



## Global Conservation Key Performance Indicators (KPIs) Workshop

### Participant list

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### Complete working group report

This working group examined the use of institutional and global Key Performance Indicators (KPIs) to help communicate the conservation work of zoos and aquaria (Z&A), to inform best practice and adaptive management and enhance efficient and effective conservation efforts.

### Introduction

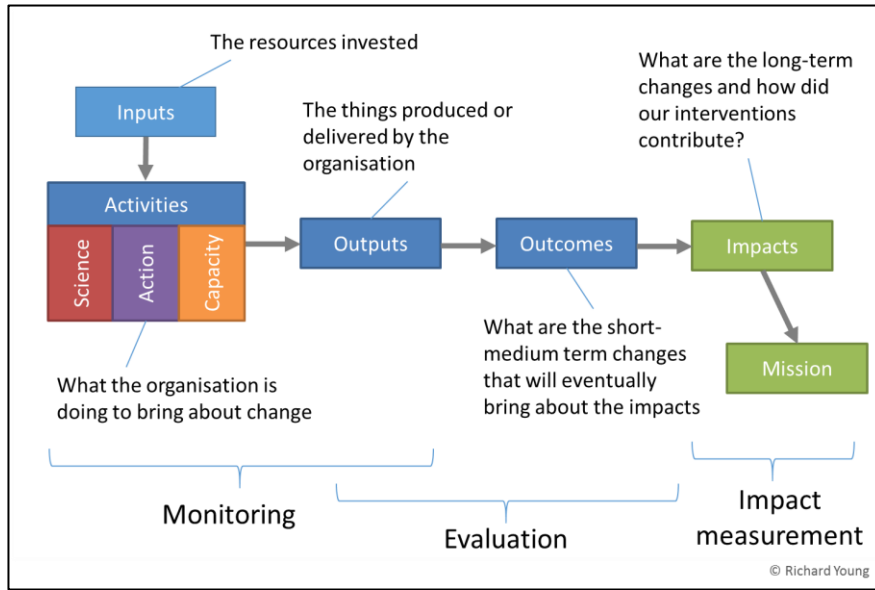
Anke Schirmer gave a brief introduction about the benefits of measuring performance.

Measuring performance with proper evidence can help

- a) *Internally* for the individual institution and the entire zoo and aquaria sector to enhance conservation and collection planning to make it efficient and effective so that the resources spent are well targeted. It makes you ask why you are doing what you are doing, which can facilitate the development of a clearer organizational strategy and help to make informed decisions about future actions.
- b) *Externally* for stakeholders and the general public to increase transparency and verifiable accountability that mediates respect, trust and confidence. It can also yield in a 'competitive' advantage over similar organizations attracting new 'impact-savvy' donors.

**Key Performance Indicators (KPIs)** are one of the most effective tools to reliably, repeatedly and accurately measure performance and allow to authentically, transparently and honestly communicate achievements. Based on proper, persuasive and credible qualitative and quantitative evidence, KPIs continuously measure progress towards a particular goal / target / mission. A targeted visualization that is intuitive to understand can further provide an easy format to contextualize the data and summarize achievements.

Additionally, *standardized* KPIs can help to measure performance both on an institutional and global level, which is of particular relevance if the One Plan Approach (OPA) is taken seriously. OPA requires collaboration of all responsible parties for all populations of a species whether inside or outside their natural range, which makes it impossible to disaggregate multiple contributions to an impact. Co-responsibility and impact sharing are the consequence.



The **results chain**, i.e. inputs produce outputs that engender outcomes that contribute to impact offers a framework for clearly defining contributions and deriving KPIs accordingly. Measuring conservation performance should not be reduced to inputs and outputs, but should consider the entire chain of results, taking into account that impact takes a long time to achieve and

measure (+/- 30 years). Performance measurement can validate the organisation’s purpose and makes impact central.

**Field Report 1: The Durrell Index**

Rich Young from Durrell described the results chain they used to develop a set of institutional-level ‘impact key performance indicators’ and qualitative measures of success of all Durrell conservation work, known collectively as the **Durrell Index**, which measure conservation impacts as well as activities and outputs [Young et al. 2014; <https://www.durrell.org/wildlife/wildlife/durrell-index/explore/>]. This includes using the global biodiversity indicator, the Red List Index, to assess if they are achieving their mission of saving species from extinction. This has proved to an essential tool in demonstrating impact to their supporters.

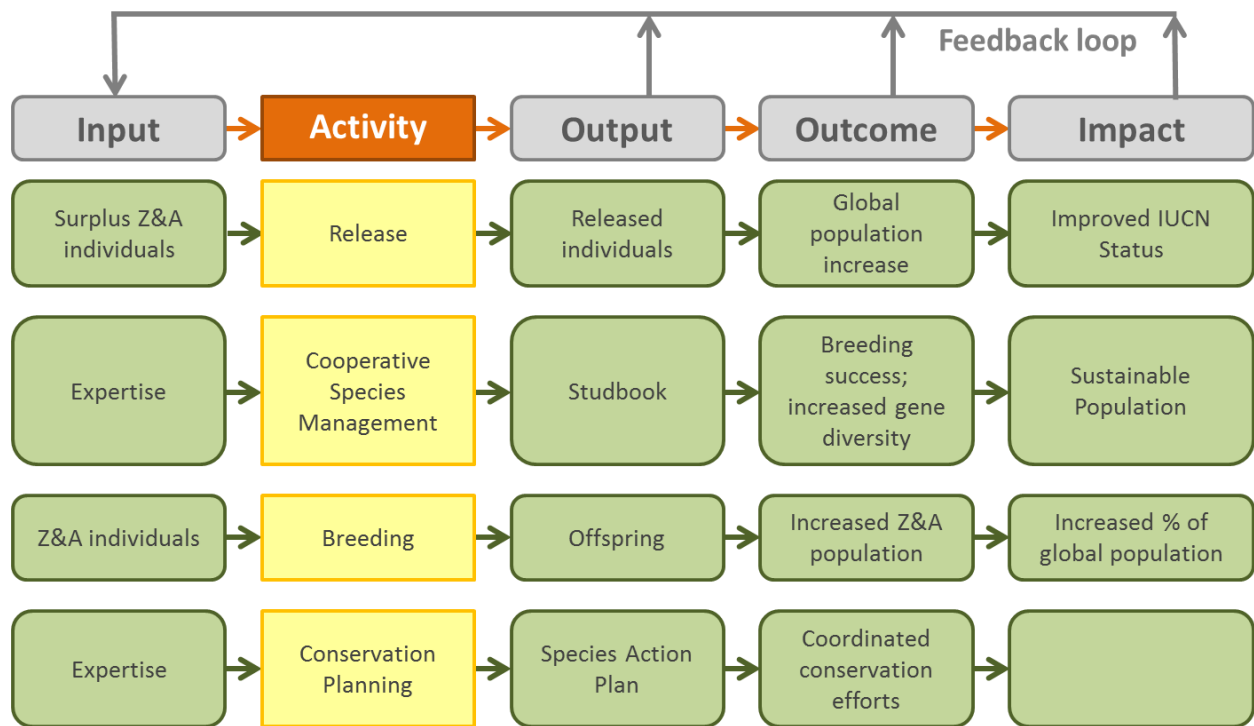
Inputs (n=1)	Activities (n=1)	Outputs (n=7)	Outcomes (n=1)	Impacts (n=4)
Size and % of annual operating budget spent directly on conservation activities	Score of effort expended on conservation actions (by species)	Numbers of animals <u>translocated</u> or released back into the wild (by species)	Species threat scores	Species survival probability (IUCN Red List Index)
		Number of species in zoo fulfilling conservation and research & training roles		Population trends (WWF/ZSL LPI)
		Cumulative area of habitat placed under legal protection (by habitat type)		<i>Multi-Dimensional Poverty Index</i>
		<u>Etc .....</u>		<i>Subjective wellbeing index</i>

Inputs are based on the EAZA criteria for assessing financial contribution to conservation. Activities measure the time spent on each action taken, e.g. planning actions, managing species, conserving habitats, monitoring impacts etc. Outputs measure for example how many species Durrell has helped to restore through rebuilding wild populations. Outcomes measure species threat scores and the ultimate impact factor uses the Red List to look for changes in status that can be attributed to conservation. To clearly delineate this, counterfactuals are used (what would have happened if no conservation had been undertaken) to calculate the survival probability of the target species. For example, the Jumping Rat was EN pre conservation and is still EN, questioning the effectiveness of the conservation work, but without it, the jumping rat would be classified CR. The Red List Index of species survival measures the long-term impact of Durrell’s conservation programs on its target species’ chances of survival in total and illustrates how Durrell makes impact.

**Field report 2: The Saving from Extinction Project**

In a second presentation, Anke Schirmer described the global KPI-based assessment of the ‘Saving from Extinction Project’ measuring global success and efficiency of conservation breeding and releases of Z&A on the output, outcome and impact level.

From these levels, KPIs are derived, e.g., number of Z&A releases, number of Z&A offspring or Z&A population trend using data from existing biodiversity information systems, conservation databases and scientific publications.



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This project along with a workshop during the WAZA annual meeting 2016 in Puebla on

whether, how and which qualitative and quantitative documentation of conservation efforts and their results could facilitate a “culture of conservation” in their own institutional activities demonstrated that documentation on Z&A contribution to conservation success stories could be much improved and needs to be standardized and integrated with other existing databases. A coordinated central repository of globally accessible, standardized data would be favorable, ideally with an embedded platform/dashboard to:

- facilitate extraction on various parameters, particularly:
  - a) Own institution’s performance
    - ⇒ Standardized annual report output
    - ⇒ Story-telling (e.g. to raise funds for conservation projects and gain respect and trust)
  - b) Global performance:
    - ⇒ Adapt collection plan
    - ⇒ Set priority species
    - ⇒ Partnership with others
- minimize input efforts once basis is established and
- allow monitoring on regular basis.

### Challenges and benefits

After pointing out the diverse benefits these systems offer, Rich and Anke listed some of the challenges faced throughout the developmental process and the ongoing management, such as:

- Up front effort high: Time-consuming and requiring a lot of thinking at the beginning (but this is good and pays off), e.g.:
  - Agreement on definitions:
    - The dynamics of species definitions and assessments (taxonomic disputes, data disputes, status disputes)
    - Disputes about “conservation entity” (e.g. only species or also habitats), “conservation contributor” (e.g. what is a zoo/aquarium? What is a population?) and “conservation contribution” (e.g. *ex situ* vs. *in situ*)
  - Appropriate selection of metrics to assess performance is crucial. Define SMART (Specific, Measurable, Achievable, Result-oriented/Relevant, Time-bound) KPIs.
  - Attributing actions to impacts for widely distributed species
  - Assigning impact to a wide set of actions
  - Understanding pre-conservation status of species
  - Developing objective and credible counterfactuals
  - The ultimate impact of ‘enabling’ activities, e.g. training
  - Limited documentation of project activities and results
- Data quality and reliability (ambiguity, diversity of formats, completeness and currentness)  
→ lack of standards
- Data availability
- Poor data management systems and reporting mechanisms

- Culture of 'doing vs. measuring' requires shift in the institutional culture – being nervous of business language

### **Group Discussion**

The entire group followed up on these challenges elaborating additional barriers that keep them from compiling institutional and global KPIs:

- Existing initiatives are not used enough e.g. EAZA/AZA contributions guidelines, EAZA conservation database – if zoos just started doing this part it would help. Lack of awareness of tools? No recognition of use of information, lack of understanding of terms?
- No effort to communicate the real outcomes of conservation, only simplistic levels of input and activities
- Not enough staff resource to undertake work
- Lack of specialist skills
- Perception of the use of KPIs: Are they relevant? What is the benefit?
- Support (or lack of) of CEO: Is the CEO of the institution engaged – if so they will ensure it happens, if not it will not (allocation of resources; lack of understanding among CEO's – fear of looking bad?)
- Reluctance/Fear of being compared against other zoos? Peer pressure or damaging
- Don't really care?
- Measuring performance on input and activity level is not sufficient, but standardized tools across institutions above activity level are not existing.
- Inconsistent reporting
- Attribution problems

### **Conclusion and Next Steps:**

In sum, all agreed that it is essential to evaluate their work and demonstrate to a wider public what they do and what impact it makes on the world.

The next steps to make KPIs widely operational were identified:

- Encourage everyone to use existing KPI tools: e.g. AZA/EAZA guidelines for contributions to conservation, EAZA Conservation database
- Expand existing tools across the entire results chain
- Presentations and working groups on existing experiences of KPIs and impacts at national and regional meetings
- Promote benefits of standardized impact-measurements
- Promote impact-sharing in the sense of the One Plan Approach
- Contact Open Standards and/or Species360 to facilitate/develop a standardization tool/process across existing databases to link them and produce synergistic effects
- Investigate further the possibility of funding to undertake a project to upscale institutional KPI's to global KPI's – possibly discussion with Open Standards