

1. What is “research excellence”?

“Research excellence” is widely invoked but often underspecified. Drawing on survey results from 86 institutions reporting 171 indicators, we propose a practical framework for the structure and formative dimensions of “research excellence”.

Note: We focus narrowly on research, without suggesting that other areas such as teaching, service, or outreach are less important in academic assessment.

2. Two evaluation targets

- Excellent Research:** The products of research activity.
- Excellent Research Environments:** An ecosystem containing: Funding and resources, infrastructure, inclusivity, leadership, mentoring, regulation and responsible incentives that enable/support excellent research. Environments should be assessed alongside research products, especially at institutional level.

(cf. CoARA National Chapter Germany, 2026)

3. What counts as excellent research?

Excellent research is a portfolio of trustworthy, high-quality contributions. It combines:

- Quality (substantive & process quality, see Figure)
- Integrity
- Quantity of eligible outputs
- Scientific and/or societal impact.

4. Safeguarding function of quality and integrity

Quality and integrity act as **filters or multiplying factors** for quantity and impact:

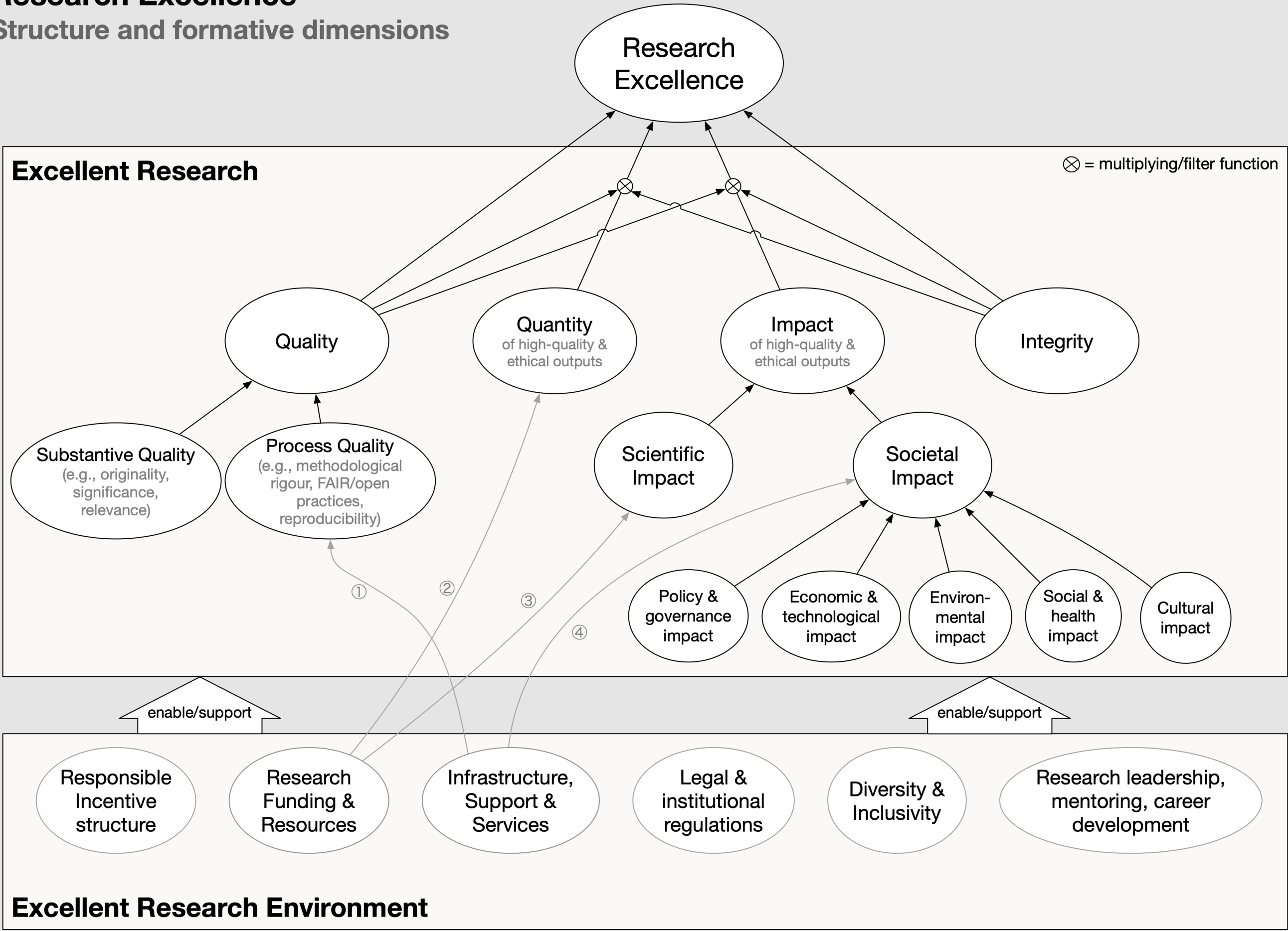
Only high-quality and ethical outputs should count, and quantity and impact cannot substitute quality and integrity:

- Impact from low-quality outputs can even be detrimental.
- A high quantity at the expense of quality or ethical conduct is not an indicator of research excellence.

(cf. Schönbrodt et al, 2025; Leising et al, 2025)

Research Excellence

Structure and formative dimensions



Black arrows indicate formative contribution to research excellence. Operationalisation and weighting of dimensions are field-, purpose- and assessment-specific.
⊗ indicates that quality and integrity condition the contribution of quantity and impact.

Grey arrows indicate exemplary enabling pathways from the research environment: ① e.g., a local training center for reproducible research, or a reproducibility check team;
② e.g., capacity for additional high-quality contributions; ③ e.g., open access, stakeholder engagement; ④ e.g., science communication officers.

5. The role of funding

Funding, although often used as an indicator in assessment exercises, is not an aspect of excellent research itself, but rather a facilitating factor through multiple pathways.

6. Responsible use of metrics and indicators

Indicators should be:

- reliable
- valid (i.e., reflect the construct being assessed)
- transparent, reproducible and non-proprietary
- readily available, provided at low or no costs
- multidimensional

(cf. Crepaldi et al., 2026)

7. KEY MESSAGES for application

- Make “research excellence” explicit, rather than relying on vague prestige signals.
- Distinguish Excellent Research from the Excellent Environments that enable it.
- Treat quality and integrity as multiplying factors (“safeguards”) for quantity and impact: If quality is zero, quantity and impact should have zero weight.
- Avoid incentives that reward quantity, visibility or funding at the expense of quality and integrity.