

Guidelines for Fair and Equitable Partnerships at the IZW

*A living document –
regularly reviewed and further developed*

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1. Fair International Partnerships – Summary

International research collaborations offer many opportunities, but they are not always fair. This is particularly true for partnerships between high-income countries (Global North/countries in the global minority) and low- and middle-income countries (Global South/countries in the global majority), where local partners have in the past often been less involved in scientific collaborations and have benefited less from the research outcomes. With these guidelines, the Leibniz Institute for Zoo and Wildlife Research (IZW) aims to support more equitable collaborations, where all partners are equally involved, respected, and benefit from their work.

At the core of fair partnerships is the idea of working as equal partners. We advise to involve all collaborators in shaping research projects from the very beginning, including defining goals, making decisions, and sharing responsibilities. We recommend recognizing and valuing different perspectives, including local, cultural, and scientific knowledge, as equally important.

Fairness also requires transparency and openness when it comes to resources, funding, and roles within a project. We recommend that partners jointly discuss how funding is allocated and agree on roles and responsibilities in a transparent way. It is helpful to openly acknowledge existing differences in viewpoints and actively work towards reducing them.

A central aspect of equitable collaboration is the fair sharing of data, results, and recognition. We suggest to treat data collected in partner countries as a shared resource rather than the sole property of one institution. We recommend recognizing all relevant contributions to research appropriately, whether through study design, fieldwork, analysis, or local knowledge, including through co-authorship where applicable. Beyond publications, it is important to consider how collaborations can generate tangible benefits, such as training opportunities, infrastructure support, and engagement with local communities.

Rather than focusing only on “capacity building” as a one-directional transfer of knowledge, we suggest emphasizing “capacity sharing” as a mutual exchange. Since all partners bring valuable expertise into the collaboration, we suggest that learning should take place in both directions. Supporting long-term research capacity and strengthening local structures are important goals for sustainable collaboration.

Language and communication also play an important role in shaping partnerships. We recommend using respectful, inclusive, and accessible language to promote equalities. This includes avoiding paternalistic terms, valuing local and indigenous knowledge, and making research findings accessible in different languages and formats wherever possible.

Finally, fair partnerships require a long-term perspective and a commitment to continuous learning. We suggest to build collaborations that are based on trust and mutual understanding over time. Regular reflection, open communication, and constructive conflict resolution can help ensure that partnerships remain fair, relevant, and effective.

Key take-home messages:

- Fair partnerships aim to share decision-making, leadership, and responsibility
- Projects should be co-developed from the start, with clear and shared goals
- Data, recognition, and benefits should be shared fairly among all partners
- Collaboration should be based on mutual learning and capacity sharing
- Inclusive and respectful language supports equitable partnerships
- Long-term commitment, reflection, and adaptation are essential for success

2. Introduction

Cross-border research collaborations can offer a wide range of opportunities and benefits for all involved, but they also present challenges. Establishing and sustaining fair and equitable partnerships is crucial to ensuring that research outcomes are mutually advantageous and more likely to deliver the desired development impact.

Equitable scientific partnerships are collaborations that promote fair participation from all parties, mutual trust and respect, facilitate knowledge exchange, unlock community benefits, and ensure shared outcomes, recognition, and rewards^{1–3}. Each partner has equal access to decision-making processes and opportunities for benefit. Equality is achieved by considering the diversity of knowledge, skills, and resources of each party, while continuously upholding the principles of mutual benefit and shared agreement.

Inequitable scientific partnerships have existed for a long time, dating back to colonial times. In the Americas, Asia, and Africa, European explorers and naturalists conducted overseas expeditions to collect, describe, and research local natural resources without necessarily aiming to improve local livelihoods, generate a positive impact on local ecosystems, or share outcomes and benefits^{4–7}. Parachute science, also known as (neo)colonial science, refers to the modern practice in which scientists from developed countries (often called the Global North or global minority) conduct research, usually focusing on data collection, in low and middle-income countries (often referred to as the Global South or global majority^a). Often, parachute science fails to fully invest in or establish equitable partnerships, and does not adequately acknowledge and utilize local knowledge, capacity, and expertise within research or conservation efforts^{8,9}.

While progress has been made towards mutual scientific development and recognition in these collaborations, for example through the access and benefit-sharing principles in the Nagoya protocol¹⁰, many contemporary challenges remain, particularly concerning long-term projects, funding acquisition, and data ownership. For example, many projects require long-term commitment, yet funding opportunities, such as those from the German Research Foundation (DFG) and Federal Ministry of Research, Technology and Space (BMFT), are often time-limited. Although these projects can benefit scientists in different ways, the intended impact on local communities and ecosystems, often a primary goal in conservation biology, is limited both in terms of effect and duration. Additionally, data ownership poses a common issue due to differing regulations across countries and their respective funding agencies. Data ownership often rests with the high-income countries in the global minority and is made available to non-partner institutions via open-data policies, providing little direct benefit to the countries from which the biological resources originate (see Chapter 5). For these reasons, the guidelines outlined in this document are specifically designed for partnerships between the Leibniz Institute for Zoo and Wildlife Research (IZW) and low and middle-income countries

^a The term “countries in the global majority” is suggested by [OXFAM](#) to avoid the more widely used, but often controversial, term “Global South”. Countries in the global majority refer mainly to low-income and middle-income countries. We adopt here this term and imply that countries in the global majority are likely to have less developed scientific (infra-)structures than countries in the global minority.

in the global majority, where there is an inherent asymmetry of financial and infrastructural resources between the IZW and the countries in the global majority. This document is likely to be transferable to other research and academic institutes in high-income countries in the global minority, provided it is adapted to comply with relevant institutional and national legislation. As proposed by Asase *et al.* (2022) the practice of parachute science shall be replaced by truly lived “global science” ⁶. That means a collaborative and interdisciplinary approach to scientific research and discovery that transcends national and regional boundaries, emphasizing mutual sharing of knowledge, resources, and expertise among scientists from around the world to address complex global challenges.

The IZW has numerous active collaborations with partners worldwide. These partnerships are manifold in nature, reflecting the diversity of people and projects at the IZW. Among our international collaborations, many are based in countries in the global majority with often less developed scientific infrastructures than countries in the global minority such as Germany. For example, IZW employees collaborate closely with researchers from Africa (e.g. Namibia, Tanzania), Southeast Asia (e.g. Viet Nam and Malaysia) and South America (e.g. Brazil, Chile) in long-term research projects. In these projects, we strive to engage a diversity of local people, including scientists, members of local communities and other parties (i.e. stakeholders) interested in or affected by the research topics. This collaborative approach allows us to identify conservation and research relevant issues together, conceptualise and implement relevant research projects, co-create knowledge and solutions, verify the solutions and jointly communicate research findings.

The goal of this document is to discuss and, ultimately, guide scientists in their pursuit of continuously building, maintaining, and enhancing equitable research processes and fair partnerships from a global science perspective. It covers the principles of fair partnerships, the process of establishing these collaborations, the ethical and legal considerations involved, the importance of careful language usage, the concept of capacity building or capacity sharing, and finally, the process of long-term monitoring the progress of established partnerships.

3. Principles of fair collaboration

We recommend the following principle for collaborations in international partnerships:

Mutual respect and trust

While we acknowledge that collaborating with partners from different backgrounds and with different expertise and scientific perspectives poses challenges, we are convinced that this diversity is an invaluable asset. We therefore recommend to establish partnerships in which all contributions are valued and interactions are guided by mutual respect and trust.

Shared decision-making and leadership

We recommend shared decision-making and shared leadership of collaborative projects. This means engaging with the partners in the co-design and joint implementation of the research projects. Transparency in all decision-making processes is important to build mutual trust. Leadership in such projects should be shared or distributed for different parts of the work, with all partners being mutually accountable. To ensure the necessary equitable power distribution, engaging in capacity sharing by sharing skills, resources, and decision-making responsibilities is important. This ensures that all collaborators can effectively participate.

Finding common ground

We recommend to hearing and recognizing all opinions, constraints, and visions. The goal should always be to conduct a respectful dialogue and to identify shared goals and/or find a compromise. Should fundamental differences arise, we advocate to finding ways for conflict resolution that maintain mutual respect and appreciation.

Sharing access and benefits

We believe that equal access to data and therefore also shared data ownership are pivotal pillars of creating fair partnerships. This also includes equal access to research results and its products, joint decisions about how to transfer research results into practice, and sharing the resulting benefits. We therefore recommend to discuss shared data ownership with the legal department of the institute to find ways of accommodating this topic in the collaboration (see Chapter 5).

Continued learning and reflection

We believe it is vital to constantly question assumptions, critically review and adapt established ways of working together. We recommend to establish a culture of joint learning and improving, where all collaboration partners feel comfortable suggesting improvements and new ways of doing things.

Long-term perspective

To build trust, to ensure that all partners benefit from joint projects and to foster lasting impact, it is often beneficial to establish long-term collaborations between the partners. Long-term projects are not always possible, e.g. because of the limited durations of third-party funded projects. Nevertheless, it is advisable to always work with a long-term perspective in

mind and to discuss early in the collaboration measures to continuously support local communities and enable local partners to build on key outcomes of the joint work after the project has ended.

4. Building partnerships

4.1. Identifying and engaging local researchers and institutions early

When the cultural backgrounds of the collaboration partners differ substantially, we suggest to approach potential collaboration partners well before a collaboration agreement or a project application is planned to be prepared. Potential partners and stakeholders might be scientists, local communities, professional and sport hunters, citizens, non-governmental organisations (NGOs), governments, national park authorities, wildlife managers, politicians or any other entity who can contribute in a meaningful way to the planned project.

Step 1: Starting the project

It might be useful to start with a smaller project with clear objectives, a few collaboration partners and a limited time span. In the initial planning phase, often many decisions need to be made and mutual trust needs to be built, thus this critical phase should be manageable in terms of work packages and responsibilities. If the collaboration is successful, the partners will likely be better prepared to develop large and long-term research programmes among themselves and with additional partners.

Engaging with new partners and stakeholders requires an open mind-set. It is helpful to accept that there might be different views on general terms such as “conservation”, “conflict” or “biodiversity”. For example, researchers might assess the increase of a carnivore population along with mitigation strategies for a human-carnivore conflict as a valuable outcome of the project, while local communities might assess the decrease of the carnivore population or the development of a compensation scheme for livestock losses as the most effective conflict solution. The government, in turn, might support an increase of the carnivore population, but not a compensation scheme because of the difficulty of verifying the cause of livestock losses or a lack of funds. Further, partners and stakeholders might judge the importance of different project aspects differently. For example, scientists might judge the scientific knowledge gain and publication in high-ranking journals as very important, local communities and wildlife managers might judge the application and impact of the results as most important, and the government and local universities might judge capacity building and development as most important.

It seems therefore relevant that in this initial planning phase all partners and stakeholders have enough time and opportunities to express their views, opinions, expectations, wishes and concerns. We believe that in this phase, it is rewarding to encourage all collaborators to appreciate the various points of view and to potentially reflect their own assumptions concerning the importance of various research topics and outputs. This phase is likely to be crucial for mutual understanding and trust building. During this process, we shall be reminded of the proverb of Epictetus, a Greek philosopher:

“We have two ears and one mouth so that we can listen twice as much as we speak”

Step 2: Define the common goal of the project

We suggest that during the next phase, bearing in mind the various points of view, the partners and stakeholders define the common goal of the project. This is straightforward when there are no conflicting goals between the collaboration partners, for example, when all parties agree to use GPS locations of snares detected in a given forest to predict other areas prone for snares that need increased ranger patrols. However, in case there are several conflicting goals (see example on human-carnivore conflict above), a compromise must be found. This can be challenging but we assess this as important to ensure that all collaboration partners feel engaged and act in concert. The compromise can be revisited during the project when first results are compiled, but at the start of the project, all partners should agree on a common goal.

Step 3: Define the roles and responsibilities of all partners

In the next phase, we suggest that the partners define their roles and responsibilities. It is important that these tasks are compatible with the competencies of the partners and align with their preferences and functions. Roles and responsibilities might include writing proposals, acquiring funds, planning the study design, data collection, animal capture and/or handling, sample collection, conducting questionnaires, laboratory analyses, data analyses, teaching, writing scientific and non-scientific reports, disseminating results, engaging with the media, giving interviews, and more. We believe it is important to acknowledge that all tasks are valuable and relevant to the project and that different partners will invest different amounts of time into the project. Furthermore, the collaboration partners should agree that some responsibilities need to be carried together, such as ensuring ethical and moral standards or complying with legal requirements while others can lay with just one partner.

Although all three steps detailed above are part of the preparatory work for a potentially successful and trustworthy collaborative project, funding bodies often do not provide funds for such preparatory work, despite its importance. This remains a challenge and often requires advance funding from one or several partners, particularly if a meeting in person is planned or a visit to the field sites. This drawback might dwindle in the future as funding bodies begin to recognize the importance of such preparatory work.

4.2. Ensuring equitable access to resources and funding

Two important parts of any project proposal are planning of the budget and its distribution among the collaboration partners. Here all partners need to jointly discuss and agree on the budget allocation. If salaries are planned to be paid through the budget, we suggest to discuss openly that salaries will follow the common rates in the countries where the partners are located. If mutual visits of several weeks or months to the different countries are planned, the variation in living costs in the partnering countries needs to be considered. In such cases, the salaries might not be high enough to cover the living costs in the hosting country, thus additional funds should be allocated to support the visits.

Mutual visits likely have different objectives for the collaboration partners. Partners from countries in the global minority^b might want to visit the projects on site to understand the local setups, the challenges, the academic structures, the political frameworks and the cultures. A visit of a few days or weeks is unlikely to be sufficient to capture the entire complexity, thus repeated visits might be useful. If local students or collaboration partners are to be trained on site to conduct research based on high-quality standards for a degree, it is of advantage to plan for a stay of several months, also repeatedly, depending on the tasks. Students and partners should be provided with all necessary equipment and safety instructions to conduct the tasks, thus adequate funds need to be allocated to them. Also, for projects that involve human-wildlife conflicts, it might be useful to plan for long stays because such projects require a comprehensive understanding of the human perception of the conflict. This perception might vary among different collaboration partners or even within one partner group. Such visits, however, have also the potential to enlarge the view to additional research questions, which might develop during discussions and exchange of ideas. Discussing new ideas in the real setting of the project can be highly beneficial for all partners and increases mutual trust.

Partners from countries in the global majority visiting partners in countries in the global minority might have different priorities and may primarily seek to gain knowledge in specific laboratory techniques or advanced data analyses not or not yet available in their home countries (see Chapter 6). These visits should also be planned for adequate time periods, perhaps for several weeks or months, possibly as PhD projects. Visitors from countries in the global majority might be in a country in the global minority for the first time and might feel alone in the new environment and culture. Thus, it is important to not only provide financial but also social support. This requires a proactive engagement of the host and involvement of a larger group to provide a welcoming and comfortable environment.

4.3. Recognizing and addressing power imbalances

Collaborating partners and stakeholders from countries in the global minority and global majority might perceive a power imbalance regarding academic knowledge and access to funding bodies. This perception is likely to be correct in most cases and it is helpful to acknowledge the existing imbalance. It can be mitigated, however, when all parties recognise that, for instance, knowledge consists of many aspects beyond academic knowledge. It also includes local, cultural, political and indigenous knowledge, all of which are crucial for a successful collaboration project. Furthermore, mutual visits support knowledge exchange and provide insights into the structure of funding opportunities and political frameworks in the collaborating countries.

^b see the definition of global majority above. We use here the term global minority referring to high-income countries. We adopt here this term and imply that countries in the global minority are likely to have well-developed scientific (infra-)structures than countries in the global majority.

5. Ethical and legal considerations

5.1. Addressing the gap: problem and vision

International research collaborations often face legal and ethical ambiguity when it comes to the ownership and use of data. While some international instruments exist—most notably the Nagoya Protocol¹⁰, which regulates access and benefit-sharing for genetic resources and traditional knowledge—many types of data commonly collected in ecological research fall outside these legal boundaries. This includes among others species observations, camera-trap images, acoustic recordings, and environmental metadata.

At the IZW, we recognize this gap and advocate for a broader understanding of fairness in international research. We believe that all data collected in a partner country, regardless of whether it is covered by formal legal instruments, should be co-owned and jointly governed with national institutions, protected area authorities, or local communities. This chapter outlines how this principle can be put into practice through appropriate legal agreements, ethical authorship, and shared data governance.

5.2. Compliance with local and international frameworks

A commitment to legal compliance is the foundation of all international research. This includes respecting national laws related to research permits, protected areas, data sharing, and wildlife ethics. Internationally, the Nagoya Protocol plays a central role in ensuring that access to genetic resources is governed fairly and that benefits are shared with provider countries.

Although the Nagoya Protocol does not apply to research that does not involve the use of genetic resources or their associated traditional knowledge from another country, its underlying principles of fairness, transparency, and benefit-sharing need to be upheld. We therefore suggest to extend these principles to all data/data types collected abroad. Even in the absence of legal obligations, we recommend that such data is co-owned by the own institute and the host country's institutions or authorities. This ethical stance strengthens trust, supports long-term partnerships, and ensures that the benefits of research are shared more equitably.

5.3. The challenge of subcontracting and data ownership

In many of our projects, financial and administrative constraints necessitate the use of subcontracting mechanisms to channel funds to local partners and implement joint research activities. While this is often the most practical approach, standard subcontracting arrangements are legally structured as service contracts. These contracts typically assign ownership of all resulting data and outputs to the contracting institution—in this case, our institution. From a legal (and economical) standpoint, the subcontracted partner is a service provider rather than a research partner, which conflicts directly with our institutional values.

To address this tension, we recommend developing supplementary agreements that are attached to subcontracts. These can take the form of co-ownership addendums or mutually agreed protocols that define shared data stewardship, long-term access, and terms for

publication and reuse. This allows us to both uphold our ethical commitments and fulfil legal requirements, ensuring that data collected in a partnering country is not simply extracted, but shared and governed collaboratively.

5.4. Data sharing, authorship, and intellectual property

Data sharing, authorship and intellectual property rights are often covered under the national regulations and all our work needs to comply with these local regulations and expectations. For example in some countries, local authorities expect a monetary benefit sharing for sample and data collection.

Beyond legal compliance, a thoughtful and inclusive approach to authorship and data attribution often facilitates fair and ethical research. We recommend that all researchers who make substantial contributions, including to study design, data collection, analysis, and writing, should be considered for co-authorship. This includes individuals who contribute essential contextual knowledge, logistical expertise, or sustained effort during fieldwork, when their input influences data quality or project outcomes. In field-based projects, such contributions are often critical yet will easily be overlooked. Field assistants, technical staff, and other contributors who do not meet the criteria for authorship should be acknowledged appropriately in all publications and presentations, recognizing the value of their work and local knowledge.

Photos, video recordings, and other forms of intellectual property (IP) generated in the field also deserve particular attention. While copyright typically rests with the creator (e.g. the individual taking a photograph), we believe photographs, videos, or other forms of IP created during field work should additionally be co-owned by the relevant authorities (e.g. national parks) or national institutions. Particularly, if the material is used in public (e.g. press releases, websites, social media) local partners should be involved and acknowledged. After all, these materials often depict wildlife or landscapes under the legal jurisdiction and sovereign ownership of the host country.

To ensure fair use and recognition, we recommend establishing co-ownership or joint licensing arrangements for such field-generated IP, particularly, if local legal requirements are not in place. These agreements can include shared decision-making on where materials are stored and how they are used, the application of Creative Commons licenses that permit non-commercial use with appropriate attribution, and protocols for seeking permission before publishing sensitive content. Intellectual property rights should reflect the collaborative and location-specific nature of field research, rather than defaulting to the individual researcher or their institution.

When projects come to an end, a responsible and transparent handover of data, knowledge, and intellectual property is essential. This includes ensuring that all partners retain appropriate access rights to jointly generated data and materials, in line with prior agreements. We further emphasize the importance of maintaining clear points of contact beyond the formal project period, or, where individuals leave institutions, of explicitly transferring responsibilities to ensure continuity. Such arrangements help safeguard long-

term, cooperative, and mutually agreed-upon use of shared data and intellectual property, reflecting the enduring nature of equitable research partnerships.

5.5. Fair benefit-sharing beyond genetic resources

Our suggested approach extends the principles of access and benefit-sharing to all forms of data, not only those covered by the Nagoya Protocol. Non-monetary benefits can take many forms: co-authorship, shared ownership and control over data repositories, training opportunities for early-career researchers, increased opportunities for local funding, or material investments in local research infrastructure. Equally important are community-level benefits, such as outreach materials in local languages, site-specific research summaries, and participatory results-sharing workshops (see Chapter 6).

Whenever possible, these benefits should be formalized in writing, either through standalone benefit-sharing agreements or embedded in data sharing protocols. Benefit-sharing should be understood as a fundamental aspect of equitable collaboration, recognizing effort, essential expertise, and contributions of local partners in enabling high-quality scientific research.

5.6. Moving forward: transparency, equity, and accountability

At the IZW, we recognize our responsibility to uphold and promote high ethical standards, particularly in contexts where clear international regulations for non-genetic data are lacking. We suggest to respecting national sovereignty over all forms of data, embedding principles of equity into contracts, authorship practices, and data governance, and building partnerships based on mutual trust, transparency, and shared ownership of knowledge.

Aligning research practices with these values are likely to contribute to more equitable scientific collaboration. We believe that doing so not only strengthens trustful partnerships but also enhances the quality, integrity, and broader impact of joint research.

6. Capacity sharing and sustainability

Capacity building is defined as the process of developing and strengthening the skills, abilities, and resources that organizations and communities need to survive, adapt, and thrive in a fast-changing world. Such activities are specifically called for in the Sustainable Development Goals defined by the United Nations (especially Targets 17.16-17.19).

While capacity building is recommended to be part of international research collaborations, it is also a way of mitigating/avoiding parachute science. However, the term “building” implies that the partnering country is only receiving. It disregards the importance of experiential, local and indigenous knowledge. Thus, in most cases, “capacity building” should be replaced by “capacity sharing”.

While capacity building aims to develop and strengthen new knowledge, skills, and infrastructure where they are lacking, its focus is usually one-directional: it typically involves training, resource provision, or institutional support provided to individuals or organizations with less existing capacity. Capacity sharing, on the other hand, is a mutual exchange of knowledge, skills, and resources between partners, recognizing that all parties bring valuable capacities to the table to be shared. These are bidirectional processes, emphasizing partnership, co-learning, co-ownership of the data, and the acknowledgment of different types of expertise.

Various publications (Asase et al. 2022, de Vos 2022) recognize the value of capacity building, especially at the individual and organizational levels. In our opinion, this concept lacks several principles of fair collaboration, such as finding common ground or constant learning of all partners (see Chapter 3 and 8).

Strengthening local research infrastructure and training are essential for building sustainable, autonomous research environments. This involves investing in physical infrastructure (laboratories, libraries, technology, and reliable data formatting and storage systems), while also ensuring access to digital resources and global networks. Equally important is the training of local researchers at various stages of their careers through mentorship, workshops, and academic exchange programmes. For example, creating a broad pool of local and national researchers and training them at the highest levels (e.g. MSc and PhD) helps to build a skilled and self-sufficient local research community and has been a principle of many of our long-term projects.

When local knowledge and expertise are valued, co-development of questions, approaches to solutions and ways of knowledge transfer of results lead to mutual respect, trust, and ownership of the research process. This helps to avoid extractive practices and ensures that the findings are translated into practical applications and policy changes. This model promotes equity in research partnerships, supports bi-directional capacity sharing, unbiased access, and sustainable usage of resources and funds (e.g. by clearly defining the needs and wishes of the local partners), and enhances the likelihood that findings will be used to inform local policies. We are convinced, that co-developing research agendas will lead to more impactful and sustainable outcomes that truly benefit the communities involved.

To achieve lasting change, we recommend to design research efforts with long-term impact in mind. This involves building sustainable institutional partnerships, strengthening local institutions and infrastructure and supporting the retention of capacities. In addition, we suggest to foster knowledge transfer and exchange beyond the project consortium. The goal would be to translate the knowledge generated in joint projects into formats that make it accessible and usable for local stakeholders (e.g. policy makers, educational institutions, local businesses and NGOs) and communities. Also, we recommend to involve the relevant stakeholders and integrate their needs and perspectives in order to increase the relevance and acceptance of the joint research.

Key strategies include co-creating recommendations with stakeholders, supporting infrastructural and leadership development, and ensuring that data and findings are accessible and usable beyond the project's lifespan. Establishing mechanisms for follow-up, such as ongoing collaboration and education, local funding pathways, or policy integration, can help to scale successful interventions. Ultimately, long-term impact depends on shifting from project-based thinking to systems-level thinking, where research informs practice, empowers local actors, and contributes to sustained development over time.

7. Language and communication

Language has an enormous and often severely underestimated power. Basically, language reveals our view of the world, and at the same time language constantly shapes and defines this view, i.e. who has power, whose knowledge counts, and whose voices are heard. Also in the context of global science, language is not just about words, it is about dismantling (potentially internalized) hierarchical narratives and setting the stage for truly inclusive, equitable partnership and cooperation.

That said, we recognize that we formulate our guidelines in English and German, languages of (formerly) colonizing nations. We acknowledge that besides the numerous mother tongues there should be one connecting language, which is currently English in the scientific sector. We recognize that, while the dominance of English cannot be overcome by individual institutions, it requires conscious efforts to reduce linguistic barriers and make research processes and outcomes more accessible and inclusive. With the constantly improving translation tools available, the dominance of the English language might also potentially decline in the future and other languages might emerge in the scientific sector.

7.1. Avoiding colonial and paternalistic language

Mutual respect and cultural humility are key to fair multinational scientific collaborations. This means actively recognizing and valuing local and indigenous knowledge and knowledge systems as essential components of conservation science, rather than treating them as supplementary or anecdotal. Avoiding assumptions of intellectual superiority means approaching collaboration with openness and a willingness to learn, rather than to instruct or “improve.” Language plays a key role in this process—it can reinforce power imbalances or help to dismantle them. We recommend to use language that reflects equality and partnership, steering away from terms that suggest hierarchy or deficiency. For example, phrases such as “capacity building” can unintentionally imply that communities lack knowledge or skills. Instead, we advocate for terms such as “capacity sharing” or “knowledge exchange,” which emphasize reciprocity and mutual learning. Engaging with local and Indigenous communities as equal partners, not as passive recipients of external expertise, is foundational to ethical and effective conservation. Critically examining words and (maybe so far unconscious) narratives, will likely contribute to the effort to decolonize conservation science and ensure it serves diverse voices and perspectives.

Table 7.1. A few examples of colonial and paternalistic language and more inclusive alternatives

Paternalistic Term	Inclusive Alternative	Why It Matters
Capacity building	Capacity sharing / Knowledge exchange / Mutual learning	Implies one side lacks capacity; overlooks existing knowledge and strengths
Giving a voice to...	Listening to / Amplifying / Partnering with	Assumes people don't already have a voice; centers the outsider's agency
Helping local communities to set up conservation measures	Supporting community-led conservation / Partnering on stewardship	Implies outsiders know best; undermines local autonomy
Training local staff	Collaborative workshops	Frames knowledge as one-way; ignores local expertise
Educating the community	Community engagement / Dialogue / Co-creating knowledge	Positions communities as passive learners rather than active contributors
Bringing conservation to...	Collaborating on conservation in... / Supporting ongoing efforts	Implies conservation is absent without external involvement

7.2. Promoting multilingualism, accessibility, and inclusive communication

To counteract the current practice that most documents of the scientific sector are only written in English and to increase accessibility, we suggest to support communication in multiple languages. This includes key materials such as consent forms, reports, meeting summaries, video materials, and press or social media content made available in local and partner languages wherever possible. This fosters inclusion and acknowledges the linguistic diversity of all participants. We recommend to avoid assuming English as the default and instead advocate for interpretation, translation services, and bi- or multi-lingual documentation. Additionally, accessibility can be improved by using plain language, avoiding jargon, and considering diverse formats (e.g. visuals or easy-read versions) for sharing information. This approach not only improves understanding and trust but also reflects respect for cultural and linguistic identities.

7.3. Language, openness, and continuous learning

In global conservation work, openness and a willingness to learn from one another are essential for trustful partnerships. We recommend to create space for honest dialogue, where all partners feel safe to express opinions, ask questions, and grow intellectually. This includes allowing ourselves and others to make mistakes, reflect, and improve without fear of judgment. Rather than acting as language police, we suggest to foster a culture of mutual respect and curiosity, where learning is continuous and enjoyable.

8. Continuous learning to improve fair partnerships

8.1. Mechanisms for evaluating partnerships

We recommend to work closely with the partners from the earliest stages of project development to co-designing and co-evaluating the collaborations. It is advisable to ensure that decisions are responsive to the diverse ecological, geopolitical, cultural and historical contexts of the work. To support this, we suggest to apply adaptive feedback mechanisms to enable continuous learning, open communication, and timely identification and resolution of challenges, helping partnerships to remain responsive and resilient over time.

We acknowledge that international collaborations often involve asymmetric access to funding, infrastructure capacity, decision-making influence, and other resources. To critically reflect on and address these imbalances, we suggest to regularly conduct evaluation meetings with the partners. These meetings provide dedicated space for honest feedback on perceived power dynamics, the fairness of roles and responsibilities and representation within the collaboration.

Based on this feedback, joint reflection can help in how the collaboration can be adjusted to better align with shared expectations and principles of fairness. As a part of this process, we suggest to revisit existing collaborative agreements between the own institute and its worldwide partners to ensure that they remain transparent, equitable and appropriate as projects and circumstances evolve.

8.2. Conflict resolution

In practice, conflict resolution is understood as an ongoing and proactive process rather than a reactive measure. We recommend to address concerns early by fostering open communication, regular reflection, and a culture in which raising critical issues is encouraged and safe for all partners. Conflicts should, wherever possible, be discussed directly among the involved parties, with sufficient time and space for all perspectives to be heard and acknowledged.

When disagreements persist, we advise to a facilitated dialogue that is sensitive to power asymmetries, institutional constraints, and cultural differences. This may involve trusted third parties within or outside the collaborating institutions. Throughout the process, the focus remains on mutual learning, transparency, and jointly identifying constructive paths forward, rather than assigning blame. Conflict resolution is thus treated as a shared responsibility and an opportunity to strengthen equitable, respectful, and long-term partnerships.

8.3. Commitment to continuous improvement

Reflection and learning are integral at both individual and collective levels and are understood as continuous processes rather than one-off exercises. We recommend to regularly reflecting on own practices, partnerships, and impacts, drawing on feedback from all collaborators and remaining attentive to changing contexts, power dynamics, and institutional constraints.

Insights gained through reflection and learning are intended to feed into wider organizational learning systems and to inform the ongoing development of institutional policies, practices, and partnership norms. In this way, continuous improvement supports not only the quality and equity of individual collaborations, but also contributes to lasting, systemic impact for people and nature alike.

9. References

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