

WOAH: Evaluation of the Workshops' program for the National Focal Points for Wildlife

Final report

—

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List of abbreviations

AU-IBAR: African Union Inter-African Bureau for Animal Resources
 CC: Collaborative Centre
 CITES: Convention of International Trade in Endangered Species of Wild Fauna and Flora
 FAO: Food and Agriculture Organization
 GF-TAD: Global Framework for the progressive control of Transboundary Diseases
 NFPW: National Focal Point for Wildlife
 TOR: Terms of Reference
 WHF: Wildlife Health Framework
 WOA: World Organization for Animal Health
 WOA HQ: WOA headquarters in Paris
 WOA RR: WOA Regional Representations

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Background

The National Focal Points for Wildlife (NFPW) mandate was created in 2008 historically with the purpose of providing guidance and support to WOA national Delegates. The NFPWs collect and share information on wildlife health, surveillance, and contribute to international disease reporting.

The WOA workshops program for the NFPW was initiated shortly after the creation of the NFPW mandate, in 2009. The objective of this program was to provide the NFPWs with the set of skills and competencies they need to fulfil their missions, which are detailed in their Terms of Reference (ToR).

The workshops program spanned from 2009 to 2023, proposing 6 different cycles¹ which each focused on a specific main theme, all relevant for the upskilling of the NFPWs. Each workshop was designed to provide global training in fields relevant to the NFPWs' missions and also to share information and experiences on regional issues.

During these 6 cycles, the importance of Wildlife in Health system was highlighted by several sanitary crises, the One Health concept emerged, and a major pandemic hit the world. The WOA policies reflected these changes, and the importance of the NFPWs in the WOA environment evolved, as did the workshops program.

In order to assess how the workshops program had sustained the test of time and how it could evolve in the coming years, WOA chose to proceed to an exterior evaluation of the 14 years of the program. This evaluation was entrusted to Biodiv^Vet.

The mandate of Biodiv^Vet was to:

1. Evaluate the WOA National Focal Point on Wildlife Workshops Program for 6 OECD criteria for evaluating development interventions: effectiveness, efficiency, relevance, coherence, sustainability, and impact.
2. Provide recommendations to improve the Workshops Programme for WOA.

The evaluation considered the initial aims, the subsequent evolution of the programme, and its relevance to WOA's mandate and missions, including how the program aligned with the Wildlife Health Framework (WHF). This report presents the methodology, main findings and recommendations issued from the evaluation.

¹ The term cycle was used by WOA to describe each workshop. This term refers to the geographical cycle of the workshops (which travelled around the world through 4 regions) and not to a cycle in the training themes. As such, "cycle" may not be the most appropriate term to describe each workshop. Biodiv^Vet would propose using the term "Edition" or "Series" for each workshop and "Cycle" for a set number of "editions" or "series"

Executive summary

The evaluation of the workshop program for National Focal Points for Wildlife (NFPW) took place from May to August 2025.

The workshops program was evaluated for six OECD criteria for evaluating development interventions (effectiveness, efficiency, relevance, coherence, sustainability, and impact). The primary training objective for the program was to train the NFPWs to improve their ability to fulfil their Terms of Reference (ToR). How the program responded to other WOAHP needs, such as the Wildlife Health Framework (launched in 2021), was also assessed.

This evaluation was essentially based on:

- The desk analysis of over 1000 WOAHP documents,
- Semi-structured interviews of the different program stakeholders (WOAHP Headquarters, WOAHP Regional Representations, Collaborative Centres, Delegates and NFPWs). In total, 12 interviews were carried out,
- A survey sent to 183 active NFPWs (77 responses were obtained).

In general, the evaluation finds that the workshops program is qualitative and adapted to the needs of the NFPWs and objectives of WOAHP. The results of the survey show that NFPWs believe that the main themes proposed by the workshops were relevant to their needs, that the training was effective and that it generally had a positive impact in supporting them in their missions as NFPWs.

Workshops were held in-person, which yielded many benefits for the NFPWs who accessed quality training, but also support and exchanges with NFPW counterparts, WOAHP staff and experts. In-person workshops were also beneficial for WOAHP personnel and collaborative centres. Biodiv^{et} recommends to keep organizing the workshops in-person.

Longer workshops would be beneficial to NFPWs (3 days is a minimum) to allow more time to teach complex skillsets and support the lectures with hands-on exercises. NFPWs would also benefit from yearly workshops but these events require resources which might be difficult to mobilise if the quality of the workshops were to be maintained.

The 2-year pace of the workshops delays the training of novice NFPWs who can sometimes wait more than a year before they are appropriately trained. We suggest mitigating this issue by proposing an e-learning platform of tailored resources, readily available for the newly appointed NFPWs.

The two-year gap between workshops might also erode NFPW motivation and skills by lack of solicitation and training. Recently, initiatives such as newsletters, regional networks and workshops were undertaken in the frame of the Wildlife Health Program. Biodiv^{et} considers these initiative as excellent complementary regional applications to the more centralized workshops. These initiatives in their implementation phase and it would be useful to evaluate how they complete the workshops in the future.

The program in its entirety lasted 14 years and presented 6 workshops, each with a different main new theme. The program would benefit from being re-evaluated at a shorter time frame, i.e. every 3 workshops. In addition most NFPWs attend a maximum of 2 workshops: Biodiv^{et} would propose a shorter program of three workshops with harmonized themes to match the length of the training program with the median mandate of an NFPW.

Biodiv^{et} finds that the contents of the workshops is satisfactory in general. Also there has been an undeniable effort to bring regional contextualization in the workshops: in the current format, it is not obvious that increasing this element would be beneficial.

Finally, the next program should be designed with its monitoring and evaluation in mind, including through the identification of relevant indicators.

Figure 1 presents a suggested scheme for the coming workshops, synthesizing the recommendations made for the format of the workshops. In summary, the workshop program would encompass an E-learning “Welcome” package for the novice NFPWs, which can be taken in the first months of the NFPWs nomination. We suggest a cycle of 3 workshops, over 6 years. Each workshop would last 4 days and be based on one main theme. The conception phase should prepare all three workshops and set up indicators (on the basis of the OECD-criteria) to be monitored during the whole cycle. The cycle is ended by a global evaluation taking into account the indicators, informing the future of the program. Satellite capacity building activities proposed by WOAHRRs and CCs would maintain contact and training for the NFPWs during the two-year gaps between the workshops. WOAHHQ and RR would regularly exchange on how central workshops and regional capacity building activities would complete each other.

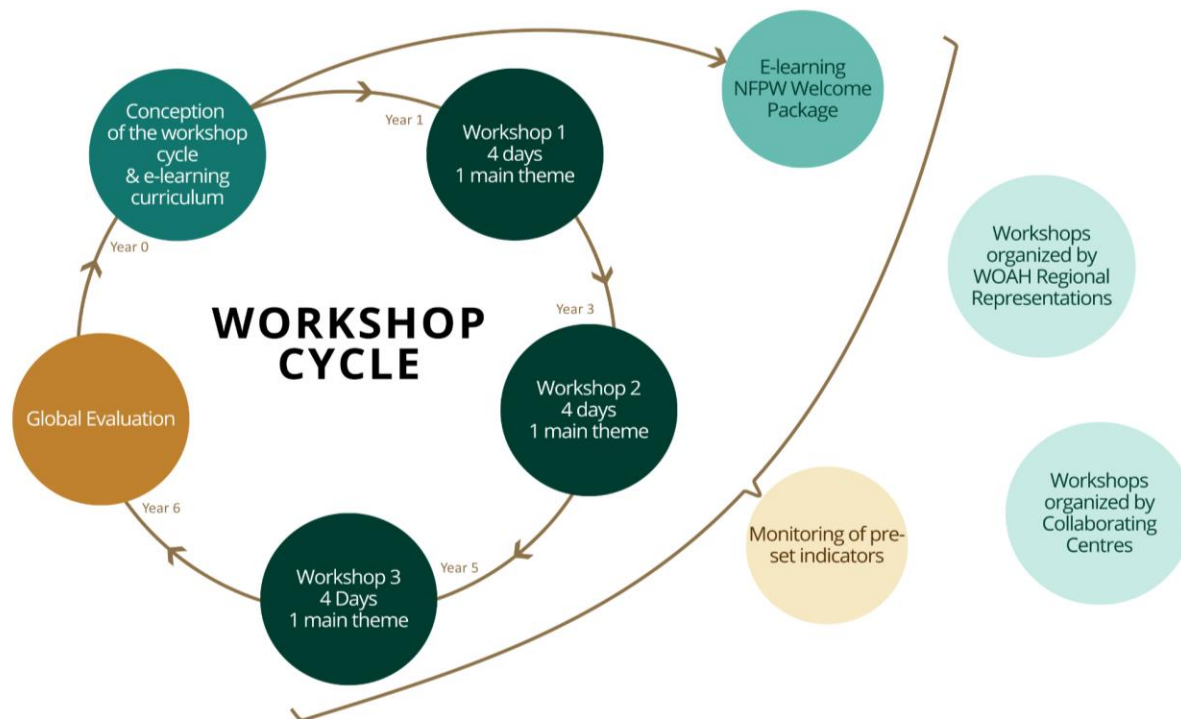


Figure 1: Proposed organization for the future of the workshops' program

1 Methodology

1.1 General methodology

The evaluation of the program was based on the OECD-criteria for monitoring and evaluation, which enable an evidence-based and comprehensive evaluation of training programs. The [OECD criteria](#) are:

- Relevance,
- Coherence,
- Efficiency,
- Efficacy,
- Sustainability,
- Impact,

The main objective of the program was to train the NFPWs to fulfil their ToRs (NFPW ToRs are listed in annex 3). We also sought to evaluate how the program responded to other WOAHP needs, such as the Wildlife Health Framework (launched in 2021), or to NFPW feedback.

We started the evaluation process by setting up a matrix of 73 indicators each pertaining to one of the six OECD criteria. This initial matrix listed each indicator as a short question, the type of data needed to answer the question, and the type of analysis which was expected to be conducted (descriptive, qualitative, and quantitative).

The different methods of data collection are detailed in the following paragraphs.

The analysis of the collected data yielded responses for each indicator, revealing strengths, weaknesses and/or gaps of the program. Following the logic of evidence-based monitoring and evaluation, the strength of evidence was considered higher for objective, measurable indicators, than for survey results, and higher for survey results than for semi-structured interviews. In reverse, interviews were the most useful to collect information on the different stakeholders' roles, experiences and needs, and necessary to help the evaluation team understand the global picture of the workshops program.

The synthesis of these analyses provided a general assessment, and offered suggestions for the future of the program. For each section of the results and discussion in this report, the corresponding OECD criteria is indicated in brackets at the end of the paragraph title.

When relevant, we issued recommendations for the future of the program, focusing on the ToR but also taking into account the wider strategies of WOAHP for wildlife.

The key findings and recommendations from the evaluation are presented in the corpus of the report. Secondary findings and the full list of indicators are detailed in Annex 1.

1.2 Desk analysis of the documentation from the workshops

WOAH provided a large amount of documents from the workshop program. These documents consisted mainly in pedagogical material (programs, presentations, exercise materials, training manuals) and administrative WOAHD documents (reports, budget sheets, official publications). The shared file initially contained 894 documents. We performed a census of the shared file, requested additional documents (to WOAH Headquarters and during interviews) and completed the document list by researching the WOAHD website. In total, over 1000 documents were accessed, consulted and labelled for the evaluation.

1.2.1 Workshop mapping

In total, 29 workshops took place, (plus one intermediate online workshop between cycles 5 and 6). The workshop program (with timetables) and most of the training material (lectures and exercise materials) were available for 17 of the 29 workshops. Each lecture, exercise or other material was labelled with one general theme (such as Wildlife Disease Surveillance) and a maximum of two specific topics (such as Targeted Surveillance and General Surveillance).

The content of each workshop was different between cycles: each cycle covered one main theme, supported by its training manual. For example, the main theme of the first cycle in 2009 was Wildlife Diseases and Surveillance; the main theme of the second cycle was the Surveillance and International reporting of Wildlife Diseases. The training manuals and exercise materials were edited by the pedagogical teams from one designated collaborating centre. For the first three manuals, the Collaborative Centre in charge was the CCWHC Canadian Centre. For the next three manuals, the USGS agency (USA) was in charge of editing the manual. Each manual presented one main theme, supported by material for exercises which were proposed during the workshops. Biodiv^{et} examined each of these manuals, assessed the quality of the material and exchanged with their authors (see "interview" paragraph).

In addition, the contents also evolved according to feedback from precedent workshops, recent events, the availability of new technologies and teaching methods and regional expectations and opportunities.

Within a cycle, regional differences in time allocation between workshops were minimal (the main sessions were the same and the WOAHD topics were taught with the same power-point presentations). We thus chose to analyse more finely one representative workshop within each cycle. The amount of time dedicated to each topic in conferences and exercises was used to weigh the relative importance each topic was awarded in the successive workshops.

The results are presented below as “treemaps” in which the area of cells is proportional to the relative weight of each topic. The mapped workshops are the following:

- Cycle 1: Arusha (Africa English speaking countries),
- Cycle 2: Colombo (Asia and the Pacific),
- Cycle 3: Saint-Petersburg (Europe),
- Cycle 4: Bali (Asia and the Pacific),
- Cycle 5: Kasane (Africa English speaking countries),
- Cycle 6: Asunción (Americas)².

Biodiv^{et} also developed a global treemap of all 6 workshops to provide an insight into the training environment of the whole program.

This mapping was used for several elements of the evaluation of the program. Mainly, this mapping informed on the relevance of:

- The format of the workshops in general (length, pace, different main theme for each workshop...),
- The contents of the workshops (themes and topics, lectures vs exercises),
- The inclusion of regional issues and challenges.

1.2.2 WAHIS and WAHIS-Wild data

WOAH headquarters provided datasets gathered for previous analyses. The information spanned from 2008 to 2019 (cycles 1 to 5). Information about the yearly percentage of listed diseases for which information was provided for wildlife, the turnover of Delegates, the cumulative number of training sessions to which the country sent a representative, and the reporting of information on non-listed diseases of wildlife was available. These data were analysed to provide an insight of the impact of the workshops on one of the roles of the NFPWs (one of the ToRs is “under the authority of the OIE Delegate of his country, to support the optimal collection and submission of wildlife disease information to the OIE through WAHIS (immediate notifications and follow-up reports, six-monthly reports, and annual questionnaires) to enable the OIE Delegate to more efficiently manage his OIE Member obligations”).

All statistical analyses were performed with the software R. Mixed model regressions were used to evaluate relationships between:

1. Dependent variables (Percentage of listed diseases, for which information was provided for wildlife, Did the country report information on non-listed diseases of wildlife?, Number of non-listed diseases of wildlife for which information has been reported),
2. Independent variables (cumulative number of training sessions, year),
3. Confounding factor (turnover of Delegates).

² The intermediate cycle mapping is not presented in the report as it was an online one half-day meeting which was held during the Covid pandemic. The topics of the intermediate cycle are however included in the general mapping of the workshops.

Countries and regions were used as (nested) random effects.

Performances of the models were appreciated through graphical observation of diagnostic plots. In the absence of convergence of the full model, the turnover of Delegates and the regions were removed from the model. When faced with collinearity, either one of the variables was removed from the model, or one of the variables was regressed against the other to obtain “decorrelated” residuals. Results with p-value <0.05 were considered statistically significant.

1.3 Survey of active NFPWs

The data available was not sufficient to fully evaluate the impact of the workshops on the ability of NFPWs to fulfil their roles. To mitigate this lack of information, a survey for current NFPWs was prepared. It was designed in conjunction with Firetail³ to avoid multiple solicitations. The part dedicated to our evaluation included 9 sets of questions about their profile, their training, the knowledge and skills they gained from the workshop, the use they made of these knowledge and skills, and their overall feeling regarding the workshops. The questions are presented in more detail in the results section. The full questionnaire is listed in Annex 4. The answers to the survey were analysed through Bayesian generalized linear multivariate multilevel models (brms package). These models allowed for the simultaneous modelization of the WOAH-linked dependent variables, followed by the simultaneous modelization of the wildlife-related variables. Independent variables included in the full models were the region, the number of workshops attended by the respondent, his/her seniority, his/her type of administration, and, when relevant, his/her proficiency in the topic before the workshops. Models were applied first to the question about proficiency before the workshops, then to the second question about the gain in knowledge, followed by the type of usage impacted by the workshops, and lastly to the question about the overall impact of the workshops. Non-informative priors were used. When faced with collinearity, failure of convergence, or inappropriate convergence (high Rhat, low estimated sample size), either the Markov chain parameters were adjusted, or the variable with the lowest probability of direction was removed from the model. An arbitrary respondent identification variable was used as a random effect. To remain close to the frequentist way of interpreting statistical results, a probability of direction >95% was considered statistically significant.

³ Firetail is a consultancy agency which was commissioned by WOAH to evaluate the Wildlife Health Framework, during the same period as Biodiv^{et} was commissioned to evaluate the workshop program. As both consultancy agencies planned to interrogate the NFPWs through a survey, a joint survey was set up and sent.

1.4 Interviews

In the process of this evaluation, 11 interviews were performed with different stakeholders of the workshops. Each interview was performed by two interviewers, one interview leader and one secretary. Interviews were semi-structured: the interviewers followed a frame of pre-set questions to lead the discussion on elements of interest to the evaluation. The lists of pre-set questions, for each type of stakeholder interviewed, are presented in annex 5.

1.4.1 WOAH Paris Headquarters staff interviews

Regular exchanges were organized with the three WOAH HQ members in charge of the implementation of the Wildlife health framework who had been implicated to different degrees in the organization and delivery of the Workshops Program.

1.4.2 WOAH Regional Representations

The three WOAH staff for the regional representations interviewed are in charge of the organization of the workshops in their region. As such, each of these three representatives took part in the organization of at least one workshop, and were able to provide first-hand feedback on questions relevant to each of the OECD criteria, including their perceived impact of the workshops in their regions.

1.4.3 WOAH Delegates and Wildlife Focal Points

Three crossed interviews of Delegates and their focal points for wildlife were organized.

Delegate/NFPWs couples were selected for solicitation in order to exchange with experienced Delegates from different regions, who sat in the council or who didn't, coupled with focal points who had been at least to the last workshop.

These interviews consisted of a 20-minute semi-structured interview with both the Delegate and his/her NFPW, followed by a 15-minute interview with the NFPW alone. This format enabled interviewers to solicit the Delegates in a short period of time with focused questions and benefit from more time with the NFPW, to ask questions focused on the NFPWs experience and expectations.

The objectives of these interviews were:

- Discussing Delegate and NFPW's perceptions of the role of the NFPW (and how these views align with the content of the workshops and with WOAH objectives for NFPWs),
- Perception of the Delegate and NFPW on the training needs for the NFPW (what skills does a Delegate expect from his/her NFPW and how a capacity building program could contribute),
- How Delegate/NFPW exchanges have evolved since the Delegate arrived and if the workshops had an impact.

1.4.4 Representatives of Collaborative Centres implicated in the program

The two Collaborative Centres that conceived the training material throughout the workshops program were interviewed:

- One member from CWHC Canada, WOAHC Collaborative Centre for Wildlife, in charge of the conception of the 3 first training manuals,
- One member from USGS USA, WOAHC Collaborative Centre for Wildlife, who took part in the conception of the 3 last training manuals.

These interviews allowed us to get information on the conception of the training material (how the manuals were conceived, what resources were mobilised to write the manuals and prepare the exercises), or on how the NFPWs responded to the lectures and exercises during the workshops.

2 Data analysis and results of the survey

2.1 Biases and limitations of the evaluation

The workshop program was initiated 16 years ago, without any formally planned monitoring and evaluation in mind. In addition, some archived documents were lost during the period. As a consequence, it was not possible to provide a fully comprehensive evaluation of the program. Instead, we had to rely more heavily on the feedback from stakeholders, which was solicited through a survey (NFPWs), and semi-structured interviews of WOAH staff and partners. The program also lasted 14 years: it was more difficult to retrieve documents and feedback (memories) from the older cycles.

These methods expose the evaluation to possible biases, since they did not collect comprehensive and consistent information along the full period, and did not systematically solicit each stakeholder.

Interviewing a sufficient number of stakeholders to follow a quantitative approach was not affordable within the scope of this evaluation. Given this limitation, more importance was given to recurrent and consistent ideas.

Both the survey and the interviews might also have suffered from optimistic biases from individuals who had an interest in the continuation of the workshop program.

The evaluation team did not have the opportunity to attend a workshop, given the timeframe of the evaluation (the last workshop was held in 2023). Having this opportunity would have been helpful to assess the quality of the presentations (assessing the quality of a presentation based solely on the written material doesn't allow to assess the quality of the trainer nor the response of the trainees, especially during hands-on exercises) and would have allowed to solicit live feedback from a wider audience of NFPWs.

Taking into account the gaps and biases listed above, the available data, interviews and survey did enabled us to assess the relevance of the program, as well as its coherence and efficacy. It was more difficult to assess the impact of the program on certain activities of the NFPWs. More specifically, one of the NFPW Terms of Reference is "to establish a network of wildlife experts within his country or to communicate with the existing network;" The impact of the program on the implication of NFPWs in national Wildlife Networks could not be evaluated because no data is collected by WOAH on this element (although it is discussed in the results section). Assessing the impact of global training programs such as this Workshops program, even with relevant data, remains complicated as actions can be motivated by many other factors (for instance, the Covid pandemic highlighted the importance of developing Wildlife Health Surveillance Networks and may have triggered such networks in various countries).

2.2 Survey: workshops had a positive impact on the ability of NFPWs to fulfil the ToRs

The survey received 99 answers, 77 of which were complete. This corresponds to a 42% response rate (77/183). Among the respondents, 13 had not participated in any of the workshops, and their answers are not presented here. To better understand the profile of the respondents and take it into account in the analyses, the NFPWs were asked about the country they represented (their region was the actual variable used), their professional affiliation, how long they have been a NFPW, and how many workshops they attended.

2.2.1 Survey: proficiency of the NFPWs before attending any workshop (effectiveness)

To evaluate the effectiveness of the workshop program to provide the NFPWs the skills to fulfil their ToR, it was important to better understand the “baseline”. The respondents were thus asked to evaluate their proficiency at the time of their nomination as NFPW (before they took part in any of the workshops) in the following topics:

- The WOAHS organization and its Wildlife Health Activities
- The role of the Wildlife Focal Point in the context of the WOAHS standard-setting process
- The WAHIS/WAHIS-Wild notification system
- Wildlife Disease Surveillance
- Building a National Wildlife Health Network
- Data management and analysis
- Complex decisions with respect to wildlife health.

The possible answers were:

- I had no training at all in this topic
- I had a basic understanding of the topic and felt I needed training to support my Delegate
- I had a basic understanding of the topic but believed I could efficiently support my Delegate
- I was proficient in this topic and believed I could efficiently support my Delegate

Results are presented in Figure 2. Among NFPWs who had attended at least one WOAHS workshop, self-assessed proficiency at the time of their nomination as NFPW varied widely across topics. For all topics, over 50% reported having no prior training or only a basic understanding with a need for further training. Overall baseline proficiency was highest for Wildlife Disease Surveillance, and, to a lesser extent, for knowledge of WOAHS and its wildlife-related activities. Respondents reporting high proficiency remained a minority, with the exception of the topic *Wildlife Disease Surveillance*. The number of workshops attended was a statistically significant predictor of the self-assessed baseline understanding of the *role of the Wildlife Focal Point in the context of the WOAHS standard-setting process*. Since we asked the NFPWs to evaluate their initial proficiency, before they attended any workshop, this correlation is either not causative, or the sign of a memory bias. No other significant correlation was observed.

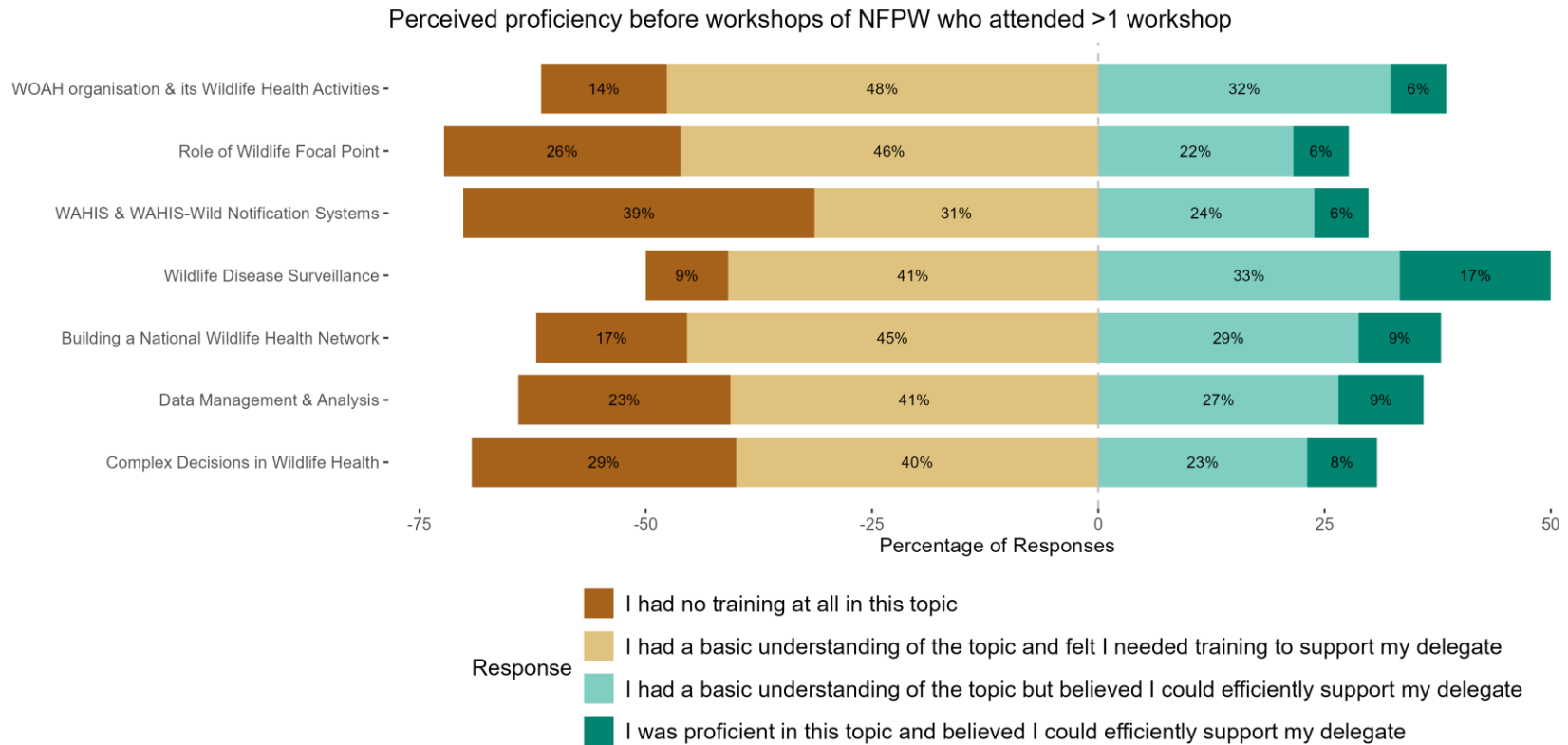


Figure 2: Self-assessed proficiency of NFPWs who attended at least one WOAHP workshop at the time of their nomination, across three WOAHP topics and four technical topics.

Bars show the percentage of respondents with no training, basic understanding requiring further training, basic understanding but able to support their role, and full proficiency. Negative values represent lower proficiency categories; positive values represent higher proficiency.

2.2.2 Survey: did respondents feel they gained knowledge thanks to the Workshops (effectiveness)?

To measure the impact of the workshops, we then tried to identify if the self-reported proficiency of the respondents had increased after the workshops. To this end, the respondents were asked whether they agreed with the statements:

“After the workshops, I feel I gained knowledge or skills in:

- The WOA organization and its Wildlife Health Activities
- The role of the Wildlife Focal Point in the context of the WOA standard setting process
- The WAHIS/WAHIS-Wild notification system
- Wildlife Disease Surveillance
- Building a National Wildlife Health Network
- Data management and analysis
- Complex decisions with respect to wildlife health”.

Results are presented in Figure 3.

A large majority of the NFPWs who attended at least one workshop reported that they gained knowledge/skills, especially on WOA-related topics. The knowledge/skills gain regarding *data management and analysis* and *complex decisions in wildlife health* was less unanimous.

After taking into account the respondents' proficiency at the time of their nomination, the number of workshops attended by a NFPW significantly increased his/her report of a gain in knowledge in all of the topics (*WOA organization and its wildlife health activities, the role of the Wildlife Focal Point in the context of the WOA standard setting process, the WAHIS/WAHIS-Wild notification system, wildlife disease surveillance, building a national wildlife health network, data management and analysis, and complex decisions with respect to wildlife health*).

These results indicate clearly that the workshops had a positive and cumulative impact on the NFPWs' knowledge, in both WOA and wildlife topics.

Did respondents feel they gained knowledge in the following topics thanks to the Workshops?

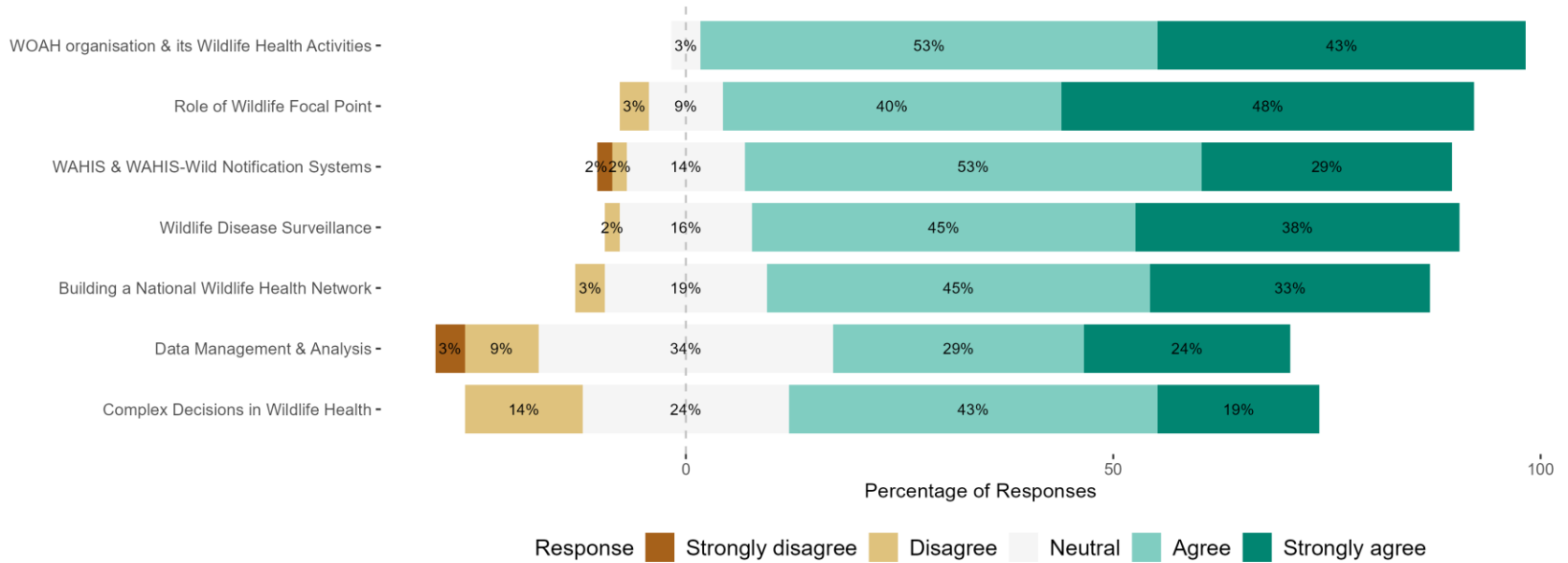


Figure 3: Self-assessed knowledge gain of NFPWs thanks to the WOAH workshop, across three WOAH topics and four technical topics

Bars show the percentage of respondents who strongly disagree, disagree, are neutral, agree, strongly agree with the idea that the workshops helped them gain knowledge in the different topics. The bars are centred on the centre of the neutral category. Negative values represent lower agreement categories; positive values represent higher agreement.

2.2.3 Survey: do NFPWs feel the WOAHP workshops program gave them skills and knowledge which they used in different situations (impact)?

Although gaining knowledge or skills is already a positive impact of a workshop program, we wanted to identify whether NFPWs had actually used these skills in their work as NFPWs. This is why they were asked whether they agreed with the statements:

“The WOAHP workshops program gave me skills and knowledge which I used when:

- I got involved in a wildlife health network in my country
- I reported disease events in wildlife through WAHIS and/or WAHIS-wild
- I contributed to WOAHP standard setting process through in-country consultation on WOAHP documentation
- I advised my Delegate on wildlife health related matters
- I organised capacity building activities related to wildlife health in my country or region”

Results are presented in Figure 4.

A vast majority of the respondents agreed with the affirmation that they used skills and knowledge they acquired during WOAHP workshops for their involvement in national wildlife health networks. Answers, although still dominated by positive opinions, were more nuanced for other topics.

Interestingly, the affirmation “The WOAHP workshops program gave me skills and knowledge which I used when I reported disease events in wildlife through WAHIS and/or WAHIS-wild” received the largest amount of negative response among all domains, followed by “The WOAHP workshops program gave me skills and knowledge which I used when I contributed to WOAHP standard setting process through in-country consultation on WOAHP documentation”. The negative responses about notification may be the consequence of the current changes in the notification tool, the fact that the NFPWs are not (necessarily) the FP who notify diseases in WAHIS-wild, or an expression of a need to review the training material on notifications. The negative responses about WOAHP standard setting process regarding wildlife could require further investigation.

After taking into account the respondents' proficiency at the time of their nomination, the statistical analyses showed that the number of workshops attended by a NFPW significantly increased the agreement to the statements “I advised my Delegate on wildlife health related matters”, “I reported disease events in wildlife through WAHIS and/or WAHIS-wild”, and “I got involved in a wildlife health network in my country”. Of note, WAHIS notifications are under the responsibility of the national focal points for notification. This may have resulted in a bias in the answers provided by the respondents.

No significant effect was observed for the statements “I contributed to WOAHP standard setting process through in-country consultation on WOAHP documentation” and “I organized capacity building activities related to wildlife health in my country or region”.

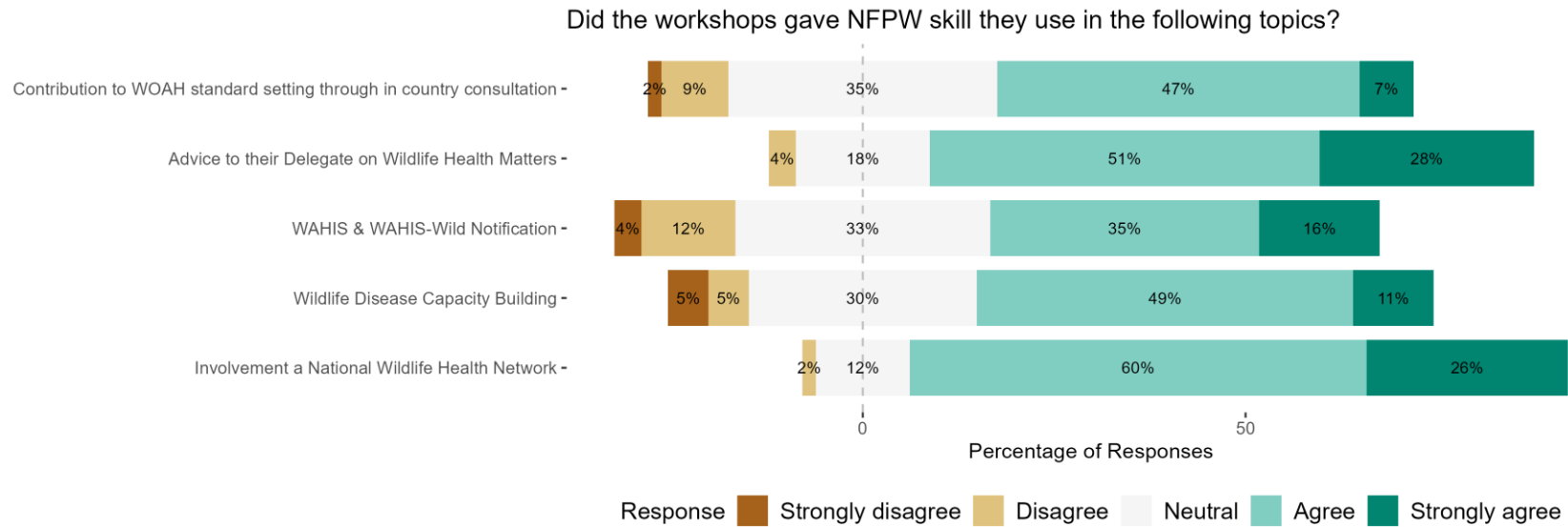


Figure 4: Self-assessed use of skills or knowledge gained during the WOA workshop, across five topics.

Bars show the percentage of respondents who strongly disagree, disagree, are neutral, agree, strongly agree. The bars are centred on the centre of the neutral category. Negative values represent lower agreement categories; positive values represent higher agreement.

2.2.4 Survey: overall perception of the impact of the workshops by current NFPWs (impact)

The respondents were asked the following question “Overall, do you believe the skills /information learnt during the workshops has had a significant impact on your performance as an NFPW to support your Delegate?”

Results are presented in Figure 5.

The majority of the respondents agreed or strongly agreed that the skills/information learnt during the workshops has had a significant impact on their performance as NFPW to support their Delegate. The level of agreement was significantly increased by the number of workshops they attended.

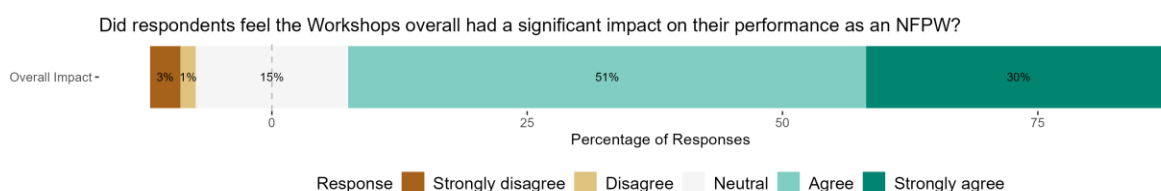


Figure 5: Self-reported agreement to the overall impact of the workshops on respondents' performance as NFPWs.

Bars show the percentage of respondents who strongly disagree, disagree, are neutral, agree, strongly agree. Negative values represent lower agreement categories; positive values represent higher agreement

2.3 Historical data analysis: impact of the workshops on global wildlife health data sharing (impact)

Data on notification for the period 2008-2019 allowed for a quantitative impact analysis. It indicated that the proportion of listed diseases for which countries provided information on wildlife declined significantly between 2008 and 2019. After controlling for the effect of time, there was no statistical evidence that the number of workshops attended by a country's representatives had any positive or negative impact on this proportion.

Similarly, based on the available data, no clear link was found between workshop participation and whether countries reported surveillance information for non-listed wildlife diseases. However, reporting of this information increased noticeably over time.

Among countries that reported at least one surveillance method for a non-listed wildlife disease, the data did not show a clear relationship between participation in additional training cycles or the passage of time and the number of non-listed wildlife diseases for which surveillance information was provided. This does not mean that such relationships do not exist, only that they were not evident in the data analysed.

Compared with the survey, which corresponds to a snapshot of the feedback of the current NFPWs, the analysis of historical data is better suited to identify temporal trends. However, looking at the notifications only is a limited and rather insensitive way of evaluating the impact of the workshop program. Notifications are indeed provided yearly, which does not generate large amounts of data for the analyses.

Interestingly, the data showed that the median number of workshops attended by unique representatives was 2 workshops. This number is consistent over all regions. This is consistent with the median number of workshops attended by the survey respondents, which was also 2.

2.4 Themes and topics: total workshop program mapping

As a reminder, the content of 6 workshops (one for each cycle) and the intermediate online workshop (between cycles 5 and 6) was mapped (this mapping of each of the 6 workshops is presented in Annex2). The global mapping of all 6 cycles is presented in Figure 6, which presents the mapping of the main training themes (WOAH, Wildlife Disease Surveillance, Health Risks...), and Figure 7 which presents the topics taught within each main theme. In total, the workshops program proposed 88 hours and 50 minutes of training (lectures + exercises). Over 36 hours of this training were exercises which represents 40% of the total training.

Total time allocated to core themes in cycle 1 to 6 workshops

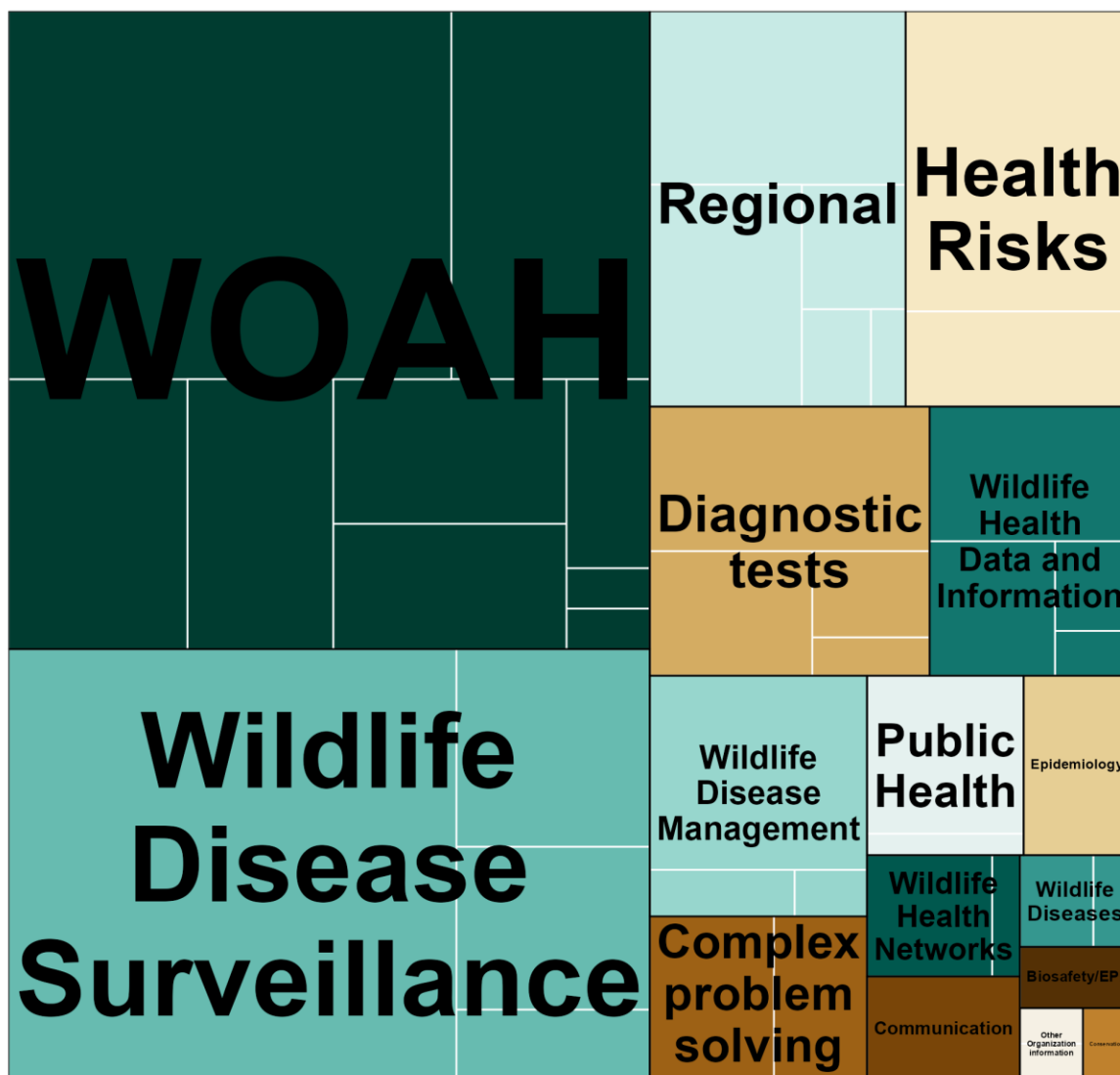


Figure 6: Mapping of the main themes for the total of the 6 workshops (and the intermediate online workshop).

The total time allocated to each of the general themes is presented in Table 8.

Theme	Time allocated	Percentage of total time
Conservation	15mn	0.3%
Other Organization information	20mn	0.4%
Biosafety/EPI	30mn	0.6%
Wildlife Diseases	45mn	0.8%
Communication	1h 10mn	1.3%
Wildlife Health Networks	1h 22mn	1.5%
Epidemiology	1h 25mn	1.6%
Public Health	2h 5mn	2.3%
Complex problem solving	2h 37mn	3.0%
Wildlife Disease Management	3h 52mn	4.4%
Wildlife Health Data and Information	4h	4.5%
Diagnostic tests	5h 35mn	6.3%
Health Risks	6h 35mn	7.4%
Regional	7h 30mn	8.4%
Wildlife Disease Surveillance	20h 27mn	23.0%
WOAH	30h 20mn	34.1%

Table 8: Time allocated to each main training theme for the total of the 6 workshops (plus the intermediate online workshop)

The lectures and exercises dedicated to WOAHO topics are by far the most intensely taught subject (34% of the training time), as these themes are recurrent in every workshop. For the same reason, the "Regional" theme represents 8.4 % of the training time. The "Regional" theme regroups:

1. lectures presented by regional experts or NFPWs, specific to the region (sanitary information, presentation of a regional network, regional challenges)⁴ or
2. lectures focused on another theme (Wildlife Disease surveillance for example) to which regional contextualization had been added (For example: participatory approaches in Wildlife Disease surveillance, adapted to Transfrontier reservations in Africa)⁵:

As they are recurrent in every cycle, they represent a relatively high percentage of the total training time.

The main technical theme is by far Wildlife Disease Surveillance which represents 23% of the total teaching time. This theme is also a recurrent theme which is treated as a standalone main

⁴ These « regional lectures » amounted, for each workshops, between 45 and 90 minutes of lectures.

⁵ In this case, the duration of the conference was divided between the general theme and the regional contextualization, to account for both in the total time.

theme (cycles 1 and 2) or in addition to other standalone themes such as Health Risks (Cycle 3) or Wildlife Health Data (Cycle 5).

The other themes are associated to one cycle but not addressed or very little in other cycles. This is the case for Health risks (Cycle 3), Wildlife Health Data and Information (Cycle 5), or Wildlife Disease Management (Cycle 6) and Complex problem solving (Multi-Criterion Decision Analysis in cycle 2 and Systems Thinking in Cycle 6).

Many themes appear with very little time, such as conservation, information on other organizations (such as CITES, FAO or AU-IBAR), Biosafety of wildlife diseases. These themes appear either as punctual presentations or as built into other topics. When a theme is constructed as a standalone theme, sufficient time must be dedicated to ensure that the pedagogical teams can build a solid theory and provide corresponding hands-on activities.

Conversely, small themes have sometimes been usefully integrated in presentations of larger themes when they are complementary. For example, in cycle 4, the smaller theme of biosafety was addressed within the main theme of diagnostic testing.

As regards the contents of the workshops, they covered all the knowledge necessary to understand how to set up, organize and sustain a wildlife health surveillance network. To provide meaningful information, a wildlife health surveillance network must rely on:

- A network of field observers trained to notice health issues and to transmit the information,
- A network of field operators able to collect carcasses or to perform field sampling safely,
- Infrastructures allowing the samples to reach a laboratory safely and in due time
- A competent laboratory or network of laboratories which are able to process the samples within a reasonable amount of time.
- Analytic methods that can reliably diagnose wildlife diseases,
- A data management system able to collect all relevant information,
- A central node of the network, which gathers, processes, interprets and communicates the data produced by the other stakeholders.

The content of the workshops adequately provided insights into the whole process, with different levels of detail. The objective was not to make NFPWs able to perform all these steps by themselves, but to help them identify stakeholders, understand the limits associated with working with wildlife, and help them build/reinforce a national network if necessary.

The contents of the workshops were also very informative on the why and the how to translate national wildlife disease surveillance into WOAH notifications. This fact, put in perspective with the absence of evidence of a strong effect of the workshops on disease notifications suggests either that our indicators were not sensitive enough to detect an effect of the workshops, or that other limitations, for example in national wildlife disease surveillance, take precedence over the skills of the NFPWs.

Of note, biosafety and personal protection did not seem to account for a significant part of the workshops, although it is a critical part of field and laboratory work.

3 Discussion and recommendations on the future of the programme

In this section, we present a synthesis of the results, taking into account the results presented above (mapping, survey analysis, and notifications) and the information and feedback collected from the interviews and the comment section of the survey. For each section, a narrative title was chosen and the corresponding OECD criteria is indicated in brackets. A colour code is given to present the program:

- ✔ Strengths,
- ✘ Weaknesses,
- ? Gaps.

Similarly, recommendations are highlighted in **blue**.

When relevant, some of the comments made by NFPWs in the survey are given as direct citations in “brackets”.

3.1 Format: in-person workshops are the way to go (Relevance)

✔ **The current in-person format is unanimously considered the necessary format for the NFPWs' training:** all of the interviewed stakeholders shared that they benefited from the in-person meetings, in ways that online formats would not allow:

- Online training would not be as efficient for the Focal Points for two main reasons: unequal access and different regional interests in (and access to) online meetings,
- In-person meetings allow the Focal Points, WOAHP staff (HQ and regional representations) to share information and experiences on regional issues and collect feedback.
- They are especially useful for WOAHP personnel as an occasion to pass on WOAHP's word.
- The collaborative centres have an occasion to confront their training contents and methods to different crowds with different regional expectations and histories: this feedback is also priceless for the pedagogical teams.
- In-person meetings were described as instrumental in the inception and sustainment of regional wildlife health networks

As long as these in-person workshops can continue, it is the opinion of Biodiv^{et} that they should. When possible, allowing these in-person workshops to have an online broadcast allows the NFPWs who could not attend in person (visa issues, regional difficulties, illness...) to still participate.

Recommendation: The in-person format is relevant and should be preserved.

“I believe that in person workshops are more effective than online workshops. In some cases internet connections are not helpful and one does not benefit from the training due to internet issues.”

“As I believe that I am still not available to participate in person, it would be good for the workshops to have the possibility to participate remotely”

It has to be pointed out that NFPWs benefit from high quality accommodation during the workshops and from a per-diem. These benefits probably encourage some NFPWs to want to maintain in-person formats to keep benefitting from these favourable conditions. The benefits listed above remain real assets to the program.

3.2 Format: it was relevant to develop one main theme per cycle (Relevance)

For each of the 6 cycles, WOA and the training teams developed one main theme (Wildlife Disease surveillance, Targeted surveillance, Health Risk assessments, Outbreak investigation, Wildlife Health Data, Wildlife Disease Management and Complex Problem solving) for which more time was dedicated and specific hands-on exercises were proposed. This extended time (300 to 400 minutes depending on the cycle) allowed to teach these themes in depth. WOA could also adapt the main themes based on the perceived needs of the NFPWs and strategies of WOA⁶ with each new cycle.

✓ The concept of cycles, for each of which a main theme was taught in detail, enabled WOA to propose thorough training content and to adapt to NFPW needs and WOA strategies.

There are many training themes which are relevant for NFPW training, each of which requires sufficient training time to be adequately taught. Biodiv^{et} believes it is more pertinent to develop one specific theme per workshop with more time for hands-on exercises than trying to give a global but quick overview of all themes within one workshop.

Recommendation: keep building new workshops around one main theme to provide in depth training.

Reminder: the term “cycles” may not be the most appropriate term to designate each workshop. We would suggest using the term “Series” or “Edition” and use the term “cycle” to describe a certain number of workshops, with a progression or different themes, after which the program restarts.

⁶ This is less true for cycles 5 and 6 for which the manuals and corresponding trainings were less focused on one specific theme and were more general.

3.3 Format: a round of 3 cycles instead of 6 to fit to NFPW turnover (Relevance)

As said previously, we believe that working on one specific theme per workshop cycle was an asset of the program.

The program counts 6 cycles, each of which successively focused on one new main theme⁷. Considering that all of these main themes were needed for a complete NFPW training, they shouldn't be developed over 14 years because NFPWs usually occupy hold their mandate for much shorter periods (reminder: the median maximum workshops attended by an NFPW is 2: more than half of the NFPW attend less than 3 workshops). Ideally, the number of workshops necessary to fully train an NFPW should roughly match the median time a NFPW holds his/her mandate.

X Each of the 6 workshop cycles focused on new themes and the whole program lasted 14 years: considering that all these themes are necessary to fully train a NFPWs, the training period of 14 years is not adapted to the median time in office of a NFPW.

Some interviewees and comments in the survey have shared the feeling that the latest workshops were "trying to find new topics" which were not necessarily central to support the NFPWs in their mandate.

Recommendation: adapt the number of cycles to NFPW turnover, possibly as a round of 3 workshops.

Working on this frame would allow to build the training program around 3 different main themes, and each of the 3 cycles would be built around:

- One session for WOAH topics (Structure and strategies, standards, Focal Points and their mandate),
- One session dedicated to regional topics,
- One session dedicated to a manual supported main theme (main themes changes from one cycle to the next).

This workshop program would be scheduled for evaluation after three workshops. This periodicity corresponds to a global period of 5-6 years if the time for preparation is included (according to interviews, preparations starts 6-12 months before a workshop is held) and the time for evaluation is included (1 year after the last cycle). A 5-6 year period to develop a training program is also closer to the periodicity usually chosen for WOAH programs (Wildlife Health Framework, Strategic plans).

Choosing a frame of 3 cycles instead of 6 entails that some themes should be sacrificed or the duration of the workshops should be expanded.

3.4 Format: should the pace of the program change (Relevance)?

The pace of the workshop program was one workshop organized every two years. Biodiv^{et} has identified through the interviews that a frequency of one meeting every two years yields two major issues, the first of which is that:

X NFPWs sometimes feel that contact with WOAHA is lost for two years and that they lose the benefit of contacts and experiences shared during the workshops.

Several comments in the survey also called for expanded or more frequent workshops.

“More training workshops may be organized and published material on awareness and capacity-building be produced for circulation in the relevant organization. “

“These workshops should be held once a year and every two years a scientific conference should be held to present research and monitoring on wildlife diseases.”

These two issues could be mitigated by organizing more frequent workshops.

3.4.1 A yearly format might not be ideal

A yearly format would ideally resolve many issues by increasing the density of the training and reducing “empty” periods between workshops. However, the interviews with WOAHA RR showed that organizing such events is very time consuming (6-12 months preparation to organize between the WOAHA HQ and WOAHA RR) and expensive. The time and resources spent by the WOAHA CCs preparing the training material are also important. Finding the funds to organize such events is already an issue for several regions and the 5th workshop in the Americas was not organized because of lack of funding. To ensure that all continents access the same training, it would seem more reasonable to choose a periodicity of workshops which would enable secure funding and leave time to maintain the quality of organization.

While increasing the frequency of workshops would seem ideal, it seems difficult to mobilize the adequate resources and propose a high quality training on a higher frequency.

3.4.2 Complementary capacity building activities and regional networks ideally complete the workshops program (Coherence)

In recent years, WOAHA has taken steps towards increasing contact with and among the NFPWs and several new initiatives were launched by the Wildlife Health Framework (WHF). The implementation of these initiatives is recent and different between regions which makes it difficult to assess their efficiency but these actions could usefully complement the workshops, all the while completing the objectives set in the WHF.

Newsletters: The Asia and Pacific region has set up a newsletter (two issues have been emailed at the present time). Biodiv^{et} was able to consult the two 2024 newsletters from the WOAHA Asia

and Pacific regional representation to its NFPWs. These newsletters updated the NFPWs on Wildlife activities at WOA, as well as regional training sessions and network meetings. As such, these newsletters constitute an ideal follow-up source of information to the workshops, and provide the NFPWs with opportunities for additional training.

Regional networks: Fostering regional networks opened to NFPWs as well as other wildlife-health stakeholders may result in more activity and richer information sharing (some NFPW regional WhatsApp groups also exist). To keep to the examples from the Asia and Pacific region, regular meetings of sub-regional networks bring NFPWs together on regional issues (online or in-person). These meetings often have a specific regional topic for which interventions by wildlife specialists are offered. Here are a few of the Asia and Pacific topics discussed during the regional network meetings:

- WOA Regional Wildlife Health Network (RWHN) for Asia and the Pacific,
 - [“Wildlife trade: addressing disease risks”](#)
- Pacific Wildlife Health Network,
 - [“High Pathogenicity Avian Influenza: conservation implications and disease mitigation”](#)
 - [“Communication of Disease Risk Posed by Wildlife”](#)
 - “Marine Ecosystem Health”
- East Asia Wildlife Health Network,
 - “Microplastic Intake in Wildlife”
 - “Lead Poisoning in Wildlife”
 - “Salmonella Infection in Wildlife”

Regional workshops and capacity building activities: WOA regional representations and regional CCs regularly organize capacity building activities which are proposed to NFPWs, through newsletters or other canals. These regional activities are more centred on regional challenges and maintain contact between the NFPWs of the regions (or sub-regions) and their WOA regional representatives. In the latest years, NFPWs took part in events such as the EBO-SURSY project, courses on Wildlife disease organized by Wildlife Health Australia (WOA CC), webinars in the Americas on HPAI and conservation or the new-world screwworm.

Recommendation: all the regional initiatives, which WOA has undertaken in the last years to build regional networks for Wildlife, ideally complete the workshops program and keep the NFPWs actively engaged in WOA activities and training, these actions should be continued and/or encouraged.

It seems that the implementation of these initiatives varies greatly between regions and it is difficult to get a clear mapping of the capacity building activities the NFPWs can access. Improved communication and traceability on these activities would improve the clarity and coherence of the system as a whole.

“It would also be helpful to introduce follow-up mechanisms, such as online check-ins or mentoring sessions after the workshops, to support implementation and maintain momentum.”

“Additionally, creating regional or sub-regional peer networks among National Focal Points would foster stronger collaboration, continuous learning, and knowledge sharing even after the workshop ends.”

Additionally, some NFPW workshops were organized adjoined to other events, such as a GF-Tad meeting which took place at the end of the 6th cycle Workshop in the Americas. During this event, the NFPWs took part in the GF-TAD meetings which they greatly appreciated. Such initiatives could be useful both to incite the NFPWs to integrate multi-sectoral networks (encouraged by the WHF) in the spirit of the One Health approach and also to limit costs.

Recommendation: joint organization of the workshops with other events, such as Wildlife Health congresses, international events or other Focal Point workshops, could be envisaged as positive developments for the program.

3.5 Format: short online tutorials and modules to welcome the newcomers (Relevance and Coherence)

A pace of one workshop every two years yields a second issue, which is that:

X Novice NFPWs may wait up to two years before they get a NFPW focused training.

NFPWs can find information on the WOAHA website and receive a welcome e-mail with relevant information. Some training now comes from WOAHA RR branches (as discussed in the precedent paragraph).

It would seem useful for these newly appointed NFPWs to have the opportunity to get easy access to focused information and training within weeks or months of their appointment.

The main point these NFPWs should be trained early on would be the use of the notifications systems. As Biodiv^{et} understands it, the new notifications system for non-notifiable wildlife diseases will be supported by online tutorials which would be highly useful for NFPWs (novice and also regular users who have a punctual need)⁸.

Other WOAHA information is useful to NFPWs, such as basic information on WOAHA standards, trade, the WOAHA structure (such as the role of the wildlife working group) and strategies. This information is available online, but some interviewees shared difficulties to find this information rapidly.

In the last workshops, WOAHA related information was proposed as pre-workshop webinars. It may be productive to organize such webinars, not as pre-workshop webinars but as a combination of e-learning resources and webinars for newcomers, organized at a more frequent pace.

⁸ In several interviews from different groups, the question of the definition of cases and terms in the notification systems has been raised: it seems that some terms are sometimes open to interpretation and some NFPWs sometimes feel uncertain of the information which is asked from them. As this is an important element of the notification system to come, it might be constructive to propose feedback or organize a plenary session with focal points for notification and wildlife to discuss and fix these issues.

All this information on WOAH topics should not be completely excluded from in-person workshops, as there are still NFPWs who will get this information only at in-person meetings.

More generally, an e-learning platform dedicated to NFPWs could be created. This common platform would centralize all the online material needed by the NFPW to understand his/her mandate and fulfil his/her notification duties.

Recommendation: set up an online e-learning platform, dedicated to NFPWs, which would centralize tutorials and short modules, tailored to the NFPW's needs.

Recommendation: schedule “beginner” webinars to complete e-learning and answer questions at a more frequent pace than the workshops.

Figure 9 presents a proposed organization for the NFPW common platform

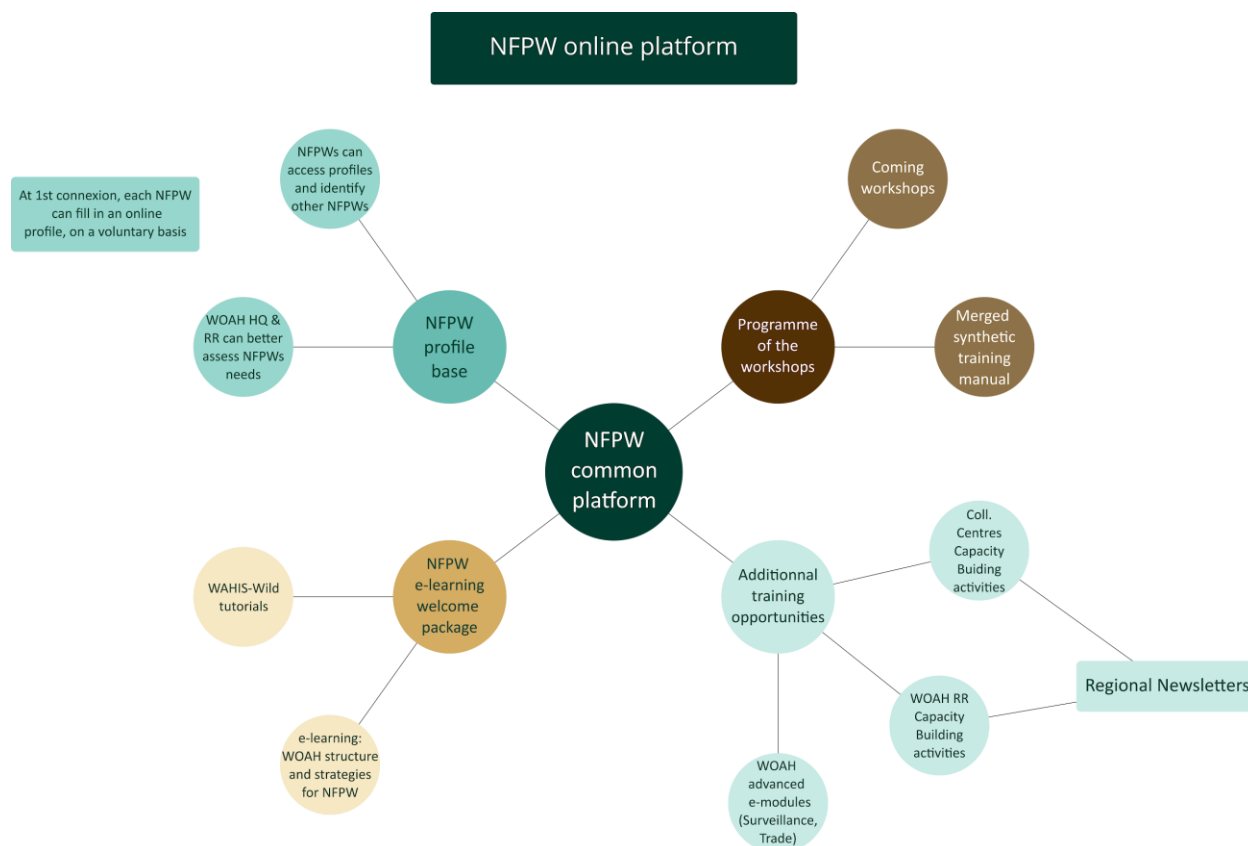


Figure 9: Proposed organization for a common NFPW online platform

3.6 Contents: how to keep the senior NFPWs motivated and get more from them? (Relevance and Effectiveness)

The NFPWs who have held the mandate for more than ten years have a very valuable experience. Some more senior NFPWs indicated that they still benefit from the workshops because they get the opportunity to share and interact with their regional partners and WOA. H.

These more experienced NFPWs are also a source and expertise and experience for WOA. H. and some can act as leaders for other WOA. H. missions, such as accepting responsibilities in regional and sub-regional networks, capacity building activities or ad hoc working groups.

Their experience also means that their motivations to participate in workshops cannot lie in basic training, as can be understood from survey answers such as:

“To improve the workshops for each country regardless of present level of activities and knowledge in wildlife surveillance, reporting etc., focus of the topics could be adjusted to be most useful on a sub-regional level, with groups of countries with similar level of surveillance etc., as the broadly varying knowledge within the FP group overall, leads to time devoted to very basic information at repeated workshops. A pre-workshop input for each sub regional group could maybe identify specific areas for each group, to advance all groups, each within its needs.”

Among ways of motivating these NFPWs to participate in the workshops and bring their valuable experience through exchanges and presentations would be to identify them and include them as presenters (already in place in the last cycles) or as discussion leaders for plenary sessions, on a pre-set discussion topic. One of the recurring themes heard during the interviews and seen in comments is how to set standards in wildlife health. Another recurrent question is the definition of terms and cases in the notification systems (this question was also recurrent in feedbacks and reports from former workshops).

Soliciting senior NFPW collective feedback (plenary sessions) on the establishment of national networks would also help identify non-technical barriers to the implementation of such networks in the different regions. Indeed, while training can solve technical issues, other means are needed for administrative/institutional, financial or cultural barriers.

A mentorship program has been suggested in some survey responses and interviews: *“WOA. H. should integrate a structured mentorship program into its next workshop cycle. This would pair less experienced NFPWs with seasoned counterparts, offering personalized guidance and practical knowledge transfer directly relevant to their challenges. This approach fosters invaluable peer-to-peer learning and builds long-term support networks.”*

While such a mentorship program would be interesting in many regards, such programs have been initiated in the past with limited success. The icebreaker exercises in the 6th cycle also paired senior NFPWs with newly appointed NFPWs in the spirit of integrating the junior NFPWs.

Some senior NFPWs have been implicated as trainers in capacity building activities. Several examples were given during the interviews for NFPWs from Africa (Ghana NFPW) and Asia and

the Pacific (Singapore and Laos NFPWs). These NFPWs have truly become stewards for Wildlife Health but these actions are not necessarily well known except by WOA staff, and they have not been highlighted during workshops. Such initiatives should be, when possible, identified and presented during the workshops or other activities. This would also help WOA identify NFPWs with potential to surpass their mandate.

Recommendation: identify senior and motivated NFPWs, solicit their experience and highlight their achievements during the workshops, and integrate them in other wildlife related WOA activities.

3.7 Contents: the pedagogical approach is relevant and modern (Relevance and Effectiveness)

☑ **The pedagogical approach is relevant, it was even ahead of its time with a big part of the training sessions dedicated to collaborative and hands-on exercises.** Although this approach may be perceived as normal today, it was very modern in 2009. In total, practical exercises represented 40% of the total training time over 6 cycles which is a high percentage. There was unanimity here also to support the exercises. Although not backed by many scientific studies, current educational recommendations advocate for initial exercises such as icebreakers, followed by an approach interspersing exercises with theoretical content to optimize understanding by workshop participants. Several comments call for more hands-on activities:

“Present and discuss different examples on practical implementation of surveillance in wildlife populations, e.g. for initial screening, then monitoring and targeted surveillance. How to calculate reasonable number of samples (when precise population is unknown) for different type of surveillance to be cost effective? “

“For the next cycle of the workshop program, I recommend incorporating more hands-on or scenario-based exercises to enhance practical application, especially in disease outbreak response. Including follow-up sessions or progress check-ins would help sustain momentum and implementation.”

“For the next cycle, I recommend increasing the practical, hands-on components of the workshops—such as real-time case studies, simulation exercises, and field-based learning. This would help participants better apply technical concepts in their national contexts.”

“Capacity building on Practical application of Dart-gun used in Wildlife restrain. “

Recommendation: keep proposing hands-on activities such as the Alert Board game which was proposed in cycle 6, or other exercises for Wildlife Disease Surveillance, Wildlife Health Data, Health Risk assessment, which were proposed as early as the first cycles. Getting help from pedagogical engineers may help fine-tune the training programme.

3.8 Contents: the technical themes are adequately prioritized in general (Effectiveness)

The general mapping of the themes taught during the 6 workshops gives a representation of the weight of each theme throughout the training program.

✓ **As pointed out in the data analysis section, the workshops covered all the knowledge necessary to understand how to set-up, organize and sustain a wildlife health surveillance network.** In general, the technical training meets the needs of the NFPWs to fulfil the terms of reference.

In the expert opinion of Biodiv^Vet, a minimum of three hours should be dedicated to complicated skillsets, such as basics in Wildlife Disease Surveillance, basics in Wildlife disease management or complex problem solving (Multi-criterion decision analysis, Iceberg Model...). With this in mind, if a particular skillset is deemed as important for the training of the NFPWs, a minimum of three hours should be dedicated to it. If no such time can be found, then subjects should be prioritized (and some skillsets excluded) rather than reduced in training time.

Recommendation: complicated themes should only be taught if sufficient time (3 hours for a complicated skillset) can be dedicated to them. If such time is not available, then it would not be constructive to teach these subjects.

Wildlife Disease Surveillance is by far the most intensely taught technical theme as it should be, followed by Health Risks (assessment and management), and Wildlife Health Data and Surveillance (Regional topics are discussed in another paragraph). These are the most central themes for NFPWs. Wildlife Health Networks represent less teaching time, also because this topic is intertwined with Wildlife Health Data and Surveillance. The need for this central bundle is corroborated by comments:

"[...] training on how to develop national wildlife health network for diseases surveillance based on one health approach. "

"Present and discuss different examples on practical implementation of surveillance in wildlife populations, e.g. for initial screening, then monitoring and targeted surveillance. How to calculate reasonable number of samples (when precise population is unknown) for different type of surveillance to be cost effective? "

"Wildlife Disease Surveillance"

"I recommend strengthening the wildlife disease surveillance system and the data-sharing platform."

"I think I obtained the best benefit by reading the 1st and 2nd training manuals and attending the second training. I don't think the later rounds of training I have been to were as effective or useful. There is a bigger focus on ecology and networking rather than: the core aspects of veterinary epidemiology (including as the first one did updating attendees on significant emerging diseases impacting wildlife), and good Veterinary Authority systems to support a strong national wildlife

health system. The earlier training linked better to the Code and focused on the system requirements to support good national veterinary systems for wildlife health. The training was more pragmatic for smaller nations around consolidating domestic and wildlife systems for disease prevention, control and surveillance and highlighted the core parts of a good national veterinary animal health system but in a wildlife context e.g. that the surveillance system should include general surveillance for early detection as its baseline and covered its necessary core components. I think there is value in focusing on those core aspects (surveillance, risk assessment to support import measures to prevent disease introduction, being able to respond to a disease occurrence in wildlife where appropriate, legislation to support components, having the awareness, communication systems and networks in place to support early detection and to respond etc.), WOAHA reporting requirements (how to do it, interpreting the WOAHA reporting codes' definitions, reporting emerging disease in wildlife), where wildlife sits in the WOAHA standards and implications for the different listed diseases e.g. discussion/training with an epidemiological basis on expectations for surveillance in wild birds vaccinated for HPAI?"

This last comment corroborates other comments made during the interviews. In the later cycles, new themes were developed which did not seem to succeed equally throughout the regions. Based on the interviews (WOAHA RR, Delegates and NFPWs), the "Complex problem solving" theme, enforced by exercises on the iceberg model does not seem to have been received as useful for all NFPWs (some found it very useful too). Feedbacks from the 6th cycle show a mixed reception of this theme. This theme is very interesting for high level deciders, but it is a complex process of thought and as such might require more time to be usefully developed than can be spared.

Recommendation: within the frame of NFPW training and if themes need to be prioritized, the complex problem solving theme does not appear as a priority.

In the same spirit, if themes needed to be prioritized, Wildlife Disease Management does not appear as central to the NFPW mandate, as it does not respond to any of their terms of reference. This theme is useful as a peripheral theme but is not central to the NFPWs mandate.

NFPWs are involved in Disease Surveillance systems, and therefore need training on diagnostic tests and sampling. From the available contents, it seems that little time was awarded to biosafety and protection equipment in the course of sampling. In Biodiv^{et}'s opinion, biosafety in the course of sampling operations is an important theme to be developed in the NFPW curriculum. Sampling dead and live wild animals exposes too many deadly zoonotic diseases and badly conceived sampling strategies can contribute to spreading diseases within the wild and domestic animal populations.

Recommendation: award more time to biosafety in the Diagnostic Tests theme.

3.9 Contents: should the workshops last longer (Effectiveness)?

We suggest that workshops should continue being held at the pace of one workshop every two years, and built around 3 cycle (instead of 6). The length of the workshops might be the adjustable variable that would enable maintaining the quality of the training over a reduced number of cycles. To assess this, it is important to discuss the contents of the training.

In cycle 1 to 5, time allocated to WOAHP topics was respectively 220, 260, 470, 260, 250 and 175 minutes. The topics of these WOAHP related conferences and exercises are:

- Focal Points and their terms of reference,
- WOAHP structure and strategies,
- Standards,
- Notifications systems,
- The role played by WOAHP in trade.

These times include the presentations as well as the exercises for using the notification system. All these topics are essential to the NFPW mandate and recognized as necessary, (including more senior NFPWs and Delegates). As such, the session dedicated to WOAHP knowledge should be kept, and a minimum of around 200 minutes should be reserved within each cycle. Even if some contents can be proposed as pre-workshop webinars or as online tutorials, it would not replace entirely the time required within the in-person workshops. Therefore, **at least one half day session would be dedicated to WOAHP topics, probably more if training was deemed necessary for the new notifications system.**

Biodiv^{et} found that the regional topics present a real asset of the workshops program, as explained earlier. Provided these sessions are kept, the time allocated to these presentations were respectively: 45, 90, 60, 70, 97.5 and 50 minutes. **Regional topics are a recurring theme which could represent up to one half day session.** There is a pull from NFPWs to increase the time spent on regional issues and sharing of NFPW experiences.

For each cycle, conferences and exercises based on the themes of the training manuals lasted respectively 180, 385, 390, 400, 180 (shorter workshop) and 380 minutes. Provided that the concept of one main theme was kept for the coming workshops, this **main theme would require around 380 minutes which would amount to 1 to 1 ½ day of training.**

Any workshop structured around these three sessions would require at least 3 days to allow enough time for each theme to be developed. Two survey comments consider that workshops could last longer:

“Yes, 2 or 3 days are not enough I recommend to take the workshops for 2 times per a year or to increase the number of days in the year. “

“WOAHP should organise 2-4 week workshops on wildlife health related topics once or twice every year.”

Such comments were also found in feedback surveys from former workshops, although this cannot be considered as a general NFPW opinion.

A 3-day workshop is a bare minimum to propose sufficient time and hands-on activities which would guarantee the quality of the training. Increasing the duration of the workshops from 3 to 4 or 5 days would give the pedagogical teams more time to build quality courses and avoid sacrificing themes to remain efficient.

Recommendation: longer workshops (4 days) would give more time to develop the training themes and allow the pedagogical teams to develop content for shorter programs (3 cycles instead of 6) without sacrificing teaching topics.

3.10 Contents: an increasing implication of Focal Points for Wildlife (Relevance)

Several trends appear in the 2 last cycles, when it comes to regional contextualization.

In cycle 5, a common theme for regional presentations was proposed: "Presentations from OIE NFPs: Practical initiatives to collect wildlife specimens from the field".

Under this common title, presentations were made directly by Focal Points for Wildlife. Although some focal points did intervene in older cycles (Focal Point for Tanzania in Arusha, cycle 1 for example), such interventions seem to have been anecdotal before the 5th cycle (based on available material). In cycle 5, 11 different Focal Points were invited to present sanitary information on their country, generally from surveillance networks which they were involved in (or at least for which they could obtain information)⁹.

In cycle 6, several Focal Points were again solicited to present information from their countries. Several of these presentations were under the same title "Root causes and drivers of disease". In total, 14 Focal Points presented information and news from their countries¹⁰.

In addition to these two cycles, the intermediate cycle, although considerably shorter (because online), yielded 8 short (5mn each) presentations by NFPWs on their countries surveillance systems and news¹¹.

⁹ The NFPWs who presented works at the 5th cycle were from Morocco, Senegal, Malaysia, New Zealand, Botswana, Kenya, Ghana, Egypt, Belarus, Lithuania and Poland

¹⁰ The NFPWs who presented works at the 6th cycle were from Morocco, Cameroun, Tanzania, Malaysia, Mongolia, New Zealand, Korea, Belgium, Israel, Kazakhstan, Norway, Argentina, Mexico and Costa Rica

¹¹ The NFPWs who presented works at the intermediate cycle were Countries involved were Ghana, Trinidad and Tobago, Lebanon, Cambodia, Uganda, Uruguay, Bahrain, and Korea.

In total, 28 Focal Points presented information from their countries, from cycle 5 to cycle 6. This is a very positive point for the workshops program.

☑ Such presentations show that the Focal Points from these countries are implicated in their national networks and are able to retrieve quality information from these networks.

There is also a call for these types of interventions in the interviews, survey comments and feedbacks from the latest cycles:

“Some short presentations from NFPW from different member countries how they manage the job in their country, this would support and help for a better understanding of the slightly “abstract” function and as NFPW”

Such experience constitutes an excellent basis for inspiring new focal points and exchange on personal experiences. These presentations are also a source of information for WOA HQ and regional representations (1) on how the focal points are embedded in their countries' Wildlife Health Networks and (2) retrieve valuable information from the most active Focal Points.

More Broadly, the involvement of NFPWs in (part of) the conception of the content of the workshops has been occasionally mentioned.

“Request for areas or topics of interest should be sent out to focal points.”

Recommendation: maintain a session dedicated to presentations by NFPWs to share national information and experiences.

3.11 Contents adapted to the regions, building on the regional Collaborating centres network (Relevance and Effectiveness)

☑ In all cycles for which the program and presentations were available, there was a variable amount of presentations dedicated to regional topics and regional contextualization. From one region to another, the themes differed, even within the same cycle. Some regional themes are:

- Africa: trade and illegal trade and associated health risks, bee health
- Europe: collaboration and communication with hunters, African swine fever
- Asia and the Pacific: Avian Influenza

In the latest cycles, the regional topics are presented essentially by regional collaborating centres (South-Africa and Kenya in Africa, Malaysia and Japan in Asia and the Pacific). In earlier cycles, it is difficult to identify the affiliation of the presenters (little material available and difficult to trace affiliations after over ten years).

✓ **The increasing implication of regional collaborating centres in the workshops for focal points¹² is a positive element which should be encouraged:** the mapping of the institutions implicated in these workshops directly reflects the structure and strategies of WOA, among which the building of a network of collaborating centres for Wildlife. The focal points and the countries they represent therefore witness how the WOA strategy unravels during the workshops. These collaborating centres also have the opportunity to connect with the Focal Points and collect useful insight on their region.

Note: on several occasions, it was pointed out that not all WOA issued documents are translated into Spanish and that this leads to limiting the inclusion of those NFPWs who do not speak English. This comment was made as a general comment on NFPW mandates and solicitation and not limited to the workshop program.

3.12 Contents: how far should workshops go into regionalization (effectiveness)?

Including the Focal Points in the workshop presentations and bringing regional context to general WOA strategies and Focal Point skills is a very positive element of the program. It does however collide with other objectives within a constrained format: if a workshop typically lasts 3 days, how far should WOA go into regional contexts?

An example of this is the workshop in Arusha during the 6th cycle, during which no less than ten presentations were proposed on regional issues. This was only possible because no WAHIS-Wild training was organized (WAHIS-Wild training usually blocks one half day session). Increasing regional contextualization in the actual format would be detrimental to other themes.

The interviews and the survey revealed that there is not necessarily a consensus on this matter. Three NFPW comments call for more regionally adapted contents:

"(...) it would also be helpful to allow more country-specific sharing to learn from diverse contexts and experiences."

"(...) more localized content that reflects regional wildlife health priorities and challenges—such as zoonotic risks from specific species or climate impacts on wildlife—would make the program more relevant and impactful."

"To improve the workshops for each country regardless of present level of activities and knowledge in wildlife surveillance, reporting etc., focus of the topics could be adjusted to be most useful on a sub-regional level, with groups of countries with similar level of surveillance etc., as the broadly varying knowledge within the FP group overall, leads to time devoted to very basic

¹² Some of these institutions intervened in the Workshops as expert centres before they became Collaborating Centres.

information at repeated workshops. A pre-workshop input for each sub regional group could maybe identify specific areas for each group, to advance all groups, each within its needs.”

During one interview with a WOAHA representative, it was pointed out that the workshops serve the purpose of bringing all focal points to a common understanding of the WOAHA structure, roles and policies and to a common skillset. As such, using these skills for regional issues (for example, using skills acquired in Wildlife Disease Surveillance to monitor a specific regional disease) should not be the role of the workshops but the role of regional meetings and workshops. By increasing regional contextualization in the workshops program, the core messages and skills which WOAHA wishes to transmit might be diluted.

In the interviews with the collaborating centres, it was indicated that the trainers got a lot of feedback from the common training frame they used in each region. It was very useful to these collaborating centres to see how focal points from different regions react differently, or choose different options for the same exercises.

Recommendation: a session could be systematically dedicated to presentations made by NFPWs, to increase their implication, show how they are embedded in their countries' surveillance systems and provide materials for exchanging on NFPW experiences. When possible, more presentations could be performed by regional collaborating centres or local administrations/NGOs for topics of particular regional relevance. Coming workshops should however keep a common main theme for all regions with the same material to ensure that the same coherent messages and skills are received.

3.13 Contents: toward one unique manual for NFPWs (coherence, effectiveness, efficiency)?

The 6 training manuals which were edited in support of the workshops all yield information which is contemporary and usefully support the NFPWs in their mandate.

Because they were conceived to serve each for one workshop, they are themselves less easy to use as standalone textbooks for NFPWs who would not have been to the workshops or who would want a refresher.

Also, there is a lot of redundant information from one manual to another which leads to less clarity in the successive manuals. The manuals would also benefit from updating the formats to more modern features and illustrations.

Recommendation: the successive manuals could be replaced by one unique textbook for NFPWs, containing synthesized non redundant training material and which could be read without participating in the workshops (as standalone material).

This would allow novice NFPWs to upskill rapidly and more senior NFPWs to refresh their skills with the same book. Adequate sections of this textbook could be referred to in the workshops and this textbook could also contain exercises which would be proposed during the workshops.

All the material for this textbook is already in the training manuals. Biodiv^{et} did not identify missing elements which would require being added in the existing material.

3.14 Keeping a straightforward and coherent training program (Coherence)

Throughout the interviews, all NFPWs interrogated confirmed that they could make time to attend the workshops as they find them highly interesting and useful. In general, if the workshops were to last longer or be more frequent, the NFPWs generally seem to be able to attend. The answer is less obvious for any supplementary online training.

In addition to the in-person workshops, many NFPWs now attend meetings for their regional networks (1 to 4 meetings per year for the Asian networks), as well as complementary online meetings, webinars, e-modules. This report also suggests new online material.

Although each of these capacity building activities has a clear objective and can be ultimately useful for the NFPW within their mandate or for WOAHP strategies in Wildlife Health -such as implementing the WHF- attention will have to be given to keeping a coherence in the capacity building environment.

Biodiv^{et} was also alerted by several interviewees that the multiplication of online solicitations could lead to a certain weariness (6 of the 12 interviewees shared this concern, from WOAHP HQ, WOAHP RR and Delegates and NFPWs).

For many NFPWs, the WOAHP mandate comes in addition to a national mandate and/or another WOAHP mandate (such as focal point for notification) and they have to balance their working hours between all mandates. Although time is scheduled for the WOAHP mandates and training within the NFPWs' professional schedules, it can regularly occur that the professional has to fulfil his/her WOAHP mandate on his/her own time, including any online training that would be time consuming (interviews). This is not necessarily because not enough time is devoted to the WOAHP mandate but because the work intensities don't always align between both mandates (online training can come at a busy time for the national mandate and sanitary crises implicating wildlife are not rare).

Recommendation: to avoid training weariness, the training environment of the NFPWs should be carefully thought to present a clear core, necessary to all NFPWs (workshops and NFPW welcome e-learning package) differentiated from additional optional training material for the most motivated NFPWs who wish to go further in their training. The online platform suggested earlier could constitute a centralized source of information for training and information, as could the newsletters already sent in certain regions.

3.15 Monitoring and Evaluation: evaluation of the workshops program on pre-set indicators (effectiveness and impact)

? **The evaluation of the workshops program, as it is proposed in this document, is based on documents and data which were not scheduled for that purpose.** Indeed, such proceedings were uncommon when the program was initiated.

Modern capacity building programs usually schedule built-in indicators which can be measured to inform on the criteria of interest for the pedagogical and managing teams.

Recommendation: plan a monitoring (internal) and evaluation (internal or external) framework before the start of the next training program which will:

1. be based on indicators which will be set up for that purpose and measured as soon as the first workshop of the program in a continuous manner,
2. set objectives for each indicator,
3. monitor regularly if objectives are completed, decide if corrective measures or follow-up actions should be implemented,
4. schedule an evaluation, for example after a 3-workshop cycle,
5. Plan for the evaluation team to attend at least one workshop.

These indicators should follow the SMART methodology when possible. In the document entitled "Guidance to facilitate monitoring and evaluation for antimicrobial resistance national action plans", WOAHP describes the ideal M&E indicators as:

- **Specific:** indicators should measure only the design elements, such as impact, output, outcome and activities, that they are intended to measure.
- **Measurable:** either quantitatively or qualitatively, indicators should be counted, observed, analysed, tested and challenged.
- **Achievable:** indicator data should be collected at reasonable cost.
- **Relevant:** indicators should collect information that meets managers' information needs to make decisions.
- **Time-bound:** indicators should be attached to the time frame of measurement.

Some indicators already exist or could be monitored as indicators to measure the efficiency and impact of the program, with improved traceability:

Feedback surveys should be systematically collected and documented.

Quizzes and their results could be systematically organized as a measurement of the basic WOAHP knowledge relevant to the NFPW mandate.

Improved traceability of feedback from discussions, especially plenary sessions, should be sought, for instance through archives, and, back to office reports.

Systematic collection of feedback from the pedagogical teams, with pre-set questions.

Indicators to inform on the notification rates and qualities should be set up as part of the coming notification system.

Indicators to inform on national Wildlife Health Networks could be collected, at least as a survey at the beginning and at the end of the training program.

Acknowledgements

The Biodiv^{et} team would like to express their deepest appreciation to WOAHPersonnel from Paris Headquarters and the Regional Representations for their support during the whole process of this work.

We are extremely grateful to the Delegates and their National Focal Points for Wildlife from Argentina, the United Kingdom and New Zealand who kindly shared their view on the roles and responsibilities of the NFPWs and their experience (NFPWs) of attending the workshops program.

We would also like to express our deepest gratitude to the representatives of the USGS (USA) and CWHC (Canada) WOAHP collaborative centres who accepted to share their experience of editing and delivering the workshop training material.

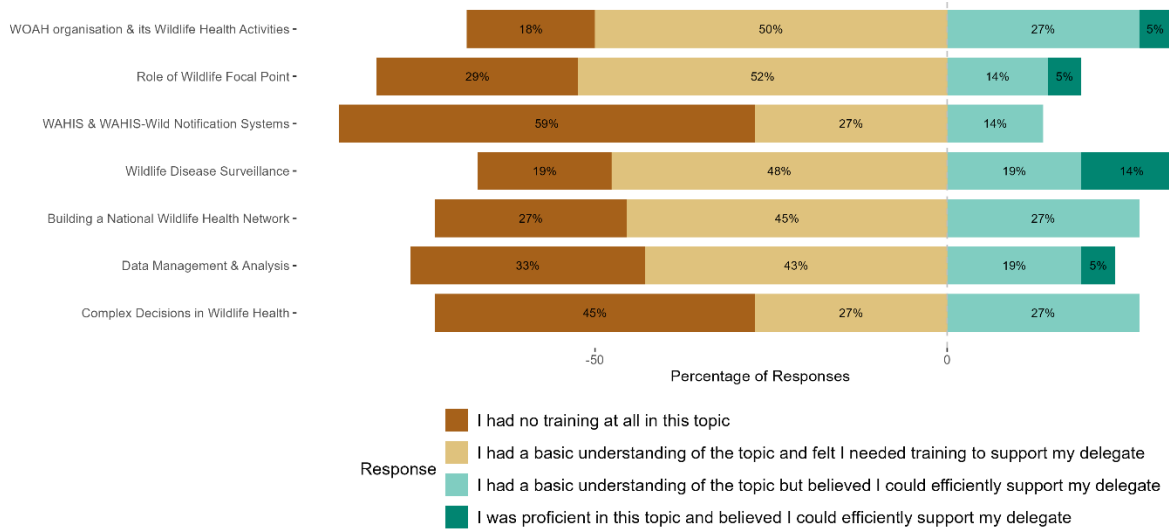
Our special thanks go out to all the National Focal Points for Wildlife who took time out of their busy schedules to answer they online survey. Their collaboration was essential to the success of this evaluation.

This work was completed thanks to the financial support of the Republic of Italy.

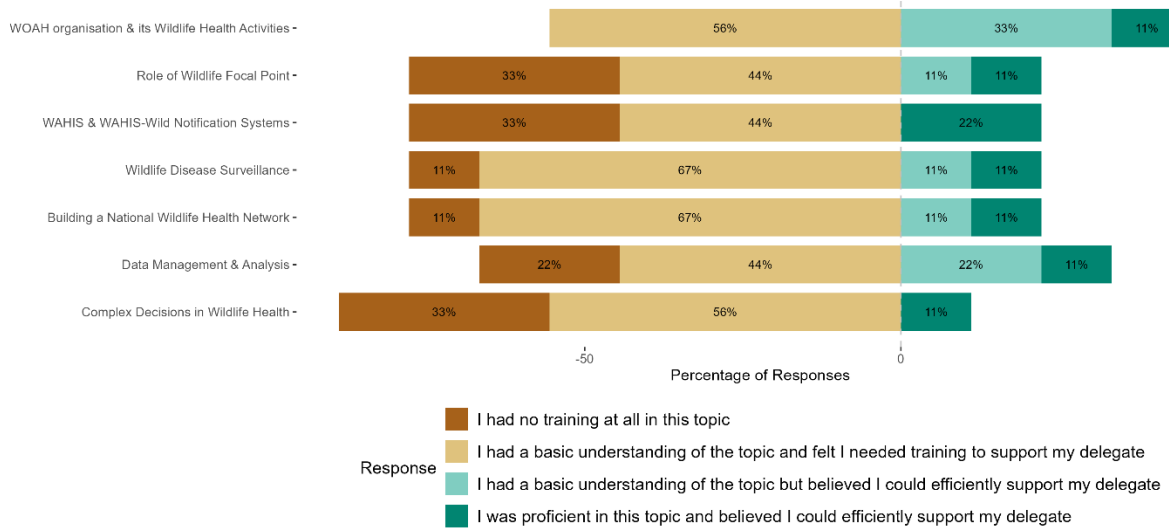
Annex 1: graphs from the survey detailed per region

Perceived proficiency before workshops

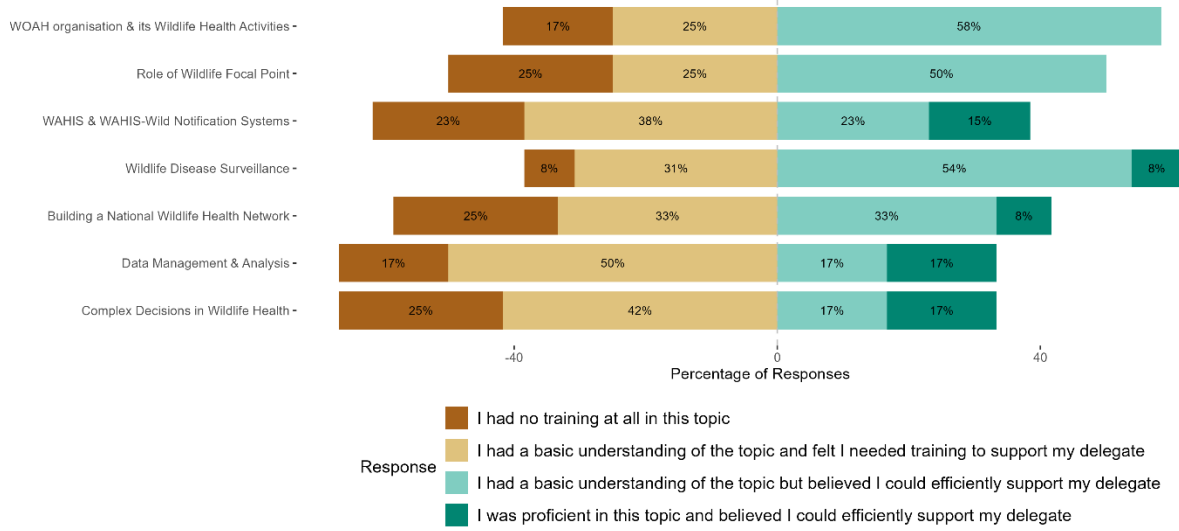
Africa & Middle East: Perceived proficiency before workshops of NFPW who attended >1 workshop



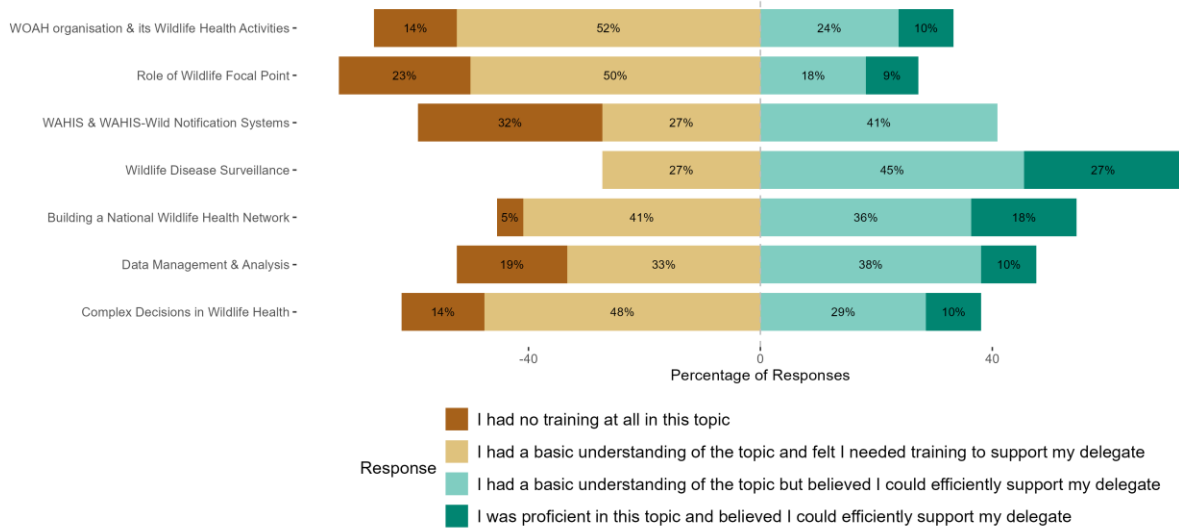
Americas: Perceived proficiency before workshops of NFPW who attended >1 workshop



Asia & the Pacific: Perceived proficiency before workshops of NFPW who attended >1 workshop

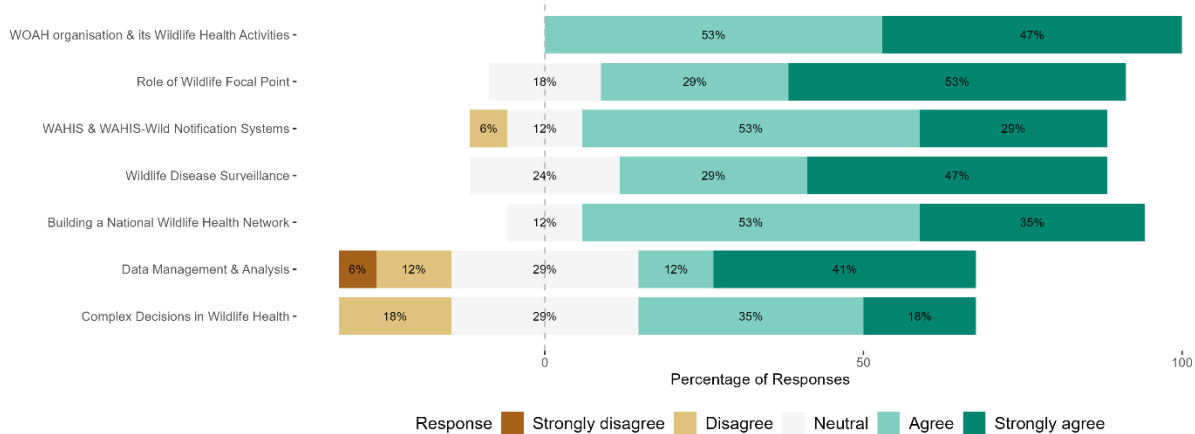


Europe: Perceived proficiency before workshops of NFPW who attended >1 workshop

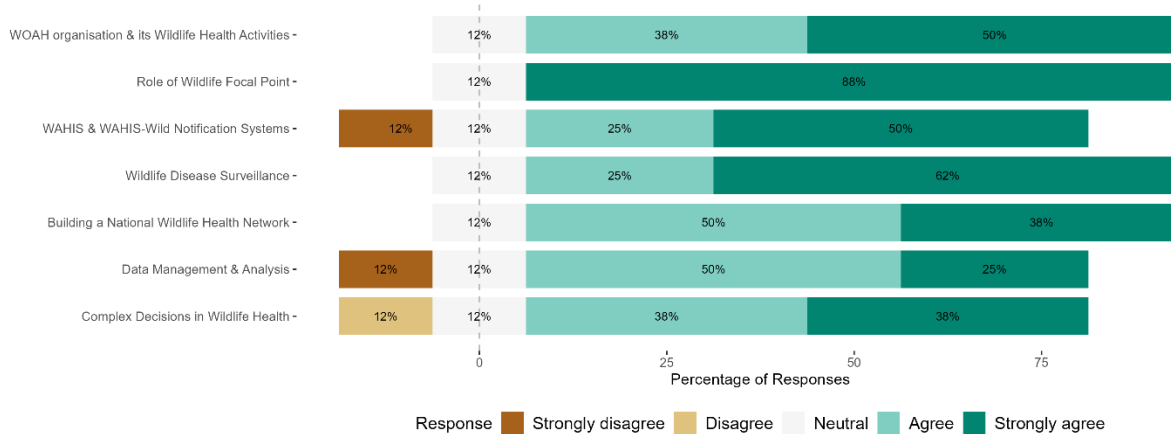


Do respondents feel they gained knowledge thanks to the workshops?

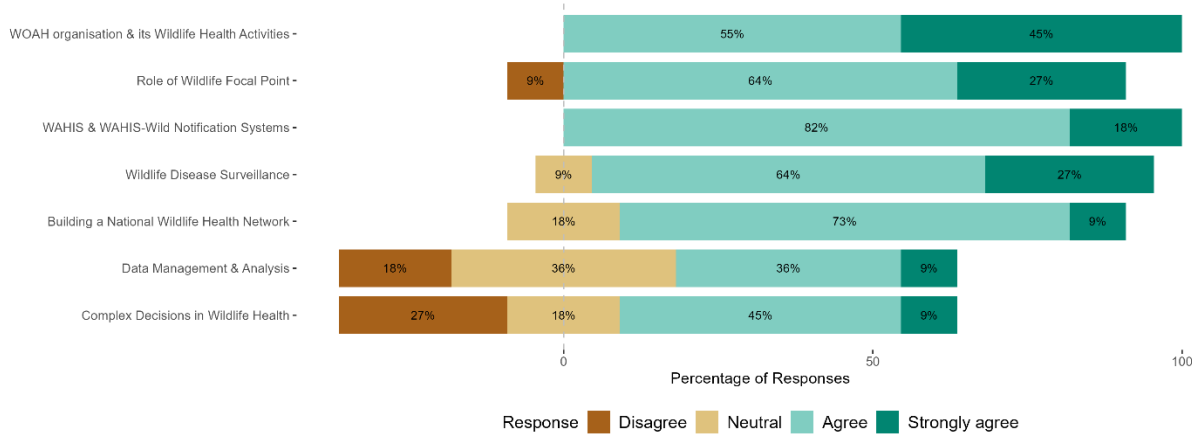
Africa & Middle East: Did respondents feel they gained knowledge in the following topics thanks to the Workshop:



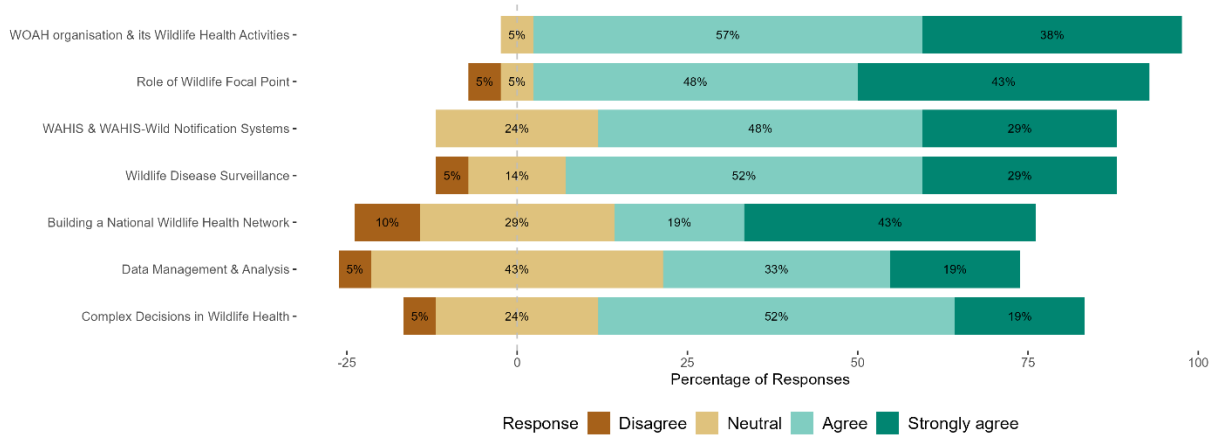
Americas: Did respondents feel they gained knowledge in the following topics thanks to the Workshops?



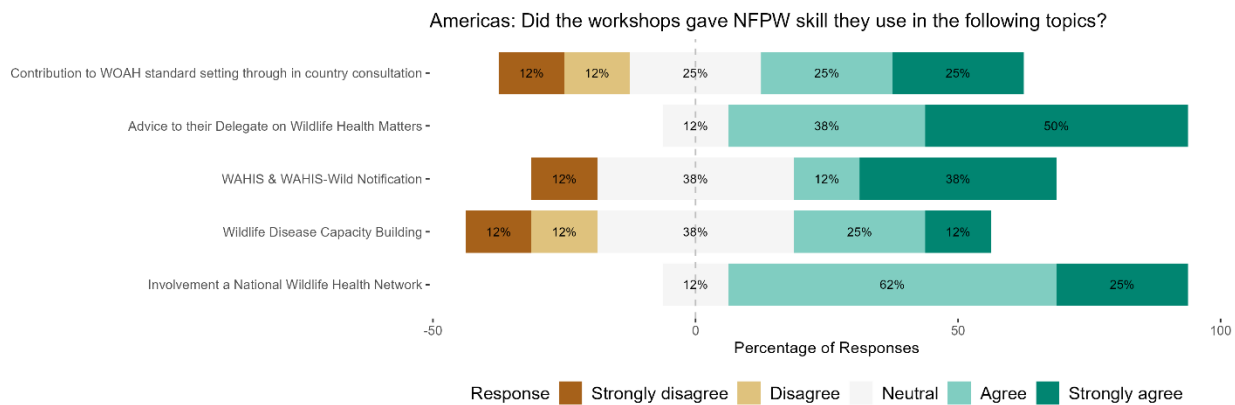
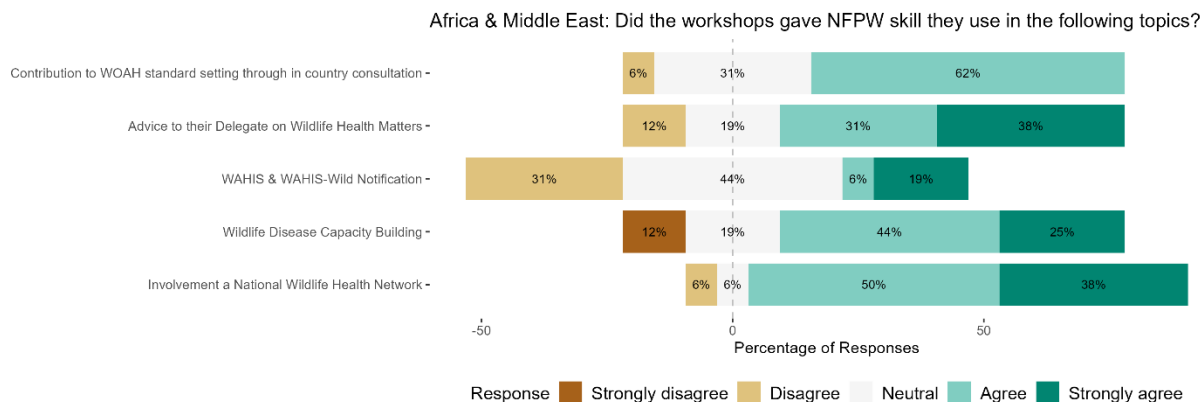
Asia & the Pacific: Did respondents feel they gained knowledge in the following topics thanks to the Workshops?



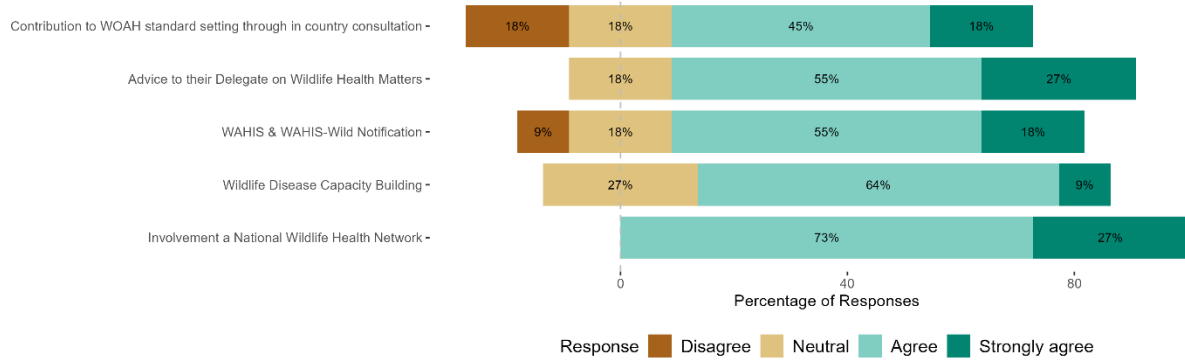
Europe: Did respondents feel they gained knowledge in the following topics thanks to the Workshops?



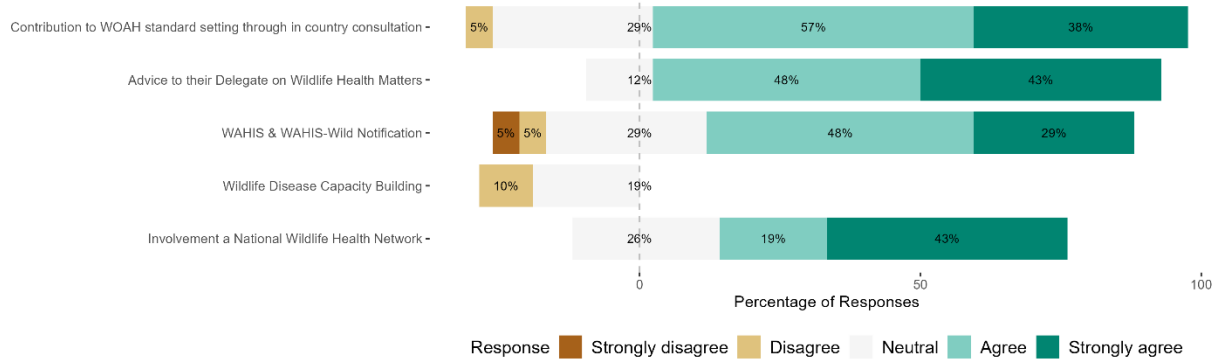
Did the workshops give NFPWs skills which they used in their actions?



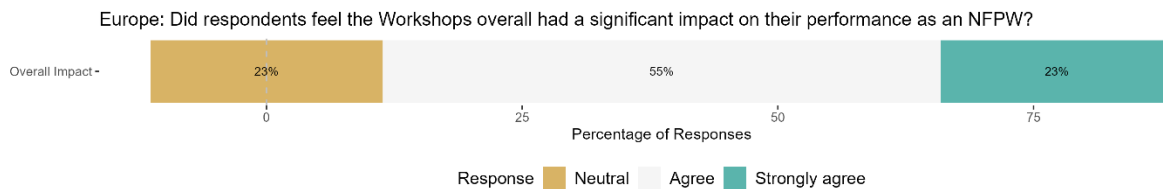
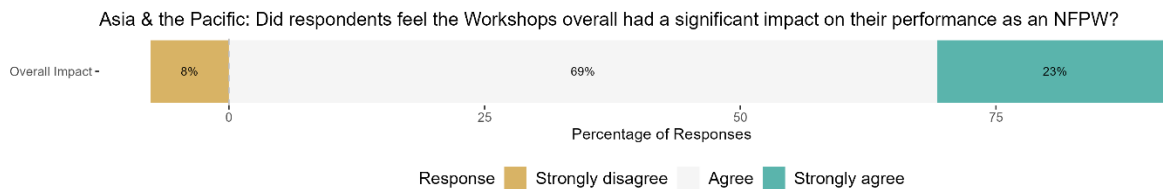
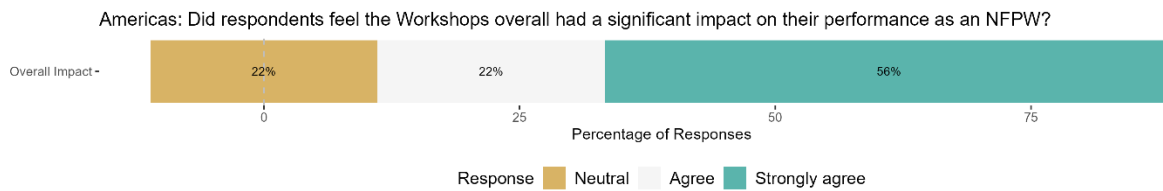
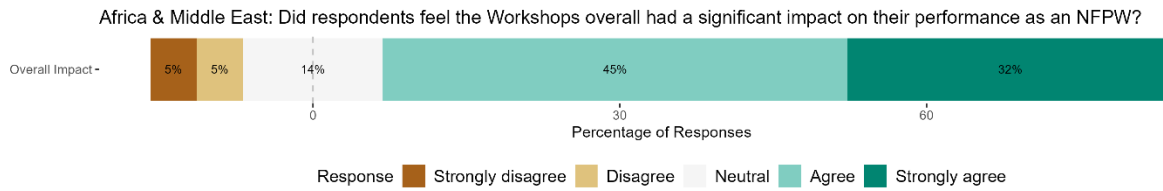
Asia & the Pacific: Did the workshops gave NFPW skill they use in the following topics?



Europe: Did the workshops gave NFPW skill they use in the following topics?



Did respondents feel the workshops overall had a significant impact on their performance as NFPWs?



Annex 2: results detailed per indicator

List of indicators documenting relevance

Indicators for relevance
Set 1: For each topic addressed in the workshops, is this topic relevant to enable the NFPW to fulfil one or more of his/her terms of reference?
<p>Set2</p> <ol style="list-style-type: none"> 1. Were the NFPW surveyed about their perceived needs? 2. Are the surveys about the needs expressed by NFPW available? 3. If so, did the NFPW identify topics which were not addressed in the workshops and would be relevant? Which ones?
<p>Set 3</p> <ol style="list-style-type: none"> 1. For each NFP, what is the proportion of WOAH topics they attended 2. For each NFP, what is the proportion of Wildlife topics they attended 3. Were regional information addressed in each WS 4. How many regional topics were treated
<p>Set 4</p> <ol style="list-style-type: none"> 1. Were the backgrounds of the NFPW evaluated to adapt the content of each workshop to their pre-existing skill set? 2. Are the results of the NFPW background evaluations available? 3. Is the training material of the workshop adapted (appropriate topic and appropriate level of complexity) to the expected skillset of a newly appointed NFPW? 4. Were the motivations of the NFPW evaluated to take their career plan into account in the design of the content of each workshop? 5. Are the results of the NFPW motivations evaluations available? 6. How were the workshops adapted to increase interest in NFPWs with varied motivations? 7. Were the positions of the NFPW and their Delegates evaluated (administrative mapping) to adapt the content of each workshop to the administrative distance/proximity between these positions? 8. Are the results of this administrative mapping available? 9. Was the administrative mapping of NFPWs integrated in topics where it was relevant (Network animation, notification...?) 10. How much time can an NFPW devote to his training as an NFPW?

Set 1

For each topic addressed in the workshops, is this topic relevant to enable the NFPW to fulfil one or more of his/her terms of reference?

A detailed analysis of this question is proposed in the report.

Set 2

1. Were the NFPW surveyed about their perceived needs?

According to the documentation and the interviews of WOA staff, at the end of each workshop, the participants were asked to fill in a feedback survey including questions on needs for future workshops

There was a process of feedback and of identifying NFPW needs as early as the first cycles.

In addition to these post-workshop feedbacks, WOA did also proceed to other surveys, including:

- 2021 In-country Wildlife Disease Surveillance Survey (Report)
- Wildlife Health Questionnaire report
- Wildlife Health Data Management and Information Systems survey WOA 2023

This process of systematic feedback shows in itself a will to propose training material which was adapted to WOA needs but also tailored for the NFPWs.

2. Are the surveys about the needs expressed by NFPW available?

? The surveys which were performed post-workshops are largely unavailable (3/30).

Most of the available survey results concern the last cycle, which is not useful to assess if WOA took into account NFPW feedback.

? It would have been possible to identify feedback in the post-workshop reports, but these reports rarely mention the feedback.

3. If so, did the NFPW identify topics which were not addressed in the workshops and would be relevant? Which ones?

It appears that some feedback was taken into account, including the multiplication of exercises for the use of the WAHIS-Wild interface following feedbacks translated in reports from cycle 1 and 2. The gaps in the data prevents from giving a more precise answer.

Set 3

1. For each NFP, what is the proportion of WOA topics they attended

WOAH topics were recurrent in each workshop, all NFPWs who attend at least one workshop are exposed to training on these topics.

2. For each NFP, what is the proportion of Wildlife topics they attended
3. Were regional information addressed in each WS
4. How many regional topics were treated

Questions 2, 3 and 4 are addressed in detail in the report.

Set 4

1. Were the backgrounds of the NFPW evaluated to adapt the content of each workshop to their pre-existing skill set?

To our knowledge, there was no official attempt to characterize the general background of the appointed NFPW. The pedagogical team (WOAHcentral and regional representations) knows the trainees because they interact with them during the workshops and in other contexts (such as EBO-SURSY or other field projects). Collaborative centres reported that they were aware of the variety of backgrounds of the NFPWs and that they strived to design training content adapted to all profiles.

X There was no attempt to evaluate the background of the NFPWs.

It is understandably difficult to evaluate the background of professionals who are appointed by another authority (national Delegates) and from whom the CV of the appointed professional cannot be obtained. WOAHA has issued non obligatory recommendations on the ideal profile of the NFPW which might yield results in the future by harmonising the profiles. At the moment, the knowledge of NFPWs background and skill sets repose entirely on the WOAHA HQ and regional staff and therefore on individuals and not on documents. This entails that knowledge is lost with staff turnover.

Recommendation: on a voluntary basis, it could be proposed to all active NFPWs and new NFPWs to fill in an online profile, on a platform dedicated to the NFPWs (already proposed in the report, not public), in which they would give non-sensitive detail on their background.

2. If so, are the results of the NFPW background evaluations available?

Not relevant.

3. Is the training material of the workshop adapted (appropriate topic and appropriate level of complexity) to the expected skillset of a newly appointed NFPW?

✓ The training material pertaining to WOAHA topics is generally, in Biodiv^{et}'s expert opinion, adapted. The presentations are easily understandable, the topics do not require a high level of skill or knowledge to be understood, and for more technical aspects such as the use of WAHIS-Wild, the conferences were supported by exercises which were straightforward and well-explained (Biodiv^{et} did not test these exercises in real conditions but accessed the training material). Therefore, Biodiv^{et} considers the WOAHA related topics as appropriately addressed. Moreover, as these topics are repeated from one workshop to another, and in other capacity building activities, an NFPW generally has the opportunity of completing any gap from a previous

workshop. These sessions are also systematically followed by discussion sessions which allows NFPWs to voice issues. In the interviews and survey, some NFPWs expressed a need towards a clarification of case definitions of some diseases in wildlife. They meant to avoid discrepancies in declarations resulting in different trade constraints among countries in similar epidemiological situations. Regarding the **technical training**, there are two limiting factors for this evaluation:

? Biodivet did not access “live” workshops and can only base its evaluation on presentations and manuals without recording most of the time

? There is limited knowledge regarding the pre-existing skill-set of NFPWs which limits the possibility to assess how the training was adapted to the skill-set.

Biodivet’s expert opinion is that in general, the level of complexity of the training is acceptable for fully trained veterinarians who have experience in public health.

The trainings are probably more complicated to follow if the trainee has no pre-existing training in animal health: disease surveillance and management requires basic knowledge in animal health which cannot be caught up on in a few hours of training. Pedagogical teams were aware of the diversity in trainee backgrounds and skills and sought to take this diversity into account.

Questions pertaining to the appropriateness of the training topics were proposed in different formats during the semi-structure interviews (CC’s, WOAHR, NFPWs). When interrogated, most of the interviewees, including the pedagogical teams, felt that most of the trainees had no issues keeping up with the rhythm and complexity of the training. It has to be noted however that this is not a unanimous opinion.

4. Were the motivations of the NFPW evaluated to take their career plan into account in the design of the content of each workshop?

The WOAHR staff have identified that NFPWs have various motivations and expectations for their mandate and the associated workshops. However, there has been no official attempt to explore these varying motivations. NFPWs can be appointed for different reasons, depending on the country. In some countries, the NFPW mandate is coupled to a specific national mandate and is therefore automatically attributed. In other countries, the NFPW mandate is obtained by a very motivated professional for whom Wildlife Health is of particular interest. In other countries, the NFPW mandate can be held by a professional who is much less motivated by the field.

Recommendation: Motivation is a complicated subject to assess. However, it would be useful at least to identify the most motivated NFPWs. WOAHR would then have the opportunity to invest more in these professionals (trainee to trainer programs, inclusion in ad hoc groups, leaders for plenary sessions).

5. If so, are the results of the NFPW motivations evaluations available?

Not relevant.

6. How were the workshops adapted to increase interest in NFPWs with varied motivations?

Throughout the workshops, several steps were taken to enhance or preserve NFPW motivation (information obtained during interviews).

Here are several elements in the workshop format, set up to enhance or preserve NFPW motivation, which were implemented as soon as the first workshops:

- all NFPW attending a workshop receive a Per-Diem (half a WOAHP Per-Diem per day),
- the workshops are set in nice locations, with good quality accommodation and good restauration,
- a field trip is systematically organised,

The feedback surveys which were organized also serve the purpose of maximising NFPW interest by identifying NFPW needs which may be fulfilled all the while supporting the WOAHP mandate. The change in the main technical theme of the workshops across the 6 cycles was likely viewed as a way to provide some amount of novelty to the NFPWs, to stimulate their continuous participation. However, given the turnover, this rationale has only benefited a minority of the current NFPWs, and should be reassessed.

7. Were the positions of the NFPW and their Delegates evaluated (administrative mapping) to adapt the content of each workshop to the administrative distance/proximity between these positions?

No, they were not evaluated, but the administrative position of the active NFPWs is available. WOAHP staff (both central and regional) are aware of the difficulty for NFPWs who are from different ministries than their Delegate and/or focal point for notifications to fulfil certain of their tasks (notification, inform the FP for notification on wildlife related events of listed diseases, access to the notification system...).

8. If so, are the results of this administrative mapping available?

The administrative position of the current NFPW is available and was processed within other indicators.

9. Was the administrative mapping of NFPWs integrated in topics where it was relevant (Network animation, notification...?)

No, there is no evidence that the workshops integrated this issue directly within the conferences and exercises (through concept notes or reports). However, there is training material that focuses on networking, data sharing, communication and systems thinking. All of these topics should contribute to help NFPWs bridge the gap between their Delegate and other stakeholders. Also, other attempts were made to generate discussions around this issue. The icebreaker exercises in the 6th cycle focused on NFPW-Delegate interactions and their administrative distances.

10. How much time can an NFPW devote to his/her training as an NFPW?

This question is discussed in the main report.

List of indicators documenting coherence

Indicators for coherence
Are there other WOAH wildlife-oriented capacity-building activities for NFPW?
Are their topics coherent with the content of the workshops?

1. Are there other WOAH wildlife-oriented capacity-building activities for NFPW?

The NFPW are regularly invited to wildlife-oriented capacity building activities (source: interviews with regional representatives and WOAHHQ). These activities are proposed either by WOAHHQ (e-modules for wildlife disease management and wildlife trade, soon available), WOAHHQ Regional Representations (such as EBO-SURSY) or Collaborative Centres.

These capacity-building activities were identified during the interviews but not in documentation.

? There is no central record of WOAH capacity-building exercises to which NFPW are invited or attend.

As such there is no comprehensive mapping of all the capacity building activities which NFPW are exposed to. And Biodiv^{et} cannot definitely conclude on the coherence of the training programs within WOAHHQ nor with other national or international capacity building activities.

Biodiv^{et} did not identify any coherence issues arising from the analysis of the documents made available.

Recommendation: for future evaluation of the coherence of the programs, centralized information and improved traceability of the capacity-building activities would be welcome. Some newsletters sent to NFPWs exist (in the Asia and Pacific region for example), which yield information on capacity building activities adapted to NFPWs. Such newsletters are useful not only for the NFPWs but also for other stakeholders to get a clear picture of a NFPW's training environment.

List of indicators documenting effectiveness

Indicators for effectiveness
<p>Set 1:</p> <ol style="list-style-type: none"> 1. For which workshops and which topics were there pre-training assessments of skills? 2. For which workshops and which topics were there pre-training assessments of knowledge? 3. Are these pre-training assessments available? 4. For which workshops and which topics were there post-training assessments of skills? 5. Are these post-training assessments available? 6. If data is available, did the workshops result in an improvement of skills (for each workshop/topic)
<p>Set 2:</p> <ol style="list-style-type: none"> 1. For workshops and topics where no pre-post-training assessment was available, was there self-assessment of skills? 2. For workshops and topics where no pre-post-training assessment was available, was there self-assessment of knowledge? 3. Are these self-assessments available? 4. If data is available, did the workshops result in a perceived improvement of skills (for each workshop/topic)
<p>Set 3: Do NFPW feel the workshops helped them gain knowledge or skills that they may use as NFPW?</p>

Set 1

1. For which workshops and which topics were there pre-training assessments of skills?

No pre-training assessments of skills were performed.

2. For which workshops and which topics were there pre-training assessments of knowledge?

Quizzes were proposed in cycles 5 and 6 of the workshop program.

3. Are these pre-training assessments available?

Quiz results are available for 3 workshops.

4. For which workshops and which topics were there post-training assessments of skills?

Quizzes were proposed in cycles 5 and 6 of the workshop program.

At least one pre and post-training quiz was proposed in cycle 5 for French Speaking Africa. Biodiv^{et} did not identify another workshop in this cycle where a quiz was scheduled in the program (question to be addressed with WOAHA staff). The quiz was proposed for WOAHA related topics, specifically the roles and responsibilities of NFPW and the notification system.

Quizzes were proposed in cycles 6 for at least two workshops: Asia and the Pacific and Europe. Biodiv^{et} has yet to identify when these quizzes were proposed in the workshop (before or after the training)

5. Are these pre-training assessments available?

? Quiz results are available only for the 3 afore-mentioned workshops in cycle 6.

6. If data is available, did the workshops result in an improvement of skills (for each workshop/topic)

? Data is insufficient to evaluate progress.

Recommendation: systematically propose quizzes in future workshops, focusing on the core competencies of NFPW (ToR, WOAHA topics) as this is a useful method for evaluating progress throughout the workshops. Biodiv^{et} would not recommend assessing the skills of the NFPWs on other topics: it would not be well perceived to assess the levels of trainees who are not students nor employees.

Set 2

1. For workshops and topics where no pre-post-training assessment was available, was there self-assessment of skills?

No

2. For workshops and topics where no pre-post-training assessment was available, was there self-assessment of knowledge?

No

3. If so, are these self-assessments available?

Not relevant

4. If data is available, did the workshops result in a perceived improvement of skills (for each workshop/topic)

Not relevant

Set 3

Do NFPW feel the workshops helped them gain knowledge or skills that they may use as NFPW?

The survey results provide answers to this indicator and are analysed in detail in the report.

List of indicators documenting efficiency

Indicators for effectiveness
Temporal and geographical trends of teaching costs per trained NFPW per workshop (including the comparison of online/physical gatherings)
Time and resources mobilized by CC's and WOAHA staff implicated in the preparation of training materials
Was training material from precedent workshops or other training events adapted and reused for the workshops?

Temporal and geographical trends of teaching costs per trained NFPW per workshop (including the comparison of online/physical gatherings).

Trends in costs could not be obtained because only 5 budget sheets were made available. The cost per invited attendee was calculated for each of these 5 budgets, taking into account all flights, accommodation, material (printed programs and other materials) and per-diem, then adjusted for inflation (World Inflation rate was used). WOAHA personnel, CC or other resources were not taken into account.

“Invited attendees” corresponded to people who attended the workshops and who were funded by WOAHA. In many instances, these attendees were not only NFPWs. In the Americas cycle 6 workshop for instance, there were 28 funded NFPWs and 28 funded Delegates.

Cost per attendee (adjusted for inflation)

- Africa cycle 4: 3293 euros
- Africa cycle 5: 3455 euros
- Africa cycle 6: 3222 euros
- Americas cycle 6: 2252 euros (participation of 28 funded Delegates)
- Asia and the Pacific cycle 6: 2930 euros

Such costs remain low for highly specialized training: WOAHA does not bear the cost of the preparation of the training material (CCs) and the preparation time spent by WOAHA staff is not accounted for.

Time and resources mobilized by CC's and WOAHA staff implicated in the preparation of training materials.

According to the collaborating centres in charge of each of the 6 workshop manuals, the writing and editing of the training manual and of the associated material requires around two full months (generally distributed over a 6-12 month period). This time was entirely supported by the professional's institutions as part of the mandate as collaborating centres.

Was training material from precedent workshops or other training events adapted and reused for the workshops?

The presentations for the WOAHA related topics were regularly reused (updated) from one workshop to the next. For the other topics, instances of training material being reused are anecdotal (source: interviews).

List of indicators documenting impact

Indicators for impact
<p>Set 1:</p> <ol style="list-style-type: none"> 1. Does WOAHA have any knowledge of wildlife experts networks set up by NFPWs between 2010 and 2023? 2. Is there a record of the presence or absence of such a network for each country/territory and year? 3. Is there an increase in the rate of the NFPW involved in such networks following workshops?
<p>Set 2:</p> <ol style="list-style-type: none"> 1. For each NFPW, rate of response before and after workshops relating to the reports sent by WOAHA for comment (List NFPW/year/workshop) 2. For contributions which were actually made by the NFPWs as responses to reports sent by WOAHA for comment, how many were considered as useful contributions
<p>Set 3: For each NFPW, number of notifications in WAHIS before and after workshops</p>
<p>Set 4:</p> <ol style="list-style-type: none"> 1. Rate of presence of NFPW in workshops by training session 2. Number of presentations by NFPW in workshops by year 3. Do the presentations made by NFPWs present an action undertaken in the NFPWs country, to which the NFPW took active part within his mandate as a NFPW?
<p>Set 5:</p> <ol style="list-style-type: none"> 1. Number of yearly exchanges between Delegates (more than 1 yr. of activity) and their NFPW. 2. Nature of exchanges (5 points) between Delegates and NFPW
<p>Set 6: Do NFPW believe the skills /information learned during the workshops actually helped them fulfil their role?</p>
<p>Set 7:</p> <ol style="list-style-type: none"> 1. Is there any knowledge of NFPWs who have taken an active part (created, animated, organized...) in training events or capacity-building activities in their own country, on a topic which they had been taught during a workshop? 2. Has workshop training material been used in training events involving NFPWs? 3. Is there an increase in the rate of the NFPW involved in such events following workshops

Set 1

1. Does WOAHA have any knowledge of wildlife experts' networks set up by NFPWs between 2010 and 2023?

? There is no centralized or regional record of the implication of NFPWs in national or regional networks.

2. Is there a record of the presence or absence of such a network for each country/territory and year?

There is no record.

3. Is there an increase in the rate of the NFPW involved in such networks following workshops

It is not possible to evaluate this point through a valid quantitative model.

Biodiv^{et} has identified through the interviews a certain number of networks including the regional/sub-regional networks which were set up on the initiative of WOAHA (examples are given in the report).

Several presentations by NFPWs present the works of national networks or investigations which they were involved in. The implication of NFPWs in presentations during the workshops are in themselves an indicator of NFPW activity (discussed in the report) which could be monitored in the future.

Set 2

1. For each NFPW, rate of response before and after workshops relating to the reports sent by WOAHA for comment (List NFPW/year/workshop)

Biodiv^{et} received the list of documents which were sent to NFPW for comments/consultation. One contribution from a NFPW to a document was found in the last two years.

2. For contributions which were actually made by the NFPWs as responses to reports sent by WOAHA for comment, how many were considered as useful contributions

Not relevant at this point: only one contribution was made.

? Several plenary sessions were organized throughout the program during the workshops. Unfortunately, there is little reporting of what these sessions yielded in the mission reports (most are missing),

Recommendation: soliciting the NFPWs through emailing does not seem to yield results for collecting feedback on official WOAHA strategies and documents. It might be relevant to replicate such sessions to solicit NFPW opinions on pre-set topics of interest to WOAHA.

These solicitations could keep motivation high for the senior NFPWs who would have the opportunity to share their experience and provide useful and more direct feed to WOAHA HQ and

RR, with the obvious condition that proceedings from these sessions appear in the reports with follow-up actions.

Set 3

For each NFPW, number of notifications in WAHIS before and after workshops

Results of quantitative analyses of this information are provided in the report.

Set 4

For each NFPW, amount of notifications in WAHIS-Wild before and after workshops

This indicator was assessed through a quantitative model, of which the results are detailed in the report.

Set 5

1. Rate of presence of NFPW in workshops by training session

Results were only partially available which did not enable to examine trends through time of NFPW attendance. The information collected during the interviews suggests that attendance is relatively stable, with the same countries not attending from one cycle to another.

2. Number of presentations by NFPW in workshops by year

The results for this indicator are presented and discussed in the report.

3. Do the presentations made by NFPWs present an action undertaken in the NFPWs country, to which the NFPW took active part within his/her mandate as a NFPW?

Results are discussed in the main report.

Set 6

1. Number of yearly exchanges between Delegates (more than 1 yr. of activity) and their NFPW.

2. Nature of exchanges (5 points) between Delegates and NFPW

These questions have been addressed through 3 interviews with Delegates and their NFPWs as a descriptive element and are integrated in the report.

Set 7

Do NFPW believe the skills/information learned during the workshops actually helped them fulfil their role?

This indicator is addressed through the survey, the results of which are detailed in the report.

Set 8

1. **Is there any knowledge of NFPWs who have taken an active part (created, animated, organized...) in training events or capacity-building activities in their own country, on a topic which they had been taught during a workshop?**

There is no centralized record of such activities. There are a few examples of such actions which were retrieved through interviews but these remain anecdotal (some are given in the report).

2. **Has workshop training material been used in training events involving NFPWs?**

Some of the training material, especially the training manuals, is referred to as useful material for training (source: interviews). There is no evidence of the material being reused in other settings.

3. **Is there an increase in the rate of the NFPW involved in such events following workshops**

Not measurable.

There is little evidence of NFPWs becoming stewards of wildlife health after being trained through WOAHS workshops. This is not central to their Terms of Reference but was an item of the Wildlife Health Framework. This element is very difficult to assess as any measurable indicator would require extensive research and interviewing.

Recommendation: the realistic objective here would be to ensure that any NFPW who want to take part or organize capacity building activities using WOAHS knowledge and material may easily access material to do so (see sustainability) and have the reflex to coordinate with WOAHS regional representations or HQ.

List of indicators documenting sustainability

Indicators for sustainability
1. Are the training manuals available to the public and easily accessed?
2. For each training manual, what are the yearly trends in clicks and downloads?
3. Are the training manuals reused in non-Workshop WOAHA training events?
4. Are the power-point presentations publicly available and easily accessed?
5. Are the power-point presentations self-explanatory?
6. Are the power-point presentations reused in non-Workshop WOAHA training events?
7. Are the exercises available, easily accessed and self-sustained?
8. Are the exercises reused in non-workshop WOAHA training events?
9. Are the video sessions publicly available, easily accessed and self-explanatory?
10. Are the video sessions reused in non-workshop WOAHA training events?

1. Are the training manuals available to the public and easily accessed?

Training manuals are available and easily accessed (WOAH website).

2. For each training manual, what are the yearly trends in clicks and downloads?

The data for clicks and download could only be obtained for 2023, 2024 and 2025 (partial) and cannot be used to analyse the long term trend between 2009 (start of the workshops) and today. Each manual was “clicked on” for download between 10 and 39 times per year in 2023 and 2024.

X The low number of downloads suggests that there is either a lack of interest in the manuals, or an inefficient search engine indexation of their content.

3. Are the training manuals reused in non-Workshop WOAHA training events?

Question asked to WOAHA HQ and regional staff and CCs. At this time, although they are regularly referred to by WOAHA central and regional staff, reuse seems anecdotal in WOAHA. The authors of the manuals keep using their material in other training events, including North-American veterinary institutes.

The question of the future of the training manuals is discussed in detail in the report.

4. Are the power-point presentations publicly available and easily accessible?

Some presentations are available on the WOAHP regional websites, though the amount of available material varies. Some workshops are also available as recorded sessions on YouTube[®].

5. Are the power-point presentations self-explanatory?

Most of the power-point presentations are not self-explanatory, with the notable exception of all recorded sessions (Intermediate cycle and Cycle 6 mainly). Also, many of these presentations are outdated today.

6. Are the power-point presentations reused in non-Workshop WOAHP training events?

Question asked to WOAHP HQ and regional staff. There is no evidence of reuse of the presentations.

7. Are the exercises available, easily accessed and self-sustained?

The exercises have been listed.

This question is not relevant for WOAHP specific exercises, especially for WAHIS-Wild related exercises which concern only the NFPW and are not useful for other publics. Also as the notification system will change in the future, the sustainability of these exercises is not an issue for the NFPWs either.

For the other topics, **most of the exercises seem still relevant and could be reused in future workshops or other activities (pending the availability of all the training material).**

Recommendations: Many requests from the survey ask for hands on activities, which is what these exercises propose. WOAHP may choose to provide new and more modern exercises but the existing ones can also usefully be reused or updated with new tools. The Alert board game should be reused.

8. Are the video sessions publicly available, easily accessed and self-explanatory?

The sessions from the last cycles 5 and 6 were filmed because they were hybrid meetings. The films are still accessible on YouTube[®] (regional channels). For the sessions recorded and available on YouTube[®], the number of views remains low which suggests that they are not used as resources after the workshops (40, 62 and 73 views for each recording of the Africa 6th cycle; available [here](#)). Keeping these recordings remains useful for those NFPWs who might want to replay certain presentations as a recall but is not a central element of the evaluation.

9. Are the video sessions reused in non-workshop WOAHP training events?

Question asked to WOAHP HQ and regional staff. There is no evidence of reuse of the video sessions.

Annex 2: workshop mapping

Arusha, Cycle 1

The Arusha cycle 1 workshop lasted 4 days and proposed a total of 890 minutes of training of which Figure 7):

- 550 minutes of Conferences (see mapping)
- 340 minutes of exercises on Wildlife Disease Surveillance, based on the training manual.

These exercises are still relevant today and the material for completing them is in the training manual. 90 minutes were dedicated to regional topics, of which 30 minutes were presented by the Focal Point for Wildlife from Tanzania (Dr Julius Keyyu).

Time allocated to different topics in a cycle 1 workshop (Africa - English)



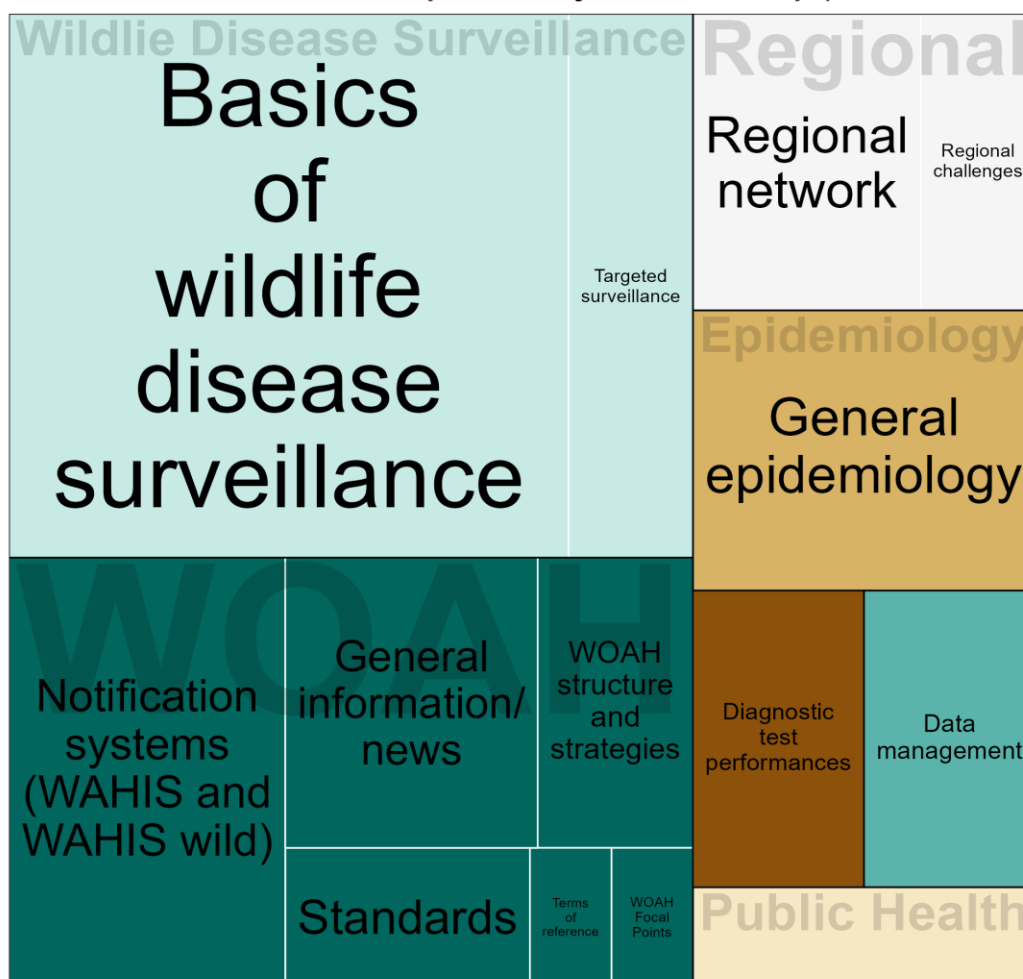
Colombo, Cycle 2

The Colombo cycle 2 workshop lasted 4 days and proposed 885 minutes of training in total (Figure 8), of which:

- 495 minutes of conferences (see mapping)
- 390 minutes of exercises: 315 minutes on Wildlife Disease Surveillance (these exercises are still relevant today and the material for completing them is in the training manual) and 75 minutes on the use of WOAH notification systems (exercises are not relevant today because WAHIS-Wild has changed).

120 minutes were dedicated to regional topics.

Time allocated to different topics in a cycle 2 workshop (Asia & Pacific)



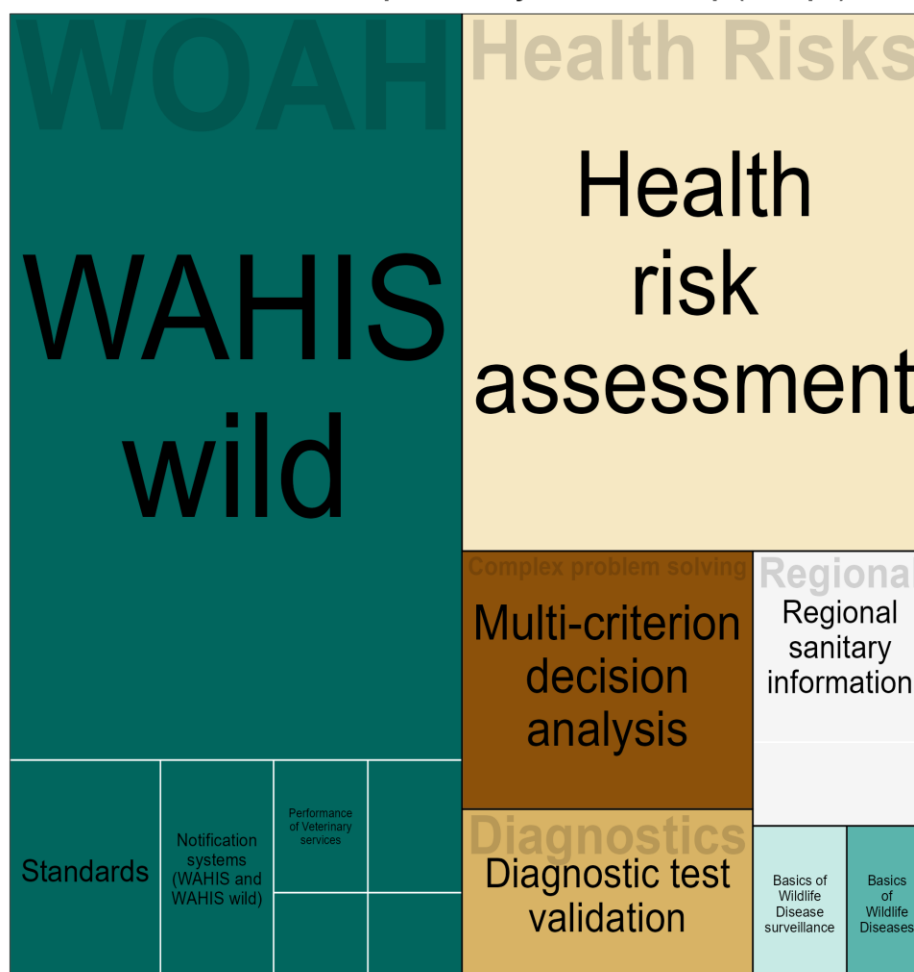
Saint-Petersburg, Cycle 3

The Saint-Petersburg cycle 3 workshop lasted 3 days, and proposed a total of 1065 minutes of training (Figure 9)(this is the maximum of training time Biodiv^{et} identified, there was no field trip):

- 495 minutes of conferences (see mapping)
- 570 minutes of exercises
 - 120 minutes on Health Risk assessments,
 - 60 minutes on Multi-Criterion Decision Analysis
 - 390 minutes on WAHIS-Wild (exercises are not relevant today because WAHIS-Wild has changed)

40 minutes were dedicated to regional topics (no implication of NFPWs).

Time allocated to different topics in a cycle 3 workshop (Europe)



Bali, Cycle 4

The Bali cycle 4 workshop lasted 3 days and proposed a total of 850 minutes of training (Figure 10), of which:

- 500 minutes of conferences
- 350 minutes of exercises
 - 110 minutes on Outbreak Investigations,
 - 60 minutes on diagnostic test performances,
 - 60 minutes on developing a surveillance plan,
 - 120 minutes on WAHIS-Wild.

50 minutes were dedicated to regional topics, with two presentations made by the Focal Points for Wildlife from Mongolia and Indonesia

Time allocated to different topics in a cycle 4 workshop (Asia & Pacific)



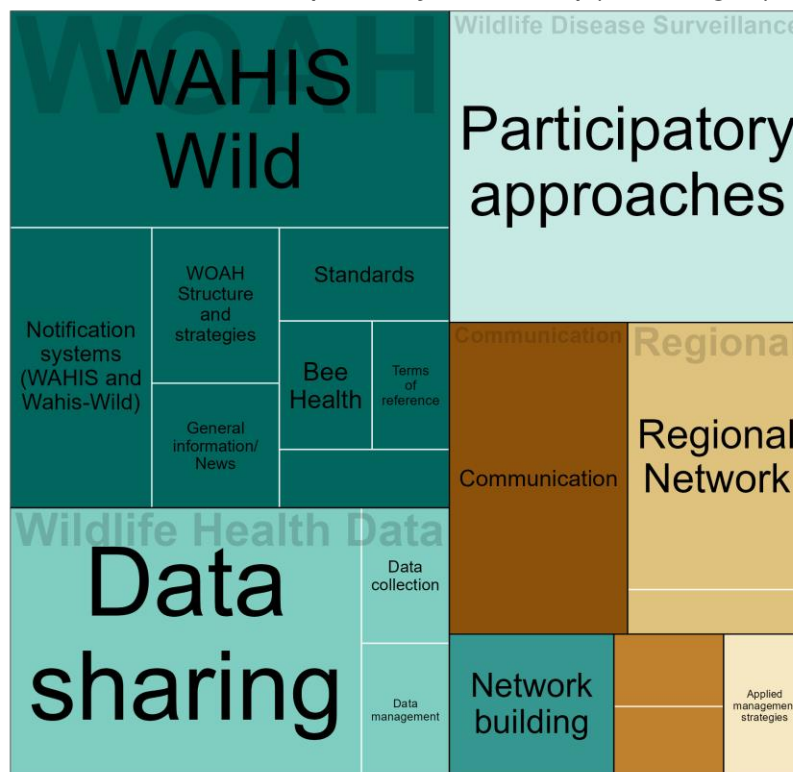
Kasane, Cycle 5

The Kasane cycle 5 workshop lasted 3 days and proposed 785 minutes of training in total (Figure 11), of which:

- 430 minutes of conferences
- 355 minutes of exercises:
 - 45 minutes on Data Sharing,
 - 70 minutes on Communication,
 - 120 minutes on Participatory approaches in wildlife disease surveillance systems,
 - 120 minutes on WAHIS-Wild.

60 minutes were dedicated to regional presentations by 4 Focal Points for Wildlife (Botswana, Kenya, Ghana, and Egypt).

Time allocated to different topics in a cycle 5 workshop (Africa - English)



Asunción, Cycle 6

The Asuncion cycle 6 workshop lasted 3 days, and proposed a total of 715 minutes of training (Figure 12), of which:

- 535 minutes of conferences
- 180 minutes of exercises:
 - 90 minutes on Systems Thinking,
 - 90 minutes on Health Risk management

There was no training on WAHIS-Wild because the notification system had been suspended at the time.

105 minutes were dedicated to the presentation of regional topics, of which 45 minutes were presentations made by Focal Points for Wildlife (Argentina, Mexico and Costa Rica).

Time allocated to different topics in a cycle 6 workshop (Americas)



Annex 3: terms of Reference for the NFPWs

The terms of reference (ToR) established for the NFPWs are the following:

- to establish a network of wildlife experts within his country or to communicate with the existing network;
- to establish and maintain a dialogue with the Competent Authority for wildlife in his country, and to facilitate cooperation and communication among several authorities where responsibility is shared;
- under the authority of the OIE Delegate of his country, to support the optimal collection and submission of wildlife disease information to the OIE through WAHIS (immediate notifications and follow-up reports, six-monthly reports, and annual questionnaires) to enable the OIE Delegate to more efficiently manage his OIE Member obligations;
- to act as a contact point with the OIE Animal Health Information Department and the Scientific and Technical Department on matters related to information on wildlife including wildlife diseases;
- to receive from the OIE Headquarters copies of the reports of the Working Group on Wildlife Diseases, selected reports of the Scientific Commission for Animal Diseases and other relevant reports, should they address discussion points on wildlife or the livestock-wildlife interface and conduct the in-country consultation process with recognised wildlife and animal health experts on draft texts of standards proposed in those reports as well as draft standards proposed by the Terrestrial Animal Health Standards Commission when dealing with wildlife diseases; and
- To prepare comments for the Delegate on each of the relevant meeting reports reflecting the scientific view and position of the individual OIE Member and/or the region including comments on the proposals for new OIE standards and guidelines related to wildlife.

These ToR have not been changed during the workshops program.

Annex 4: list of questions from the surveys sent to the active NFPWs

Reminder: these questions were sent via the Survey Monkey platform as a joint survey between Biodiv^{et} (evaluation of the Workshops program for NFPWs) and Firetail (evaluating the Wildlife Health Framework). The questions listed in this annex are only those pertaining to the evaluation of the workshops program.

1. Which country do you represent as the NFPW?

[Open question]

2. Which sector best describes your professional affiliation?

- Ministry for the Environment (or equivalent government agency)
- Ministry for Agriculture hosting the Veterinary Services (or equivalent government agency)
- Other Ministry hosting the Veterinary Services (or equivalent government agency)
- Non-Governmental Organisation (NGO)
- Academia or research institution
- Other (please specify)

3. How long have you been a WOAHP NFPW?

- 0-2 years
- 3-4 years
- 5-10 years
- +10 years

4. How many WOAHP workshops on wildlife did you attend?

- I did not attend any workshop
- 1
- 2
- 3
- 4
- 5
- 6

5. Which of these options best describes your knowledge and understanding of the following topics regarding the WOAH Wildlife Workshops programme?

At the time of my nomination as NFPW (before I took part in any of the workshops):

	I was proficient in this topic and believed I could efficiently support my delegate	I had a basic understanding of the topic but believed I could efficiently support my delegate	I had a basic understanding of the topic and felt I needed training to support my delegate	I had no training at all in this topic
The WOAH organisation and its Wildlife Health Activities				
The role of the Wildlife Focal Point in the context of the WOAH standard setting process				
The WAHIS/WAHIS-Wild notification system				
Wildlife Disease Surveillance				
Building a National Wildlife Health Network				
Data management and analysis				
Complex decisions with respect to wildlife health				

6. To what extent do you agree or disagree with the following statements about the WOAH Wildlife Workshops programme?

After the workshops, I feel I gained knowledge or skills in:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	I did not participate in any Workshops
The WOAH organisation and it's Wildlife Health Activities						
The role of the Wildlife Focal Point in the context of the WOAH standard setting process						
The WAHIS/WAHIS-Wild notification system						
Wildlife Disease Surveillance						
Building a National Wildlife Health Network						
Data management and analysis						
Complex decisions with respect to wildlife health						

7. To what extent do you agree or disagree with the following statements about the WOAH Wildlife Workshops programme?

The WOAH workshops program gave me skills and knowledge which I used when:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	I did not participate in any Workshops
I got involved in a wildlife health network in my country						
I reported disease events in wildlife through WAHIS and/or WAHIS-wild						
I contributed to WOAH standard setting process through in-country consultation on WOAH documentation						
I advised my delegate on wildlife health related matters						
I organized capacity building activities related to wildlife health in my country or region						

8. Overall, do you believe the skills /information learned during the workshops actually has had a significant impact on your performance as an NFPW to support to your Delegate?

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
- I did not participate in any WS

9. Do you have any other recommendations for the next cycle of the workshops' program?

[Open-ended response]

Annex 5: pre-set of questions for the 4 different semi-structured interviews

The interviews were built as semi-structured interviews: a list of pre-set questions was set up for each type of interview, which would frame the interview. This approach ensured that the interviews would be comprehensive, all the while allowing the interviewee to bring additional information during the conversations.

WOAH Headquarter staff

General questions

What is the path of the NFPW after his appointment? Does the NFPW receive some sort of “welcome package”? Are any e-learning modules suggested to him/her?

Relevance

The overall objective of the workshops' program for NFPWs is capacity building for the NFPWs to help them fulfil their mandate. Therefore, the primary objective of the program is to enable the NFPWs to fulfil their ToRs. Which other objectives were pursued?

Which elements of the WHF pertain to NFPW training and how was the WHF integrated in the last cycle?

Were the NFPW surveyed about their perceived needs?

Are surveys about the needs expressed by NFPW available?

If so, are the documents available?

If not so, do you recall whether the perceived needs of the NFPW were taken into account in the design of any workshops?

In which cycles were NFPWs perceived needs integrated?

Which topics were specifically addressed?

Aside from needs expressed by NFPWS, did WOAHS identify other needs for NFPWs or for WOAHS itself?

Backgrounds and skills

Were the backgrounds of the NFPW evaluated to adapt the content of each workshop to their pre-existing skill set?

Are the results of the NFPW background evaluations available?

If so are the documents available?

If not so, did you formally or informally take the type of backgrounds of NFPWs into account in the design of the workshops?

In the 6th cycle, pre-workshop webinars were proposed. Why were these webinars proposed?

Professional motivation

Were the motivations of the NFPW evaluated to take their career plan into account in the design of the content of each workshop?

If so, are the results of the NFPW motivations evaluations available?

If not so, did you formally or informally take the type of professional motivation of NFPWs into account in the design of the workshops?

Has WOAHA implemented Per-diem for participation in workshops in order to incentivise focal point participation?

NFPW presentations: did WOAHA encourage presentations during the workshops by NFPWs or was it NFPW initiative? If this was a choice of WOAHA, what were the reasons to encourage focal point participation?

Administrative mapping

Were the positions of the NFPW and their delegates (administrative mapping) evaluated to adapt the content of each workshop to the administrative distance/proximity between these positions?

If so, are the results of this administrative mapping available?

If not so, did you formally or informally take the administrative mapping of NFPWs vs delegates into account in the design of the workshops?

For which terms of the TOR do you believe that the administrative position of the NFPW would have an impact?

Coherence

Are there other WOAHA wildlife-oriented events for NFPW?

If so are the documents available?

E-modules catalogue: do the NFPWs have access to the e-modules and if so when and how does it work?

NFPW homepage: do NFPWs have a dedicated webpage where they can find all the training material, guidelines, technical cards, studies....relevant to their work?

Effectiveness

For which workshops and which topics were there pre-training assessments of skills?

Are these pre-training assessments available?

If not so, were the pre-training skills of participants measured in any way?

For which workshops and which topics were there post-training assessments of skills?

Are these post-training assessments available?

If not so, were the post-training skills of participants measured in any way?

If no document is available, did you observe improvement of NFPW skills during the workshops?

For workshops and topics where no pre-post-training assessment was available, was there self-assessment of skills?

Are these self-assessments available?

If no document is available, did you receive formal or informal feedback from the NFPWs during or after the workshops?

Efficiency

Do you recall how much time and resources were mobilized by CC's and WOAH staff implicated in the preparation of training materials for cycles 5 and 6 (former cycles excluded because too old)?

Was training material from precedent workshops or other training events adapted and reused for the workshops (workshops 2 to 6)?

If so, do you remember which material or which topic?

Impact

Do you have any knowledge of wildlife experts' networks setup by NFPWs between 2010 and 2023?

Is there a record of the presence or absence of such a network for each country/territory and year?

If not, are you able to know whether there was an increase in the number of NFPW involved in such networks following workshops?

Subjectively, are you under the impression that the number or quality of notifications differs before and after workshops?

How difficult/easy was it to have the NFPW attend the workshops?

Do you have any knowledge of NFPWs who have taken part in training events in their own country, on a topic which they had been taught during a workshop?

Do you know if workshop training material has been used in training events involving NFPWs?

Do you know if there was an increase in the rate of the NFPW involved in such events following workshops?

Sustainability

Are the training manuals reused in non-Workshop WOAH training events?

Are the power-point presentations reused in non-Workshop WOAH training events?

Are the exercises reused in non-workshop WOAH training events?

Are the video sessions reused in non-workshop WOAH training events?

WOAH Regional Representations

General questions

When a WFP is appointed in your region, does he receive any info/documentation from the regional representation?

Which workshops did you personally take an active part in organizing/animating?

What were your roles in the different workshops you took part in?

Aside from the workshops, what are your interactions with WFP?

Training objectives

In the workshop that you witnessed, what part did the regional representation take in the setup of the program of a workshop?

The primary objective of the program is to enable the NFPWs to fulfil their ToRs. Which other objectives were pursued?

In your region, which particular challenges do WFP face which you feel should be taken into account specifically for the next workshop?

In your opinion, what are the priority topics related to WOAHP that WFP should be appropriately informed on, from a regional perspective?

In your opinion, what are the 3 priority skills that WFP should possess to fulfil their mandate efficiently - not related to WOAHP or WOAHP tools (WAHIS Wild for instance)?

Relevance

In your region, in the workshops which you took an active part in, did you identify regional challenges for the WFP which you took into account when setting up the workshops?

If you did identify challenges, how did you identify them (Discussion between members of the RR, surveys to WFP, other)?

At the end of the workshops, surveys were systematically made to get feedback from the WFPs and identify themes for the next workshops. Can you confirm this?

Are surveys about the needs expressed by NFPW available?

If so, do you remember any specific needs that the WFP expressed and if these were integrated in the next workshop?

In which cycles were NFPWs perceived needs integrated?

Which topics were specifically addressed?

Throughout the workshops you witnessed, are the difficulties the WFP face recurrent or different from one workshop to another?

In general, what is the feedback you get from WFP on the workshop?

Backgrounds and skills

Were the backgrounds of the NFPW evaluated to adapt the content of each workshop to their pre-existing skill set?

Are the results of the NFPW background evaluations available?

If not so, does anyone in the regional representation know the profiles of the WFP in the region?

Is it possible to draw a "typical" WFP profile or are the profiles very different?

If not so, did you formally or informally take the type of backgrounds of NFPWs into account in the design of the workshops?

Professional motivation

Were the motivations of the NFPW evaluated to take their career plan into account in the design of the content of each workshop?

Are the results of the NFPW motivations evaluations available?

If not so, did you formally or informally take the type of professional motivation of NFPWs into account in the design of the workshops?

NFPW presentations: did WOAHP encourage presentations during the workshops by NFPWs or was it NFPW initiative? If this was a choice of WOAHP, what were the reasons to encourage focal point participation?

Administrative mapping

Were the positions of the NFPW and their delegates (administrative mapping) evaluated to adapt the content of each workshop to the administrative distance/proximity between these positions?

Are the results of this administrative mapping available?

If not so, did you formally or informally take the administrative mapping of NFPWs vs delegates into account in the design of the workshops?

For which terms of the TOR do you believe that the administrative position of the NFPW would have an impact?

Coherence

Do you have knowledge of other WOAHP wildlife-oriented events for NFPW organized at a regional level?

If so, are these documents available?

Several virtual meetings on wildlife health were organised in your region recently. Were NFPWs systematically associated to these meetings (also informs impact)?

Collaborative centres for wildlife regularly organize or take part in training events on wildlife health. Do you exchange with the CCs regarding capacity building activities that may be suitable for WFP?

How are the NFPWs associated with these activities? Do they take part in some of the workshops/training events, do they receive pedagogical material from the CCs other than during the Wildlife workshops?

Do you know if WFP attend other capacity building activities proposed by other international bodies such as -but not excluding - FAO, CITES, INTERPOL, NGOs....

Effectiveness

In your opinion, what is the maximum amount of time a WFP could be spending on training in a year?

Do you feel that some WFPs would have time to spare for other formats (e-modules, online courses) that already exist or would be prepared?

Do you feel that there is an improvement of the technical level of the WFPs in your region?

If so, is it because the WFP profiles are different (turnover) or because the same WFP have gained in experience/skills/knowledge....?

When organizing a workshop, do you have to solicit the WFP for them to come or do they spontaneously enlist?

For those WFP who don't attend, what are the reasons generally?

Efficiency

Do you recall how much time and resources were mobilized by CC's and WOAHA staff in the regions representation implicated in the preparation of training materials for cycles 5 and 6 (former cycles excluded because too old)?

Was training material from precedent workshops or other training events adapted and reused for the workshops (workshops 2 to 6)?

If so, do you remember which material or which topic?

Impact

Do you have any knowledge of wildlife experts' networks setup by NFPWs between 2010 and 2023 on your region (specific questions pertaining to the activities of the regional networks could be asked in complement)?

Do you keep record of national networks? If so, what is in the record (each country/territory and year)?

If so, are these documents available?

If not, are you able to know whether there was an increase in the number of NFPW involved in such networks following workshops in your region?

What are your interactions with WFP if you exclude the workshops?

Do you have any knowledge of NFPWs who have taken part in training events in their own country, on a topic which they had been taught during a workshop?

Do you know if workshop training material has been used in training events involving NFPWs?

Do you know if there was an increase in the rate of the NFPW involved in such events following workshops?

Sustainability

Do you use the training manuals in non-Workshop WOAHA training events regionally?

Are the power-point presentations reused in non-Workshop WOAHA training events?

Are the exercises reused in non-workshop WOAHA training events?

Are the video sessions reused in non-workshop WOAHA training events?

Miscellaneous questions

Do you any comments, recommendations for the coming programs in terms of topics?

Do you have any comments, recommendations for the coming programs in terms of format?

*Depending on the region, specific questions could be asked, based on information we retrieved during the desk study (for example: questions were asked regarding the newsletters for the Asia and the Pacific region).

WOAH collaborating centres

General questions

From the data we could access, you conceived the training material for cycles XXXX tell us how you were implicated?

Relevance

How did you interact with WOA HQ and RR and how were the themes/topics chosen?

Did you get any feedback or follow-up from WOA HQ after the workshops (feedback on the past workshop in terms of quality/relevance/efficiency) (feedback on future themes, formats...)?

Do you remember if trainees expressed particular interest in a specific topic?

Efficiency

How much time do you think it took you and your team to prepare the material for each cycle?

How is the time spent by CC personnel on the conception of the material paid for? Is it paid by WOA HQ? CC's own funds?

Effectiveness

During the exercises you animated, did you feel that most of the trainees were able to fulfil the tasks that you set them?

During the presentations that you gave, did you feel that the trainees were interested in all the topics and what was the level of questions/discussions you had immediately after the presentation or during the workshop?

Is there any particular topic for which you remember the trainees having difficulties following (or achieving tasks)?

Sustainability

Do you feel that the training manuals you published and the exercise material you produced would be reusable in the context of new workshops?

If so, how would you update it? Format? Enrichment?

Did you reuse some of the training material or exercises in other capacity building activities?

Coherence

Does your CC propose capacity building activities to WFP?

Miscellaneous

Other than the workshops, did you have any interactions with WFP?

Delegates and their NFPW

Part one Delegate and NFPW (20 minute crossed interview)

As the delegate for XXXX, could you tell us a bit about your interactions with your focal point for wildlife?

What in your opinion are the duties of a WFP to his/her delegate?

Do you sometimes exchange on WOAHP issued documents related to wildlife (Reports from the Wildlife Working group, other reports, guidelines, surveys?)

Do you sometimes exchange on the situation in your country regarding wildlife diseases? Notifiable diseases? Non-notifiable diseases?

Do you exchange on Wildlife disease surveillance in your country?

Do you exchange on Outbreaks of diseases implicating wildlife in your country (wildlife specific diseases or multi-host diseases)?

Do you exchange on other topics?

In both your opinions, what is the basic knowledge that a WFP should have of WOAHP wildlife related activities? If no specific response propose the following:

- WOAHP standards and how they work
- Information related to Wildlife legal and illegal trade
- The WOAHP wildlife health programs and WOAHP wildlife network
- Notification systems

In your opinion, what is the ideal skill-set of a focal point for wildlife? If no specific response propose the following:

- Communication
- Wildlife Disease Surveillance systems
- Network building
- Outbreak investigation
- Disease management
- Health risk assessment and mitigation
- Diagnostics

Part two: Focal point alone (15 minute interview)

What is your national mandate, in addition to your mandate as WFP?

What is your background?

How long have you been a focal point? (And how many workshops did you attend?)

In your opinion, today, what are your needs in terms of training for your mandate as a WFP?

What the most difficult duties to achieve in the Terms of Reference?

How much time can you devote to your mandate of WFP (aside from your national mandate)?

How much time can you spend in capacity building activities for your mandate as WFP?

For the workshops to which you went:

In your opinion, were there some themes or topics which were not/less relevant to your job as a focal point?

In your opinion, were the lessons and exercises adapted to your level or were they too complicated or too simple?

Do you interact with other WFP in your region? How often and in which context?