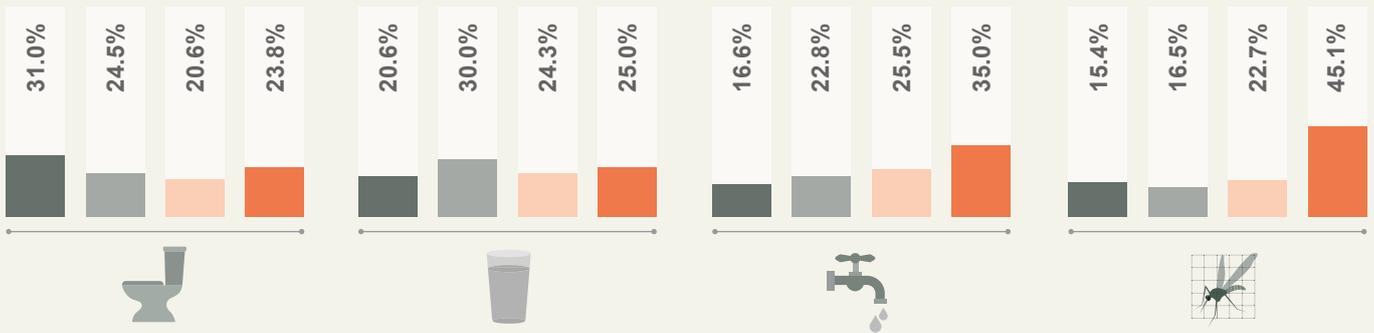


The basic necessities that I am provided (water, toilet etc.) are adequate

Strongly agree
Agree
Disagree
Strongly disagree

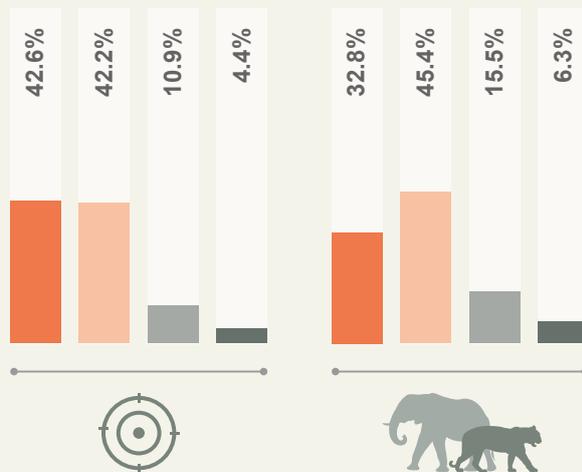


At outpost/station, I have access to



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

Strongly agree
Agree
Disagree
Strongly disagree



Dangerous Work

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.

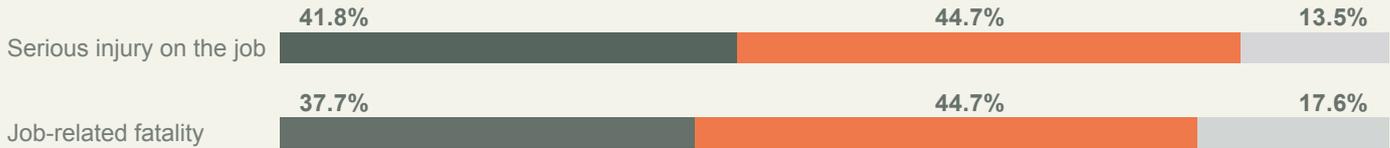
Sean Willmore
Founder of TGLF

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

Health and Insurance

● Yes ● No ● Unsure

My employee insurance scheme provides compensation in case of



I have

Spouse

78.3%

IF YES,
I live with
spouse

31.1%

I have

Children

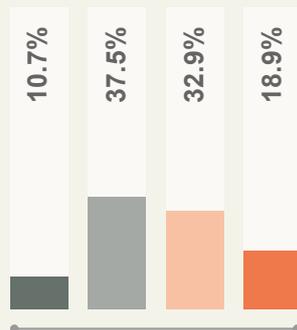
80.1%

IF YES,
I live with
children

29.9%

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

- Strongly agree
- Agree
- Disagree
- Strongly disagree

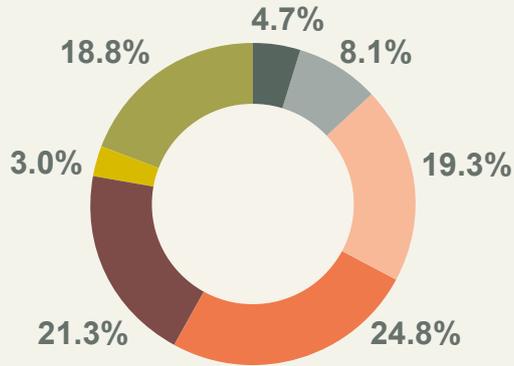
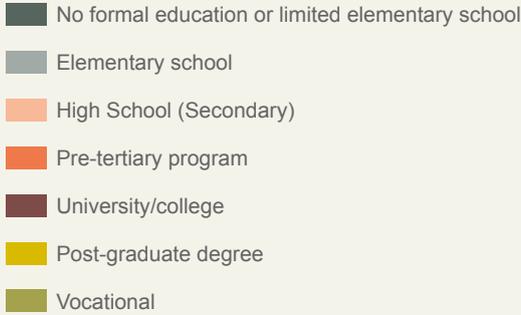


WE ARE MONITORING THE HEALTH AND BEHAVIOUR OF WILD ANIMALS. SOMEONE SHOULD DO THIS FOR US TOO.

For more information on ranger insurance please see page 117.

Training

Highest level of education completed



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)



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



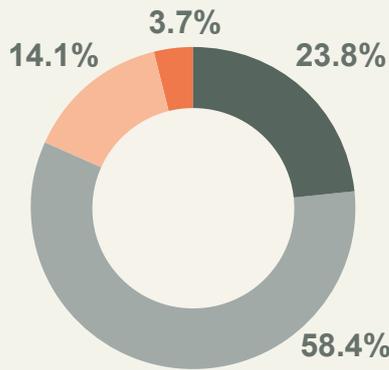
Community Relations

IMPORTANCE OF COMMUNITY TRUST

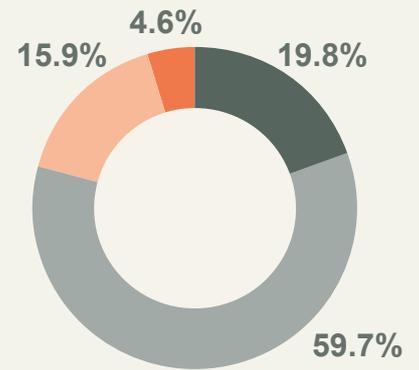
The trust and support of local communities, characterized by a regular and constructive dialogue with rangers, is known to be one of the most critical factors in reducing the likelihood of poaching activities in protected areas. It encourages communities to report illegal incursions, which in turn makes 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.

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

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

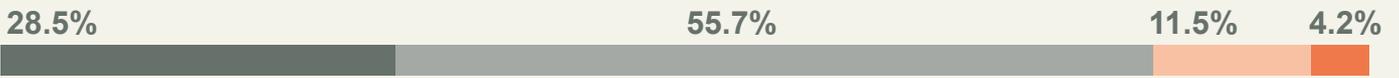


I believe community members trust me

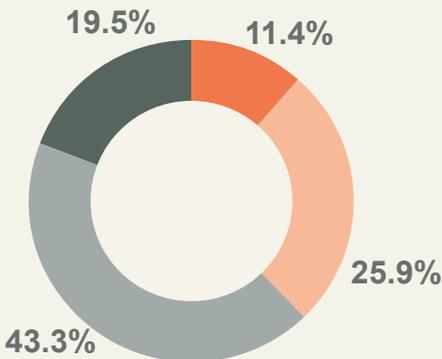


- Strongly agree
- Agree
- Disagree
- Strongly disagree

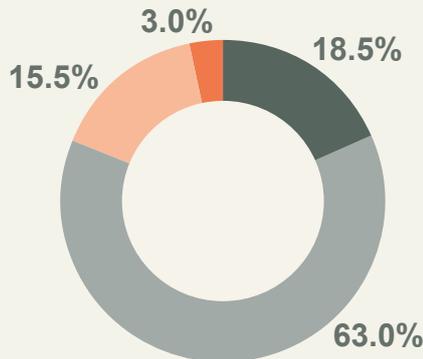
The organization I work for shows concern for community members' well-being and quality of life



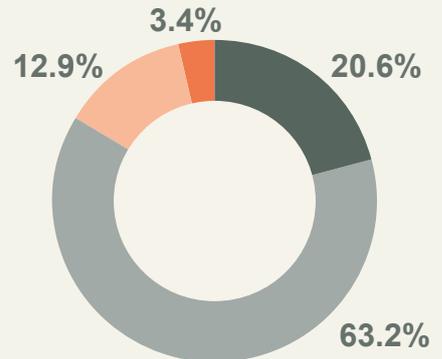
Community members do not see me as an enemy



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 **36.0 %** No **64.0 %**

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.

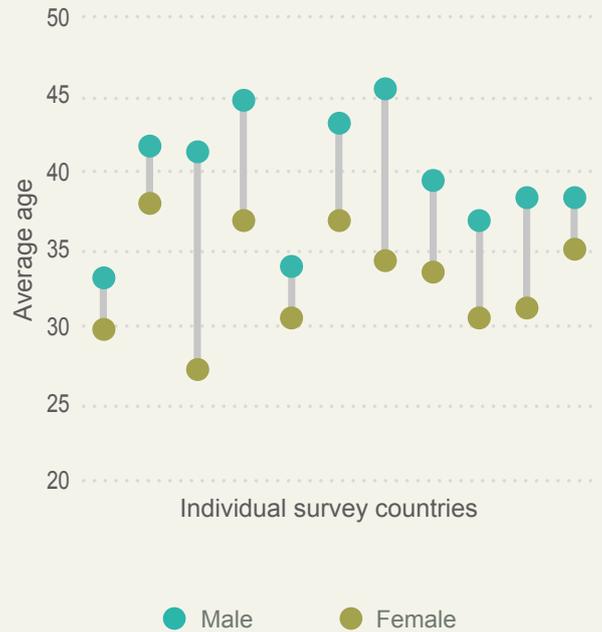
Gender

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.



My efforts are fairly rewarded by my organization

51.9%

60.4%

I am a supervisor

24.4%

32.7%

Time as a ranger

7.6 years

12.6 years

While on the job I have been subjected to sexual harassment or violence by co-workers

2.6%

1.1%

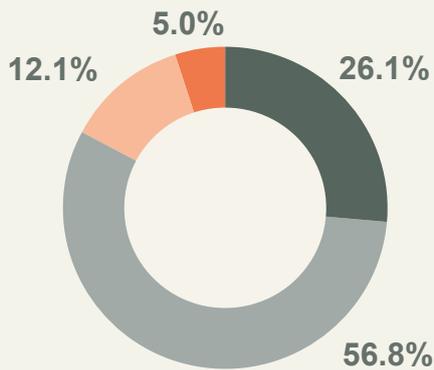


LAST YEAR I GOT PREGNANT BUT I HAD TO EXECUTE MY RESPONSIBILITIES, INCLUDING GOING FOR PATROLS. WE USUALLY PATROL FOR 15 DAYS BEFORE COMING BACK TO CAMP. I WAS PART OF THE PATROL UNTIL I WAS SIX-MONTHS PREGNANT. IT WAS AN EXPERIENCE I WISHED I COULD AVOID BUT COULDN'T BECAUSE NOT GOING TO THE PATROLS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

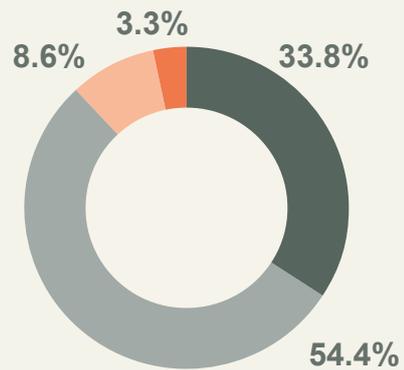
Misconduct

Strongly agree
 Agree
 Disagree
 Strongly disagree

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

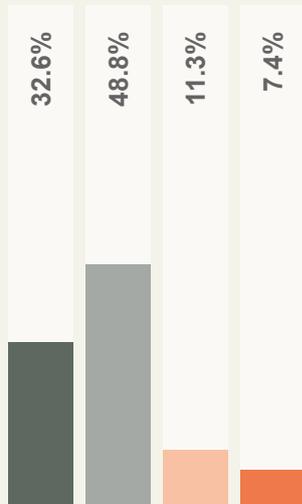


I would report a ranger if I witnessed them accepting a bribe or engage in other corrupt and illegal activities



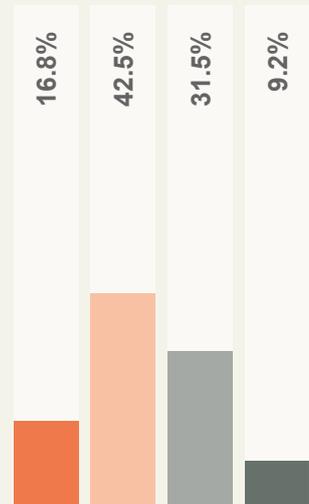
My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)

Strongly agree
 Agree
 Disagree
 Strongly disagree



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
 Agree
 Disagree
 Strongly disagree



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



Supervisor



Co-workers



Community members



Verbal abuse/
bullying/
harassment



Threats



Physical violence



Sexual harassment
/violence

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

While on duty

While off duty



12.7 %
7.6 %



10.0 %
6.4 %



2.0 %
1.4 %



1.1 %
0.8 %



15.3 %
8.2 %

11.0 %
5.9 %

3.1 %
2.0 %

1.3 %
0.8 %



31.1 %
18.2 %

31.6 %
18.0 %

7.8 %
4.5 %

1.6 %
1.1 %

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

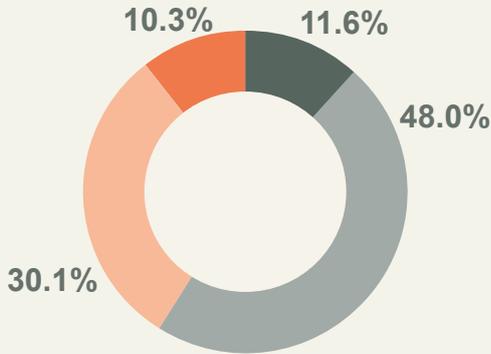
factors such as human-wildlife conflict rates, or even the age of a given protected area, impacts these numbers.

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.

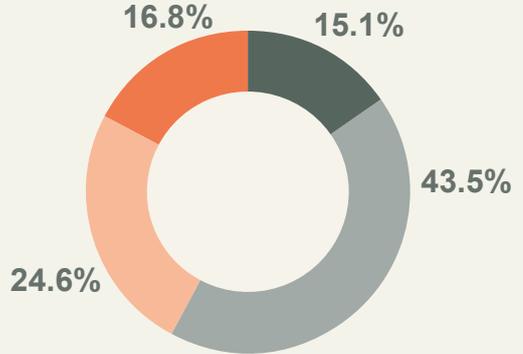
Workplace Dynamics

Strongly agree Agree Disagree Strongly disagree

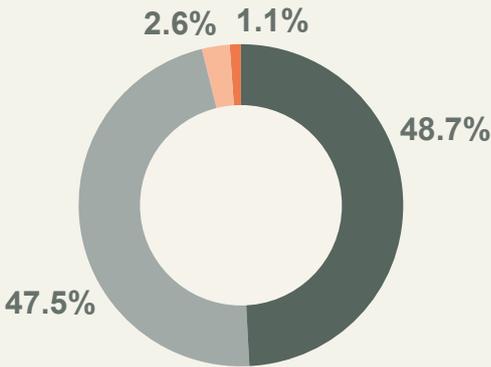
My efforts are satisfactorily rewarded by my organization



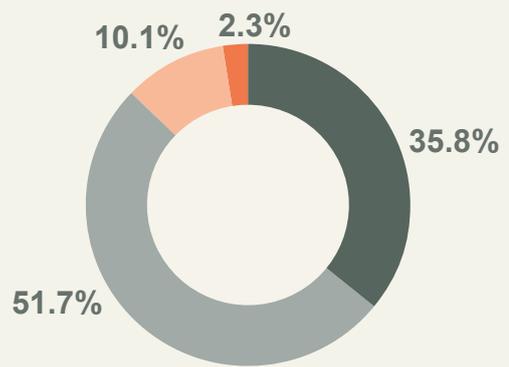
I am satisfied with my chances for promotion and advancement



I'm proud of the work I do as a ranger



I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death



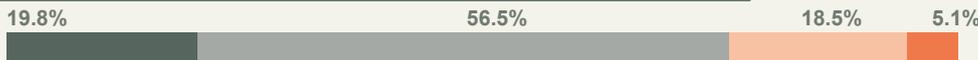
I believe that my supervisor treats me with respect



I feel comfortable sharing my concerns with my supervisor



My supervisor's decisions are equally fair to every ranger



Clear objectives are communicated to me by management



There is good communication between the supervisors and frontline staff

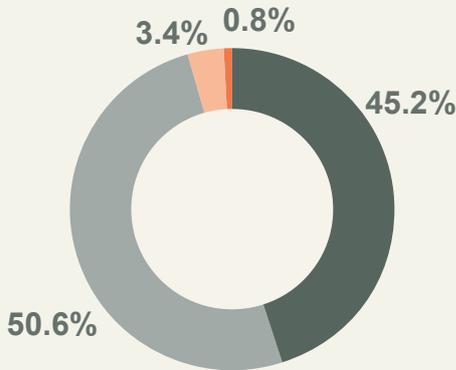


I am a supervisor

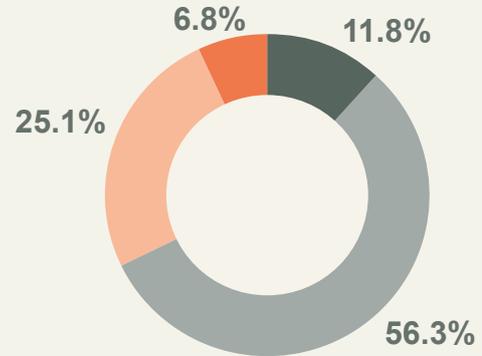
Yes 31.3%

Effectiveness of Laws

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



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



Strongly agree Agree Disagree Strongly disagree

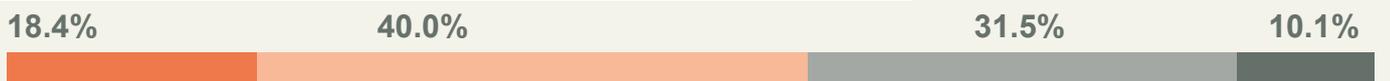
People arrested in the conservation area are treated too lightly by prosecutors



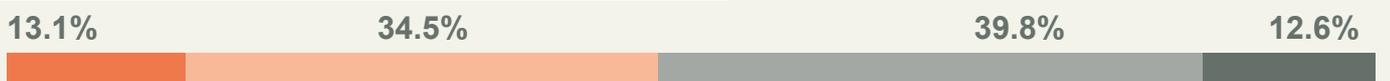
People arrested in the conservation area are treated too lightly by judges



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



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



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

Age **35.6 years old**

Time in current organization **9.7 years**

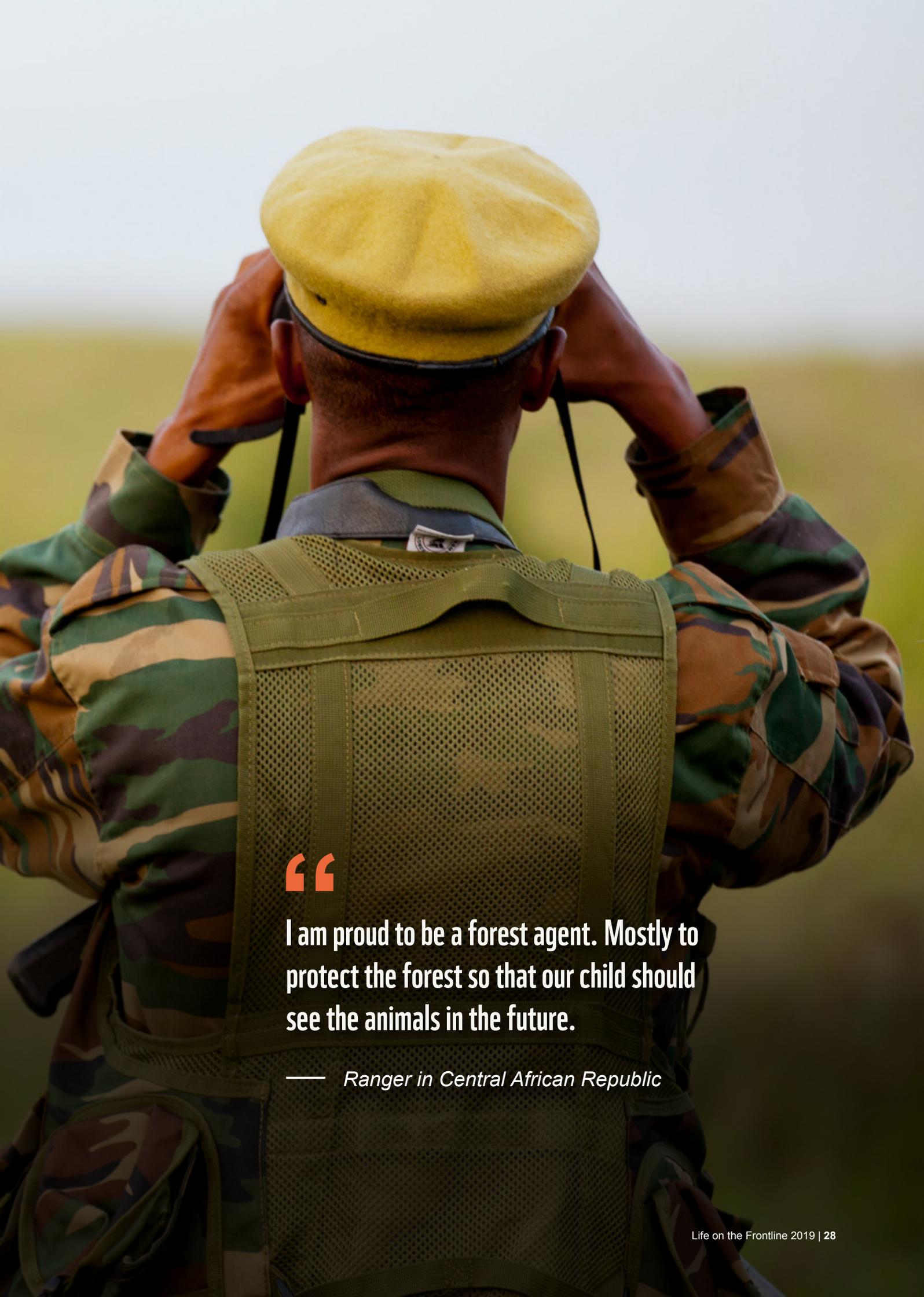
Work as a ranger **9.4 years**

Work in current conservation area **7.1 years**

		Frequency	Percent
Gender breakdown*	♀	225	11.2
	♂	1,777	88.8

*59 respondents did not indicate their gender

Rangers surveyed **2,061**



“

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



Overtime compensation



Extra pay for bad/dangerous work conditions

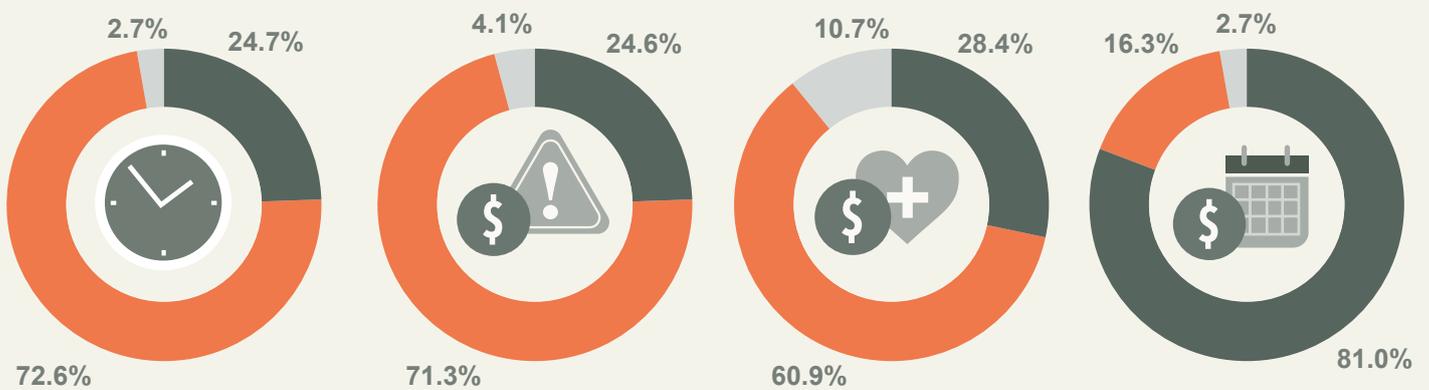


Paid sick leave



Paid annual leave

Benefits from the work that I do ● Yes ● No ● Unsure



I have access to ■ Yes ■ No ■ Unsure

A union, work council or similar committee that represents employees



A union, work council or similar committee that can 'collectively bargain' on my behalf



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



My organization is required to provide notice of termination



*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

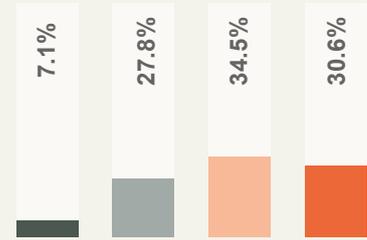


I am paid this much in my local currency

USD 249.11
monthly

I am paid a fair wage

- Strongly agree
- Agree
- Disagree
- Strongly disagree



Average total hours I work weekly

Total **89.7** hours

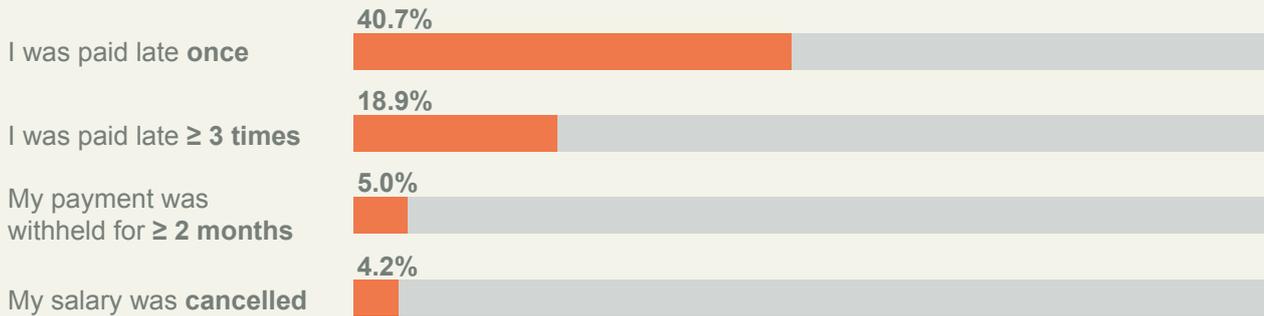


Average hours worked at night

6 PM-6 AM **52.0** hours

During the last 12 months

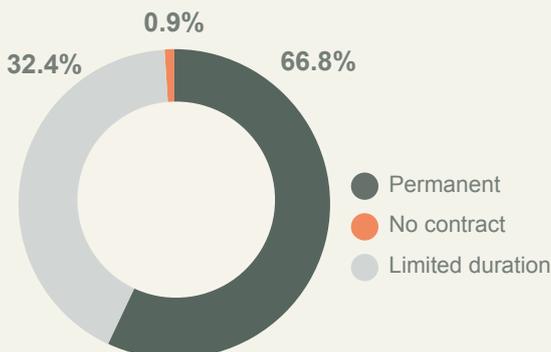
Yes



I have other paid jobs besides being a ranger

2.6%
have other jobs

Type of employment contract



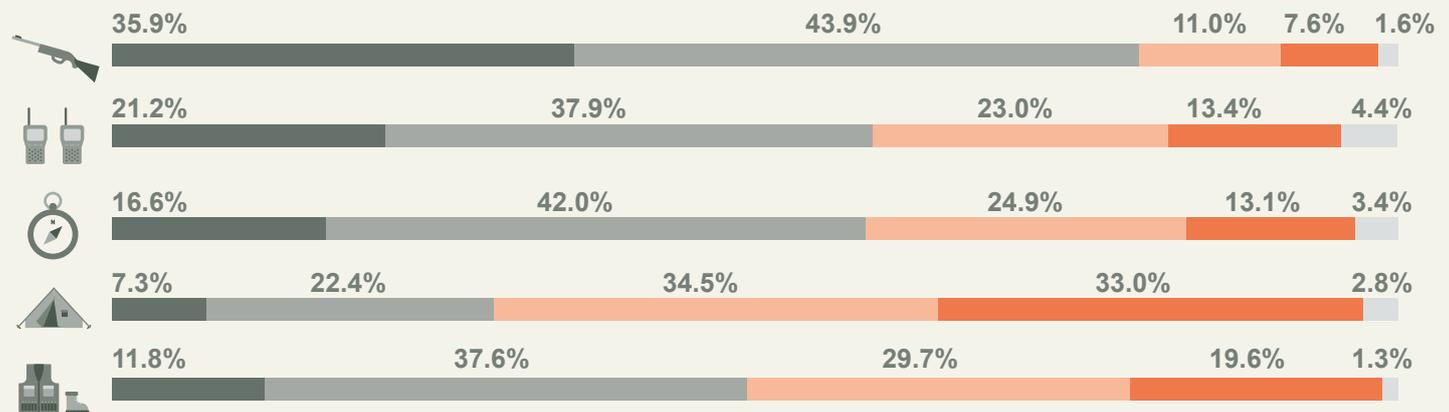
I TRUST MY FELLOW RANGERS 100 PER CENT BECAUSE I CANNOT GO ALONE TO THE FOREST - AND IF I AM WOUNDED, HE WILL CARRY ME BACK TO THE VILLAGE. WE ALL WEAR THE SAME UNIFORM, SO HE IS MORE LIKE MY BROTHER.

Equipment

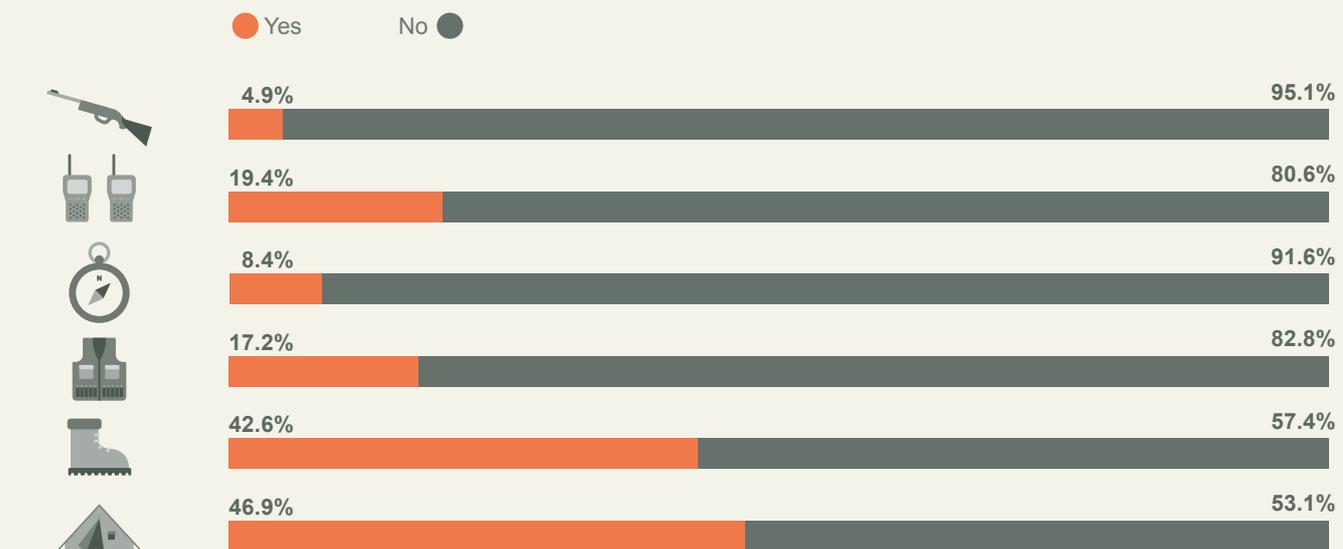


Strongly agree
 Agree
 Disagree
 Strongly disagree
 Not applicable

The equipment provided is sufficient for the work that I do

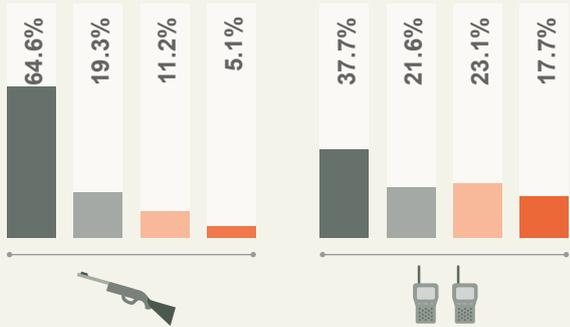


I bought the following equipment with my own money

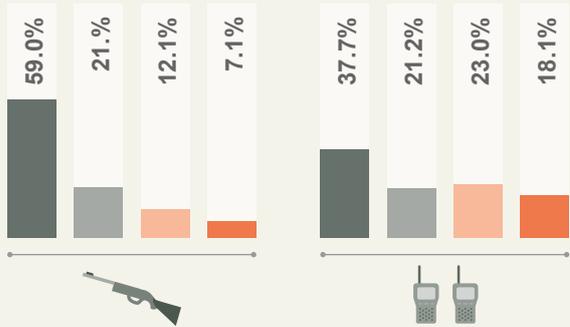


● Always ● Often ● Rarely ● Never

On patrol, I have access to



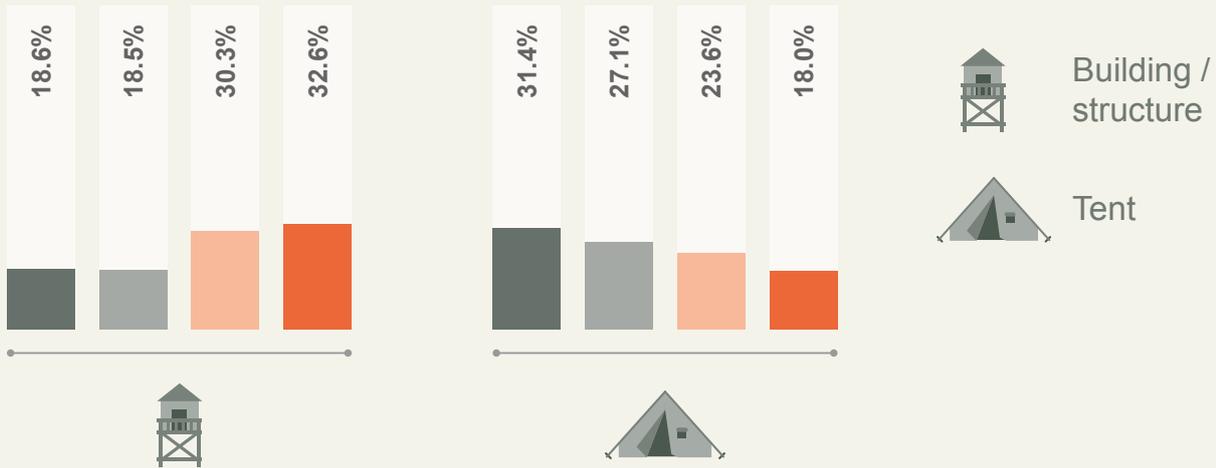
At outpost/station, I have access to



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

Frequency	Percentage
Always	21.6%
Often	21.1%

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

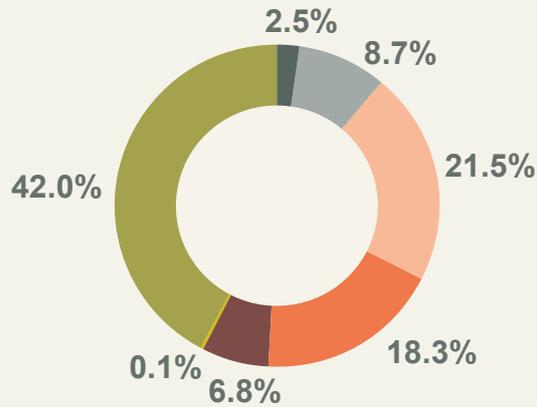


“ THE PROBLEM FACED BY RANGERS DURING PATROL IS THAT WE DON’T HAVE ADEQUATE EQUIPMENT TO PERFORM OUR WORK, LIKE BOOTS AND RAINCOATS.

Training

Highest level of education completed

- No formal education
- Elementary school
- High School (Secondary)
- Pre-tertiary program
- University/college
- Post-graduate degree
- Vocational



- Strongly agree
- Agree
- Disagree
- Strongly disagree

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)



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

25.7%
First aid & emergency

25.4%
Navigation

20.3%
Wildlife conflict

21.5%
Crime scene investigation

36.7%
Firearms

26.9%
Tracking

33.9%
Ranger-based data collection

22.9%
Law and regulation

26.4%
Engagement /combat

21.5%
Wilderness survival

34.1%
Patrol tactic

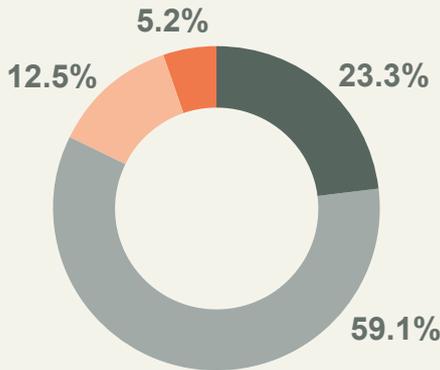


ALL CONSERVATION EFFORTS IN AFRICA WILL AMOUNT TO VERY LITTLE WITHOUT A WELL-LED, WELL-SUPPORTED, WELL-SKILLED, WELL-RESOURCED, DEDICATED AND MOTIVATED FIELD FORCE.

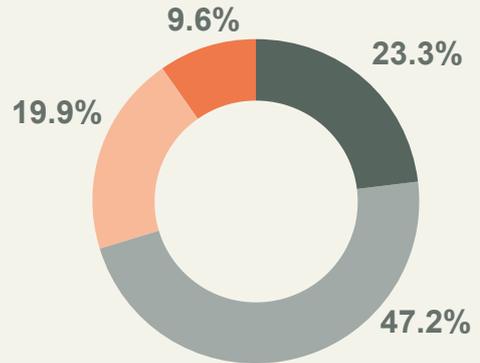
Community Relations

Strongly agree
 Agree
 Disagree
 Strongly disagree

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



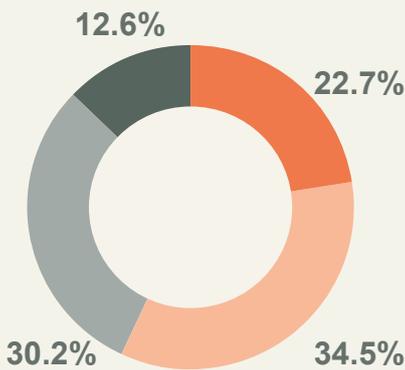
I believe community members trust me



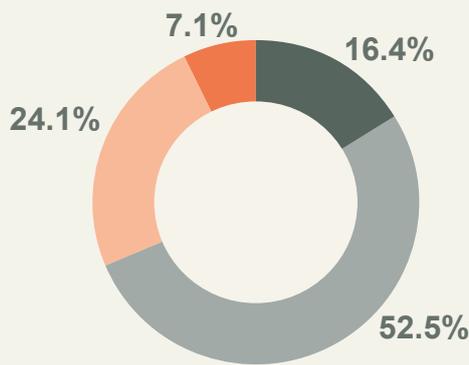
The organization I work for shows concern for community members' well-being and quality of life



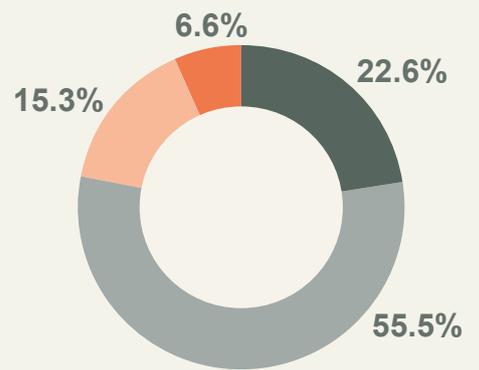
Community members do not see me as an enemy



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

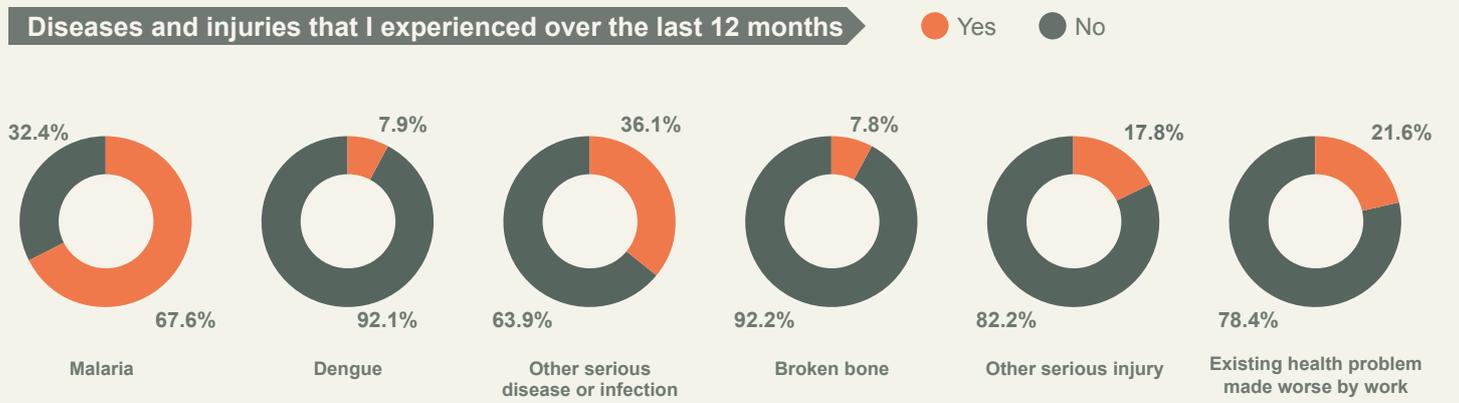
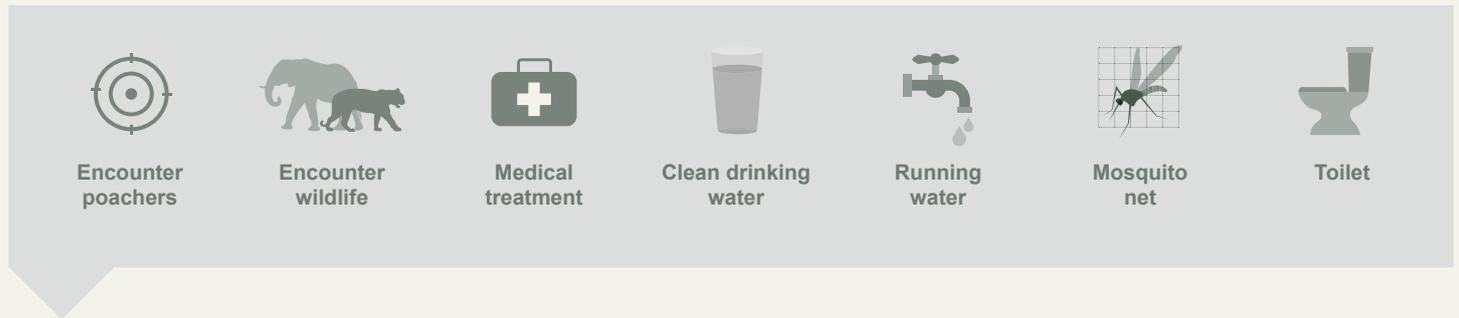


I believe community members respect me

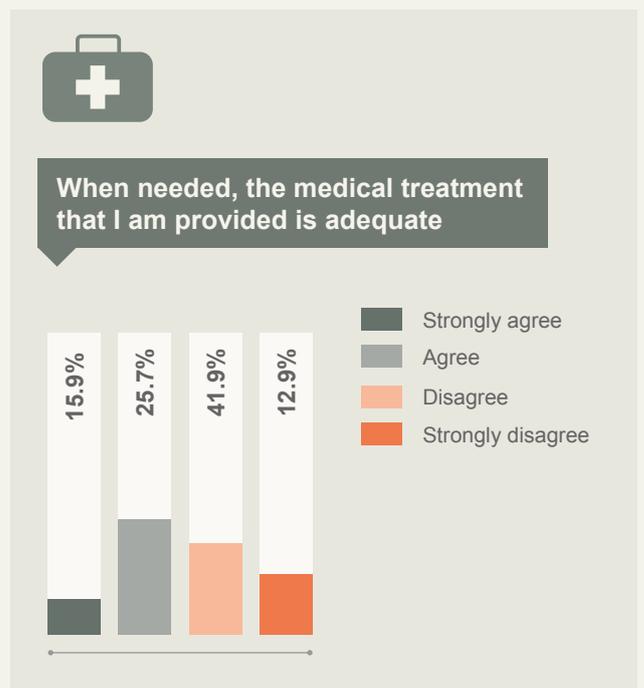
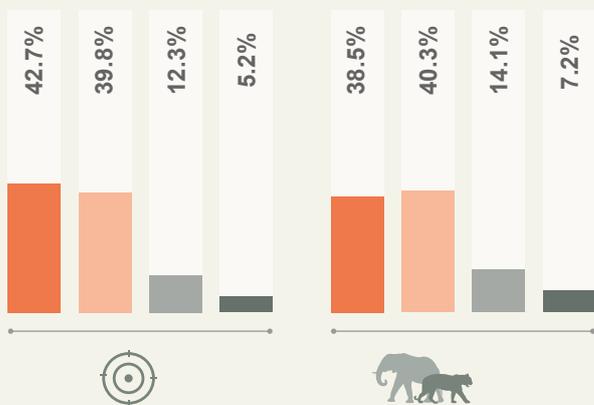


I am originally from a neighbouring community (within 20km of the park) Yes 26.2% No 73.8%

Health and Insurance

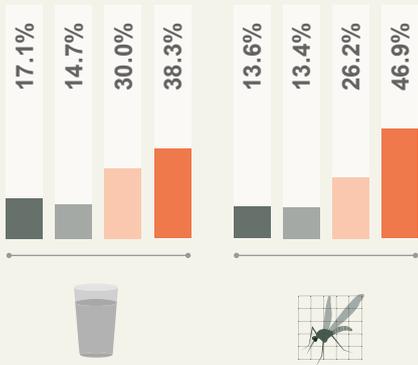


I think that being a ranger is a dangerous job due to chance of

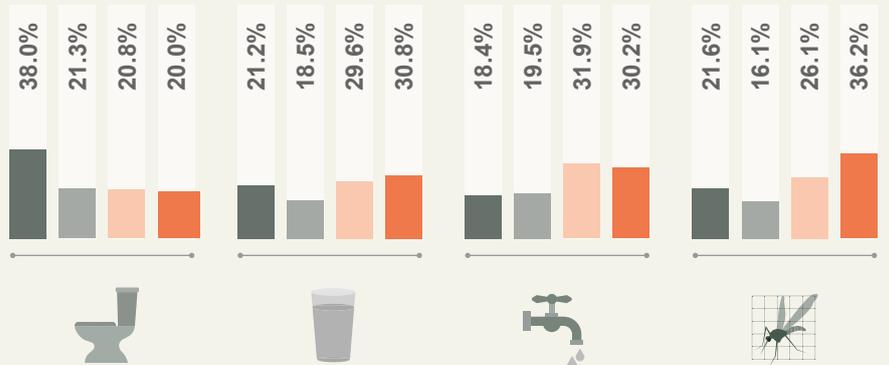


● Always ● Often ● Rarely ● Never

On patrol, I have access to

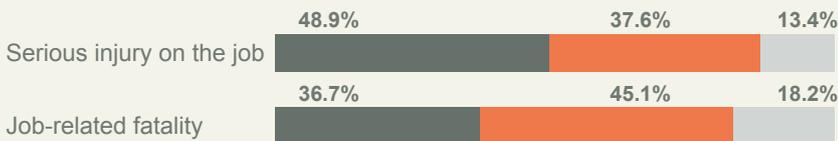


At outpost/station, I have access to



● Yes ● No ● Unsure

My employee insurance scheme provides compensation in case of



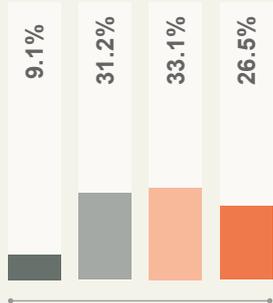
I have

Spouse
73.7%
IF YES,
I live with
spouse
18.9%

Children
81.4%
IF YES,
I live with
children
23.3%

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

Strongly agree
Agree
Disagree
Strongly disagree

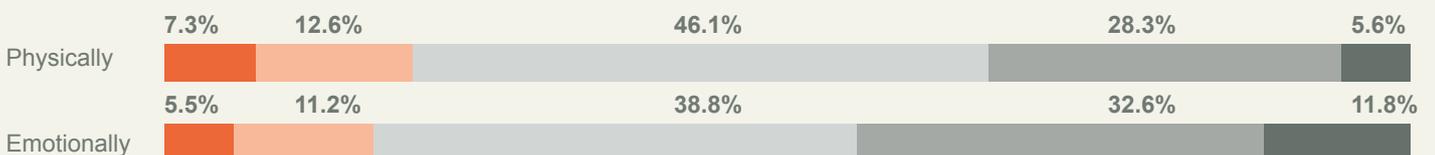


Average number
of rangers who
accompany me
on patrol

5.2
rangers

I often feel exhausted

Always Often Sometimes Rarely Never



Misconduct



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

■ While on duty

■ While off duty



● Strongly agree

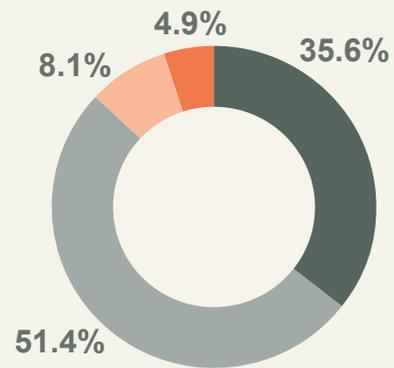
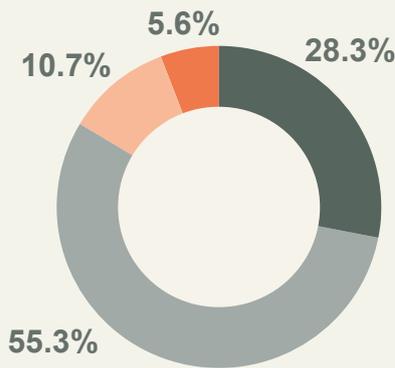
● Agree

● Disagree

● Strongly disagree

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

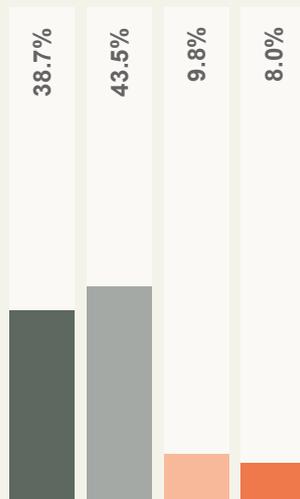
I would report a ranger if I witnessed them accepting a bribe or engage in other corrupt and illegal activities



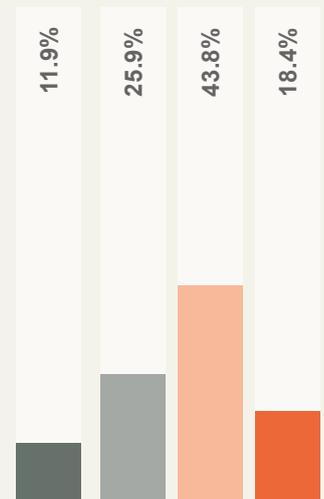
My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)

I would 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
 ● Agree
 ● Disagree
 ● Strongly disagree



● Strongly agree
 ● Agree
 ● Disagree
 ● Strongly disagree

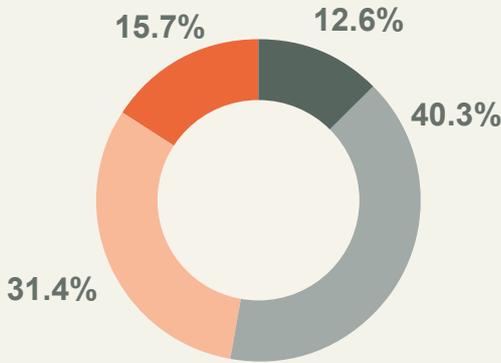


SOME RANGERS MAY PARTICIPATE IN CORRUPT ACTIVITIES FOR PERSONAL GAINS, OTHER RANGERS WOULD REPORT THEIR FELLOW RANGERS IF THEY WITNESSED THEM PARTICIPATING IN CORRUPTION. IT IS MY PERSONAL BELIEF THAT CORRUPTION CAN BE MINIMIZED BY STRICT PUNISHMENT, IMMEDIATE TERMINATION FROM JOB AND IMPOSING HEAVY PENALTY ON CORRUPT OFFICIALS.

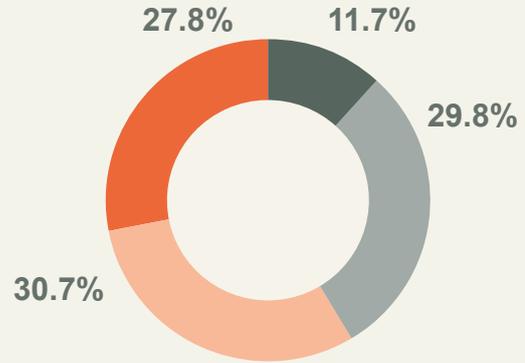
Workplace Dynamics

Strongly agree Agree Disagree Strongly disagree

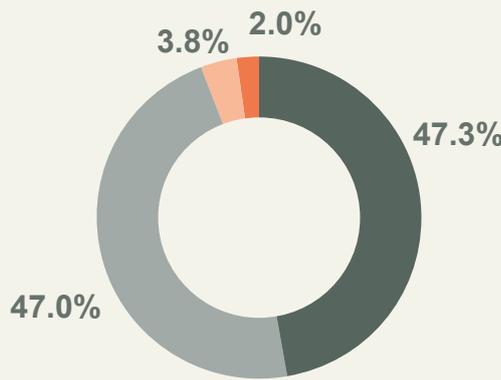
My efforts are satisfactorily rewarded by my organization



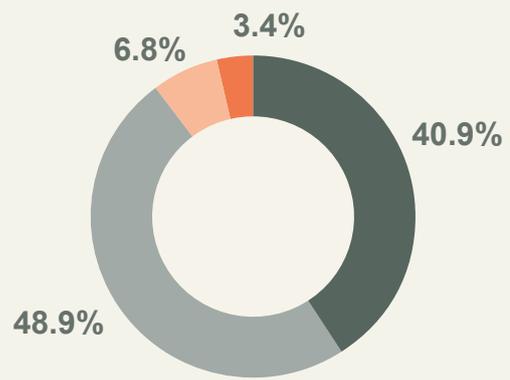
I am satisfied with my chances for promotion and advancement



I'm proud of the work I do as a ranger



I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death



I believe that my supervisor treats me with respect



I feel comfortable sharing my concerns with my supervisor



My supervisor's decisions are equally fair to every ranger



Clear objectives are communicated to me by management



There is good communication between the supervisors and frontline staff

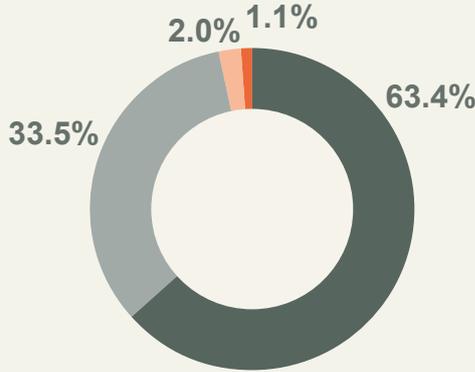


I am a supervisor

Yes **37.0%**

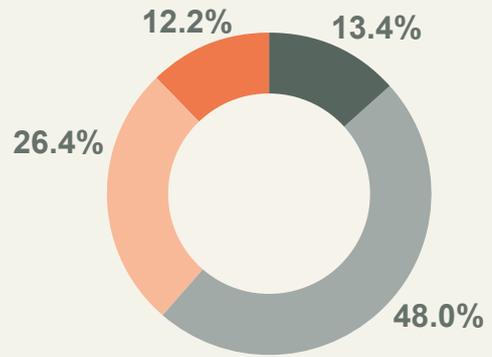
Effectiveness of Laws

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

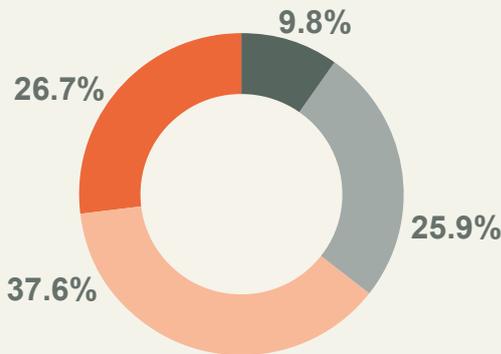


Strongly agree Agree Disagree Strongly disagree

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

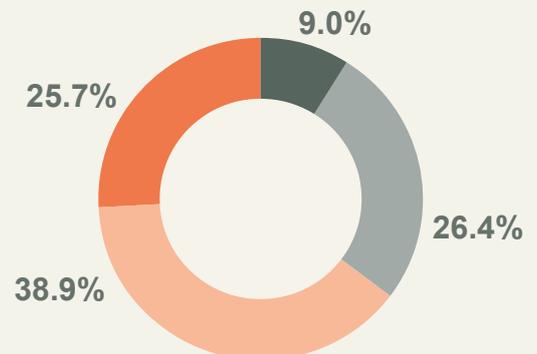


People arrested in the conservation area are treated too lightly by prosecutors

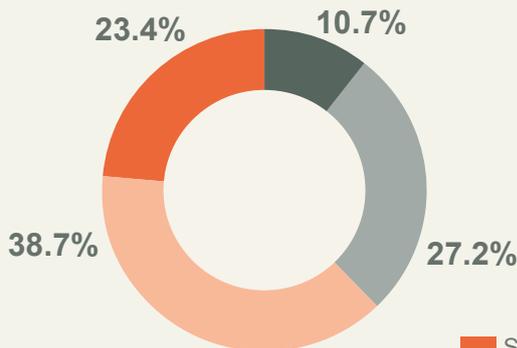


Strongly agree Agree Disagree Strongly disagree

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

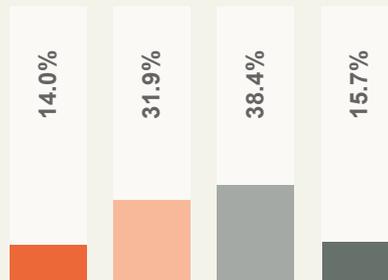


People who commit crimes in the conservation area are not worried about the potential punishment they may receive if they are arrested



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



South Asia



Average

Age	40.4 years old
Time in current organization	15.1 years
Work as a ranger	14.4 years
Work in current conservation area	9.2 years

	Frequency	Percent
Gender breakdown*		
	♀ 74	4.2
	♂ 1,706	95.8

*Three respondents did not indicate their gender

Rangers surveyed 1,783

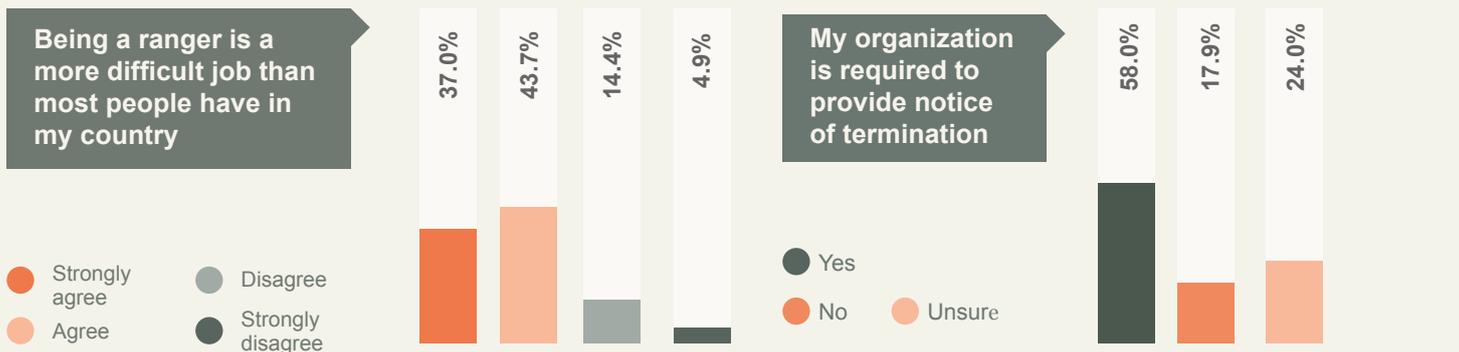
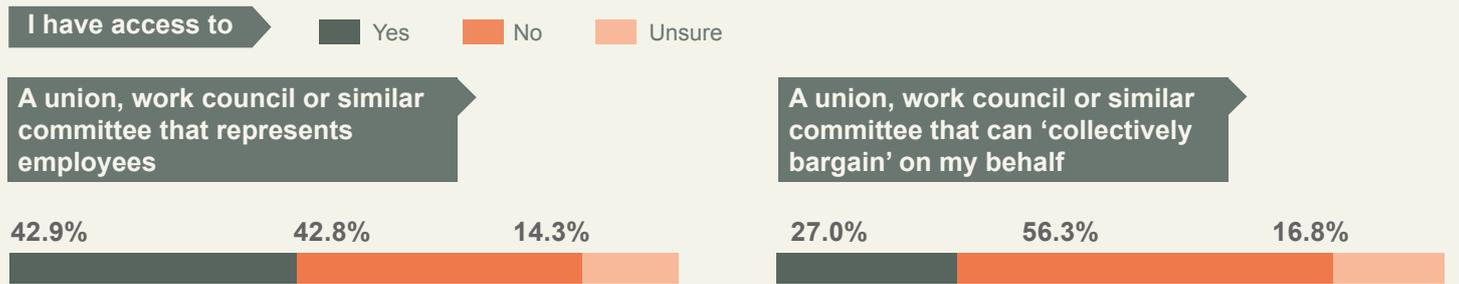
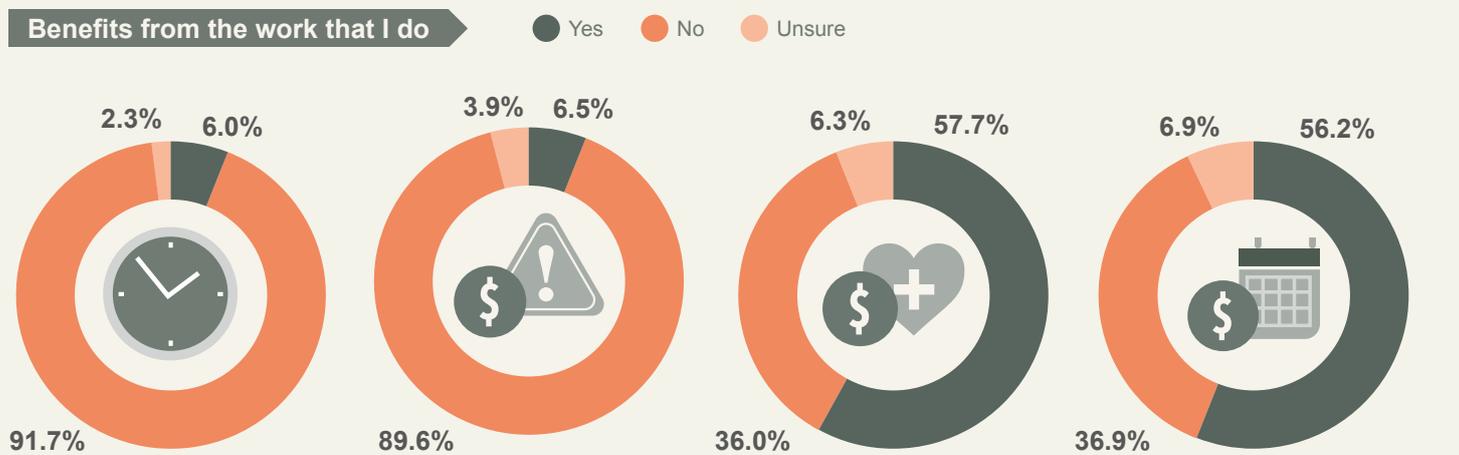


“

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*

Employment

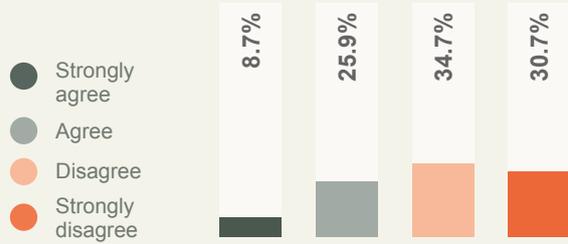


*In data visualizations the colour orange correlates to the more concerning or 'negative' response categories for all non-neutral questions *Quotes with no citation are from rangers who were interviewed after completing the survey



I am paid this much in my local currency **USD259.34** monthly

I am paid a fair wage



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

Total per week

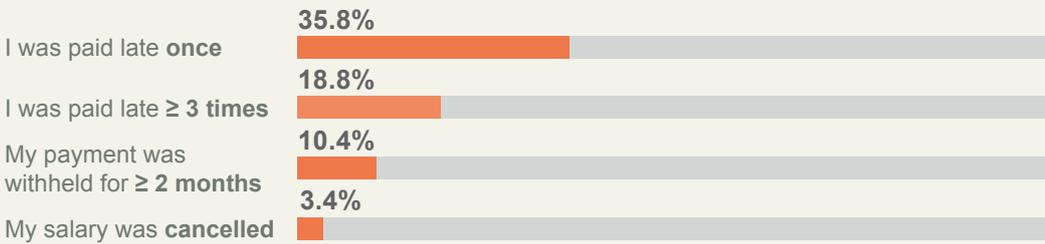


Average hours worked at night **29.4** hours

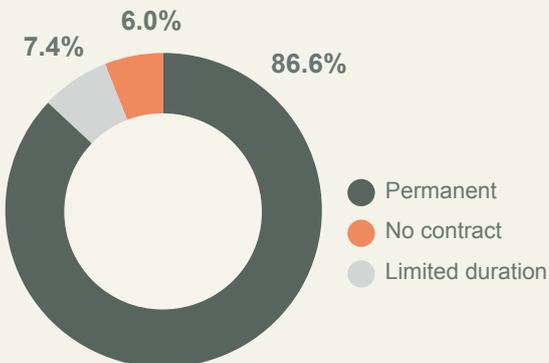
6 PM-6 AM

During the last 12 months

Yes



Type of employment contract



I have other paid jobs besides being a ranger

3.0% have other jobs



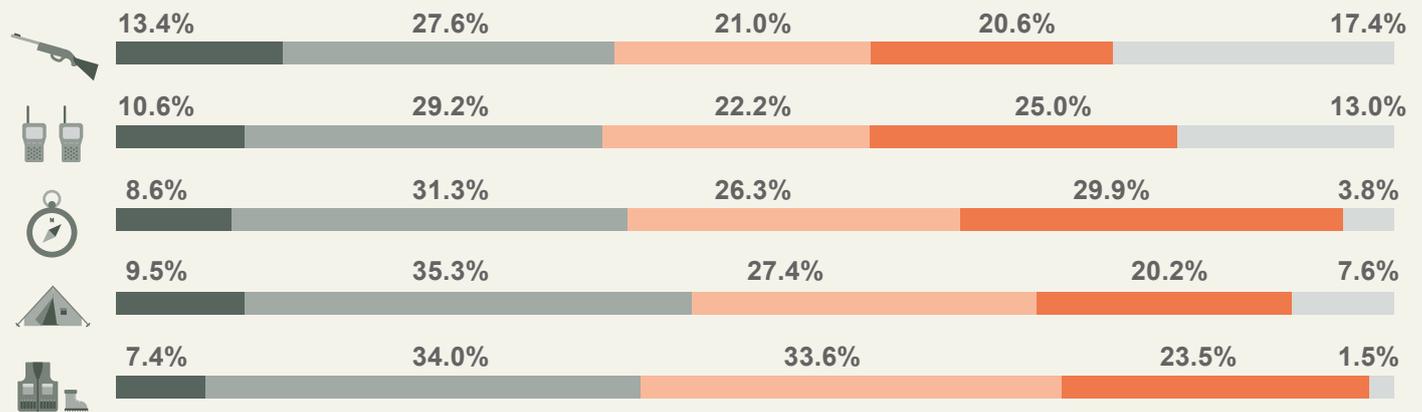
THERE ARE TOO MANY TASKS ASSIGNED FOR ANY GIVEN JOB TITLE, AND THE STAFF IS NOT PAID ACCORDING TO THE TASKS HE COMPLETES.

Equipment

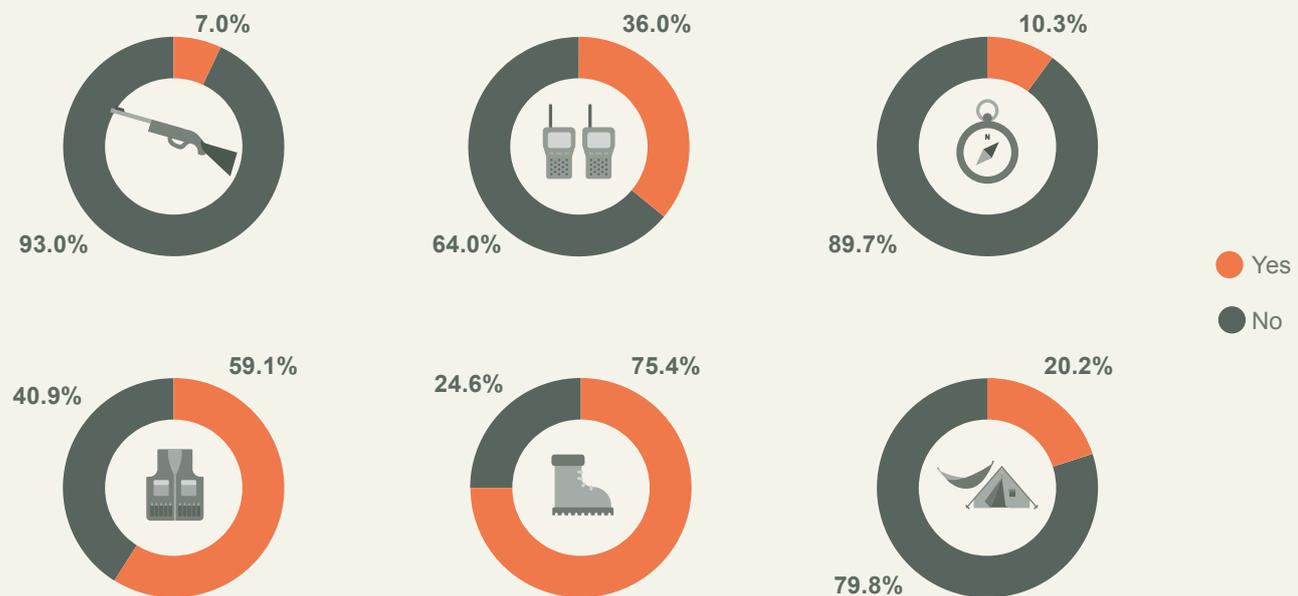


Strongly agree Agree Disagree Strongly disagree Not applicable

The provided equipment is sufficient for the work that i do

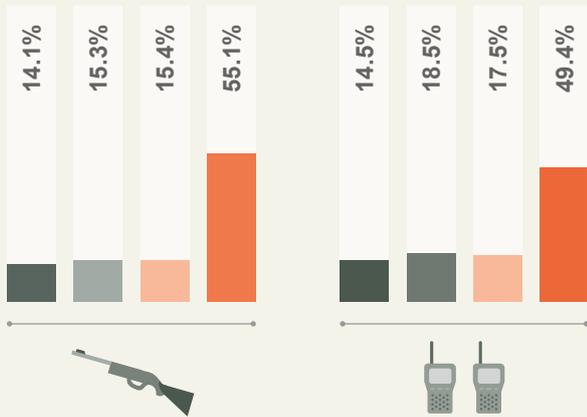


I bought the following equipment with my own money

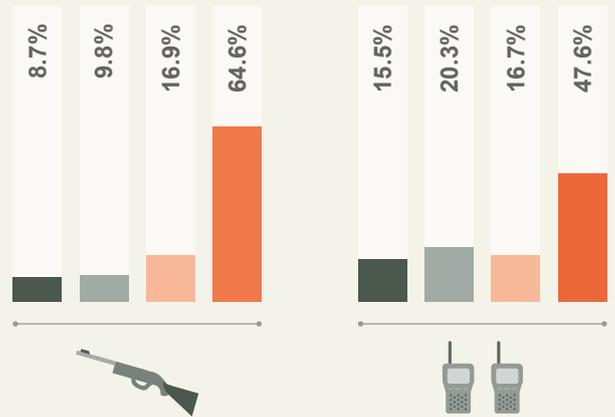


● Always ● Often ● Rarely ● Never

On patrol, I have access to



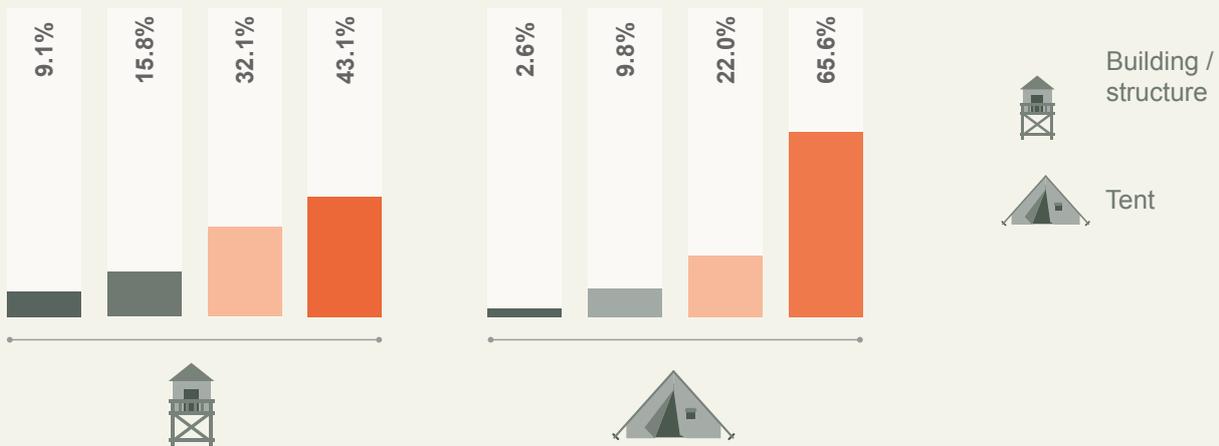
At outpost/station, I have access to



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

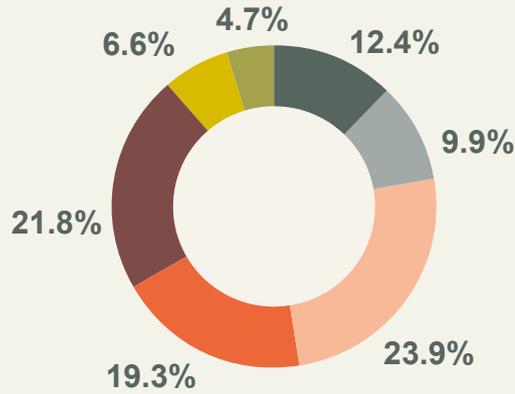


TO HAVE THE CONSERVATION WORK DONE PROPERLY, THERE MUST BE SUPPORT FROM THE MANAGEMENT, INCLUDING THE PROPER GEAR THAT IS REQUIRED ON THE GROUND.

Training

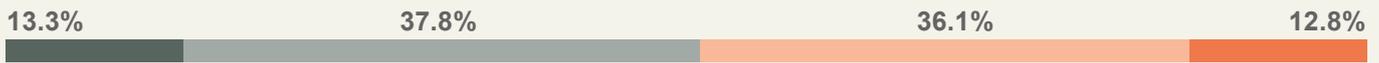
Highest level of education completed

- No formal education or limited elementary school
- Elementary school
- High School (Secondary)
- Pre-tertiary program
- University/college
- Post-graduate degree
- Vocational



- Strongly agree
- Agree
- Disagree
- Strongly disagree

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)



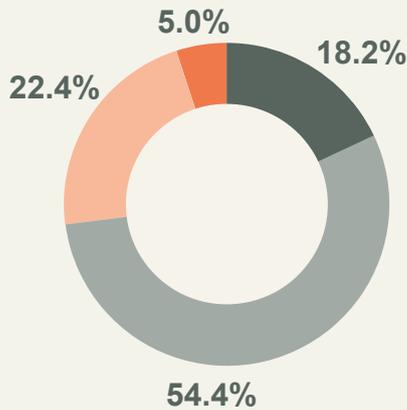
Within the past 12 months, I went to the following types of training to improve my skills



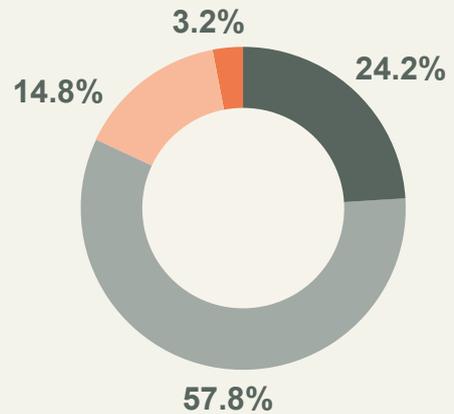
Community Relations

Strongly agree
 Agree
 Disagree
 Strongly disagree

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



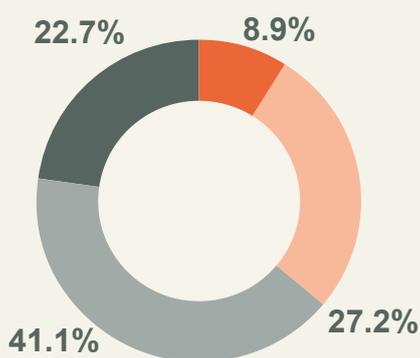
I believe community members trust me



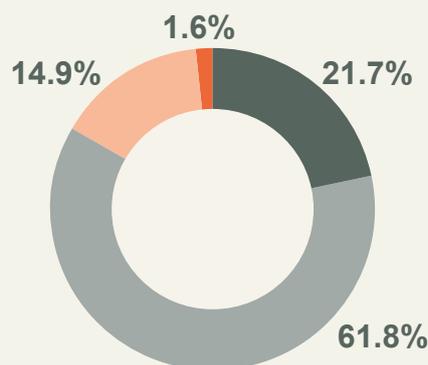
The organization I work for shows concern for community members' well-being and quality of life



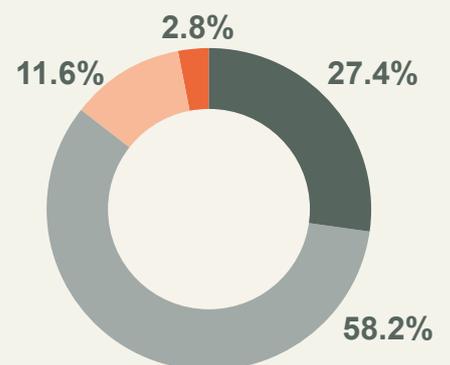
Community members do not see me as an enemy



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



I believe community members respect me

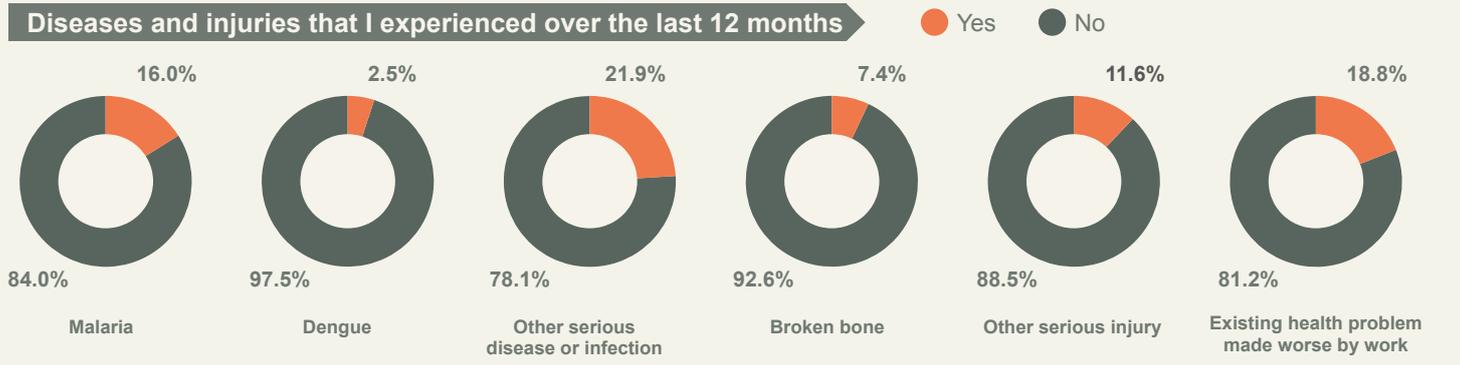


I am originally from a neighbouring community (within 20km of the park)

Yes **44.5%**

No **55.5%**

Health and Insurance

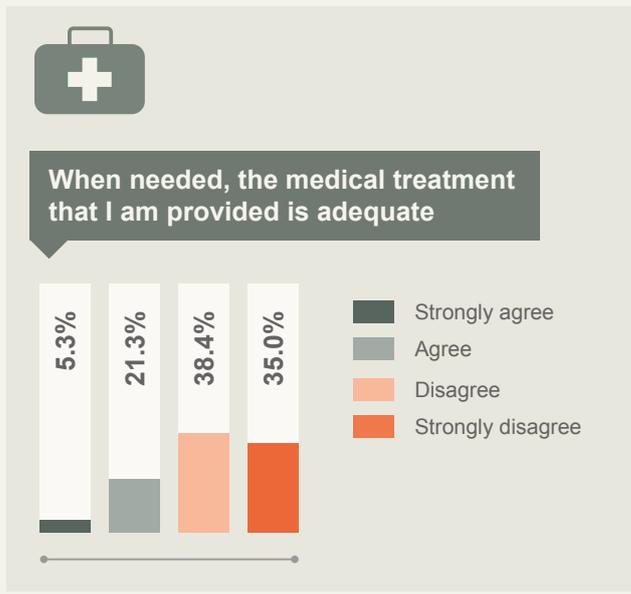
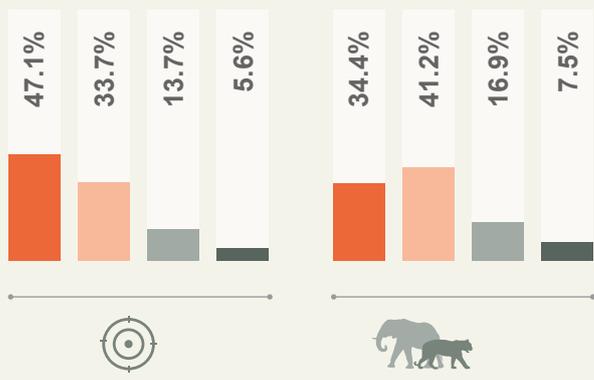


Malaria cases

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.

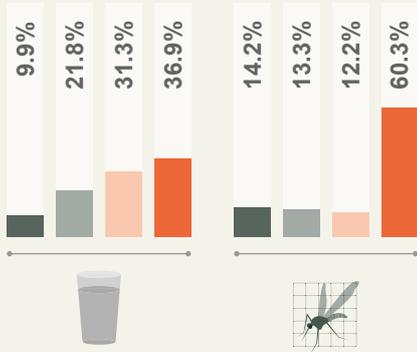
- Strongly agree
- Agree
- Disagree
- Strongly disagree

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

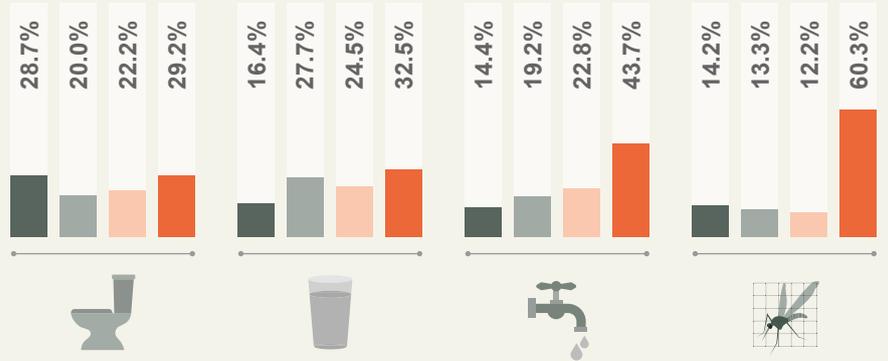


● Always ● Often ● Rarely ● Never

On patrol, I have access to



At outpost/station, I have access to



● Yes ● No ● Unsure

My employee insurance scheme provides compensation in case of

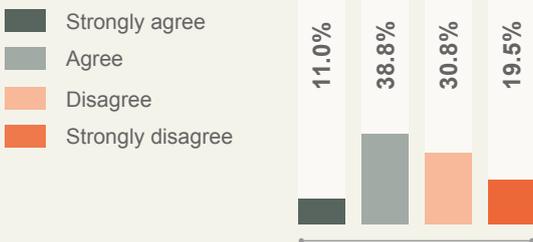


I have

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

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

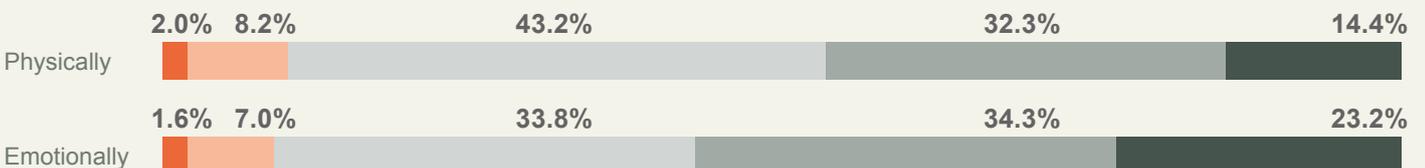
The basic necessities that I am provided (water, toilet etc.) are adequate



Average number of rangers who accompany me on patrol
3.6 rangers

I often feel exhausted

● Always ● Often ● Sometimes ● Rarely ● Never



Misconduct



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

While on duty (dark orange) While off duty (light orange)

	Verbal abuse/ bullying/harassment	Threats	Physical violence	Sexual harassment /violence
Supervisor	10.4 % 6.2 %	7.3 % 4.1 %	0.9 % 0.7 %	0.6 % 0.2 %
Co-workers	10.6 % 5.4 %	7.3 % 3.6 %	2.0 % 1.1 %	0.7 % 0.4 %
Community members	28.1 % 14.9 %	28.8 % 15.2 %	5.3 % 2.9 %	1.3 % 0.8 %

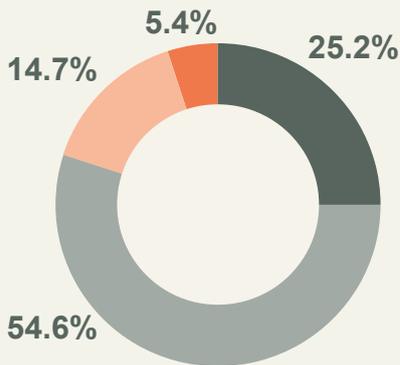
● Strongly agree

● Agree

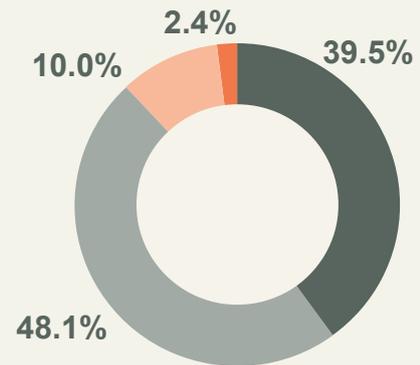
● Disagree

● Strongly disagree

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

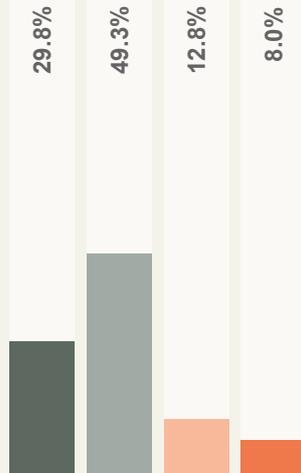


I would report a ranger if I witnessed them accepting a bribe or engage in other corrupt and illegal activities



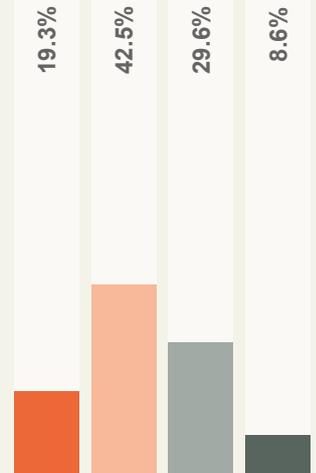
My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)

● Strongly agree
 ● Agree
 ● Disagree
 ● Strongly disagree



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
 ● Agree
 ● Disagree
 ● Strongly disagree

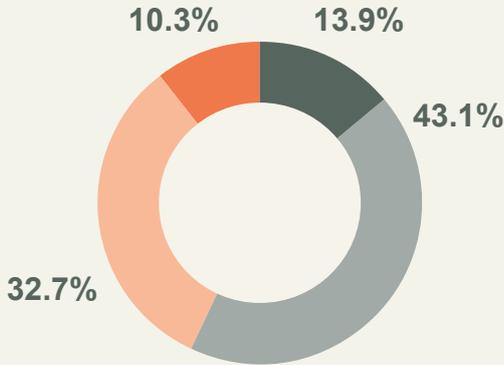


I FEEL FREE IN SHARING MY THOUGHTS ON PROBLEMS REGARDING FOREST CONSERVATION IN MY FIELD OFFICE AND WITH MY SUPERVISOR. I TRUST MY SUPERVISOR FULLY.

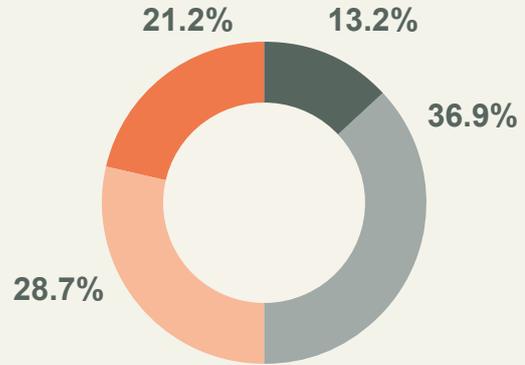
Workplace Dynamics

Strongly agree Agree Disagree Strongly disagree

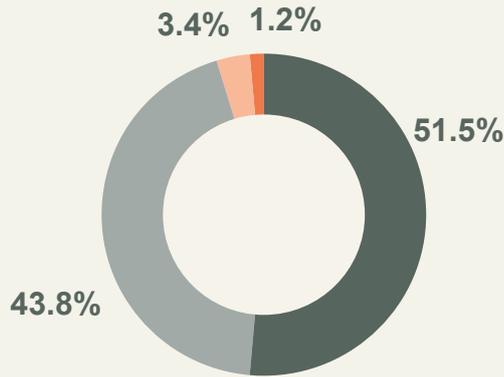
My efforts are satisfactorily rewarded by my organization



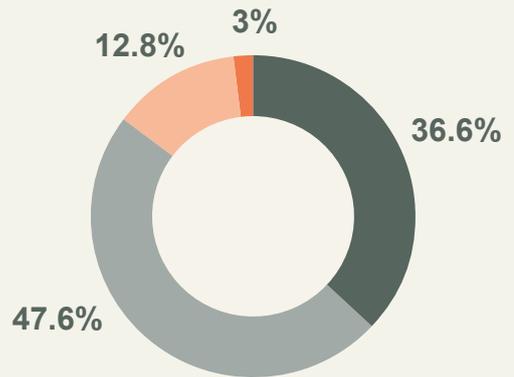
I am satisfied with my chances for promotion and advancement



I'm proud of the work I do as a ranger



I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death



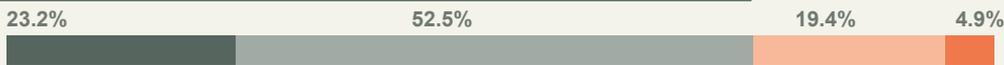
I believe that my supervisor treats me with respect



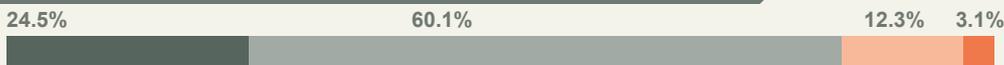
I feel comfortable sharing my concerns with my supervisor



My supervisor's decisions are equally fair to every ranger



Clear objectives are communicated to me by management



There is good communication between the supervisors and frontline staff

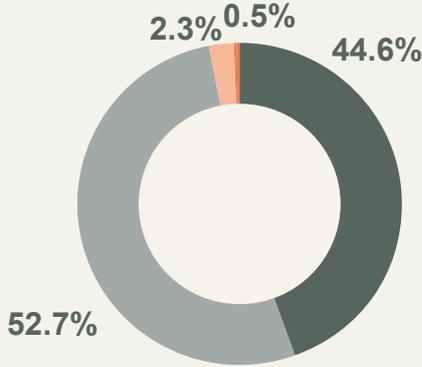


I am a supervisor

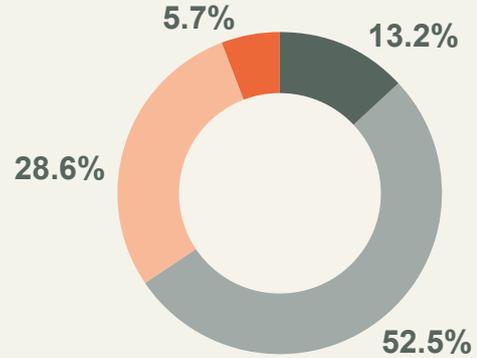
Yes **33.0%**

Effectiveness of Laws

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

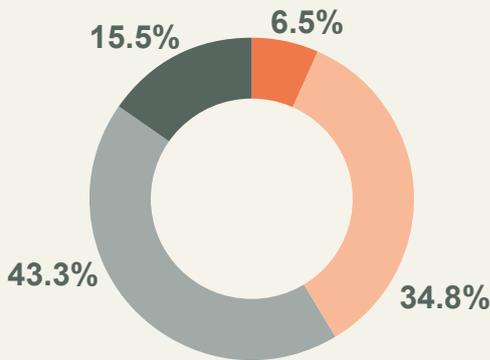


The laws and regulations of my conservation area are in line with the moral values of local community members

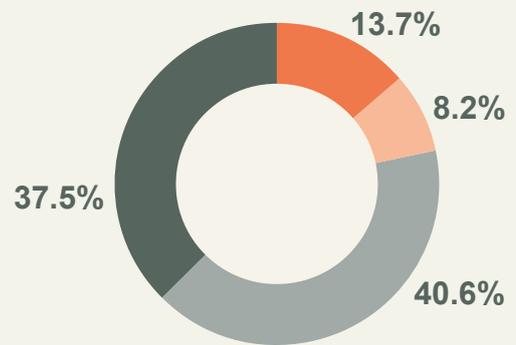


Strongly agree Agree Disagree Strongly disagree

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

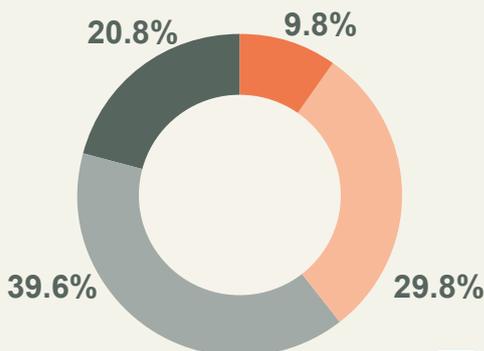


People arrested in the conservation area are treated too lightly by judges

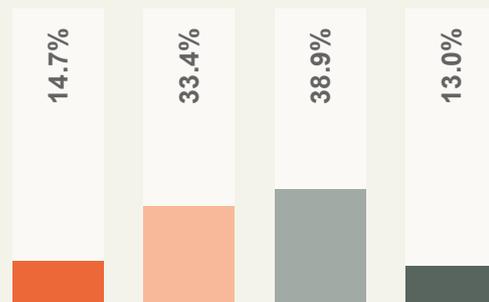


Strongly agree Agree Disagree Strongly disagree

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



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



Strongly agree Agree Disagree Strongly disagree

East and Southeast Asia

Average

Age 41.1 years old

Time in current organization 14.3 years

Work as a ranger 13.8 years

Work in current conservation area 12.7 years

	Frequency	Percent
Gender breakdown*	♀ 86	4.2
	♂ 1,975	95.8

*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



Overtime compensation



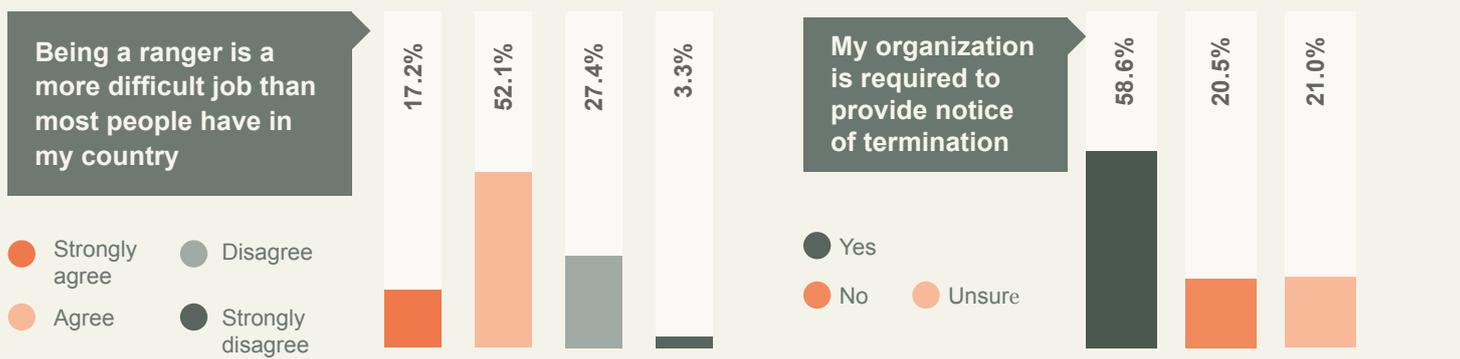
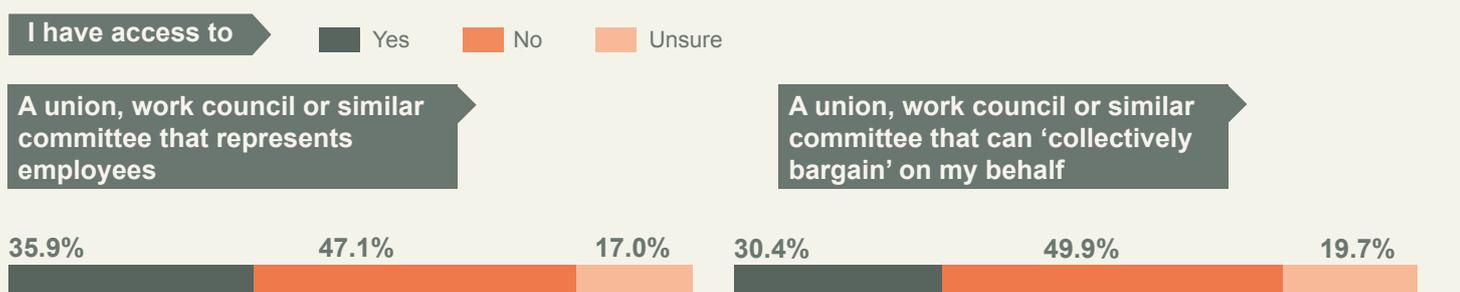
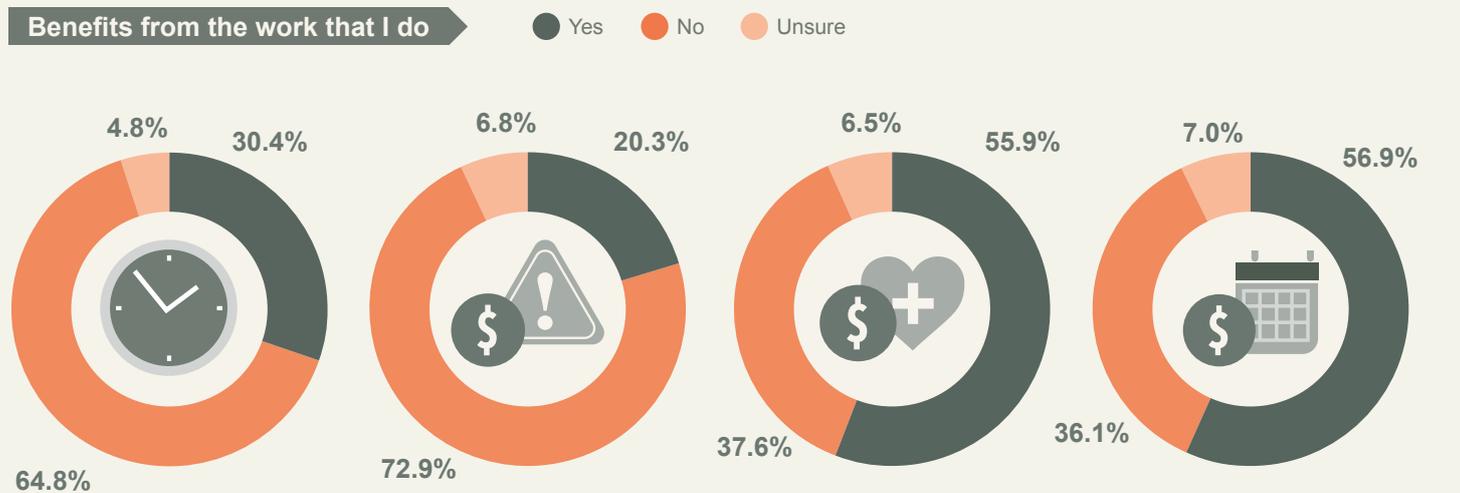
Extra pay for bad/dangerous work conditions



Paid sick leave



Paid annual leave



*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

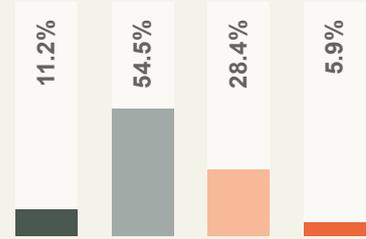


I am paid this much in my local currency

USD 320.33
monthly

I am paid a fair wage

- Strongly agree
- Agree
- Disagree
- Strongly disagree



Average total hours I work weekly

Total **51.3** hours

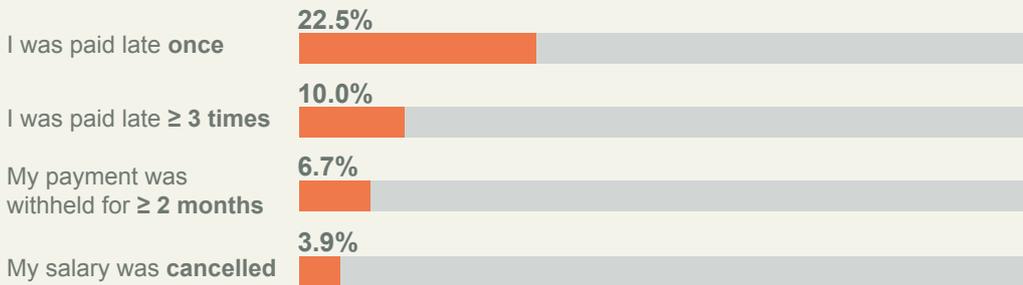


Average hours worked at night

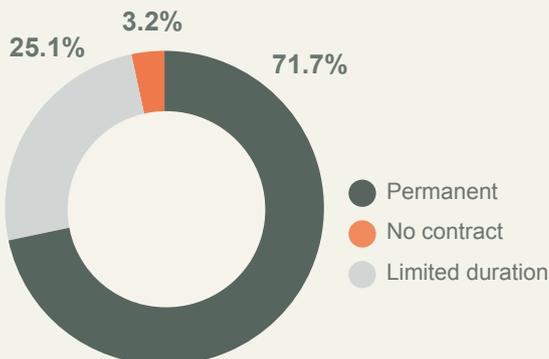
6 PM-6 AM
20.6 hours

During the last 12 months

Yes



Type of employment contract



I have other paid jobs besides being a ranger

10.7%
have other jobs



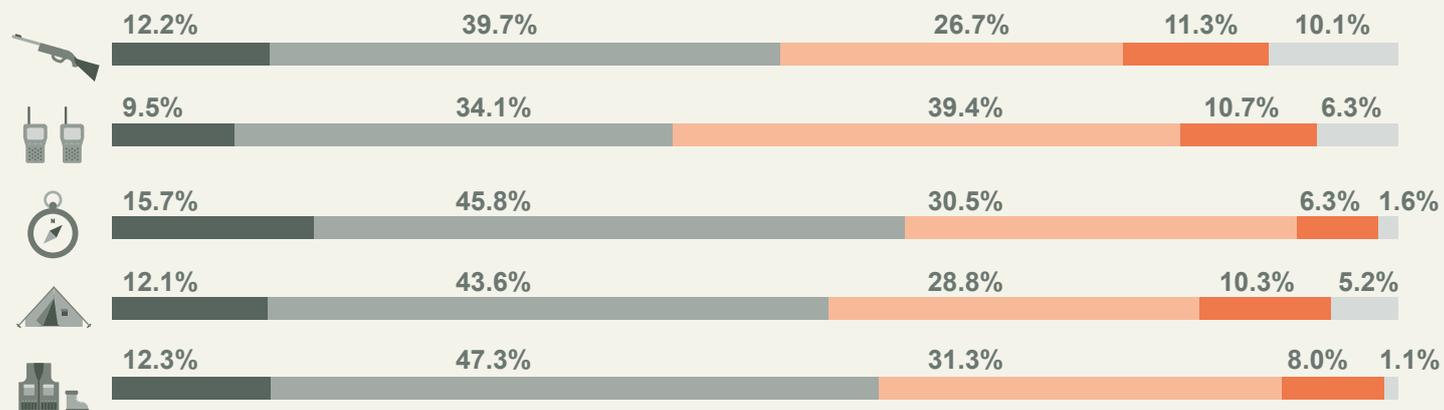
THE SIZE OF THE FOREST AREA IS NOT PROPORTIONAL TO THE NUMBER OF FOREST RANGERS.

Equipment

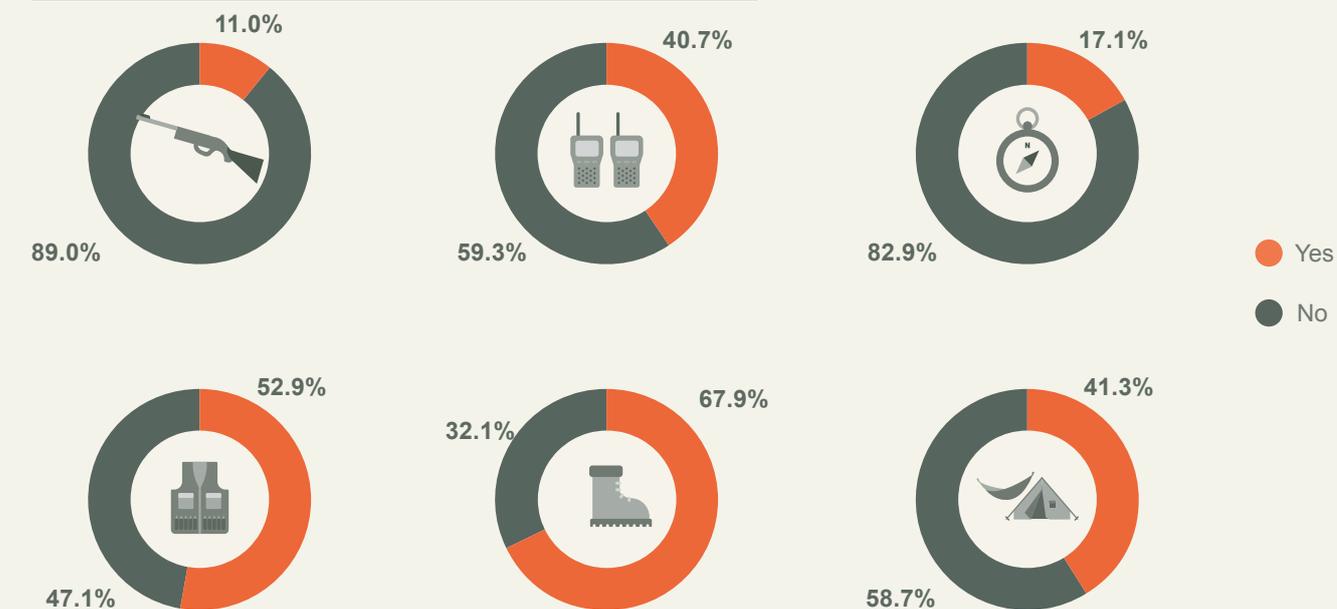


Strongly agree
 Agree
 Disagree
 Strongly disagree
 Not applicable

The provided equipment is sufficient for the work that i do

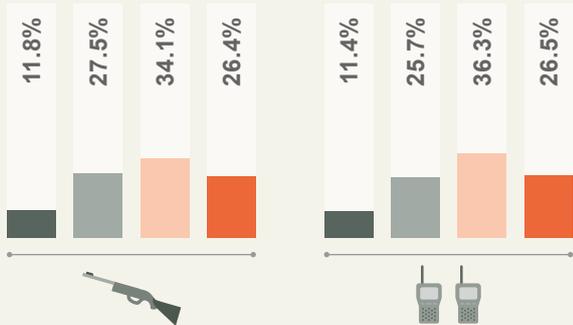


I bought the following equipment with my own money

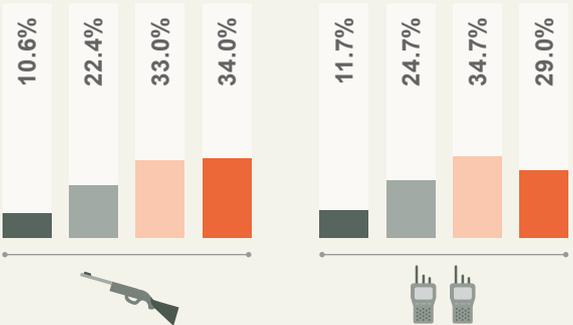


● Always ● Often ● Rarely ● Never

On patrol, I have access to



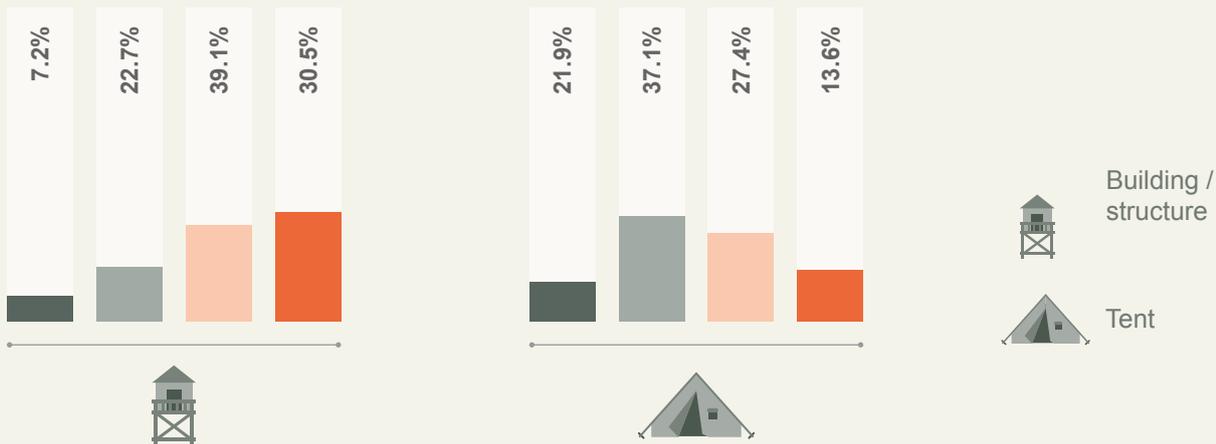
At outpost/station, I have access to



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

Always: **6.4%** Often: **26.1%**

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

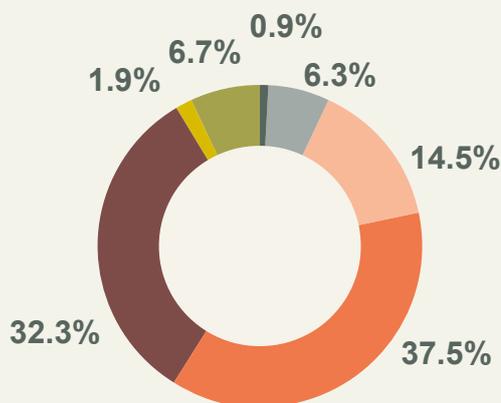


ONE OF THE CHALLENGES I FACE AS A RANGER IS THAT I OFTEN MUST BE FAR FROM MY FAMILY AND I'M CUT OFF FROM THE OUTSIDE WORLD. THIS MAKES MY FAMILY WORRY CONSTANTLY ABOUT ME, BUT THEY ARE NOT ABLE TO CONTACT ME BECAUSE OF LACK OF COMMUNICATION MEANS.

Training

Highest level of education completed

- No formal education or limited elementary school
- Elementary school
- High School (Secondary)
- Pre-tertiary program
- University/college
- Post-graduate degree
- Vocational



- Strongly agree
- Agree
- Disagree
- Strongly disagree

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)



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

32.1%
First aid & emergency

49.1%
Navigation

37.0%
Human wildlife conflict

39.4%
Crime scene investigation

54.3%
Firearms

42.2%
Tracking

45.6%
Ranger-based data collection

51.7%
Law and regulation

29.3%
Engagement /combat

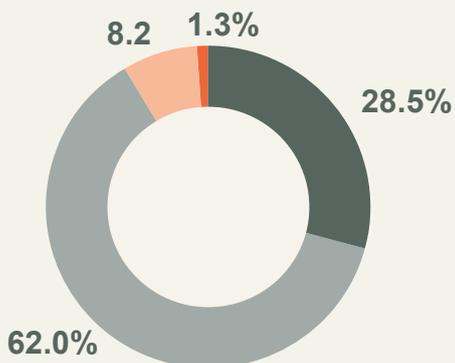
33.1%
Wilderness survival

44.9%
Patrol tactic

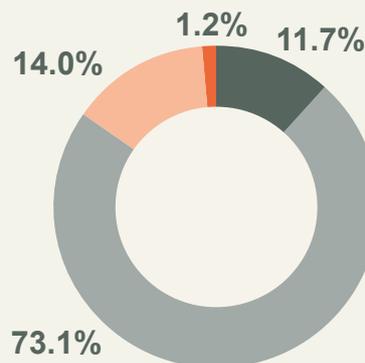
Community Relations

Strongly agree
 Agree
 Disagree
 Strongly disagree

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



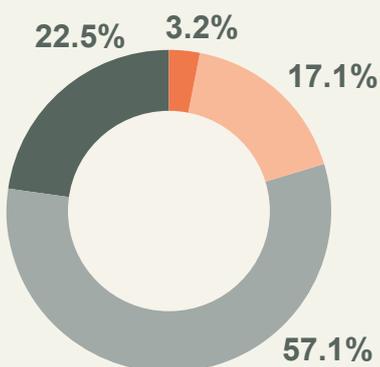
I believe community members trust me



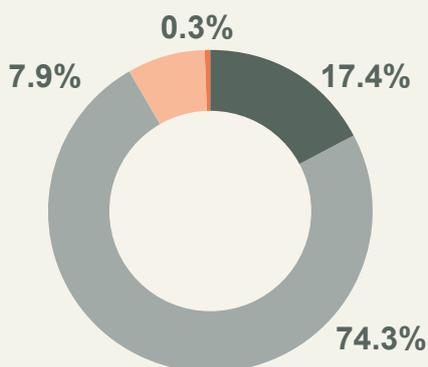
The organization I work for shows concern for community members' well-being and quality of life



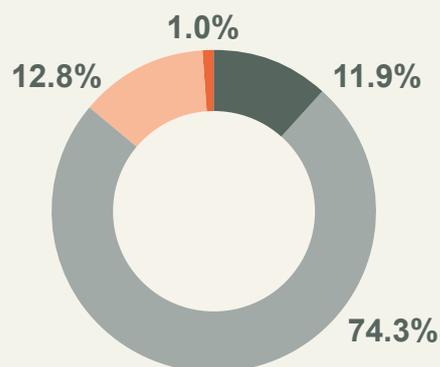
Community members do not see me as an enemy



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



I believe community members respect me

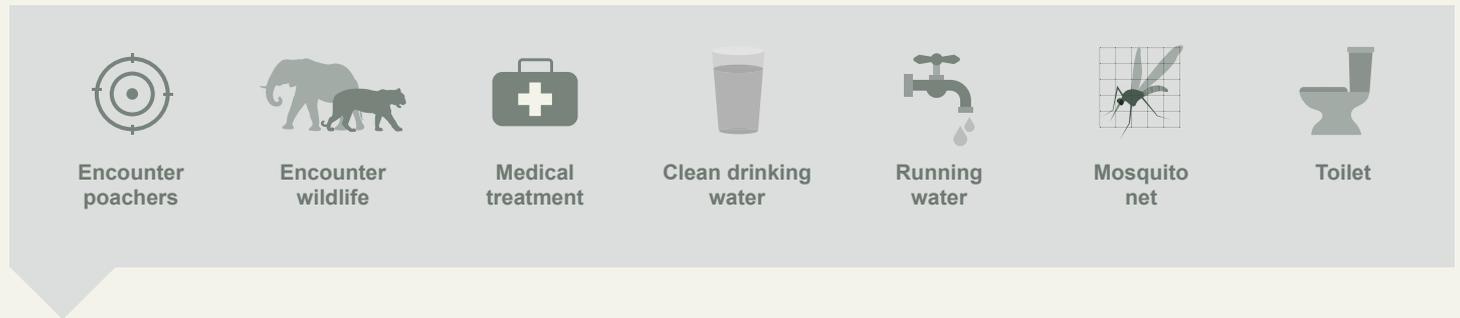


I am originally from a neighbouring community (within 20km of the park)

Yes 37.9%

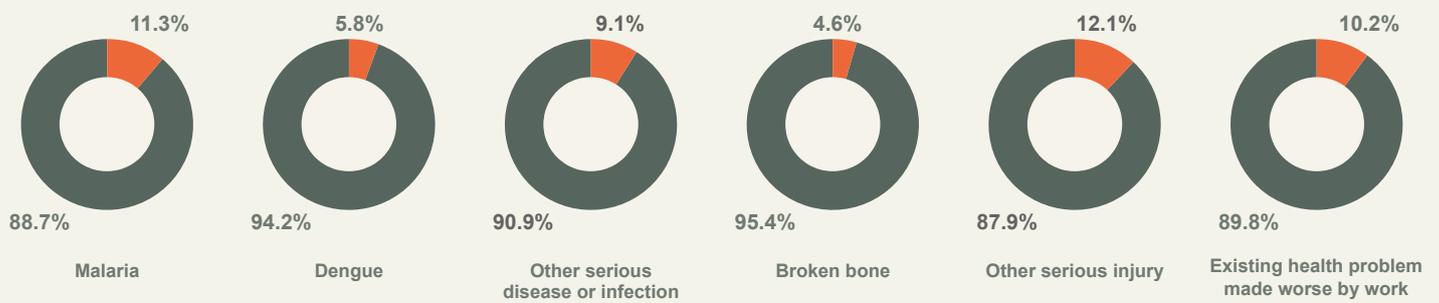
No 62.1%

Health and Insurance



Diseases and injuries that I experienced over the last 12 months

● Yes ● No

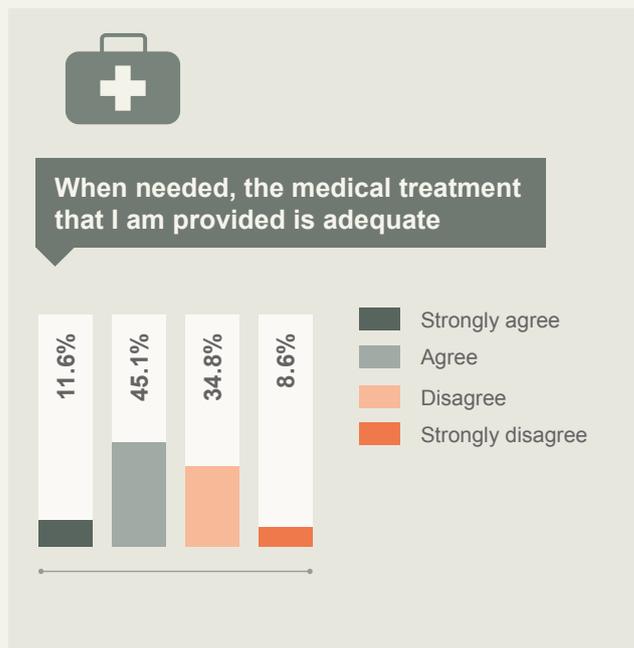
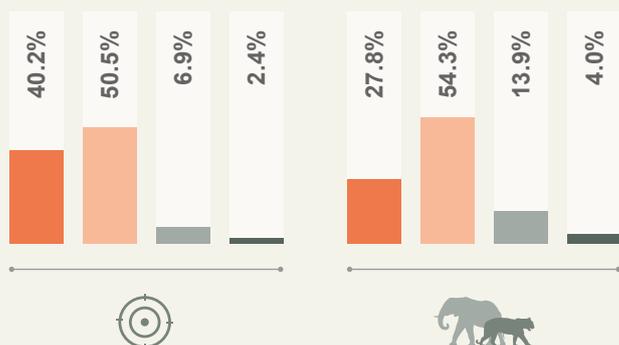


Malaria cases

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.

Strongly agree Disagree
Agree Strongly disagree

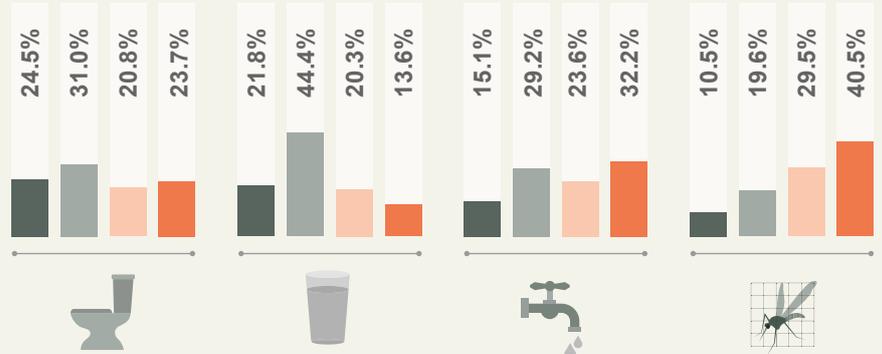
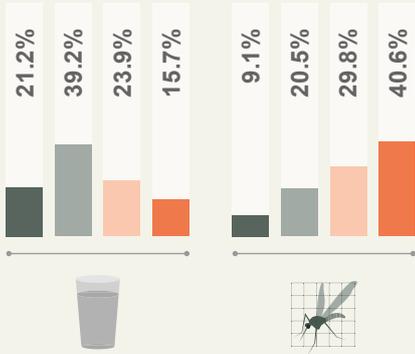
I think that being a ranger is a dangerous job due to chance of



● Always ● Often ● Rarely ● Never

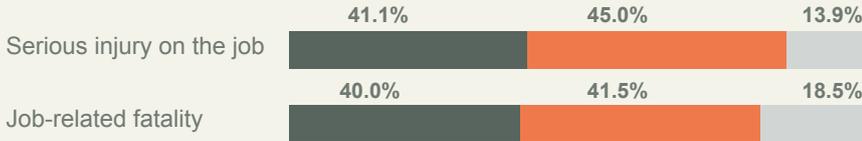
On patrol, I have access to

At outpost/station, I have access to



● Yes ● No ● Unsure

My employee insurance scheme provides compensation in case of



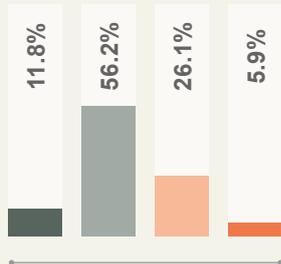
I have

Spouse
80.8%
IF YES,
I live with
spouse
36.4%

Children
78.0%
IF YES,
I live with
children
33.5%

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

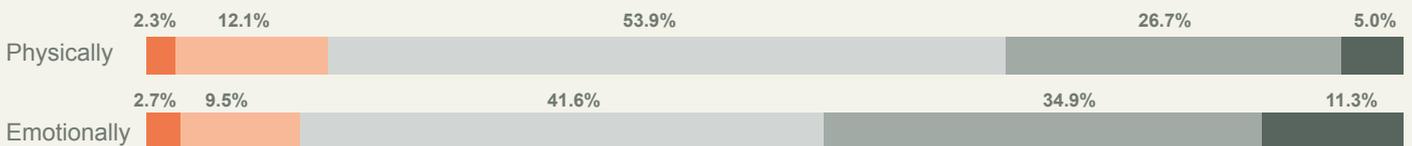
● Strongly agree ● Agree ● Disagree ● Strongly disagree



Average number of rangers who accompany me on patrol
5.0 rangers

I often feel exhausted

● Always ● Often ● Sometimes ● Rarely ● Never



Misconduct



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

■ While on duty

■ While off duty



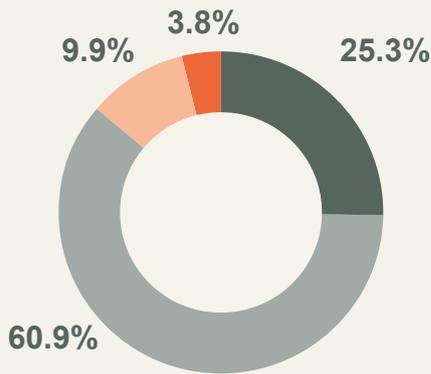
● Strongly agree

● Agree

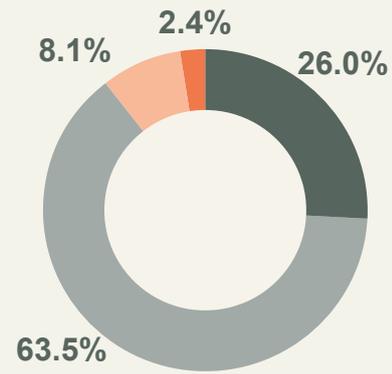
● Disagree

● Strongly disagree

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

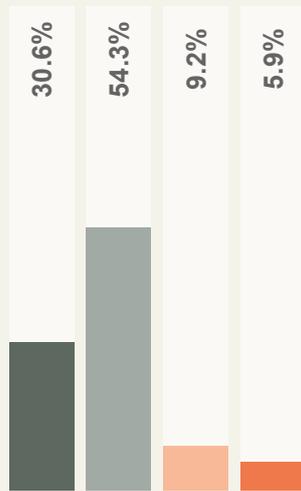


I would report a ranger if I witnessed them accepting a bribe or engage in other corrupt and illegal activities



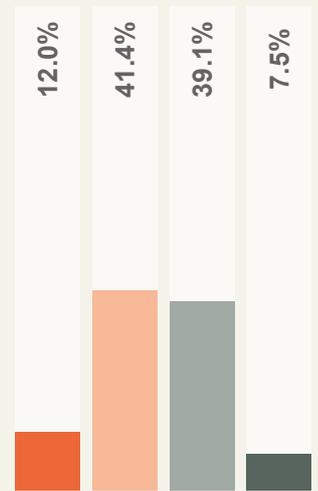
My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)

● Strongly agree
 ● Agree
 ● Disagree
 ● Strongly disagree



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
 ● Agree
 ● Disagree
 ● Strongly disagree

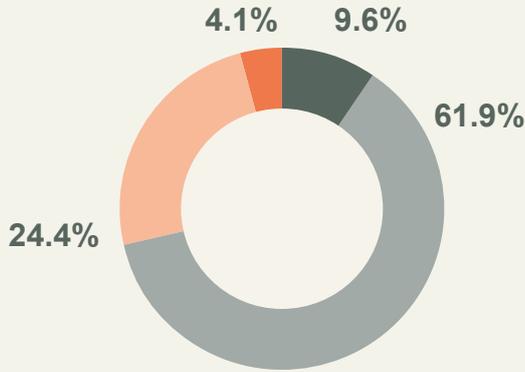


RANGERS TAKE BRIBES NOT BECAUSE THEIR SALARIES ARE INADEQUATE, THEY TAKE THEM BECAUSE THEY THINK NO ONE NOTICES. I DON'T KNOW HOW TO REPORT ANONYMOUSLY, BUT IT WOULD BE GOOD TO BE ABLE TO REPORT IN THIS WAY TO HAVE THOSE RESPONSIBLE CHARGED.

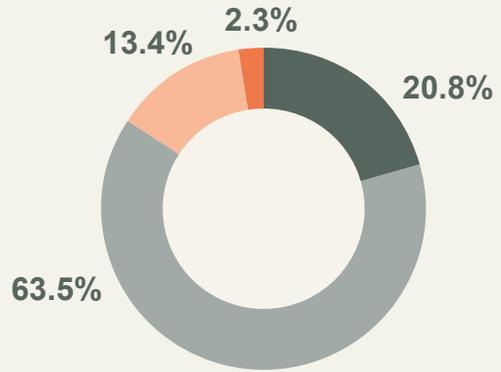
Workplace Dynamics

Strongly agree Agree Disagree Strongly disagree

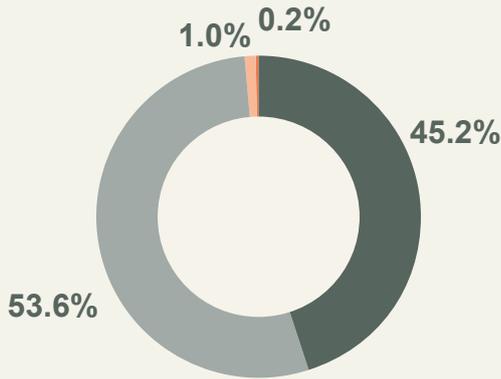
My efforts are satisfactorily rewarded by my organization



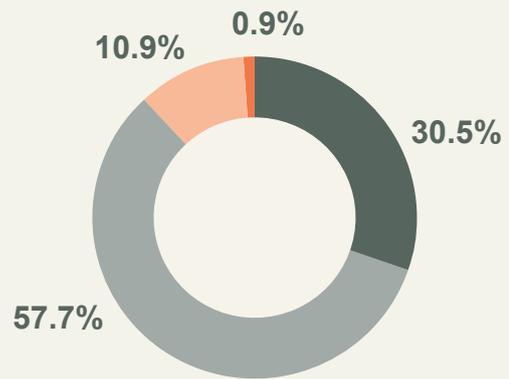
I am satisfied with my chances for promotion and advancement



I'm proud of the work I do as a ranger



I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death



I believe that my supervisor treats me with respect



I feel comfortable sharing my concerns with my supervisor



My supervisor's decisions are equally fair to every ranger



Clear objectives are communicated to me by management



There is good communication between the supervisors and frontline staff

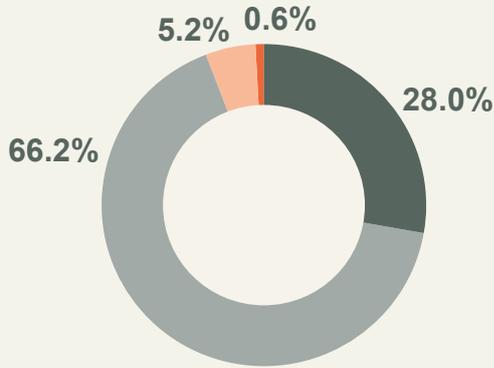


I am a supervisor

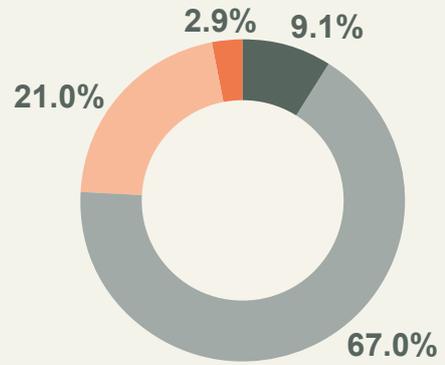
Yes **25.1%**

Effectiveness of Laws

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

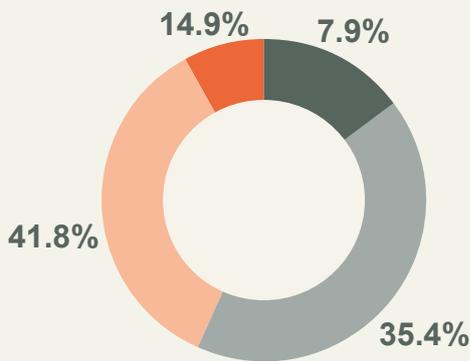


The laws and regulations of my conservation area are in line with the moral values of local community members

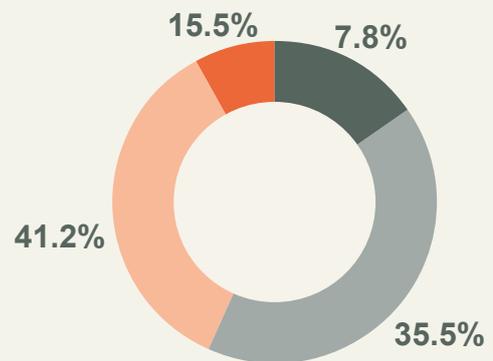


Strongly agree Agree Disagree Strongly disagree

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

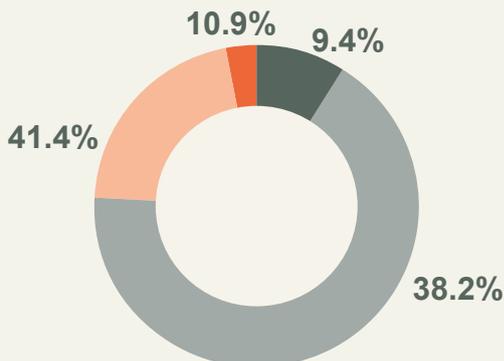


People arrested in the conservation area are treated too lightly by judges

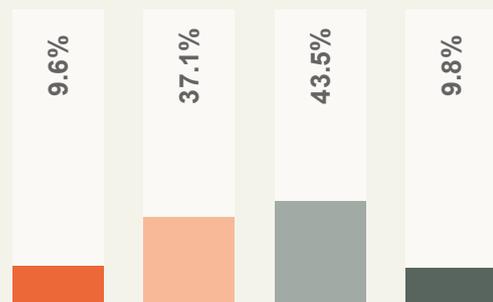


Strongly agree Agree Disagree Strongly disagree

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



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



Strongly agree Agree Disagree Strongly disagree

Latin America

Average

Age 39.2 years old

Time in current organization 8.8 years

Work as a ranger 8.5 years

Work in current conservation area 7.4 years

	Frequency	Percent
Gender breakdown*		
♀	77	26.7
♂	211	73.3

*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.

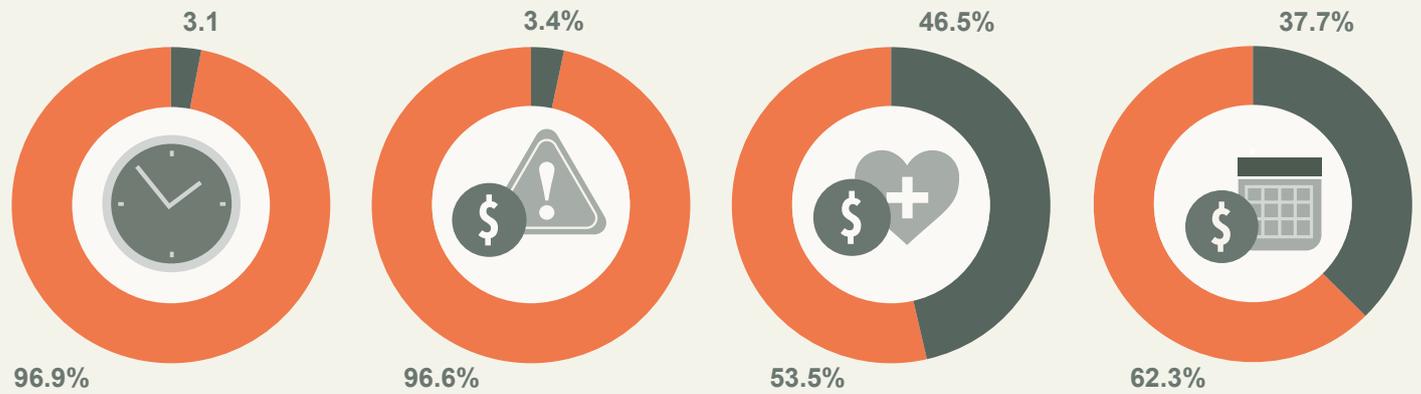
— Ranger in Colombia

Employment



Benefits from the work that I do

● Yes ● No



I have access to

● Yes ● No ● Unsure

A union, work council or similar committee that represents employees

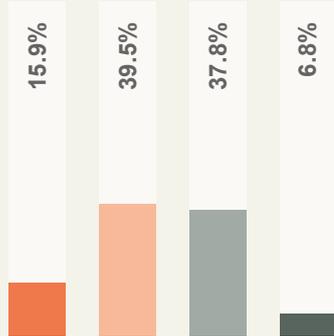


A union, work council or similar committee that can 'collectively bargain' on my behalf



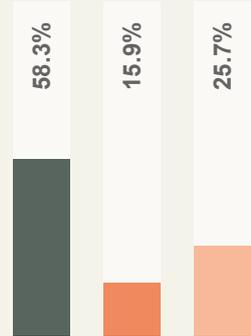
Being a ranger is a more difficult job than most people have in my country

● Strongly agree ● Disagree
● Agree ● Strongly disagree



My organization is required to provide notice of termination

● Yes ● No ● Unsure



*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

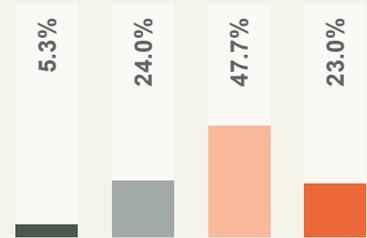


I am paid this much in my local currency

USD 653.03
monthly

I am paid a fair wage

- Strongly agree
- Agree
- Disagree
- Strongly disagree



Average total hours I work weekly

Total **48.2** hours

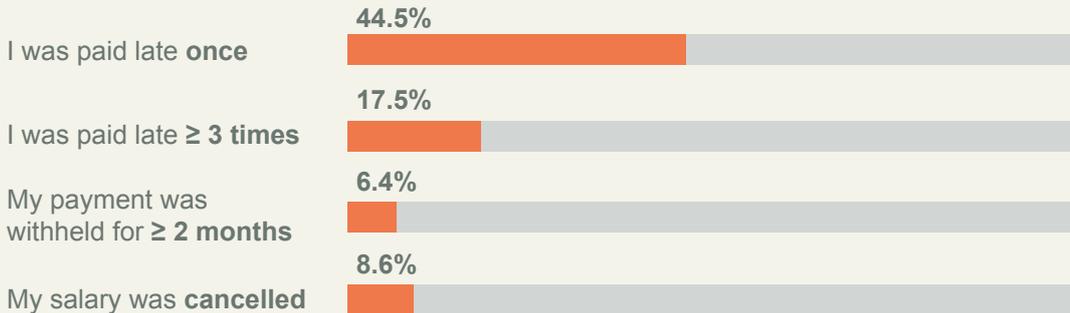


Average hours worked at night

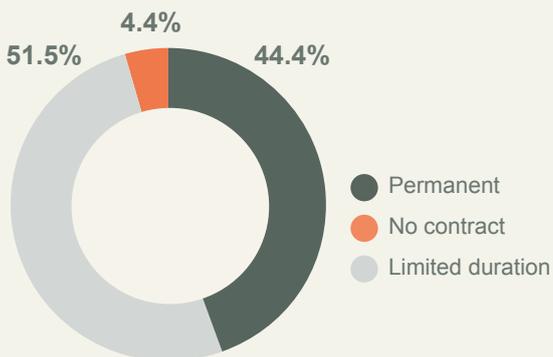
6 PM-6 AM **11.1** hours

During the last 12 months

Yes



Type of employment contract



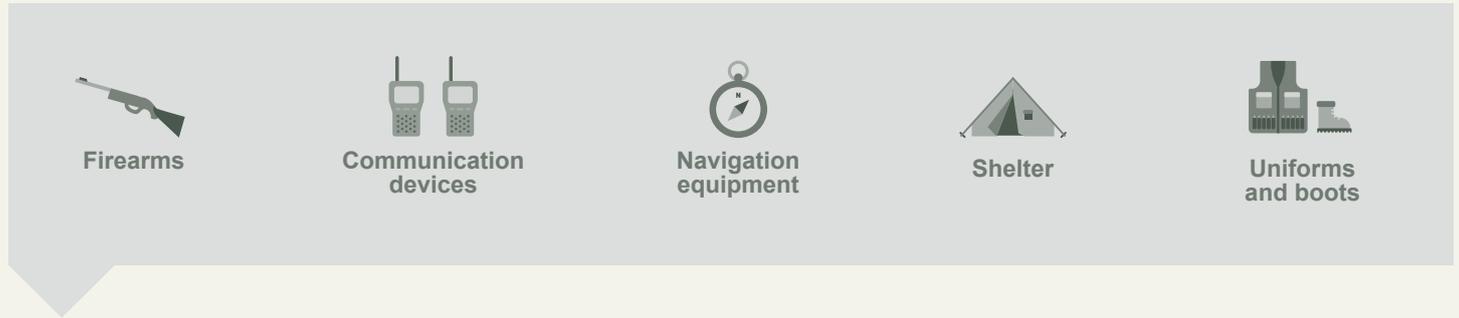
I have other paid jobs besides being a ranger

5.8% have other jobs



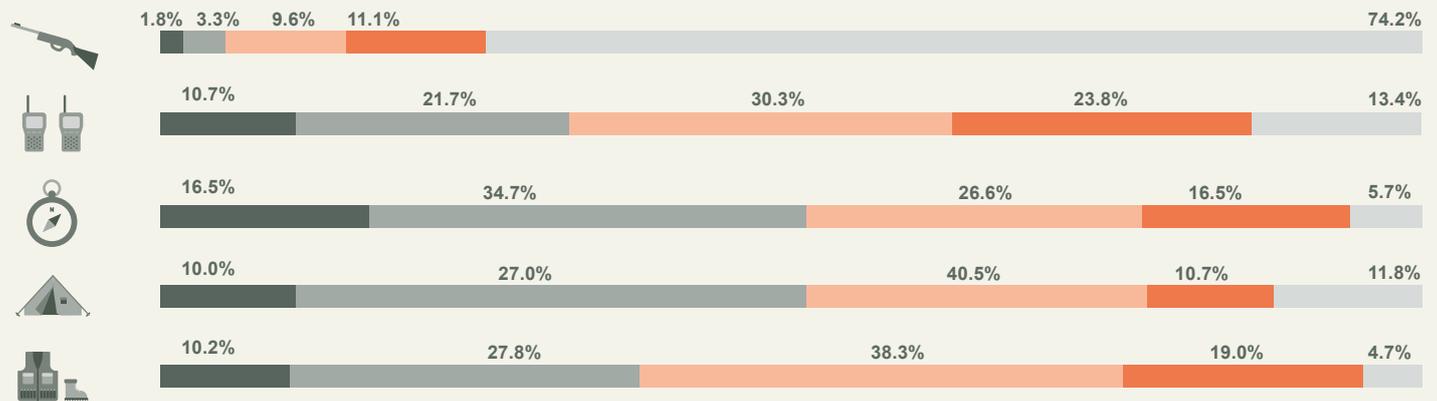
WE ARE CLEAR ABOUT THE HIGH RESPONSIBILITY WE HAVE, WHICH IS TO PROTECT OUR NATURAL AND CULTURAL HERITAGE.

Equipment

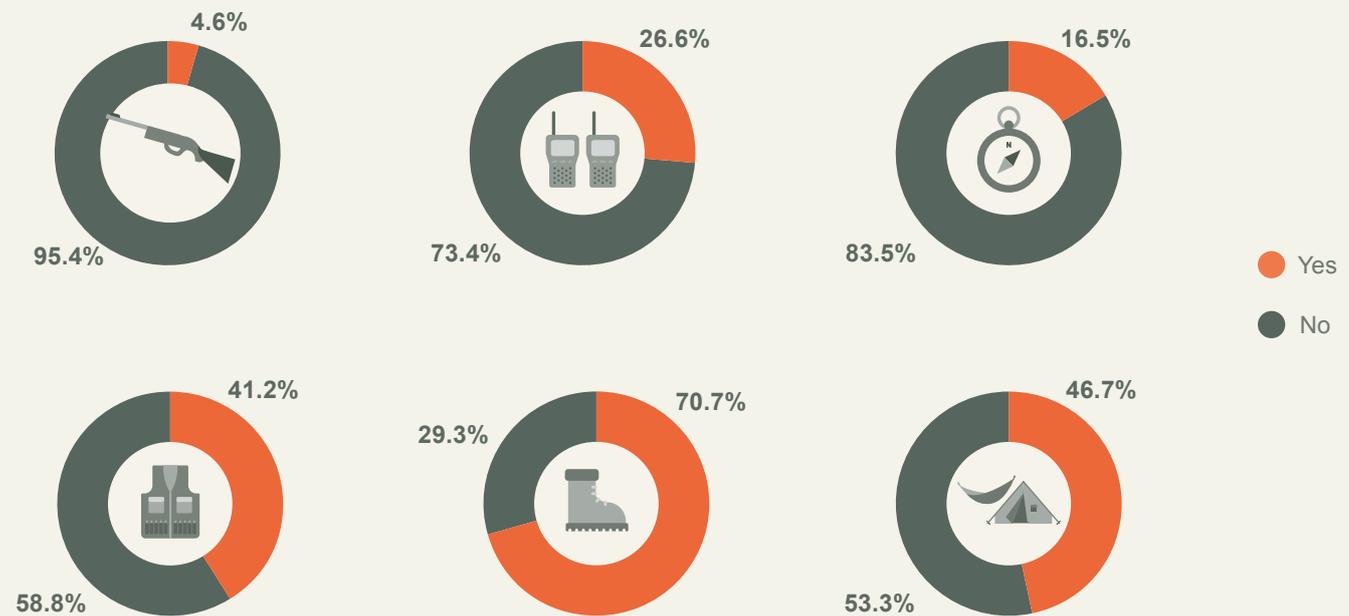


Strongly agree
 Agree
 Disagree
 Strongly disagree
 Not applicable

The provided equipment is sufficient for the work that i do

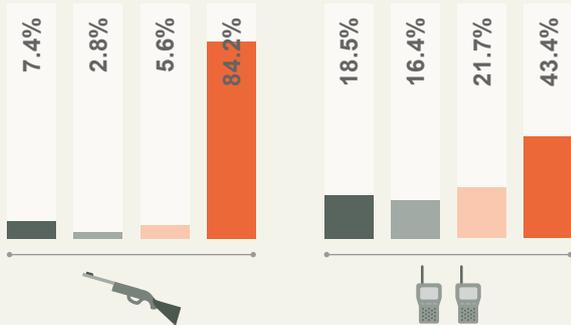


I bought the following equipment with my own money

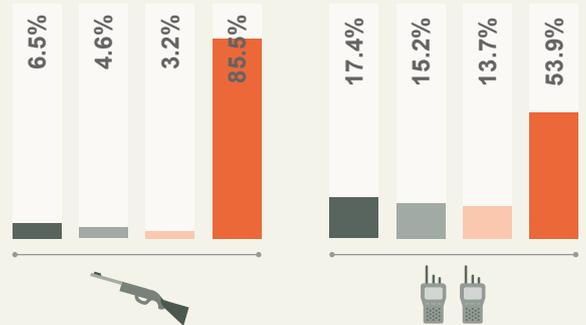


● Always ● Often ● Rarely ● Never

On patrol, I have access to



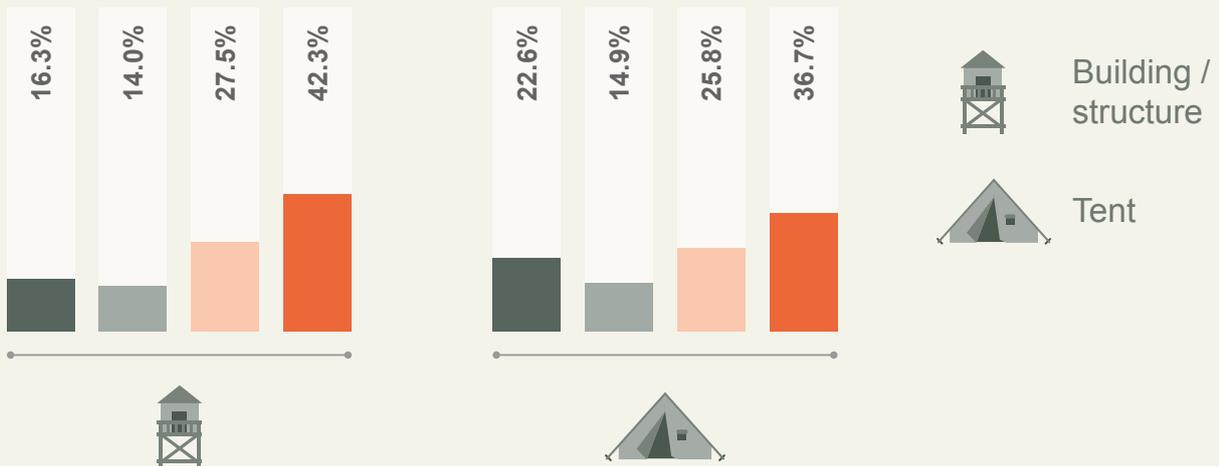
At outpost/station, I have access to



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

Always: **8.6%** Often: **11.7%**

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

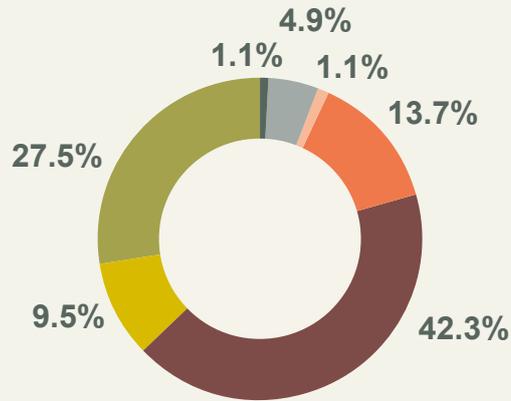


MANY OF THE PARK RANGERS WORK WITH A LACK OF BASIC EQUIPMENT SUCH AS COMMUNICATION TOOLS AND SELF-DEFENSE GEAR. THERE ARE CASES OF RANGERS KILLED FROM NOT HAVING BASIC SECURITY EQUIPMENT.

Training

Highest level of education completed

- No formal education or limited elementary school
- Elementary school
- High School (Secondary)
- Pre-tertiary program
- University/college
- Post-graduate degree
- Vocational



- Strongly agree
- Agree
- Disagree
- Strongly disagree

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)



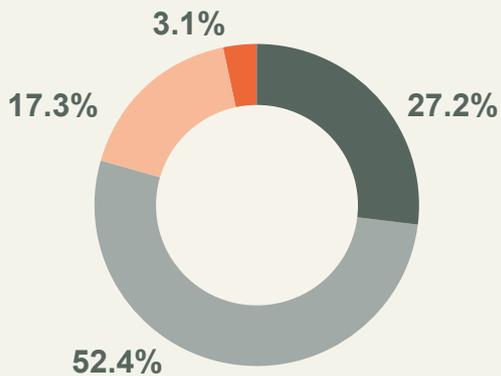
Within the past 12 months, I went to the following types of training to improve my skills



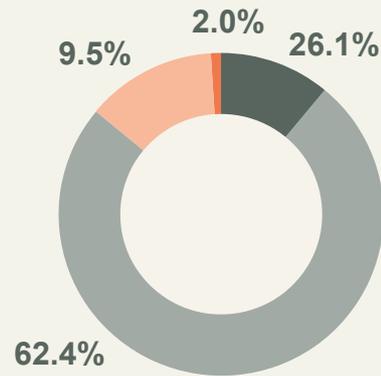
Community Relations

● Strongly agree ● Agree ● Disagree ● Strongly disagree

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



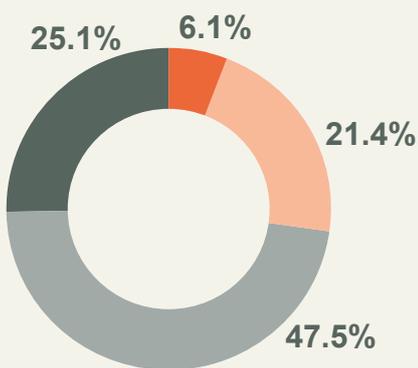
I believe community members trust me



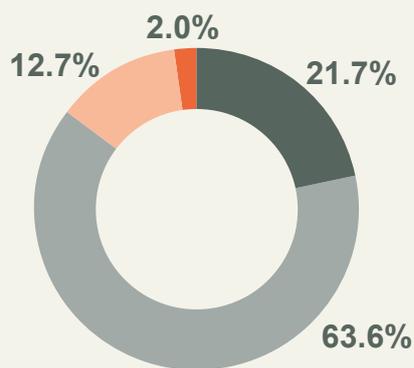
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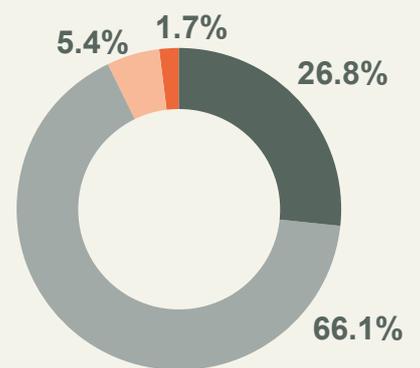
Community members do not see me as an enemy



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



I believe community members respect me

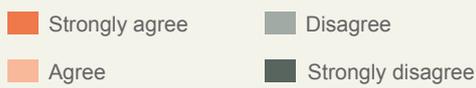
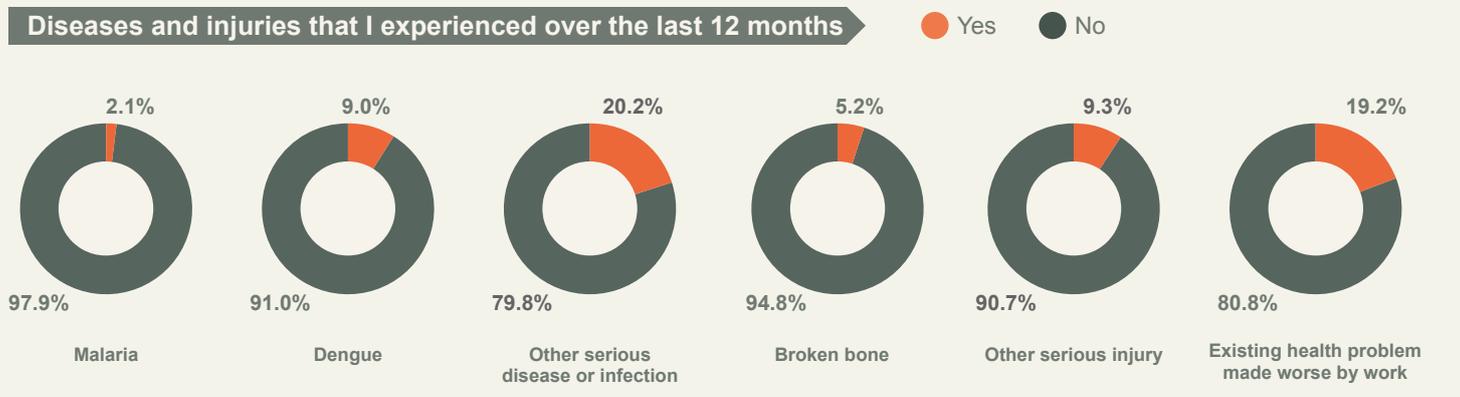
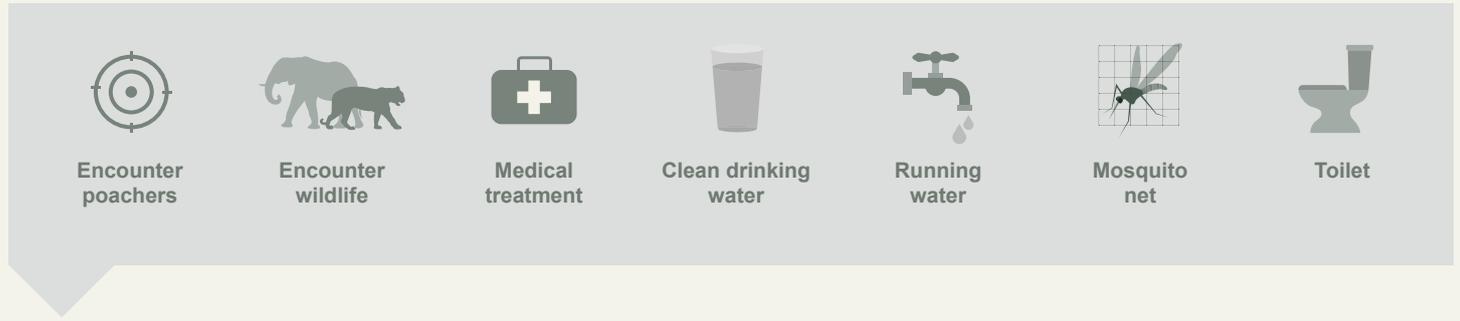


I am originally from a neighbouring community (within 20km of the park)

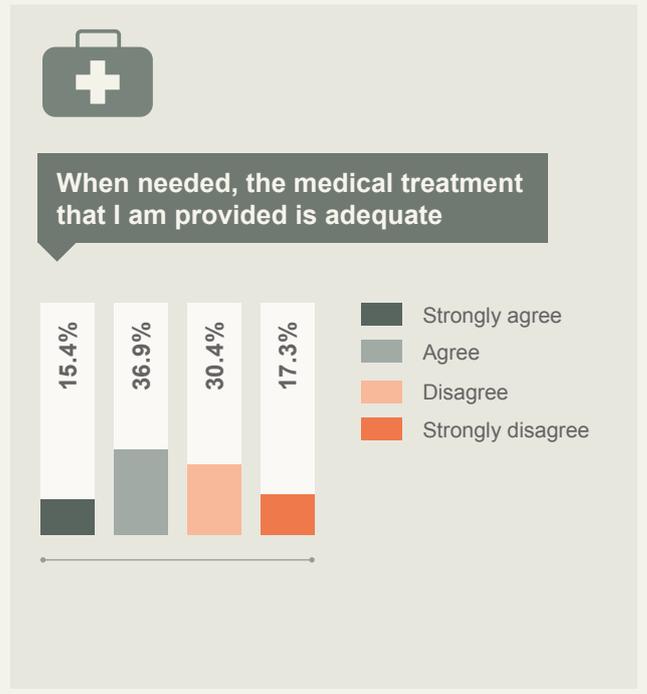
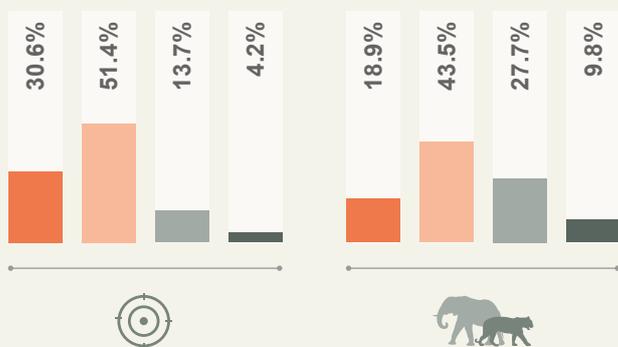
Yes 38.6%

No 61.4%

Health and Insurance

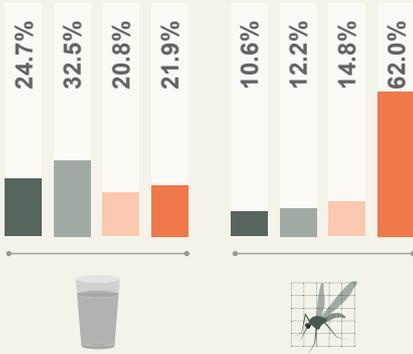


I think that being a ranger is a dangerous job due to chance of

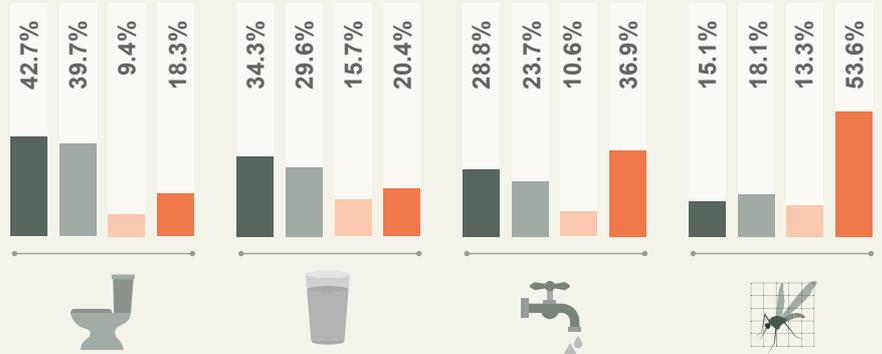


● Always ● Often ● Rarely ● Never

On patrol, I have access to

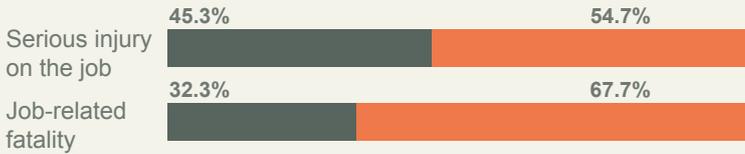


At outpost/station, I have access to



● Yes ● No

My employee insurance scheme provides compensation in case of



I have

Spouse
44.4%

Children
67.0%

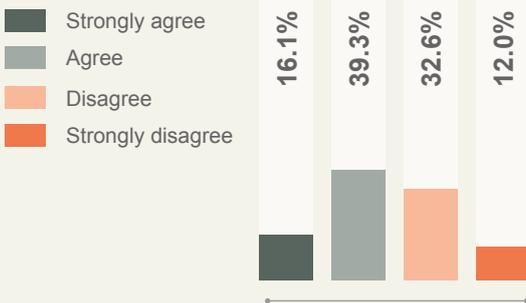
IF YES, I live with spouse

18.9%

IF YES, I live with children

19.9%

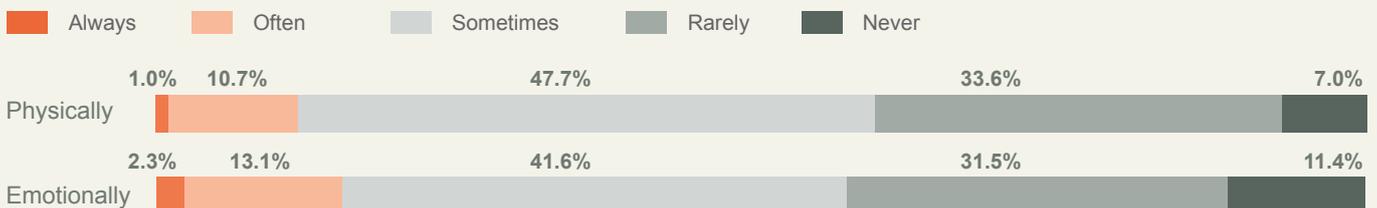
The basic necessities that I am provided (water, toilet etc.) are adequate



Average number of rangers who accompany me on patrol

2.7 rangers

I often feel exhausted



Misconduct



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

While on duty While off duty



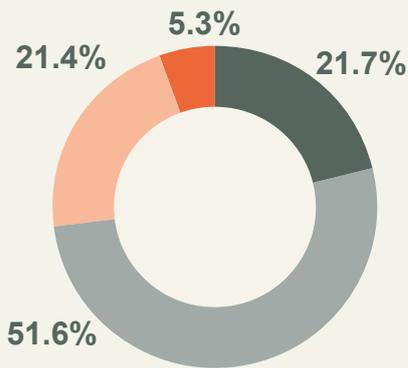
● Strongly agree

● Agree

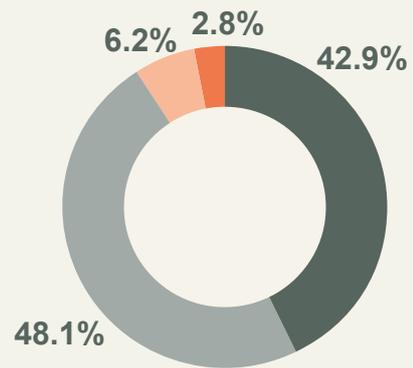
● Disagree

● Strongly disagree

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

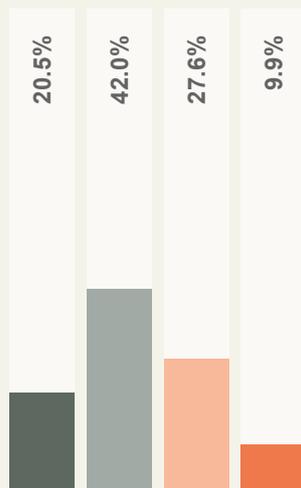


I would report a ranger if I witnessed them accepting a bribe or engage in other corrupt and illegal activities



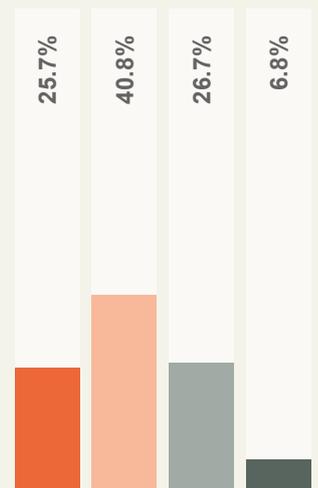
My organization does a good job reprimanding rangers found to have participated in corrupt activities (such as accepting bribes)

● Strongly agree
● Agree
● Disagree
● Strongly disagree



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

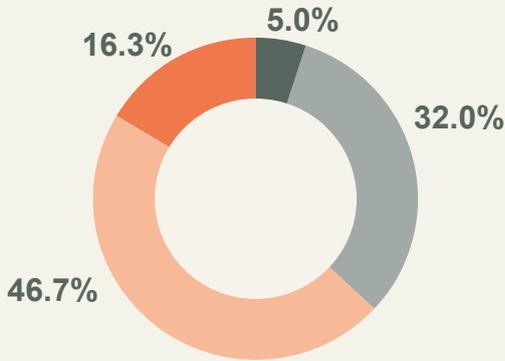
● Strongly agree
● Agree
● Disagree
● Strongly disagree



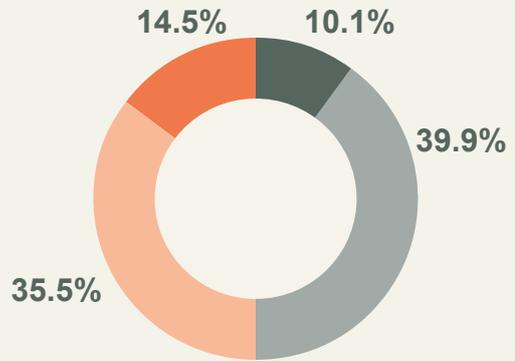
Workplace Dynamics

Strongly agree Agree Disagree Strongly disagree

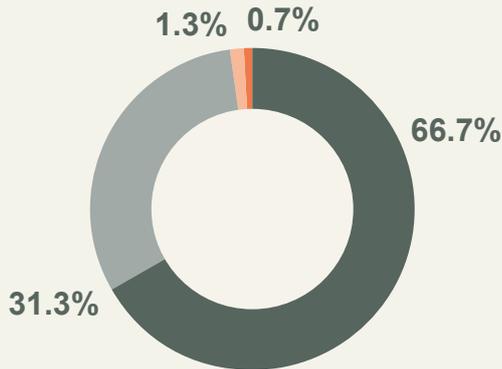
My efforts are satisfactorily rewarded by my organization



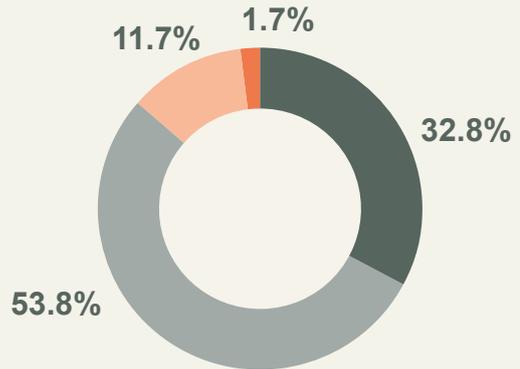
I am satisfied with my chances for promotion and advancement



I'm proud of the work I do as a ranger



I feel my colleagues would assist me in an emergency, even if helping me would put them at risk of serious injury or death



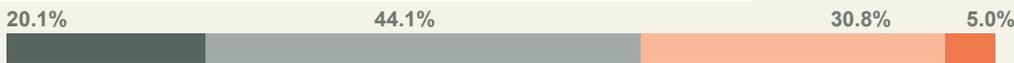
I believe that my supervisor treats me with respect



I feel comfortable sharing my concerns with my supervisor



My supervisor's decisions are equally fair to every ranger



Clear objectives are communicated to me by management



There is good communication between the supervisors and frontline staff

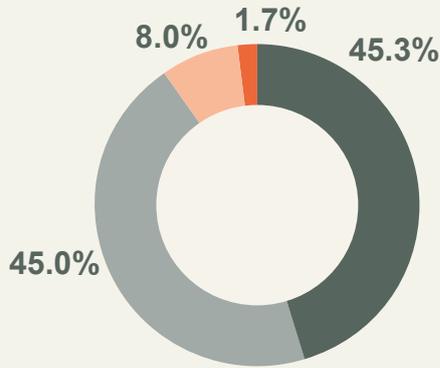


I am a supervisor

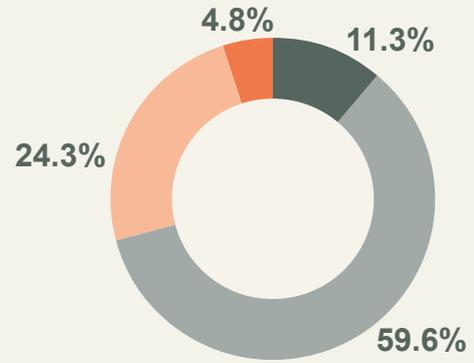
Yes **22.0%**

Effectiveness of Laws

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

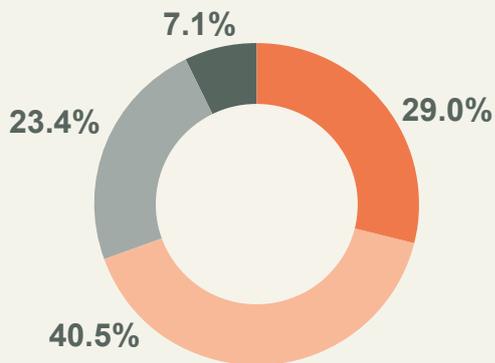


The laws and regulations of my conservation area are in line with the moral values of local community members

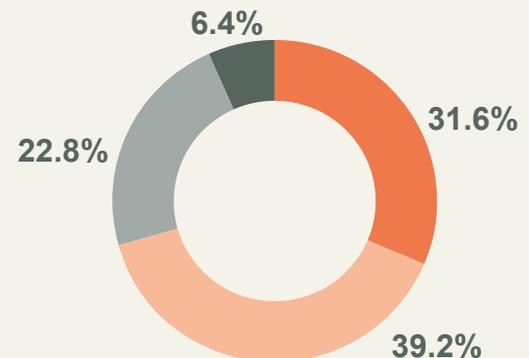


Strongly agree Agree Disagree Strongly disagree

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

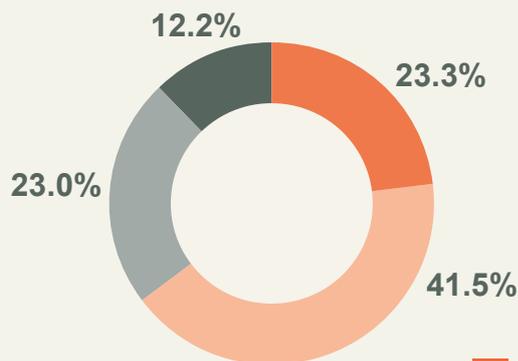


People arrested in the conservation area are treated too lightly by judges

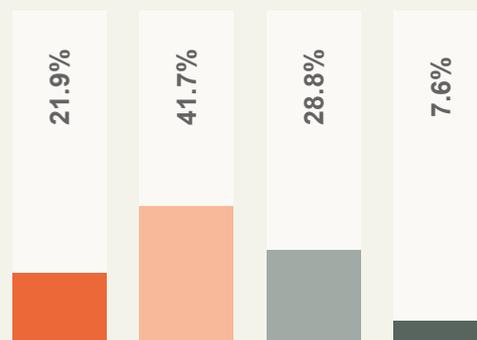


Strongly agree Agree Disagree Strongly disagree

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



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



Strongly agree Agree Disagree Strongly disagree

Further Regional Comparison

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

	Latin America	Africa	South Asia	East and Southeast Asia
Relationships with co-workers ¹	73.9 %	77.8 %	75.8 %	75.3 %
Relationships with managers and supervisors ²	61.8 %	60.4 %	64.1 %	68.6 %
Relationship with communities ³	65.9 %	60.0 %	65.5 %	66.7 %
Job satisfaction and sense of importance ⁴	78.0 %	77.6 %	80.3 %	77.2 %
Job reward ⁵	42.7 %	43.0 %	46.8 %	61.2 %
Physical and mental stress ⁶	65.4 %	62.8 %	68.8 %	66.1 %
Perception of legal-judicial system ⁷	41.8 %	46.6 %	47.0 %	54.0 %

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.

China-Russia Tiger Landscape Case Study

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 of 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.



Average age of survey taker

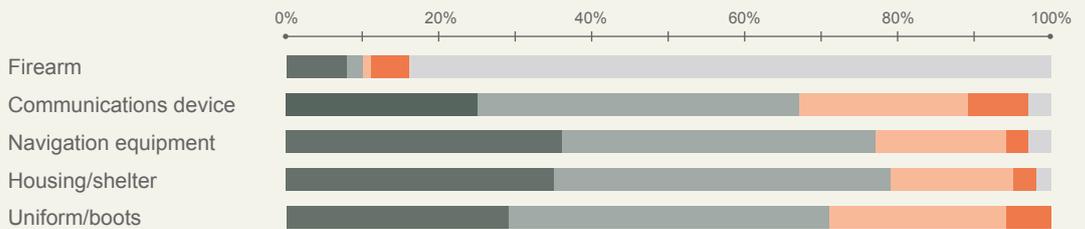
39.6
years

Average duration of employment as a ranger

7.3
years

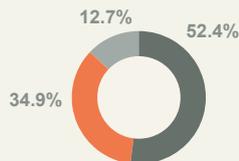


The provided equipment is sufficient for the work that I do

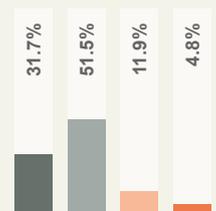


● Yes ● No ● Unsure

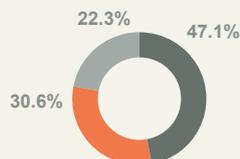
I have an employee insurance scheme that provides compensation in case of serious injury on the job



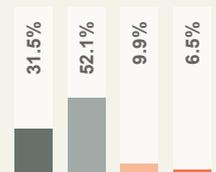
The training I received when I first started was sufficient for my job responsibilities



I have an employee insurance scheme that provides financial or otherwise significant compensation to my family in case of job-related fatality



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



Phillipines Case Study



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.

Average age of survey taker

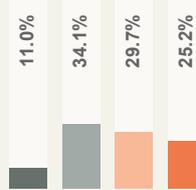
45.5 years

Average duration of employment as a ranger

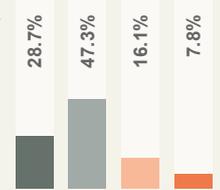
5.7 years

Strongly agree Agree Disagree Strongly disagree Not applicable

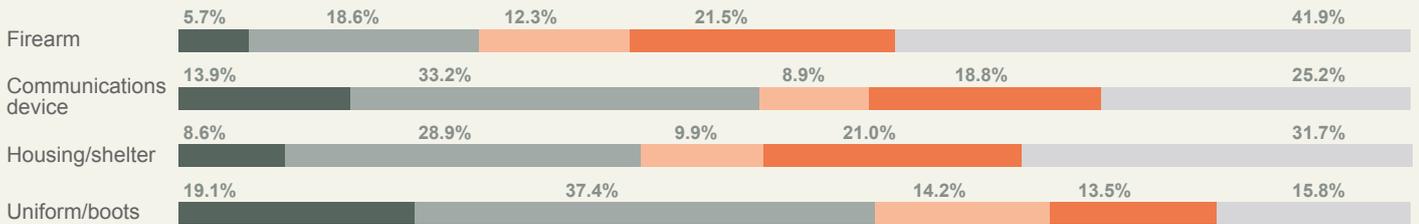
I feel I'm paid a fair wage for the work I do



I am satisfied with my chances for promotion and advancement

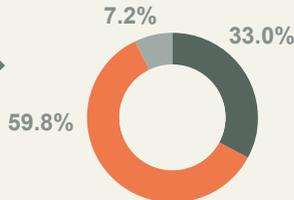


The provided equipment is sufficient for the work that I do

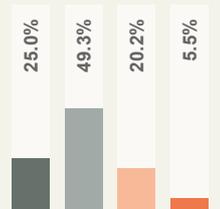


I have an employee insurance scheme that provides compensation in case of serious injury on the job

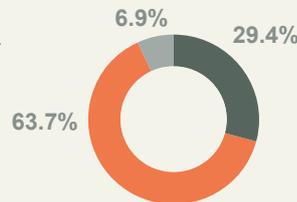
Yes No Unsure



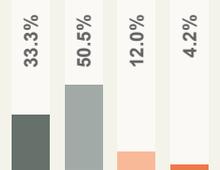
The training I received when I first started was sufficient for my job responsibilities



I have an employee insurance scheme that provides financial or otherwise significant compensation to my family in case of job-related fatality

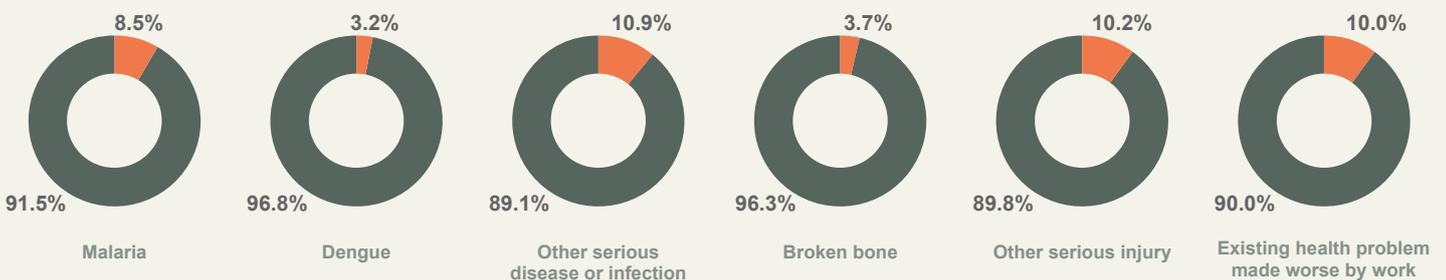


I feel that my organization provides sufficient additional training (such as refresher trainings)



Diseases and injuries that I experienced over the last 12 months

Yes No



Recommendations

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.

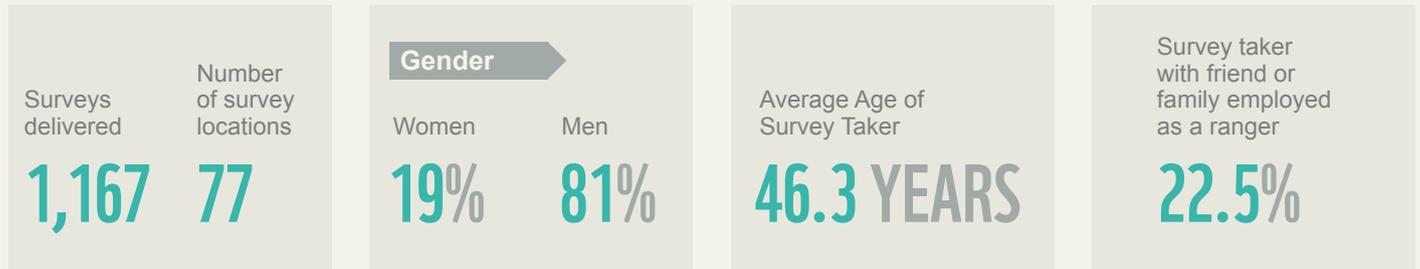
In order to accomplish this, **governments should:**

- 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.



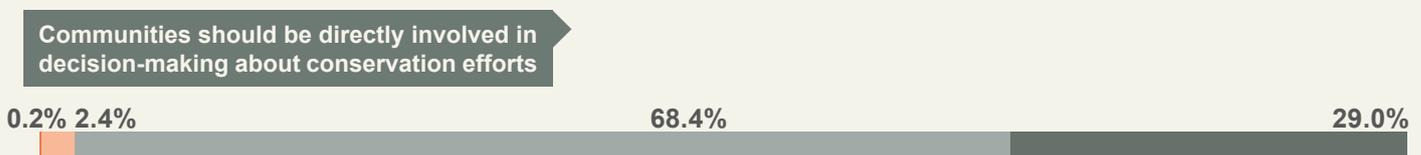
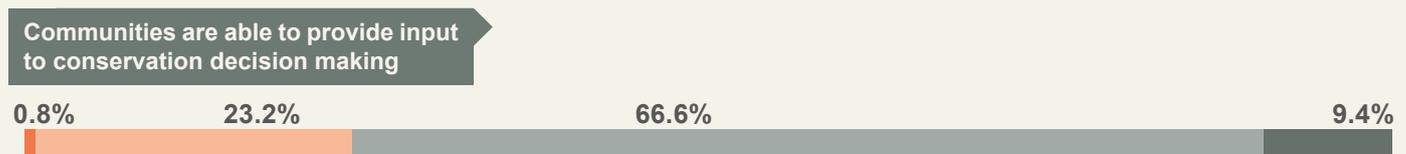
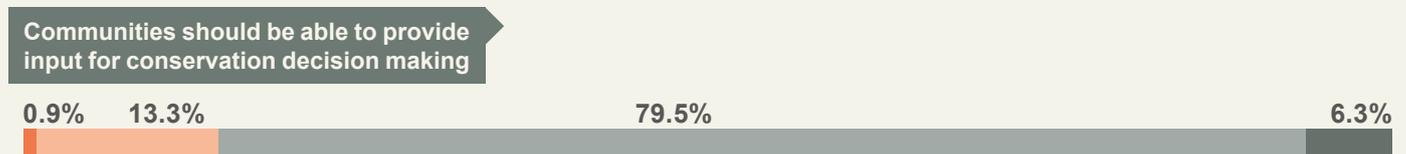
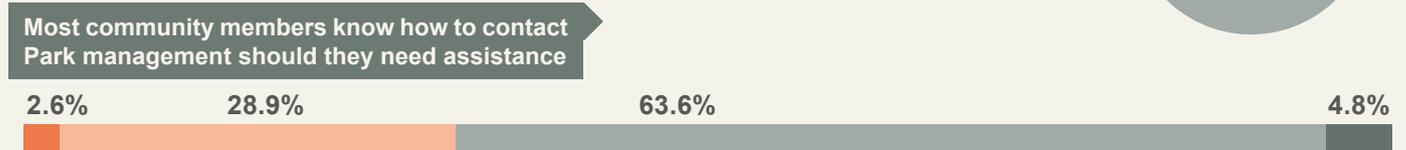
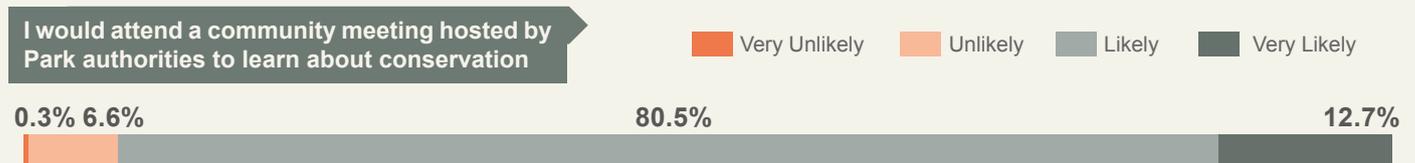
Community Perception Survey Results - Myanmar

Basic information

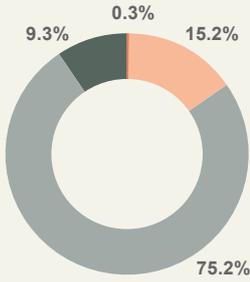


Survey dates: Aug-Dec 2018

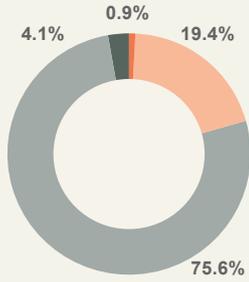
Consultation and collaboration



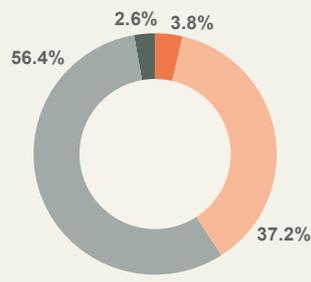
Local community members should work alongside Park rangers to reduce poaching



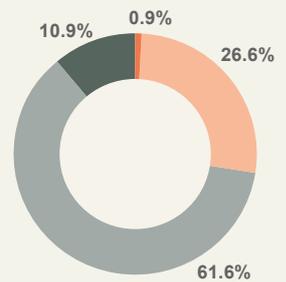
Park management listens to the needs and concerns of the community



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



Community members believe that they benefit from conservation.



Strongly disagree Disagree Agree Strongly agree

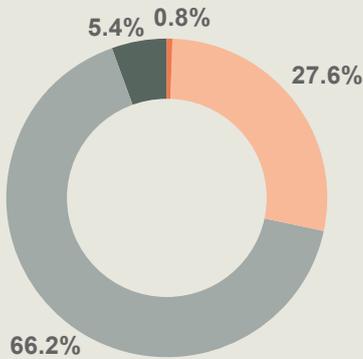
How satisfied are you with the level of community involvement in Park management?

Very Unsatisfied Unsatisfied Satisfied Very Satisfied

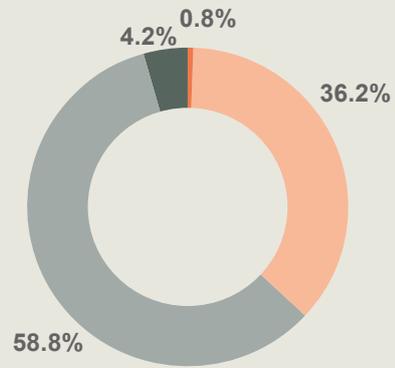


How likely would you be to...

Call Park authorities if you saw a person entering the conservation area illegally



Tell Park rangers if you had information about wildlife crime or suspected offender?



Very Unlikely Likely Unlikely Very Likely

Park management can not be effective without the help of the community



Strongly disagree Disagree Agree Strongly agree

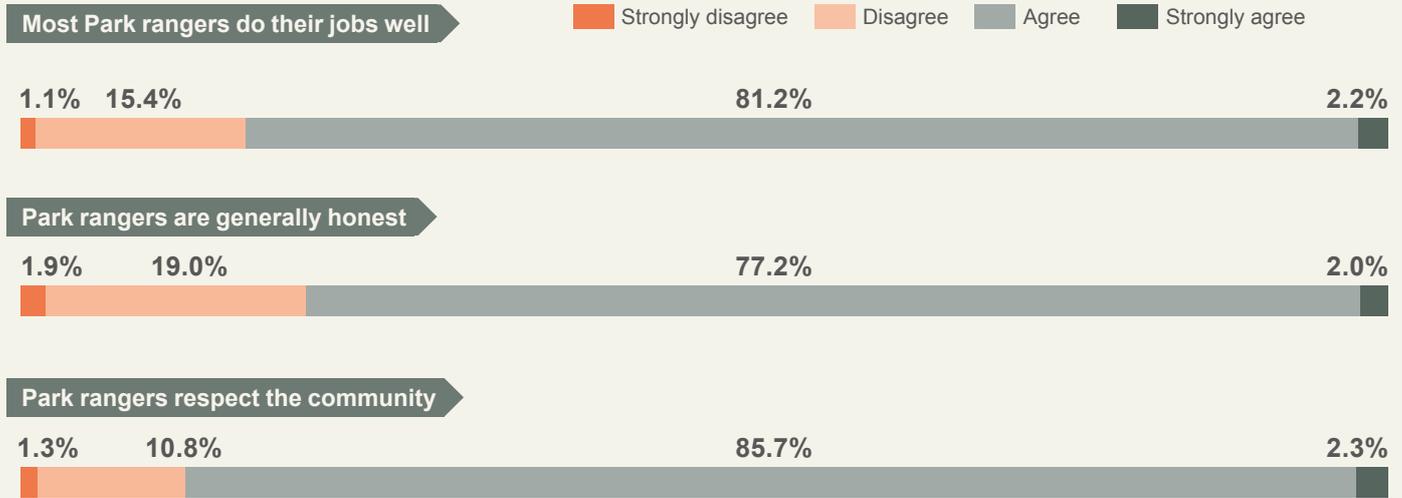
From Myanmar Ranger Survey

Part of rangers' success at their jobs depends on the community providing them with information.



Community Perception Survey Results - Myanmar (continued)

Perceptions of / experiences with rangers

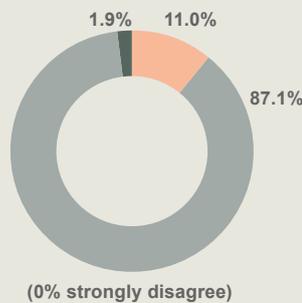


Have you ever had an encounter with a Park ranger?

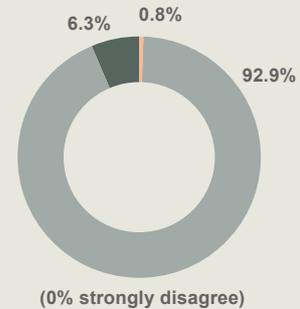
YES 30.4%

If yes

the Park ranger listened to my needs and concerns?



...the Park ranger treated me with respect.



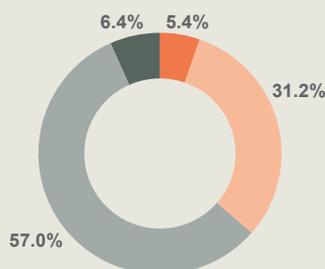
Over last 12 months I've been subjected to the following from community members:

VERBAL ABUSE, BULLYING OR HARASSMENT 33.0%

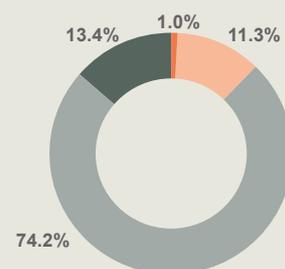
THREATS 21.1%

From ranger survey

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



Community members believe that officers treat those they encounter with politeness and dignity



Strongly disagree Disagree Agree Strongly agree

From Myanmar Ranger Survey

The community respect Park rangers



I believe community members respect me



The community trust the Park rangers



I believe community members trust me



The community and Park rangers generally have the same sense of right and wrong.



I feel that I represent the values of the local community.



Opinions on laws and regulations

Endangered wildlife should be protected

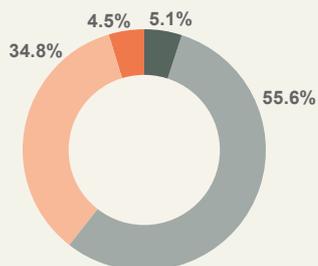
Strongly disagree Disagree Agree Strongly agree



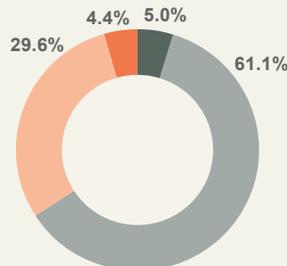
Most community members are familiar with the punishments associated with violating Park laws and regulations



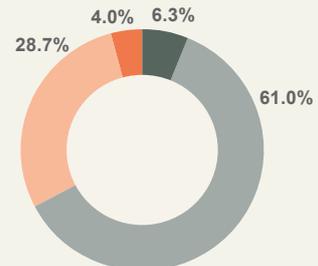
Current laws unfairly restrict access to important resources (e.g. firewood)



Current laws unfairly restrict access to important medicinal resources

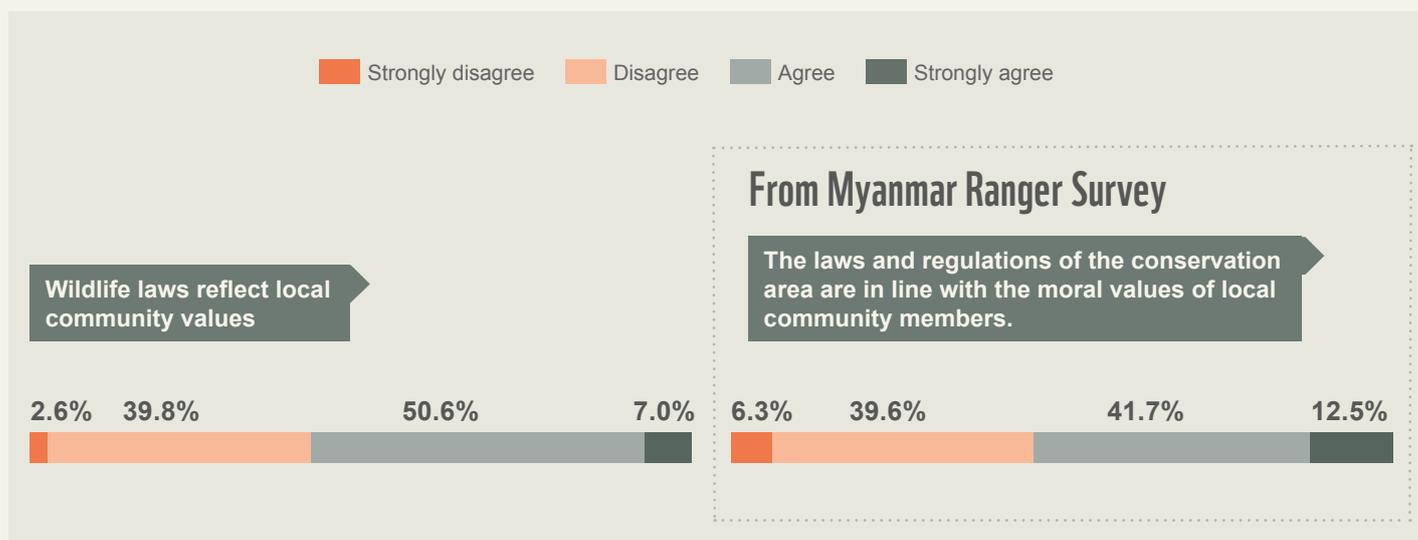


Current laws unfairly restrict access to resources important for cultural practices

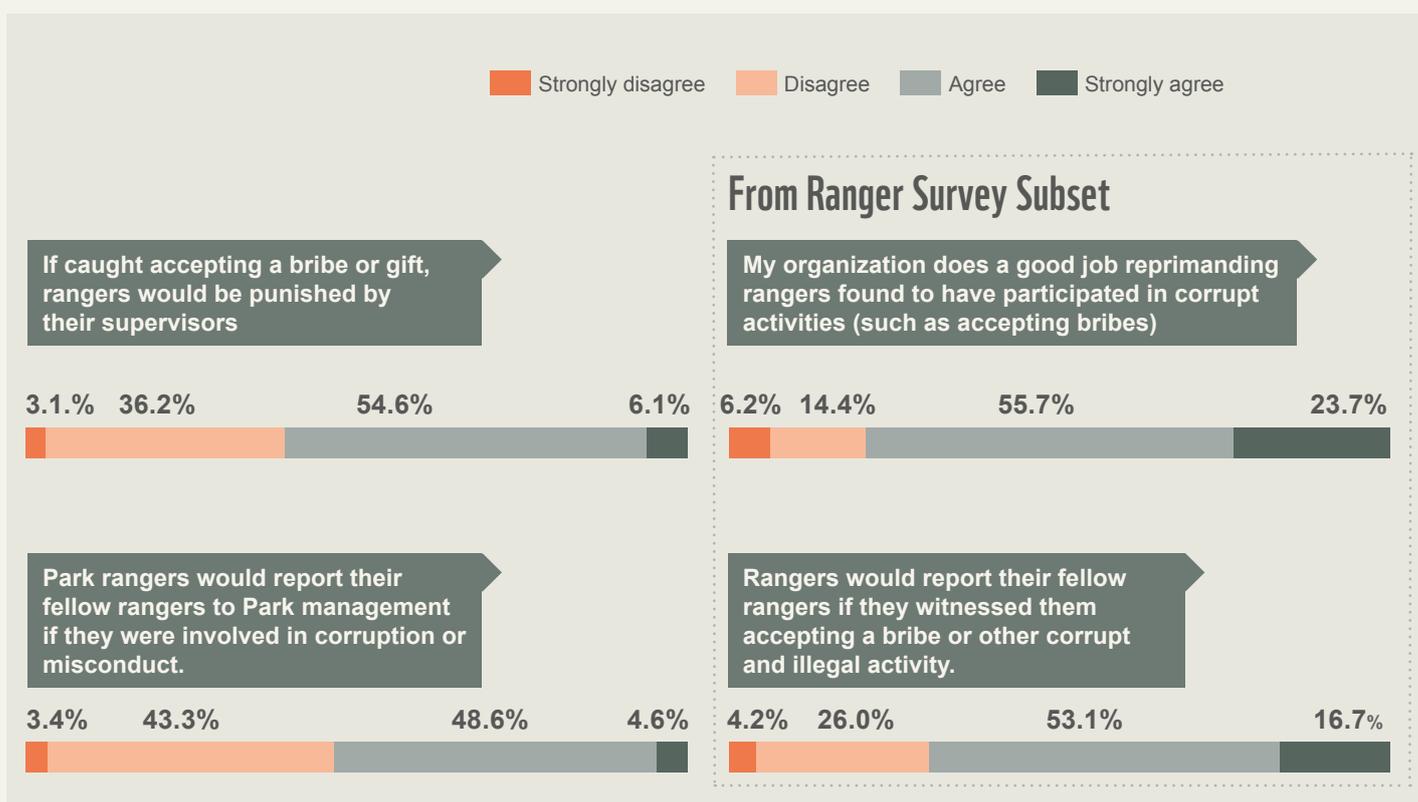


Strongly disagree Disagree Agree Strongly agree

Community Perception Survey Results - Myanmar (continued)

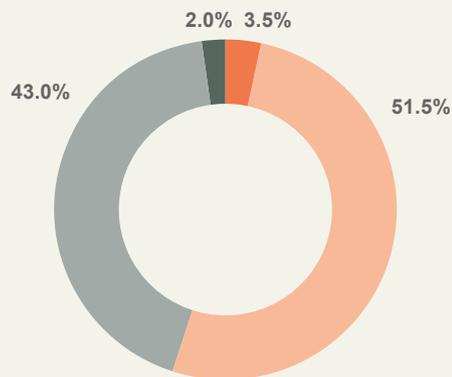


Perceptions of Misconduct



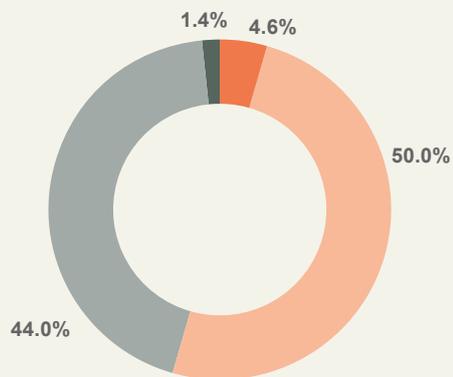
Impact of wildlife on community

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



- Strongly agree
- Agree
- Disagree
- Strongly disagree

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



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%

did you lose crops as a result of the encounter?

YES 94.3%

were you or your family harmed as a result of the encounter?

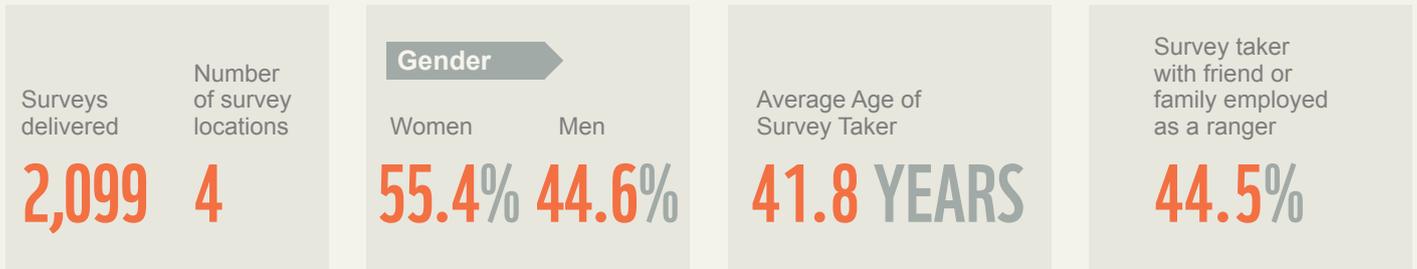
YES 4.0%



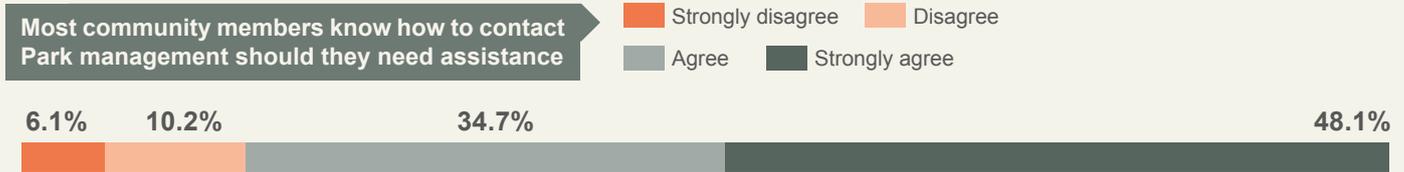
© Hkun Lat / WWF - Australia

Community Perception Survey Results - Philippines

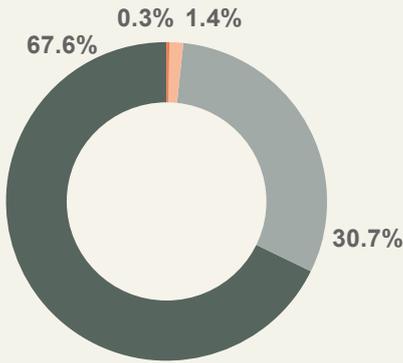
Basic information



Consultation and collaboration

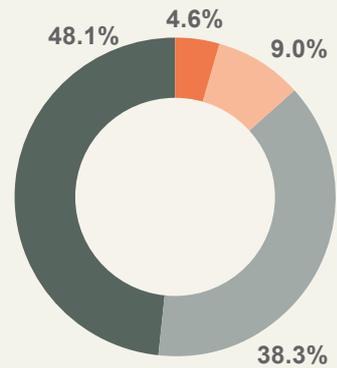


Local community members should work alongside Park rangers to reduce poaching



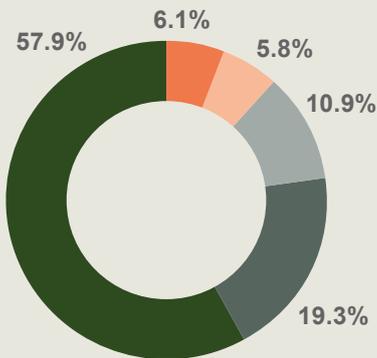
Strongly disagree Disagree Agree Strongly agree

The local community benefits from local conservation efforts.



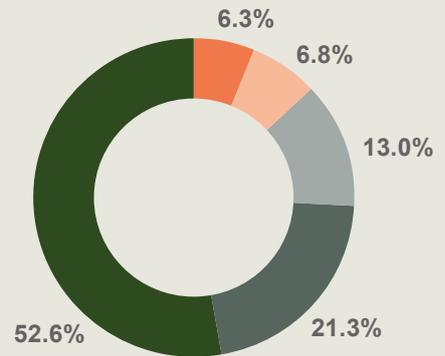
How likely would you be to...

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



Very Unlikely Somewhat unlikely Unsure Somewhat Likely Very Likely

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



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



Strongly disagree Disagree Agree Strongly agree

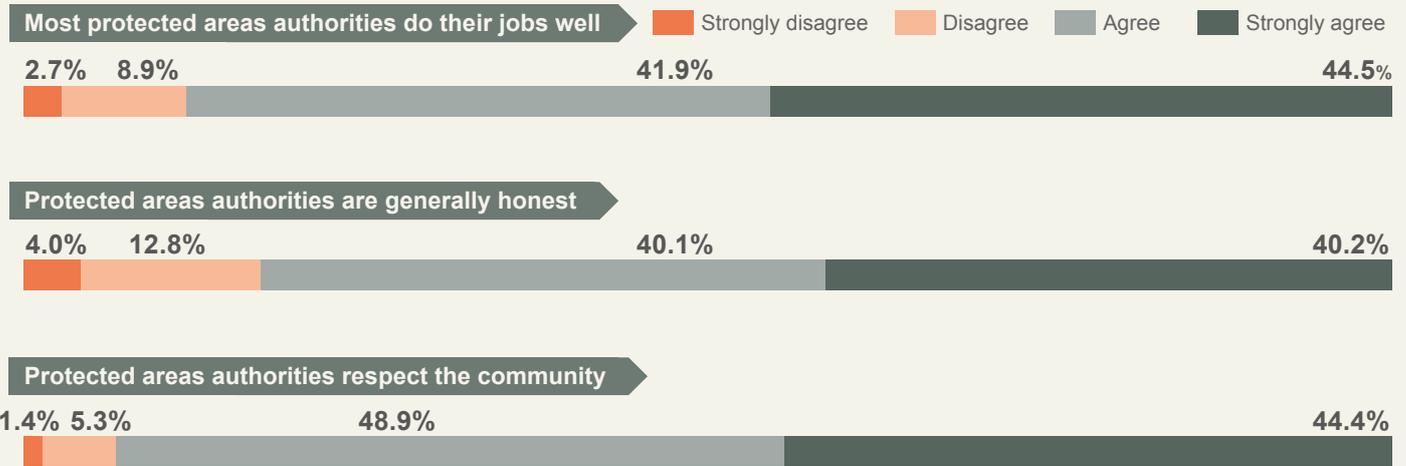
From Philippines Ranger Survey

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

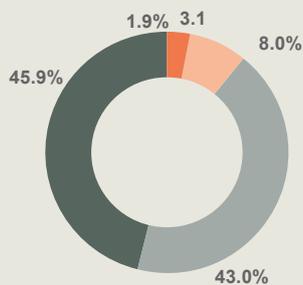


Have you ever had an encounter with a Park ranger?

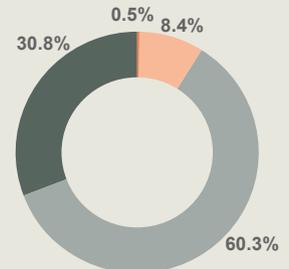
YES 36.9%

If yes

the protected area authority listened to my needs and concerns



the protected area authority was polite



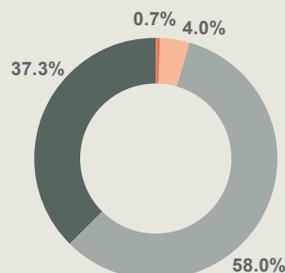
Over last 12 months I've been subjected to the following from community members:

VERBAL ABUSE, BULLYING OR HARASSMENT 27.4%

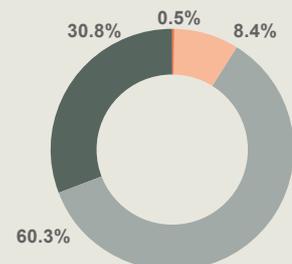
THREATS 31.8%

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



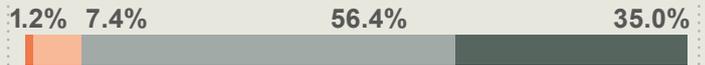
Strongly disagree Disagree Agree Strongly agree

From Philippines Ranger Survey

The community respect protected area authorities



I believe community members respect me



The community trust the protected area authorities



I believe community members trust me



Opinions on laws and regulations

Endangered wildlife should be protected

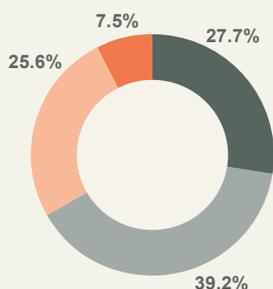
Strongly disagree Disagree Agree Strongly agree



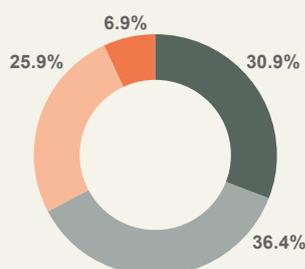
Most community members are familiar with the punishments associated with violating Park laws and regulations



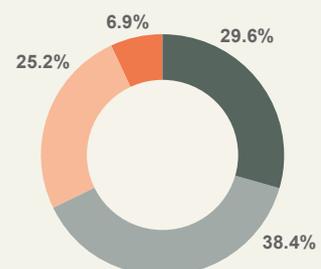
Current laws unfairly restrict access to important resources (e.g. firewood)



Current laws unfairly restrict access to important medicinal resources



Current laws unfairly restrict access to resources important for cultural practices



Strongly disagree Disagree Agree Strongly agree

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%



©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 rangers responded more pessimistically in all cases. 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 is listed in inverted commas.

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

* 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*, *guardaparque*, 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



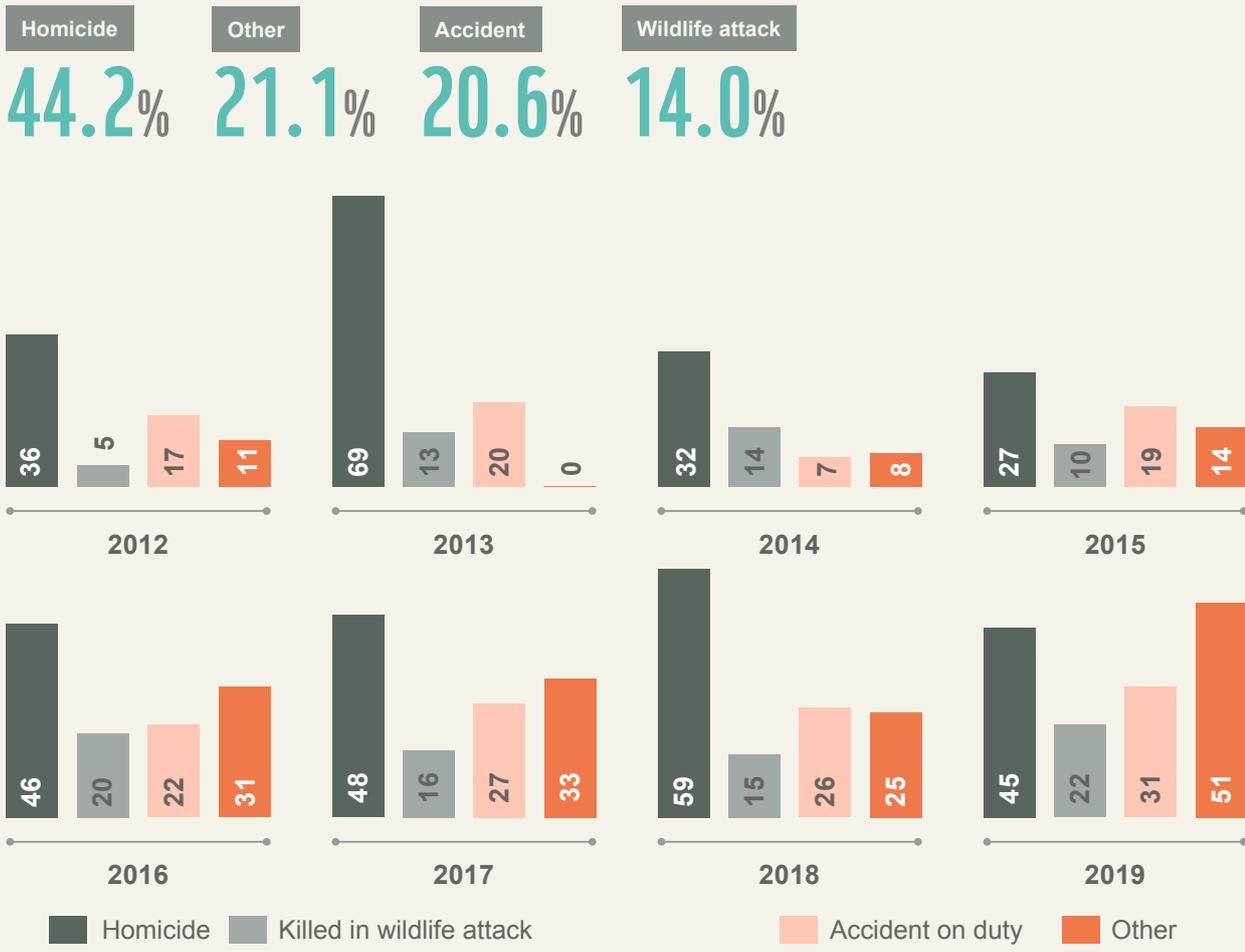
Percentage of recorded ranger deaths by region, 2009-2019*

Asia	48.36%
Africa	36.71%
North America	5.68%
South America	4.05%
Europe	2.99%
Central America	1.35%
Oceania	0.87%

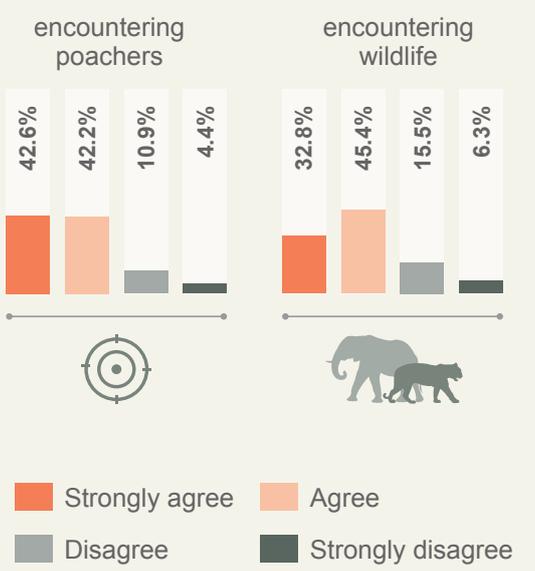
*Data source: international Ranger Federation (IRF) and Thin Green Line Foundation (TGLF)

- 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.

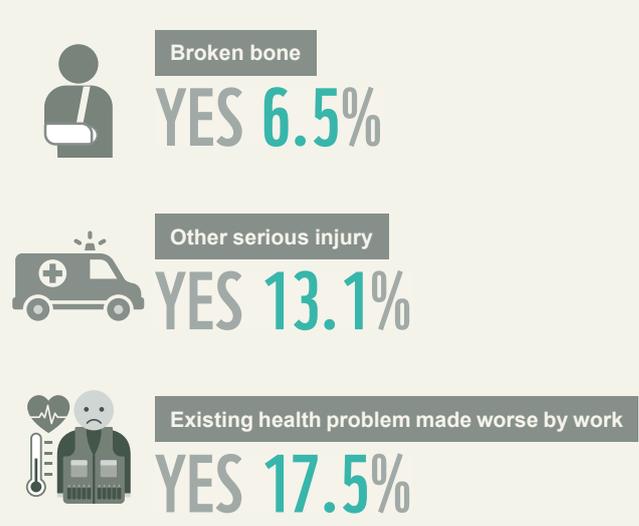
Reported causes of ranger deaths, 2012-2019*



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



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



*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.

ILO legal instruments most relevant to ranger work	Ratification rate (%) of listed conventions by ranger survey countries				Global ratification average for all ILO members
	Latin America	Africa	South Asia ¹	East & Southeast Asia	
Governance conventions: 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)	62.5% (15/24)	62.5% (15/24)	55.0% (11/20)	39.3% (11/28)	61.9% (463/748)
Fundamental conventions: 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)	97.9% (47/48)	97.9% (47/48)	92.5% (37/40)	78.6% (44/56)	92.3% (1,381/1,496)
Technical conventions: 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)	45.8% (22/48)	14.6% (7/48)	5.0%* (2/40)	5.4%* (3/56)	25.5% (381/1,496)

***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.

¹Bhutan is excluded from the calculations given that it is not an ILO member state.

Comparing Ranger and Police Salaries

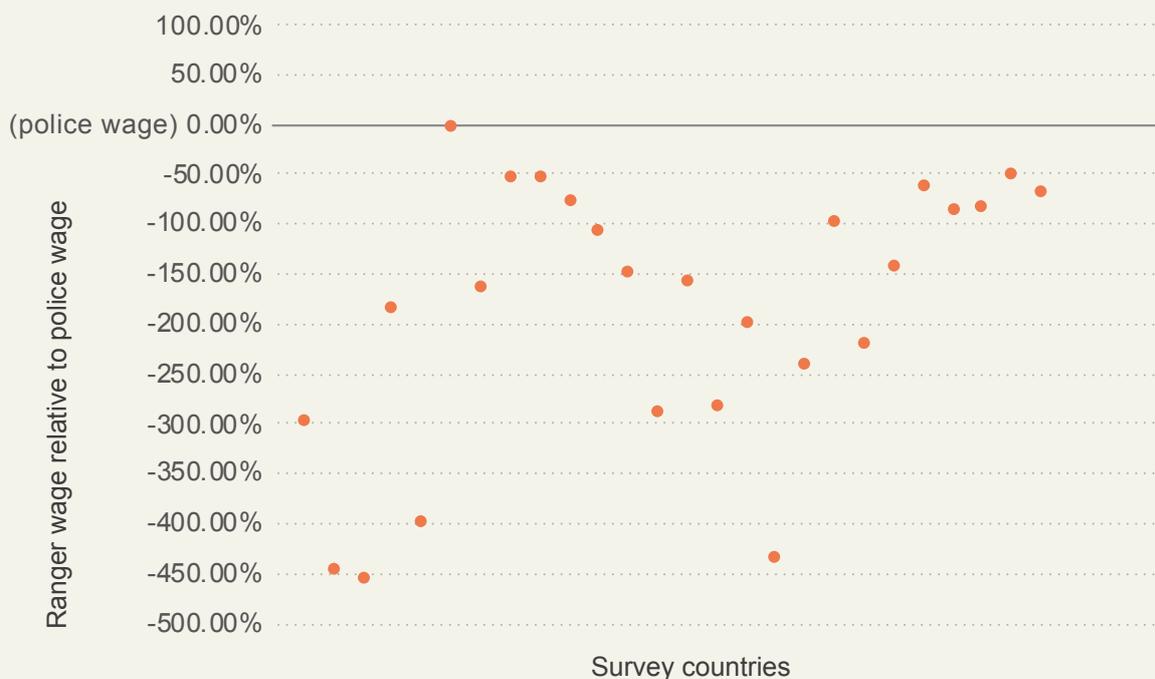
The graph displayed at the bottom of this page quantifies the gap between patrol ranger and police officer salaries in each of the 26 countries where ranger perception surveys were delivered. The wage figures for rangers in each country was calculated by taking the mean of all responses to the survey 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 websites¹ 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 **345.27 USD per month**.³ The average police wage from those same 26 countries was **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 *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.



Rangers at World Heritage Sites

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

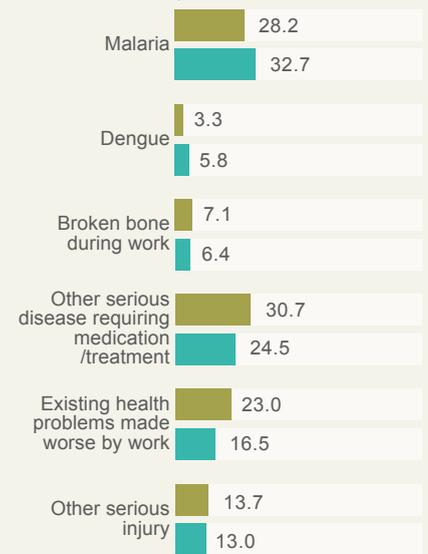
Employment indicators



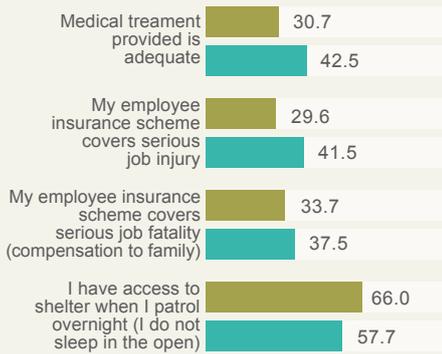
Always or often available at outposts



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



Health and Insurance



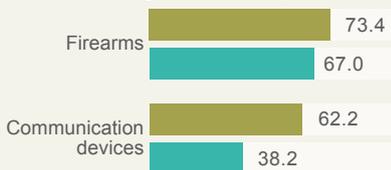
Adequacy of equipment (% agree)



Training in last 12 months (% yes)



I 'often' or 'always' have access to these things while on patrol



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



■ World Heritage Site
■ Non World Heritage Site

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



© WWF Pakistan

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.

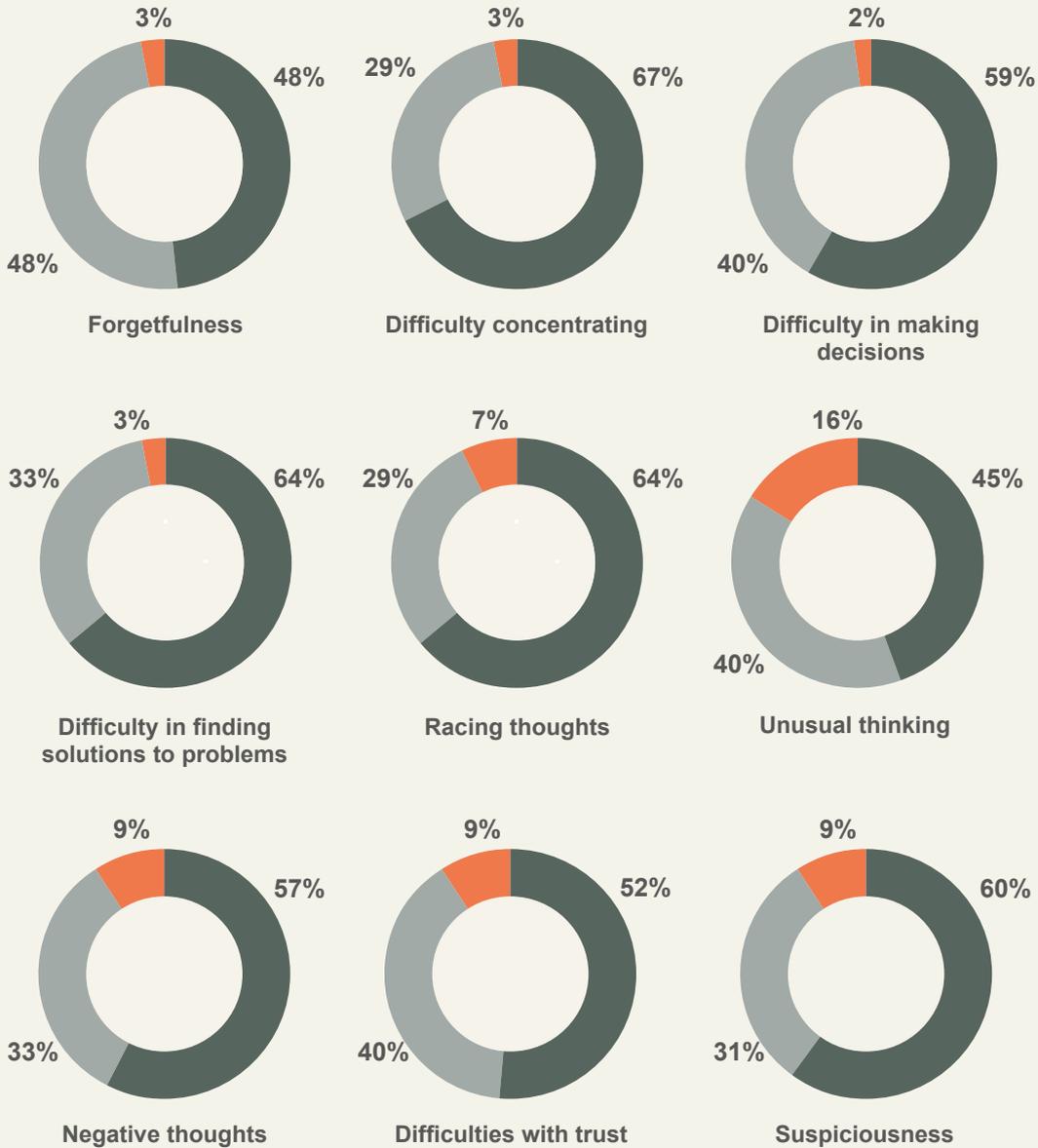


© WWF Pakistan

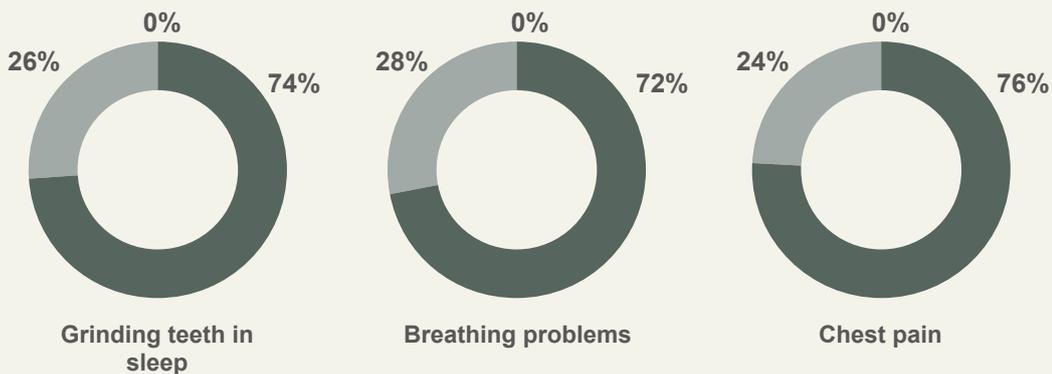
During the last year, I have experienced the following:

Always Never Occasional

Cognitive Symptoms



Physical Symptoms



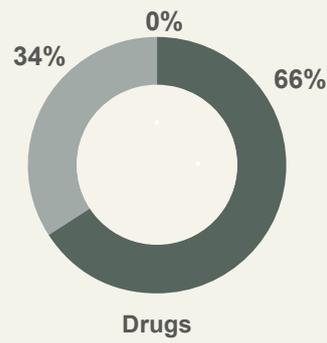
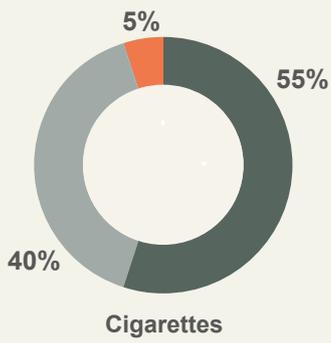
During the last month, I have experienced the following:

Always Never Occasional



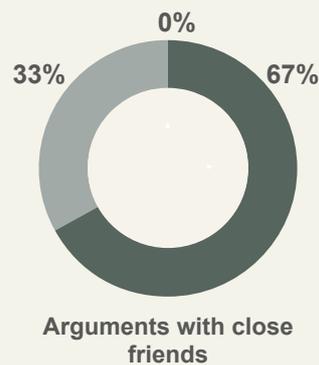
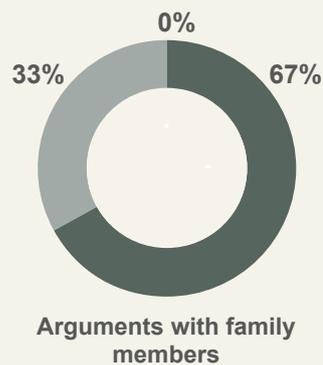
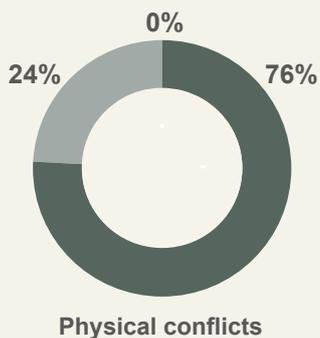
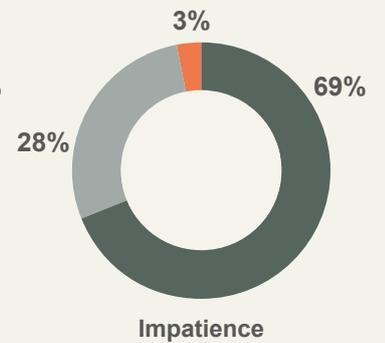
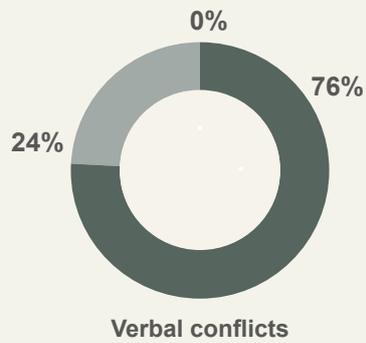
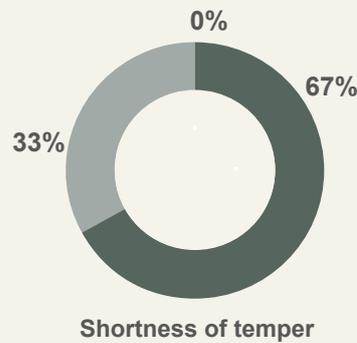
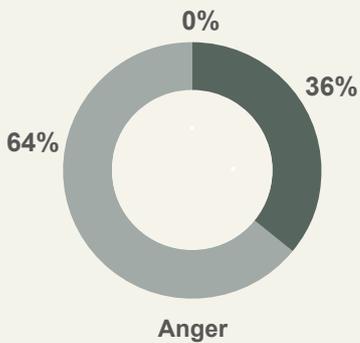
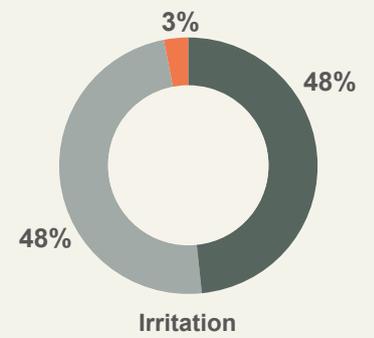
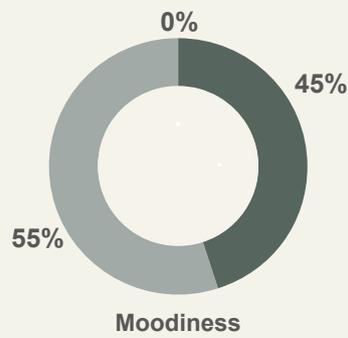
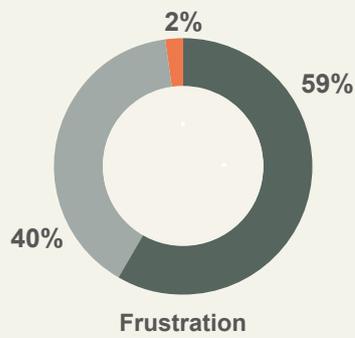
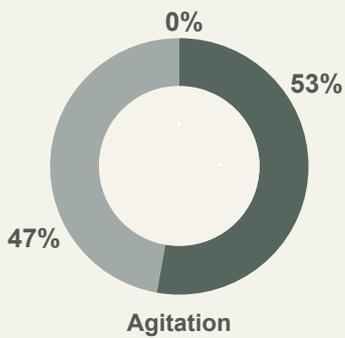
During the last month I have used:

Always Never Occasional



During the last month, I have experienced:

Always Never Occasional



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:

Insurance product	Kenya		Cameroon	Thailand
	KWS Rangers	County Rangers and Community Rangers	Rangers ¹	Rangers ²
 Life Insurance	Will vary based on current salary and number of months worked.			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.
 Health/Medical Insurance	Health Insurance: National Hospital Insurance Fund (NHIF) coverage (comprehensive). Monthly premium is dependant on salary. Medical Insurance: Funded by KWS. inpatient benefit = 500,000 KSH; outpatient benefit = 45,000 KSH.			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.
 Accident Insurance	Lump sum benefit against accidental death and permanent disability. Sum insured = 200,000 KSH.			
 Disability Insurance			Temporary Disability Benefit: 66.7% of the average monthly earnings in the three months before the disability began paid until full recovery or certification of permanent disability. Permanent Disability Pension: 85% of the insured's average monthly earnings in three months prior to disability.	
 Funeral Insurance	200 KSH deducted per month from wages. Benefit = 85,000 KSH (ranger); 50,000 KSH (spouse); 30,000			10,000 THB towards funeral expenses.
 Critical Illness				

■ Coverage
 ■ No coverage
 ■ Limited coverage
 Research for table above conducted by Ayandev Saha, K.M. Dastur

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.

		India		Rwanda	Bhutan	Nepal
		Corbett TR	Valmiki TR			
Rangers Permanent)	Rangers (Temporary)	Rangers Permanent)	Rangers (Temporary)	Rangers ³	Rangers	Rangers ⁴
Death compensation due to wildlife attack = 300,000 INR (government compensation) + 200,000 INR (Corbett Tiger Foundation). Death due to other causes = 200,000 INR.	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.	Death compensation due to wildlife attack = 300,000 INR (government compensation). All other insurance coverage must be exclusively self funded by rangers.	Death compensation due to wildlife attack = 300,000 INR (government compensation). All other insurance coverage must be exclusively self funded by rangers.		75,000 BTN for death of insurance holder; 35,000 BTN for death of spouse.	Rangers make 200 NPR monthly payments into a fund that would pay out 100,000 NPR to family in case of accidental death before the completion of a 20 year service period. Otherwise, the same amount is disbursed upon a compulsory retirement.
Health Insurance: Fully reimbursed for expenses related to illness.				Health Insurance: same as for other civil servants - this covers 85% of bill for medical treatment and prescribed drugs.	The Ministry of Health has provided universal health care in the country since the 1970s.	
For any injury or illness, full pay for first year of medical leave, and half pay for second year of such leave.				Protects one at work, travelling to work, or on a work-related journey. This insurance scheme also covers any occupational disease that is caused by work.		
Compensation entitlement in case of wildlife attack: 100,000 INR (partial disability); 200,000 INR (total disability).	Compensation entitlement in case of wildlife attack: 100,000 INR (partial disability); 200,000 INR (total disability). No additional compensation.	Process for reimbursement available for wild animal attack only, but is unstructured and subject to approvals and funds availability.	Process for reimbursement available for wild animal attack only, but is unstructured and subject to approvals and funds availability.	The benefit is given according to the degree of incapacity in proportion to the pension the beneficiary would get if they had been permanently incapacitated.		

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). **Health Insurance:** Similar coverage to medical insurance but provided by the state rather than private companies. **Accident Insurance:** The insurer pays for accidental death. In few of the policies even accident insurance covers death, dismemberment, loss of sight, limb, caused by accidental injury (fatal). **Disability Insurance:** The insurer pays disability benefit as a partial replacement of income lost due to illness or injury. Most disability insurance policies pay a fixed lump sum on disability. **Funeral Insurance:** The insurer guarantees to cover the funeral costs of the insured. Policy may also cover related expenses e.g. burial fees, cremation costs, and grave-digging charges. **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

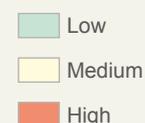
Accessibility and adequacy of ranger insurance in Kenya and Cameroon

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



Risk mapping exercise for Kenya and Cameroon

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



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:

	Latin America	Africa	South Asia	East and Southeast Asia	Global
Serious injury on the job	45.3%	48.9%	37.6%	41.1%	41.8%
Job-related fatality	32.3%	36.7%	38.4%	40.0%	37.7%

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.

	Government insurance	Private company on behalf of government	Insurance purchased by Ranger	Nonprofit/ NGO Insurance
Health insurance provider	47%	27%	15%	12%
Life insurance provider	37%	22%	12%	7%
Long-term disability insurance provider	32%	20%	5%	5%

Rangers and the Law

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

POWERS/DUTY

	INDIA	SRILANKA	BANGLADESH
	Indian Forest Act	Forest Conservation Ordinance	The Forest Act
POWER TO ARREST	Section 64 (1): Forest Rangers may arrest, without a warrant, any person whom the they suspect to be involved in an offence punishable under this act with a sentence of one month and above.	Section 48: Forest Rangers may arrest, without a warrant , any person whom the they suspect to be involved in an offence punishable under this act with a sentence of one month and above. The officer may also arrest without a warrant if there is reasonable suspicion that the offender will abscond.	Section 64: Forest Rangers may arrest any person, without a warrant , whom the they suspect to be involved in an offence punishable under this act with a sentence of one month and above.
POWER TO USE ARMS	Wildlife Protection Act Section 14: Forest Rangers may use minimum necessary force, including the use of firearms, in cases of prevention of commission of offences and effective searches. ¹		
POWER TO INVESTIGATE / INTERVENE	Section 6: Forest Officers are empowered to take any action/ intervene in order to prevent a commission of a forest offence.	Section 49: Every Forest Officer may interfere for the purpose of preventing, the commission of any forest offence.	Section 66: Forest Officer shall prevent, and may interfere for the purpose of preventing, the commission of any forest-offence.

Not Applicable Applicable Data Not Found

¹ (Procedure under Chapters XI and XII of the Criminal Procedure Code, 1973 will have to be followed

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

NEPAL	MALAYSIA	BHUTAN	MYANMAR
Nepal Forest Act	Wildlife Conservation act 2010	Forest and Nature Conservation Act (1995)	Forest and Nature Conservation Act
<p>Section 59: Any Forest Officer may arrest without a warrant if there is a likelihood of escape of the culprit.</p> <p><i>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.</i></p>	<p>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.</p>	<p>Section 32: A Forest Officer may stop, detain, search and arrest any person whom he suspects of having committed an offence under this act.</p>	<p>Section 32: A Forest Officer may stop, detain, search and arrest any person whom he suspects of having committed an offence under this Act.</p>
<p>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.</p>	<p>Section 8: A Forest Officer may carry and use firearms in his exercise of powers and duties under this Act.</p>		<p>Forest Officers are not permitted to use firearms in Myanmar.</p>
<p>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.</p>	<p>Section 92: A Forest Officer shall have all the powers to detect and investigate the commission of any offence or suspected offence under this Act.</p>	<p>Section 32: An authorized Forest Officer may require any person to answer any questions and provide any information relating to this Act.</p>	<p>Section 32: An authorised Forest Officer may require any person to answer any questions and provide any information relating to this Act;</p>

	INDIA	SRILANKA	BANGLADESH
POWER TO SEIZE, IMPOUND AND CONFISCATE	<p>Section 52(1) & 53: All Forest Officers are empowered to seize forest produce and confiscate property; which includes all tools boats, carts etc. used in the offence.</p> <p>Section 70: Forest Officers are empowered to seize cattle.</p>	<p>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.</p> <p>Section 37: any Forest Officer may seize and detain timber or forest produce, together with all tools, vehicles and cattle.</p>	<p>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</p> <p>Section 70: Any forest officer can seize and impound trespassing cattle.</p>
POWER TO DEMAND AND RECEIVE AID AND ASSISTANCE	<p>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.</p>	<p>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.</p>	<p>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.</p>
PERSONAL LIABILITY / IMMUNITY FROM PROSECUTION	<p>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.</p>	<p>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.</p>	<p>Section 74: No suit shall lie against any public servant for anything done by him in good faith; no court may try such a public servant for a crime caused from actions related to official duty, unless the court first conducts a preliminary inquiry and verifies that there is credible evidence to support the basic elements of the complaint</p>

OTHER

	INDIA	SRILANKA	BANGLADESH
COMPENSATION FOR INJURY	<p>All India Services (Compensatory Allowance) Rules 1954</p> <p>Compensatory allowance is granted to Forest Service Employees to meet personal expenditure necessitated by special circumstances in which their duty is performed.</p>	<p>Workmen Compensation Act</p> <p>Section 3: 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.</p>	<p>Bangladesh Labour Law 2006</p> <p>Section 150: Employer's Liability for compensation - If personal injury is caused to a worker by accident arising out of and in the course of his employment, his employer shall be liable to pay compensation as according to section V.</p>
	<p>Employees Compensation Act⁴</p> <p>Section 3, Section 4: An employer is liable to pay compensation in cases of occupational disease, death or injury arising out of employment.⁵</p>	<p>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).</p>	
GRATUITY ⁶	<p>All India Services (Death Cum Retirement Benefits) Rules 1958</p> <p>Rule 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.⁷</p>	<p>Payment of Gratuity act 1983</p> <p>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.</p>	<p>Section 2 (x): '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 not be included in this calculation.</p>

Not Applicable Applicable Data Not Found

² Section 8: Amount of compensation in case of injury which results to death a lump sum equal to 60 months earning or 18,000 ringgit (approximately 4,300 USD); whichever is less shall be payable. In case of injury resulting in permanent disablement of an adult, a lump sum of 84 months earnings or 23,000 ringgit (approximately 5,500 USD); again whichever is less shall be payable.

³ The compensation is governed by the Government Employees Group Insurance Scheme and

is determined by the pay scale of the forest officer which could range from scale A- D with insured sum ranging from approximately 2,700USD to 6,700USD.

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.

NEPAL	MALAYSIA	BHUTAN	MYANMAR
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 on his/ her own discretion the power to seize any item, livestock, tools or weapons which were used as a part of the offence.	Section 32: An authorised Forest Officer may enter and search any land, building, premises or structure in which he believes that evidence of the commission of an offence is to be found. The Forest Officer may also Confiscate any produce and may dispose of the confiscated property as desired.
	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		<p>Protection of Wildlife & Protected Areas Law</p> <p>Section 45: When a request is made by the Forest Staff for assistance in the performance of their duties, the Myanmar Police Force shall render necessary assistance.</p> <p>Forest Law 1992</p> <p>Section 52: When a request is made by the Forest Staff for assistance in the performance of their duties, the Myanmar Police Force shall render necessary assistance.</p>
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.	

NEPAL	MALAYSIA	BHUTAN
Nepal Civil Services Act, 2049 (1993)	Workman Compensation Act 1957²	Labour and Employment act of Bhutan 2007
Compensation with regard to injury of disease is not provided in the Nepal Civil Service Act nor in the Nepal Civil Service Rules, The labour act 2017 covers compensation but is not applicable to Forest Officials as they are civil servants.	<p>Section 4: Employer is Liable to pay compensation on personal injury by accident arising out of and in the course of employment.</p> <p>Section 5: Compensation for occupational diseases: Compensation shall be provided to diseases specified in schedule 1 such as loss of hearing, sight, amputation, Injuries resulting in being permanently bedridden or any other injury causing permanent total incapacity.</p> <p>Section 6: Compensation limited to injuries arising out of work over the course of employment .</p>	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 from 2700 USD to 6700 USD ³
Section 36 Gratuity: If any civil employee, who has served for Five years or more.	Malaysia Public ruling 9/2016	Bhutan Civil Service Rules 2018
<p>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.</p> <p>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.</p>	When an employment ceases, the employer may make a <i>lump sum payment</i> 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.	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.

⁵ Compensation Rates: Where an injury results in death an amount equal to 50% of the monthly wages of the deceased employee or an amount of Rs 120000 whichever is more. Where an injury results in permanent total disablement an amount equal to 60% of the monthly wages or Rs 120000 whichever is more.

⁶ Gratuity is a monetary benefit given by the employer to his employee at the time of retirement. It is a defined benefit plan where no contributions are made by the employee.

⁷ The rate ranges from twice the emoluments to a maximum of 33 times of emoluments and maximum of USD 14,000.00

	INDIA	SRILANKA	BANGLADESH
RETIREMENT	<p>Rule 18: The amount of pension shall be 50% of emoluments or average emoluments, whichever is more beneficial.</p> <p>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.</p> <p>Rule 19: Retirement or death Gratuity: In case of death of an employee the gratuity shall given to the employees family at various rates depending on service.</p>	<p>Employees Provident Fund Act</p> <p>Section 23: Forest Officers are eligible for old age benefit (pension) when they reach the age of 55 years.</p>	<p>The Public Servants (Retirement) Act.</p> <p>Section 4 - Retirement from Public Service: A Forest Ranger may retire at the age of 59 years.</p> <p>Section 9 - Optional Retirement: 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.</p>
	<p>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.</p>	<p>Public service commission of, the democratic socialist republic of Sri Lanka procedural rules</p> <p>Section 54: The Appointing Authority may terminate the appointment of a government officer a without notice.</p>	<p>Employee Provident Fund Act</p> <p>Section 22: A worker may be discharged from service for reasons of physical or mental incapacity or continued ill-health.</p> <p>Section 23: A worker may be dismissed without prior notice or pay in lieu thereof if he is-</p> <p>(a) convicted for any criminal offence ; or</p> <p>(b) he is found guilty of misconduct.</p>
TERMINATION			
WORKING HOURS			
LEAVE			<p>Prescribed Leave Rules 1959</p> <p>Section 9 - Types of leaves: Forest Rangers shall be entitled to sick leave, maternity leave, hospital leave, quarantine leave, special disability leave and study leave</p>
PARTICIPATION IN TRADE UNIONS	<p>Trade Unions Act 1926; Industrial Disputes act 1926</p> <p>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</p>		

Not Applicable
 Applicable
 Data Not Found

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

NEPAL	MALAYSIA	BHUTAN
<p>Compulsory retirement Section 33: Any civil employee who has reached the age of 58 years or completed a specified tenure shall retire from civil service.</p> <p>Voluntary retirement: Section 35: Any civil employee who is eligible to receive pension and has completed the age limit of Fifty years may voluntarily retire</p> <p>Section 34A Retirement due to disease: 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.</p> <p>Pension Section 37: A civil employee who has been in government service for a period of twenty years or more shall be entitled to a monthly pension.</p>	<p>Public Service Pension Scheme (Act 227)</p> <p>Section 12 – Optional Retirement: A person who has attained the age of 40 years may apply for optional retirement.</p>	<p>Rule 20.2.1 Retirement age: A Forest Ranger shall retire from service upon completion of 56 years.</p> <p>Rule 20.3 Early Retirement Scheme: A forest Officer may apply for a voluntary retirement after the age of 51.</p> <p>Rule 20.4.2 Pension: Forest Rangers are entitled to pension as per the National Pension and provision fund Rules and Regulations.</p>
<p>Section 34 Power to award retirement: 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.</p>	<p>Malaysia Employments Act, 1955</p> <p>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.</p> <p>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.</p>	<p>Rule 20.3.5 Mandatory Termination from service: A Forest Officer is liable to be terminated from service if he is convicted of a criminal offence related to discharge of Ranger duties. The employee in this case shall not be entitled to pension.</p>
<p>Nepal Civil Service Rules 2050 (1993)</p> <p>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.</p> <p>(The mentioned notification was not found in secondary sources)</p>	<p>Section 60 - Hours of work & leaves: Each employee shall work a maximum of 8 hours of work each day.</p> <p>Section 59 - Rest day: Each Employee shall be given one rest day a week.</p>	<p>Rule 11.11.1 Overtime allowance: Forest Rangers are not entitled to overtime allowance for work done beyond normal working hours, weekends, and government holidays.</p> <p>Rule 6 - Duty: Forest Rangers shall be expected to attend any task assigned to the Ranger on any day and any time (Includes Weekends and statutory Holidays)</p>
<p>Leaves - Section 71: The Civil employee will be entitled to prescribed leaves such as casual and festive leave, home leave, sick leave, maternity leave, study leave, and extraordinary leave.</p>	<p>Section 60: A Forest Officer shall be entitled to sick leave, annual leave, and 10 days paid leave.</p>	
<p>Authentic Trade Union- Section 53: The civil employees may form an Independent organization where in which they submit professional demands and conduct social dialogue and collective bargaining directly to the government.</p> <p>Restrictions on Participation - Section 50: No civil employee shall perform an agitation, participate in a strike or entice anyone to perform such acts.</p> <p>Restriction on Staging - Section 51: No civil employee shall stage any strike or pen-down action and exert any pressure inflicting physical or mental suffering, or entice other persons to commit such acts.</p>	<p>Trade Unions Act 1959</p> <p>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.</p>	<p>Civil Service act 2010</p> <p>Not eligible for Unionization - Section 38: A Civil Servant shall not be permitted to participate in a strike.</p> <p>Forest Officers do not have a legal right to form any workers association to represent their interests.</p>

Acknowledgements

Partner in survey design, methodology and data analysis



UNIVERSITY OF
CENTRAL FLORIDA

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

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



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



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



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



ELEMOTION

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



IUCN, Bangladesh

The International Union for Conservation of Nature is an international organization working in the field of nature conservation and sustainable use of natural resources. It is involved in data gathering and analysis, research, field projects, advocacy, and education. Bangladesh joined IUCN as a State Member in 1972. IUCN started its operations in the country in 1989 and established a country office in 1992. To achieve its goals and objectives, IUCN in Bangladesh works in close collaboration with its Members comprising national non-government organizations, with key support from the Ministry of Environment and Forest, a State Member.

www.iucn.org/asia/countries/bangladesh



Ranger Federation of Asia

The RFA is a group of conservation-focused individuals who strive to further the standards of the profession and vocation of rangers throughout Asia. The concept for the RFA came into existence at the 7th World Ranger Congress. We are an association of rangers, wildlife wardens, forest guards, foresters, scouts, watchers and other frontline field staff (collectively referred to here as “rangers”). We promote and provide opportunities for members to gain and share their knowledge and experience in all aspects of wildlife conservation and protection work. The RFA is a platform for discussions on matters of interest to rangers and provides opportunities for members to interact with other national and international ranger associations.

www.rangerfederationasia.org



University of Nottingham

The University of Nottingham Malaysia offers a world-class British education which is ranked among the top 100 universities worldwide. Designed to reflect University Park Campus in Nottingham, it is a self-contained, vibrant village situated on an attractive and landscaped 125-acre site. The University has around 5,000 students and around 700 teaching and administrative staff from all over the world. According to The Graduate Market in 2016, High Fliers Research, our alumni are among Britain's top choice for employers. We offer the best of UK education in an Asian setting.

www.nottingham.ac.uk



Kasetsart University

Kasetsart University is a public research university in Bangkok, Thailand. It was Thailand's first agricultural university and Thailand's third oldest university. It was established on 2 February 1943 to promote subjects related to agricultural science. Professor Usaradee Phumalee from the Faculty of Forestry led the survey work in Thailand.

www.ku.ac.th



USAID

Through the Protect Wildlife project, USAID is working to reduce threats to Philippine biodiversity, such as poaching and illegal trade of wildlife and wildlife products, and to improve ecosystem goods and services. USAID works with partners in the government and different sectors to strengthen conservation policies and improve habitat management and on-site and off-site enforcement systems.

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11 CONSERVATION PARTNERS

participated in survey
deliveries

28 COUNTRIES

in which surveys
delivered



7,110 RESPONSES

with each survey
containing 197 questions

465 CONSERVATION SITES

at which rangers filled
surveys



Working to sustain the natural
world for people and wildlife

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