

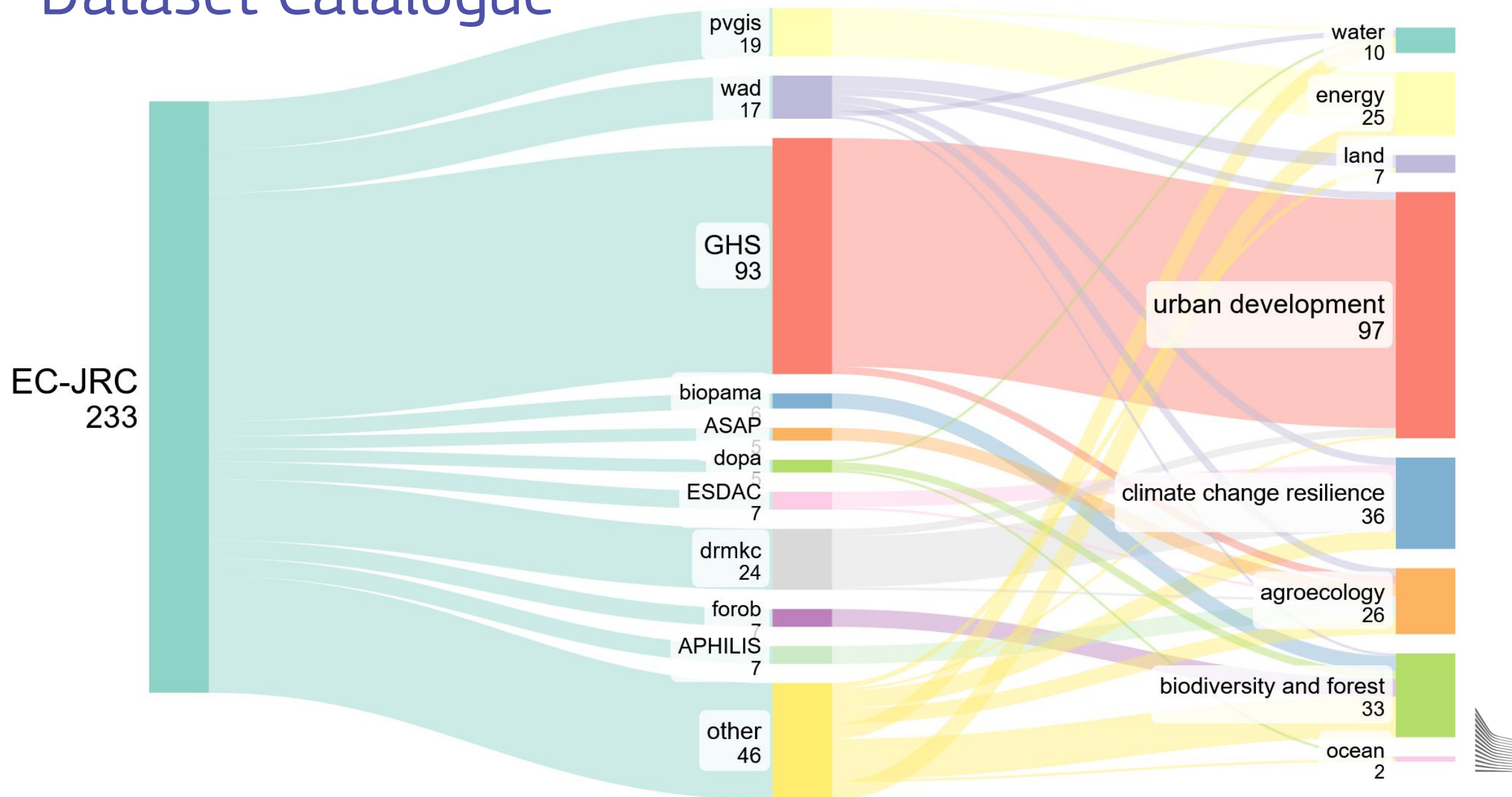
AKP Data Governance

Africa Regional Centres of Excellence for the Green Transition

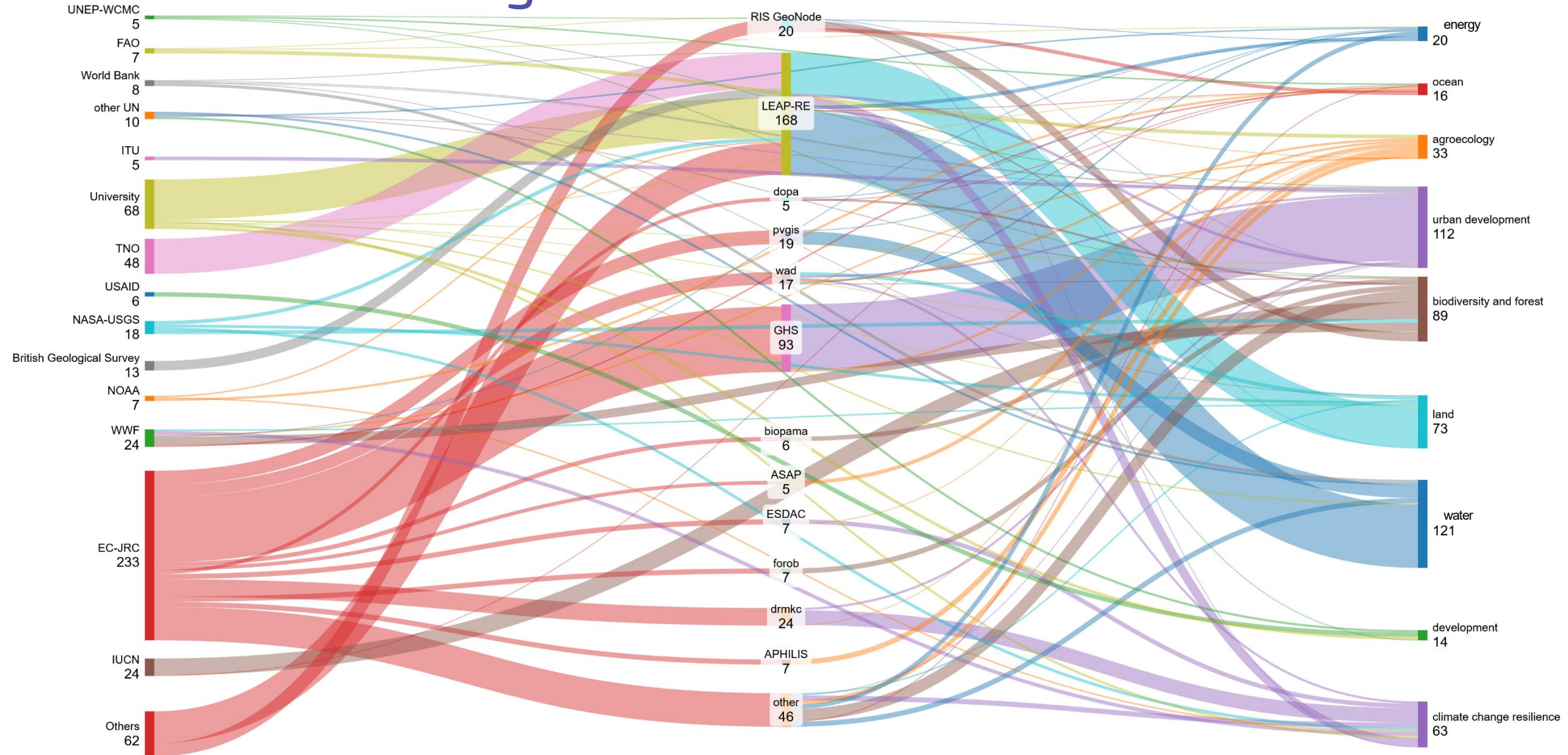
Southern Africa Regional Workshop – 08-07-2026

Speakers: Francesco Tonnarelli

Dataset Catalogue



Dataset Catalogue



Data Governance

A Gateway, Not a Proprietor

The Africa Knowledge Platform (AKP) operates as a decentralized facilitator.

By prioritizing partner autonomy and avoiding unnecessary data duplication, we aim to foster absolute trust and collaboration among all ArcX partners, bridging African and European data ecosystems.

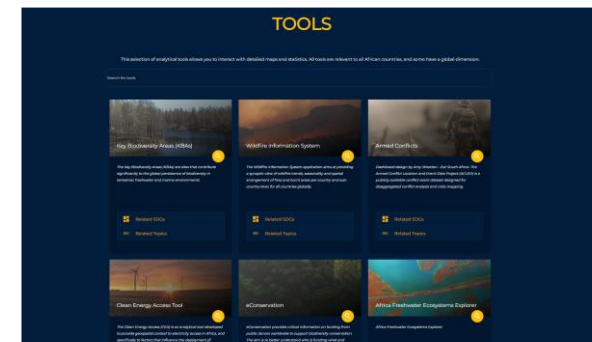
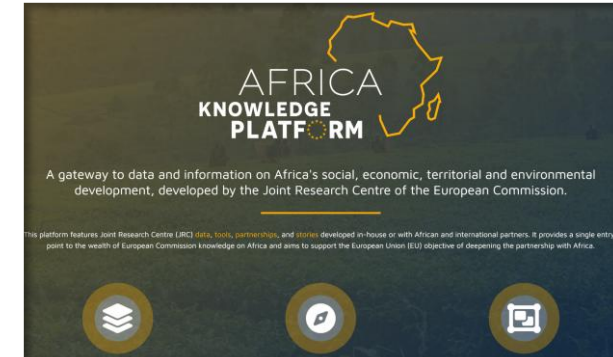
Data Ownership & Roles

100% Intellectual Property: Data Providers retain absolute sovereignty and ownership over the data they generate.

Display Licensing Only: Sharing data via the platform grants a display license, transferring zero ownership to the European Commission or JRC.

Data Owners (Partners): Dictate access tiers, licensing terms, and update schedules natively.

Platform Admins: Responsible for portal infrastructure, metadata harvesting, and reliable routing.



Data Security

Access Tiers

Role-Based Access Control (RBAC) empowers partners to define which datasets are fully public and which require EU Login clearance for restricted environmental data.

Metadata-First

The platform primarily stores descriptive metadata in its searchable catalog. Sensitive raw datasets are never unnecessarily exposed on public-facing servers.

Secure Transit

All environmental, territorial, and socio-economic data queried through the platform is rigorously encrypted in transit utilizing modern HTTPS/TLS protocols.

Store once, use many times



Single Source of Truth Uploading creates duplicates. By using APIs/WMS, data lives exactly once on the partner's secure servers, preventing version conflicts.



Real-Time Accuracy Corrections and updates pushed by ArcX partners are instantly reflected on the AKP without requiring manual re-uploads or tedious syncs.



Enhanced Sovereignty Partners keep physical control. If access needs to be restricted, partners simply adjust the API endpoint on their own infrastructure.



Reduced Infrastructure Overhead Connecting large geospatial datasets via WMS avoids processing bottlenecks and immense storage costs on the central platform.

Future Potential

How the AKP data ecosystem paves the way for
transformative ArcX partnerships



Scaling African Expertise

Cross-Border Analytics

With data standardized via APIs, partners can instantly overlay localized environmental datasets with regional socio-economic models, enabling complex, continent-wide insights previously hindered by siloed data.

Co-Developing Tools

Partners are not just data providers; they become co-creators. AKP can allow African technical centers to build customized dashboards and early-warning systems natively integrated with the AKP infrastructure.

Capacity Building

Adopting WMS/API standards across the ArcX network facilitates joint training programs. Technical teams can share best practices in modern geospatial architecture, elevating the technical baseline across all partner institutions.



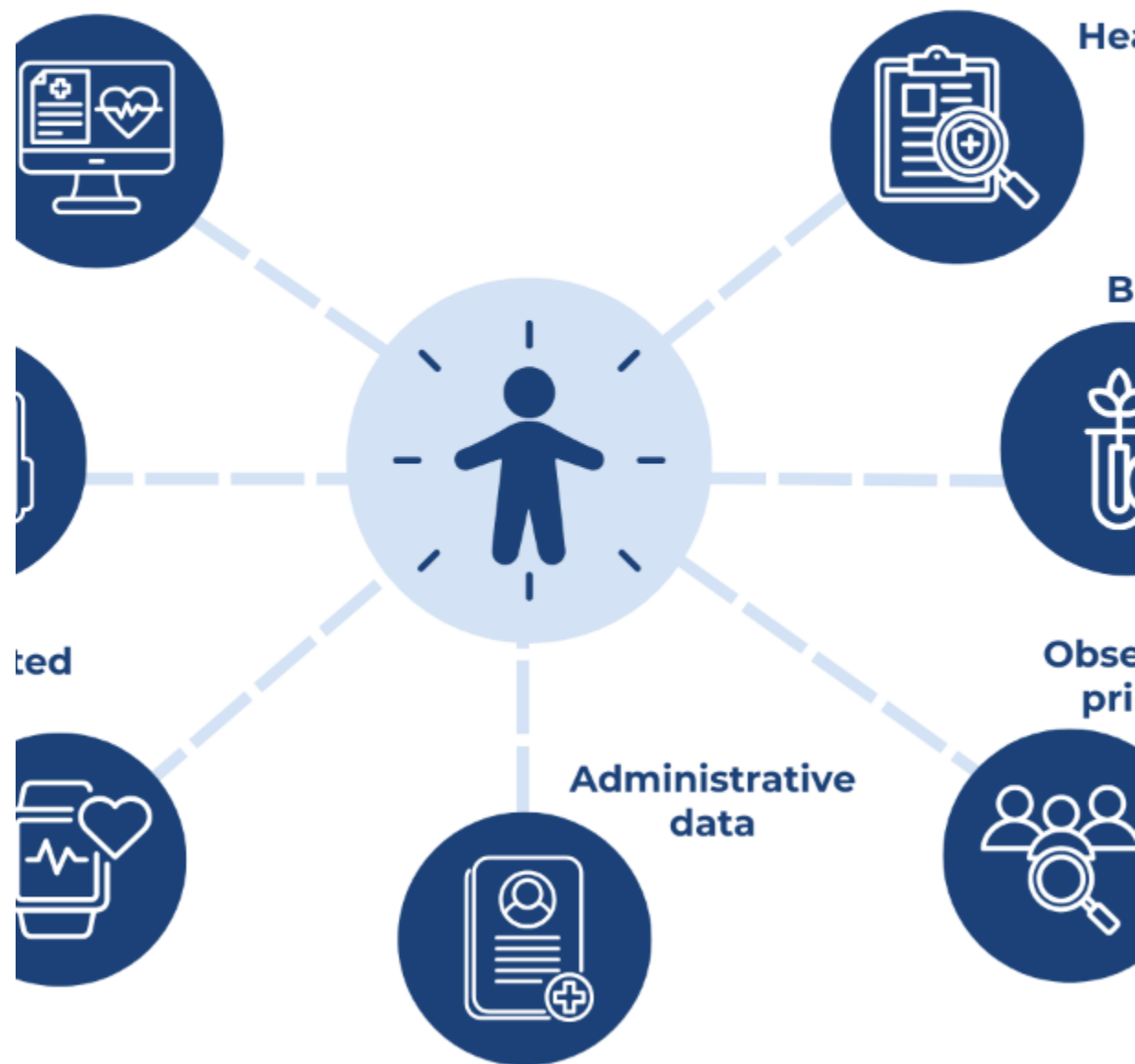
A Unified Scientific Voice

Bridging Science and Policy

A federated data network ensures that when African policymakers seek guidance on climate resilience or biodiversity, they draw from a unified, verified pool of evidence contributed directly by regional experts.

This collaboration strengthens the science-policy interface, elevating African-generated data to the forefront of continental and global decision-making.

Uses of Real World Data (RWD)



Joint Funding & Projects

- **Demonstrable Interoperability:** Proving that partner systems can seamlessly connect via APIs makes joint consortiums significantly more attractive for major EU or global grants.
- **Rapid Prototyping:** The ability to instantly call upon shared data services allows partner institutions to rapidly prototype solutions during critical events (e.g., extreme weather or agricultural crises).
- **Elevated Visibility:** By linking resources to the Africa Knowledge Platform, regional centers amplify their global visibility, attracting new strategic collaborations.



Thank you



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