

CGIAR Climate Data Hub - System-Wide Climate Data Asset Mapping

Internal review draft

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Version 1.1.0-draft — 123 assets in this build. **Interactive data access:** [CDH interactive dashboard](#).

Generated programmatically from the data — no numbers are hand-typed. The figures and tables below are interactive (hover, sort, filter) in this HTML edition. See **Data Access, Feedback and Reproducibility** near the end for the source code, steps to reproduce, and how to suggest corrections or additions.

Who This Report Is For

This report turns the first system-wide mapping of CGIAR’s climate data assets into something the Hub can act on. It is written for three audiences:

- **CDH leadership and the Core team** — to see where the system is strong and where it is thin, and to steer Phase-1 priorities. (*Start with the Executive Summary and [Section 5](#).*)
- **The CDH development and data team** — to decide what to federate or ingest now, what to queue for later, and where effort is being duplicated. (*[Section 6](#).*)
- **Contributing centres** — to check how their assets are represented and flag corrections or additions. (*[Annex A](#) and the feedback links in the Data Access section.*)

The questions it answers

- Where is CGIAR strong, and where are the gaps — by centre, theme, and geography?
- Which assets should the Hub act on now, and which belong in the next cycle?
- What is openly reusable, foundational, or nationally important — and what is locked behind an access conversation?
- Where are centres independently reprocessing the same upstream climate inputs?

The needs it serves

The Hub exists to reduce fragmentation in CGIAR’s climate evidence base. This mapping is the evidence behind that effort: it prioritises a focused set of high-value assets for Phase-1 inclusion or federation, surfaces reusable and nationally-relevant datasets, flags duplicated preprocessing the Hub can do once instead of many times, and points to the gaps — and the centres — still to engage. It is deliberately strategic, not exhaustive ([Section 1](#)).

Executive Summary

CGIAR holds a wealth of climate data — but it is scattered across centres, programmes, and bilateral projects: hard to find, easy to duplicate, and difficult to reuse. The Climate Data Hub was created to change that, and this exercise is its first concrete step: a structured look at the strongest climate data assets the centres themselves put forward.

123 assets from 11 centres were catalogued, spanning hazard monitoring, adaptation analytics, exposure, mitigation accounting, and integrated multi-domain platforms; **70 (57%)** come from the six Hub-funded centres. Coverage is deepest in **Adaptation Analytics** and **Hazard**, and concentrated in Africa and Global datasets.

Three messages stand out:

- **There are clear quick wins.** 28 assets are openly accessible, technically ready, and high-value — they can be federated or ingested with little friction ([Section 6.5](#)).
- **The centres’ nominations provide a strong starting point.** The 28 top-three nominations come with written justifications and are the primary starting set for immediate Hub consideration, but not the only assets that may enter Phase 1 review ([Section 6.2](#); [Section 8](#)).
- **The gaps are specific and actionable.** Adaptive Capacity is essentially absent, Latin America & Caribbean and Asia are thin, and two major centres — CIMMYT and ICARDA — have yet to submit ([Section 5](#); [Section 7](#)).

The rest of the report makes each of these concrete: where the strengths and gaps sit ([Section 5](#)), and exactly what to do now and next ([Section 6](#)).

Work-in-progress caveat. This report is one piece of evidence to guide the Climate Data Hub, alongside other technical, strategic, and governance inputs; it does **not** by itself dictate exactly what the Hub will do. The mapping is iterative and will be updated as centres review their entries, flag corrections, and suggest additions. Centres and partners will have multiple opportunities across the annual CDH cycle to engage, refine priorities, and shape what comes next.

1. Background and Objectives

The CGIAR Climate Data Hub (CDH) is a CGIAR initiative under Area of Work 1 (AoW1), designed to surface, standardise, and federate climate-relevant data assets held across the CGIAR system. The Hub operates under a **federation model**: it points to data where it already exists, rather than duplicating it, and only ingests data where cloud-optimised or API-accessible formats are not available.

This report summarises the first system-wide asset mapping exercise, conducted in early 2026. Centres were asked to nominate climate data assets through a structured submission template covering identity, structure, spatiotemporal scope, thematic domain, context of use, and a readiness/nomination assessment.

Consistent with the mapping strategy, the exercise is deliberately **focused and strategic, not exhaustive**: each centre nominated a limited set (up to ~20) of its strongest, most decision-relevant assets, prioritising quality and reuse over volume. It is **not an audit of past outputs, and not a scientific evaluation of data quality**, and it does not alter data ownership or impose hosting requirements. It is a coordination and governance step to inform Phase 1 of the Hub.

Objectives of the mapping:

1. Surface a focused, strategic set of high-value climate data assets across CGIAR (not an exhaustive inventory).
 2. Identify gaps and priorities for Hub curation and integration.
 3. Provide a foundation for cross-centre collaboration and data-sharing.
 4. Inform the CDH technical roadmap for ingestion and federation.
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2. Methods

2.1 Submission process

Each centre received a standardised Excel template with six thematic sheets. Nominators were asked to complete one row per asset, covering:

- **Sheet A — Identity:** asset name, nominator, organisation, asset type, short description.
- **Sheet B — Structure:** file format, storage location, licence, API/access details.
- **Sheet C — SpatioTemp:** spatial coverage, resolution, temporal type, update frequency.
- **Sheet D — Thematic:** climate domain, farming system, commodity, output variable type.
- **Sheet E — Context & Use:** decision relevance, reuse potential, existing use cases.
- **Sheet F&G — Assess & Nominate:** technical readiness, contemporary validity, sustainability, asset rank, and intended Hub role.

Submissions were received from 11 centres.

The blank template, full submission guidelines, and every centre's completed Excel workbook are version-controlled in the project repository: the raw submissions are at [\[data/submissions/\]\(https://github.com/CGIAR-Climate-Data-Hub/cdh-asset-mapping/blob/main/data/submissions/\)](https://github.com/CGIAR-Climate-Data-Hub/cdh-asset-mapping/blob/main/data/submissions/) and the mapping strategy and template instructions at [\[docs/CDH-Asset-Mapping-Strategy.docx\]\(https://github.com/CGIAR-Climate-Data-Hub/cdh-asset-mapping/blob/main/docs/CDH-Asset-Mapping-Strategy.docx\)](https://github.com/CGIAR-Climate-Data-Hub/cdh-asset-mapping/blob/main/docs/CDH-Asset-Mapping-Strategy.docx).

2.2 Normalisation

Free-text fields for climate domain, asset type, and spatial coverage were normalised to controlled vocabularies using keyword matching. The normalisation rules are documented in [src/ingest.py](#) and applied reproducibly by the pipeline documented in the **Data Access, Feedback and Reproducibility** section.

2.3 Consolidation of duplicate entries

4 consolidations were applied where multiple submitted entries represented sub-components of a single dataset (e.g. model inputs and outputs from the same pipeline). This reduced the raw submission count of **129** to **123** catalogued assets. The full merge log is in [Annex C](#).

2.4 Optional composite priority score

The mapping strategy deliberately avoids reducing the five qualitative criteria to a single rank (Section 6.1). For navigation only — to help sort long lists in the report and dashboard — a transparent **composite score (0–100)** is nonetheless computed. It is defined once in [src/ingest.py](#) and shared verbatim with the dashboard, so the two never diverge. It is **not** an official ranking; the authoritative signal remains each centre’s own top-three nomination.

Each component is mapped to a 0–1 sub-score, then combined as a weighted average:

- **Ordinal criteria** (Decision Relevance, Technical Readiness, Reuse Potential, Contemporary Validity, Sustainability) map Very High = 1.0, High = 0.85, Medium-High = 0.75, Medium = 0.5, Medium-Low = 0.35, Low = 0.25.
- **Submitted rank** maps to a *centre-relative* sub-score $(\text{max_rank_in_centre} - \text{rank} + 1) / \text{max_rank_in_centre}$, so rank 1 scores highest within each centre regardless of how many assets that centre ranked.
- **Intended Hub role** maps Hub-native = 1.0, Derived = 0.8, Federation = 0.7, Reference/Operational = 0.6; unspecified is omitted.

Component	Weight
Decision relevance	0.20
Technical readiness	0.20
Reuse potential	0.15
Submitted rank (within centre)	0.15
Contemporary validity	0.10
Sustainability	0.10
Intended Hub role specified	0.10

The score is the weighted mean of **only the components that are present**: a missing criterion is dropped from both numerator and denominator rather than scored as zero, so incomplete submissions are not unfairly penalised (they simply rest on less evidence). The portfolio mean is **73**.

3. Domain Definitions

The following climate domain vocabulary is used throughout this report:

Domain	Definition
Hazard	Climate variables and indices that characterise physical hazard (e.g. rainfall, temperature, drought, flood extent).
Hazard / Climate Services	Operationally processed hazard products delivered as services (e.g. seasonal forecasts, advisories).
Exposure	Data on agricultural systems, land use, populations, and assets exposed to climate hazards.
Sensitivity	Data on how exposed systems respond to climate stressors (e.g. crop yield sensitivity, disease risk models).
Adaptive Capacity	Data on capacity of systems or communities to adjust to climate impacts.
Adaptation Analytics	Integrated datasets and model outputs that assess adaptation options, impacts, or trade-offs (combines hazard, exposure, and response).
Mitigation	GHG inventories, emission factors, and tools for quantifying emission reductions in agriculture.
Multi-domain	Assets that span two or more domains without clear primary classification.
Hybrid labels	Some assets are tagged with two adjacent domains (e.g. Sensitivity / Adaptation Analytics) where single label would be misleading.

*These labels follow the mapping strategy’s domain vocabulary. The strategy lists **Climate finance** and **Climate policy** as separate domains; given the small number of assets in either, this report combines them under **Climate Policy / Finance** — they can be split if future submissions warrant.*

4. Results

This section describes the portfolio as a whole — how much was submitted and by whom, which themes and geographies it covers, who owns the assets, and what they actually contain. Sections 5 and 6 then turn this into strengths, gaps, and actions.

4.1 Volume and coverage

A total of **123 assets** were catalogued across 11 centres (Figure 1). All figures reported here reflect post-consolidation count (see [Section 2.3](#) and [Annex C](#)).

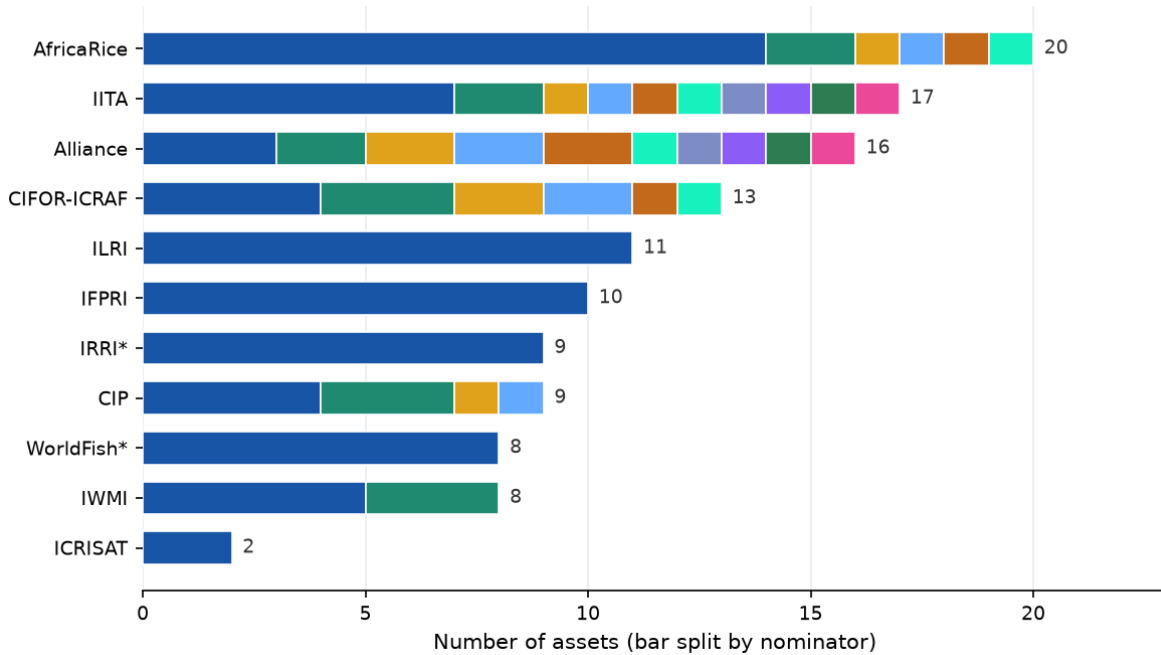


Figure 1. Assets submitted per centre. Total catalogued assets per centre after consolidation (Section 2.3), ordered largest to smallest. Each bar is split into one coloured segment per nominating individual — a longer run of colours means more contributors behind a centre’s portfolio (e.g. AfricaRice and IITA drew on many nominators, while ILRI and IFPRI came through a single nominator). Segment colour is arbitrary and carries no meaning (hence no legend); the number is the centre total. Centres marked with an asterisk indicate cases where a single listed nominator may understate broader internal consultation or contribution. The interactive dashboard names each nominator and their count on hover.

Centre	Assets	Hub-funded
AfricaRice	20	No
IITA	17	Yes
Alliance	16	Yes
CIFOR-ICRAF	13	No
ILRI	11	Yes
IFPRI	10	Yes
CIP	9	No
IRRI	9	No
IWMI	8	Yes
WorldFish	8	Yes
ICRISAT	2	No
Total	123	

Hub-funded centres account for **70 assets (57%)** of portfolio.

Coverage caveat — centres not yet represented. Submissions were received from 11 centres. **CIMMYT** and **ICARDA** had not submitted at the time of this build and are therefore absent from all totals and figures below; their inclusion will materially change domain and geographic coverage (CIMMYT in particular for South Asian wheat/maize systems and adaptation analytics — see the box in [Section 5.4](#)). Targeted follow-up with both centres is underway.

4.2 Domain distribution

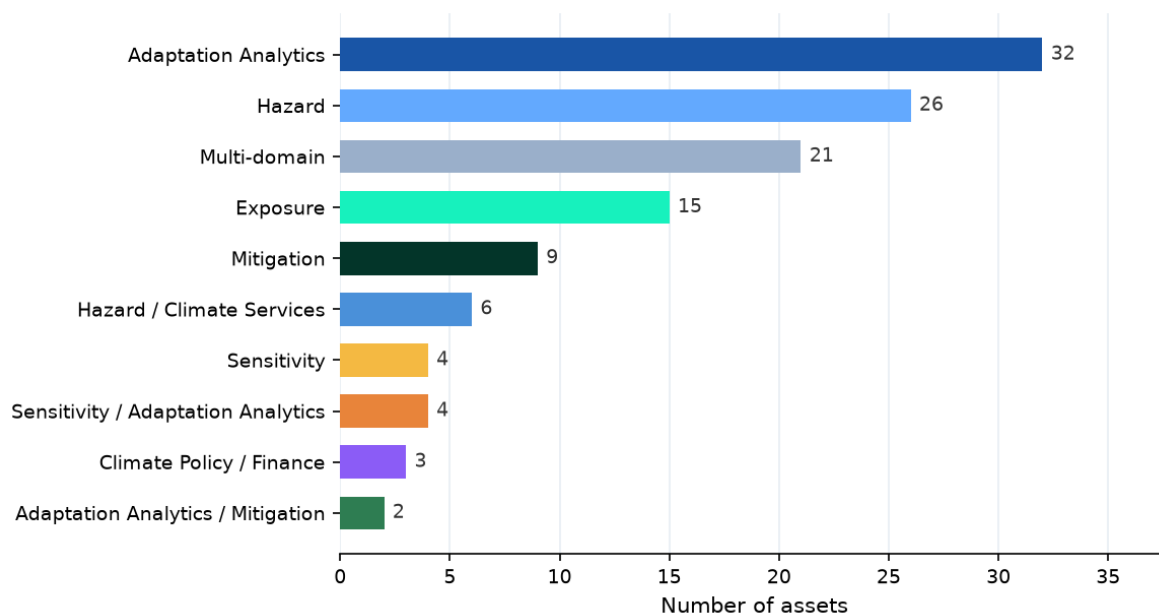


Figure 2. Distribution by climate domain. Number of assets in each normalised climate domain (definitions in [Section 3](#)); assets with no specified domain are excluded. Hover a bar for its share of the portfolio, the centres contributing it, and how much is openly accessible. Adaptation Analytics and Hazard are the largest domains; Adaptive Capacity and Climate Policy / Finance the thinnest.

Adaptation Analytics is most represented domain (32 assets, 26%), followed by **Hazard** (26 assets). **Multi-domain** assets (21 assets) reflect submissions where nominated asset spans two or more domains — common for integrated platforms and modelling frameworks.

High Multi-domain share from IITA reflects their submission labels (‘Agronomy and climate’, ‘Disease risk’) which span exposure, sensitivity, and adaptation. CIFOR-ICRAF’s multi-domain assets include food security and livelihoods datasets with indirect but significant climate relevance. See Figure 5 for centre-by-domain breakdown.

Cross-centre domain coverage

	Adapt. Analytics	Hazard	Multi- domain	Exposure	Mitigation	Hazard / Clim. Svc	Sensitivity	Adaptive Capacity
AfricaRice	1	2	14		1	1	1	
Alliance	5	6			1			
CIFOR-ICRAF	7		3		3			
CIP		1				5		
ICRISAT	2							
IFPRI				10				
IITA	11	1	2				2	
ILRI		11						
IRRI	4				3			
IWMI	1	4	2	1				
WorldFish	1	1		4	1		1	

Figure 5. Centre × domain heatmap. Number of assets each centre holds in each single-label climate domain; darker cells hold more, blank cells none. Hover a cell for example assets and the open-access share of that centre–domain combination. Hybrid-domain assets are excluded here for readability but counted in Figure 2.

Heatmap shows number of assets per centre per domain. Hybrid domain labels (e.g. Sensitivity / Adaptation Analytics, Adaptation Analytics / Mitigation) are excluded from heatmap for readability; they are included in Figure 2.

A further interpretation caveat is that current centre profiles may reflect how assets were surfaced, not only the full thematic breadth held within each centre. In particular, IFPRI's current submission sits entirely in Exposure and ILRI's entirely in Hazard, so targeted next-round outreach would help test whether those centre-level profiles are complete or mainly reflect the first-round submission pathway.

4.3 Ownership and asset type

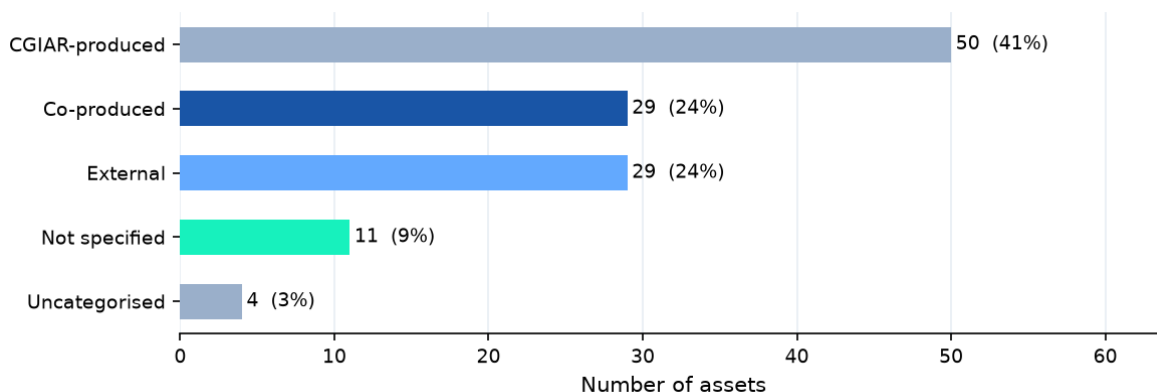


Figure 3. Asset type (ownership). Share of catalogued assets by ownership class — CGIAR-produced, co-produced with partners, or external datasets adopted into CGIAR workflows. Hover a bar for the centres behind it and its open-access share.

50 assets (41%) are CGIAR-produced; **29 (24%)** are external datasets adopted into CGIAR workflows; and **29 (24%)** are co-produced with external partners. External assets are included where centres have demonstrated active use in climate analytics and where Hub can add value through standardisation or linkage.

4.4 Geographic coverage

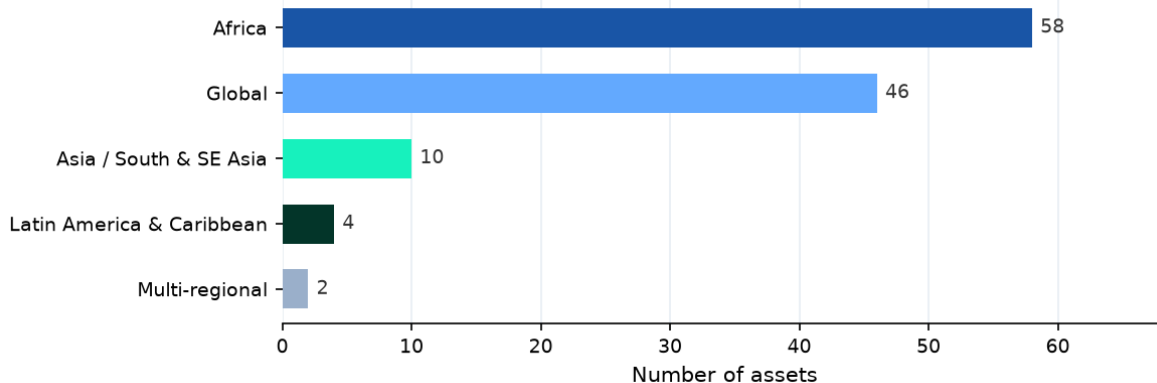


Figure 4. Geographic coverage. Number of assets per geographic grouping; assets with no specified coverage are excluded. Hover a bar for the dominant domains and centres in that region. Africa and Global dominate; Latin America & Caribbean, Asia, and Multi-regional are comparatively thin.

Africa (58 assets) and Global (46 assets) together represent 85% of portfolio. Asia and South/Southeast Asia (10 assets) is driven primarily by IRRI. Latin America & Caribbean (4 assets) is represented by Alliance and CIP submissions.

3 assets had no spatial coverage specified in submission and are excluded from Figure 4.

4.5 Priority nominations

Of 123 catalogued assets, **106 (86%)** include Asset Rank (Section F&G of submission template) and **53 (43%)** specify intended Hub Role.

Intended Hub Roles describe how asset should be integrated with Hub:

- **Hub Native** — asset will be ingested and hosted directly by Hub.
- **Hub Reference** — Hub will link to asset at its existing location, without ingesting copy.
- **Hub Derived** — Hub will produce derived or value-added product from asset.

Hub preference is federation over ingestion. Datasets in existing platforms that are not cloud-optimised or available by API may require ingestion to enable interoperability; in such cases Hub will work with data owner to agree on approach. Where permissions already allow it, Hub may proceed without delay; otherwise, formal agreement with data owner is required before ingestion.

4.6 What the assets measure, and who uses them

Counts alone understate what was captured. The submissions also describe what each asset actually produces (template Sheet D — Thematic) and how it is used in practice (Sheet E — Context & Use). That detail is what turns an inventory into a basis for reuse, and it sharpens the picture of where the portfolio’s real value sits.

What they measure. **123 of 123** assets specify an output variable type, spanning raw climate variables and hazard indices, biophysical outputs (crop yields, biomass, soil moisture), greenhouse-gas emissions, and suitability or classification layers. The commodity focus tracks CGIAR’s mandate crops — led by **Rice** (32), **Potato/sweetpotato** (11), **Livestock** (11) — while farming systems are dominated by **Cropping** (60), **Rice-based** (15), **Mixed** (13). The recurring upstream climate inputs in [Section 6.7](#) show how many of these outputs are, in turn, built on a small shared set of sources, which is exactly where the Hub can remove duplicated effort.

How they are used. Submitters most often describe their assets serving **Modelling** (44), **Research** (44), **Policy** (43) purposes — confirming a portfolio that skews decisively toward decision support rather than purely academic output. The user communities named most frequently are **Researchers** (77), **Governments** (76), **Donors** (52). Most tellingly for the Hub’s reuse mandate, **114 assets** already name the CGIAR programmes using them, **68** are

rated high or very-high national relevance (the datasets that underpin country engagement and policy dialogue), and **78** are flagged as foundational to ongoing work — assets whose withdrawal would break existing pipelines.

Two implications follow. First, the portfolio’s value is concentrated in a relatively small core of foundational, multi-programme, nationally-relevant datasets; these are the natural anchors for Phase 1, ahead of more peripheral or single-use submissions. Second, the strong policy, advisory, and modelling orientation means the Hub’s task is less to surface new science than to make assets that are *already relied upon* discoverable, interoperable, and durable — reducing the risk that critical datasets remain locked to the teams that happen to maintain them today.

5. Strength and Gap Analysis

This section is written for the **CDH Core team**: where the system-wide portfolio is strong, where it is thin, and where coverage depends on a single centre.

5.1 Domain × geography coverage

	Africa	Asia / SE Asia	Lat. Am. / Caribbean	Global	Multi- regional
Hazard	17	•	•	9	•
Hazard / Climate Services	1	1	1	3	•
Exposure	2	•	•	13	•
Sensitivity	2	1	•	1	•
Adaptive Capacity	•	•	•	•	•
Adaptation Analytics	16	3	1	11	•
Mitigation	1	3	2	2	•
Climate Policy / Finance	1	•	•	2	•
Multi-domain	17	2	•	•	2

Figure 6. Where coverage is deep, thin, or absent (climate domain × geography). Each cell counts the assets in one domain (row) and geography (column); darker blue = more

assets, a red dot = a true gap with none. Hover any cell for the exact count. Two patterns stand out: coverage concentrates heavily in Africa and Global, and **Adaptive Capacity is empty across every region** while **Latin America & Caribbean** and **Multi-regional** are thin throughout — the clearest targets for the next cycle. Hybrid-domain and unspecified-geography assets are excluded for legibility.

Coverage concentrates in two cells — **Hazard × Africa** (17 assets) and **Adaptation Analytics × Africa** (16 assets) — alongside a strong **Global** column. Of the 45 domain × geography combinations, **21 are empty**.

The clearest thematic gap is **Adaptive Capacity**, with no catalogued assets in any region. **Latin America & Caribbean** and **Multi-regional** are the thinnest geographies across nearly every domain.

5.2 Concentration risk

2 domain(s) are currently represented by a single centre, making system-wide coverage dependent on one submitter:

Domain	Sole centre
Adaptation Analytics / Mitigation	IRRI
Climate Policy / Finance	Alliance

These are priorities for cross-centre outreach: a second submitter would reduce single-point dependency and validate the domain’s representation.

5.3 Per-centre strength profile

Mean priority score summarises each centre’s portfolio on the shared 0–100 scale (see [Section 6.1](#)). ‘Domains’ counts the distinct climate domains a centre covers.

Table — Per-centre strength profile (mean priority is the optional composite of [Section 6.1](#)).

Centre	Assets	Mean priority	Domains covered	Hub-funded
IWMI	8	82	4	Yes
IRRI	9	81	3	No
AfricaRice	20	77	6	No
Alliance	16	74	5	Yes
IITA	17	73	4	Yes
CIFOR-ICRAF	13	72	3	No
CIP	9	70	3	No

Centre	Assets	Mean priority	Domains covered	Hub-funded
IFPRI	10	69	1	Yes
ILRI	11	67	1	Yes
WorldFish	8	66	5	Yes
ICRISAT	2	63	1	No

5.4 Notable assets outside this mapping

Two strategically important assets are intentionally **not** ranked in the analysis above, and should be read alongside it:

AAA Atlas (CGIAR Adaptation Atlas). Already planned for integration into the Climate Data Hub from the outset, the AAA Atlas has been **deliberately excluded** from the nomination ranking so that other centre assets can surface on their own merit. Its inclusion in the Hub is assumed, not contingent on this exercise.

South Asia Adaptation Atlas (ACASA). Developed by CIMMYT / BISA (<https://acasa-bisa.org/>), ACASA is a major adaptation-analytics resource for South Asian food systems. CIMMYT has not yet submitted to this mapping, so ACASA does not appear in any totals or figures; it is flagged here as a high-priority asset to capture once CIMMYT engages.

6. Priorities and Actions

This section is written for the **CDH development and data team**: which assets to act on now, which to queue for the next cycle, and the suggested integration pathway for each.

6.1 How to read priority here

The mapping strategy is deliberate that the five qualitative criteria are a **comparison aid, not a formal score or ranked list** — collapsing them into a single number would oversimplify. This report follows that intent: the authoritative signal is each **centre’s own ranking**, and the **top three assets per centre are the strategic nominations** for immediate Hub consideration ([Section 6.2](#)).

As a navigation convenience only, each asset additionally carries an **optional composite score (0–100)** — a weighted blend of the five criteria, submitted rank, and hub-role specification,

computed reproducibly in [src/ingest.py](#) and shared with the dashboard so the two never diverge. Treat it strictly as a sorting aid for long lists, **not as an official quality verdict**; absent criteria are dropped from the blend rather than penalised. Portfolio mean **73**.

6.2 Strategic nominations — each centre's top three

The **28 assets** below are each centre's three best-ranked submissions. Under the mapping strategy these are the unit for **immediate Hub inclusion or federation**; lower-ranked assets are candidates for later cycles. Each carries a centre-written justification (summarised below; full text in the asset record).

Data-quality note: 4 centre(s) (AfricaRice, ICRISAT, IITA, ILRI) submitted tied/duplicate ranks, so their nominations are capped at the three lowest-ranked assets (ties broken by name); IRRI submitted no ranks and so contribute no nominations; a centre with fewer than three ranked assets shows fewer. To be corrected with centres next cycle.

Table 1 — Strategic nominations: each centre's top-ranked assets (sortable / filterable in HTML; asset names link to the data source).

Centre	Rank	Asset	Domain	Access	Justification
AfricaRice	1	AfricaRice AgDataHub climate database (integrated agrometeorological datasets)	Hazard / Climate Services	Restricted	Backbone climate dataset enabling modelling, advisories, and risk analytics
AfricaRice	1	AfricaRice-processed ENACTS climate datasets (enhanced and quality-controlled)	Multi-domain	Restricted	Essential input for most climate applications and models
AfricaRice	2	AfricaRice Data Sharing Tool (DST) for climate services	Multi-domain	Restricted	Enables institutional climate data sharing and integration
Alliance	1	CGIAR Africa Agricultural Adaptation Atlas	Adaptation Analytics	Open	A comprehensive collection of data products specifically curated to support end-to-end policy and investment for adaptation in Africa. It includes not only data to support climate risk analysis (hazard, exposure, vulnerability), but also so
Alliance	2	CCAFS-Climate data portal (MarkSim, CMIP5/6 downscaling, bias correction)	Hazard	Open	An ecosystem of global, foundational climate data and associated tools widely used in adaptation analytics, climate and crop modelling. It strategically fills multiple gaps between direct GCM outputs and more ready-to-use data products for
Alliance	3	IPR Tool	Adaptation Analytics	Open	The IMPACT model is a multimarket economic model for the agriculture sector widely used for assessing climate impacts on global food price, production, trade, and demand. The IPR tool updates intrinsic productivity rate, a key input for the
CIFOR-ICRAF	1	The potential of Indonesian mangrove forests for global climate change mitigation	Mitigation	Open	Foundational mangrove carbon dataset supporting climate mitigation planning, carbon accounting, and restoration policy in Indonesia and globally
CIFOR-ICRAF	2	National Mountain Peatland Maps of Colombia	Mitigation	Open	Strategic peatland mapping asset supporting restoration, conservation planning, and emissions mitigation
CIFOR-ICRAF	3	Evaluating the restoration of the commons: LDSF field data	Adaptation Analytics	Open	Strong adaptation and restoration relevance with reusable LDSF methodology and operational restoration monitoring applicability

Centre	Rank	Asset	Domain	Access	Justification
CIP	1	ILCYM – Insect Life Cycle Modeling Platform for Pest and Natural Enemy Risk Modeling	Hazard / Climate Services	Open	ILCYM is the highest-priority candidate in this submission because it is a CIP-developed climate-risk modelling platform that directly links temperature-driven insect biology with pest and natural enemy risk assessment. It supports developm
CIP	2	Lateblight Advisor / SIMCAST Digital Advisory Platform for Potato Late Blight	Hazard / Climate Services	Open	Lateblight Advisor / SIMCAST is a top strategic Climate Data Hub candidate because it directly connects climate data to real- world advisory decisions for potato late blight management. The platform converts observed and forecast weather int
CIP	3	SOLANUM / Spatial Solanum / SWEETPO Crop Growth Modeling Tools	Sensitivity / Adaptation Analytics	Open	SOLANUM / Spatial Solanum / SWEETPO is a top- three candidate because it represents a CIP- developed crop modelling asset that translates climate, crop physiology and management conditions into yield and crop-growth outputs. SOLANUM estimates
ICRISAT	3	Pest & disease risk distribution & hot spot mapping tool	Adaptation Analytics	Restricted	Simple tool understand the futute climate change in the selected regions, to plant the future breeding program, varietal deplyment, stress monitoring and adapating the integrated management stratergies. Ability to replicate to other crops
ICRISAT	3	Climate change impacts on crops yield and Nutrition	Adaptation Analytics	Open	Higly reliable data sets on simulated cliate variables on crop, plant for mudulation of crop repsonse, breaking of resistance, nutrient acqusation, changes in the benifical microbes. Simulate the other regions climatic condition, specifica
IFPRI	1	Global MapSPAM 2020	Exposure	Open	Global spatial dataset of crop production, area, and yield at ~10 km resolution using data fusion methods
IFPRI	2	Global hamonized cropland	Exposure	Restricted	Advisory, Invesment, Decision making
IFPRI	3	High resolution national crop type maps	Exposure	Restricted	Research, Investment and policy

Centre	Rank	Asset	Domain	Access	Justification
IITA	1	AKILIMO	Adaptation Analytics	Open	Akilimo translate data on climate–soil interactions into actionable insights for farmers and systems. Enables targeting, climate vulnerability assessment, and segmentation for scaling climate-smart interventions. Used by extension agents to
IITA	2	Predicted aflatoxin risk in maize	Sensitivity	Open	This asset provides strategic value as a data-driven tool for anticipating aflatoxin contamination risk in maize, a major food safety and public health concern in East and Southern Africa. By translating climate and environmental signals in
IITA	3	Carob	Adaptation Analytics	Open	This asset provides structured access to historical agricultural research, not only CGIAR, but also from other organizations on experimental and observational data from thousands of experiments. It serves as a foundational database for meta
ILRI	1	Bias-corrected climate dataset for East Africa	Hazard	Open	This asset is strategically important because it translates climate observations and seasonal forecast information into practical agriculture indicators: onset, cessation and length of growing season. These outputs are directly relevant to
ILRI	1	Operational Onset, Cessation and Length of Growing Season Forecast Dataset	Hazard	Open	This asset is strategically important because it translates climate observations and seasonal forecast information into practical agriculture indicators: onset, cessation and length of growing season. These outputs are directly relevant to
ILRI	2	Administrative Boundary Climate Extractor Outputs	Hazard	Open	Policy, Research, Modelling, Investment
IWMI	1	Africa Flood Hazard	Exposure	Open	The Africa flood hazard dataset utilizes Earth Observation (EO) data to deliver continent-wide flood monitoring at a 500 m spatial resolution. It is developed using moderate-resolution NASA MODIS data spanning 2001 to 2025 and is available

Centre	Rank	Asset	Domain	Access	Justification
IWMI	3	Africa Multi-hazard risk maps	Adaptation Analytics	Open	Multi-Hazard Map integrates data on various natural disasters to assess risk exposure and support climate adaptation. This map visualizes hazard (floods, droughts, cyclones, landslides, epidemics, volcanic activity, earthquakes, extreme tem
WorldFish	1	FishBase	Sensitivity	Open	Foundational Climate Action enabler. FishBase underpins climate impact models, exposure assessments, and adaptation analyses by providing species-level biological and ecological traits. Its interoperability and long-term maintenance make it
WorldFish	2	Bio-Oracle	Hazard	Open	Bio-ORACLE provides the biophysical climate drivers required to assess exposure and vulnerability of marine systems. Its direct use in climate modelling and adaptation analytics makes it a high-priority asset for supporting Climate Action a
WorldFish	3	FishScores	Mitigation	Open	Useful for specific mitigation and industry decision contexts, but limited relevance for national or system-level Climate Action analytics within a Hub framework.

6.3 Priority quadrant

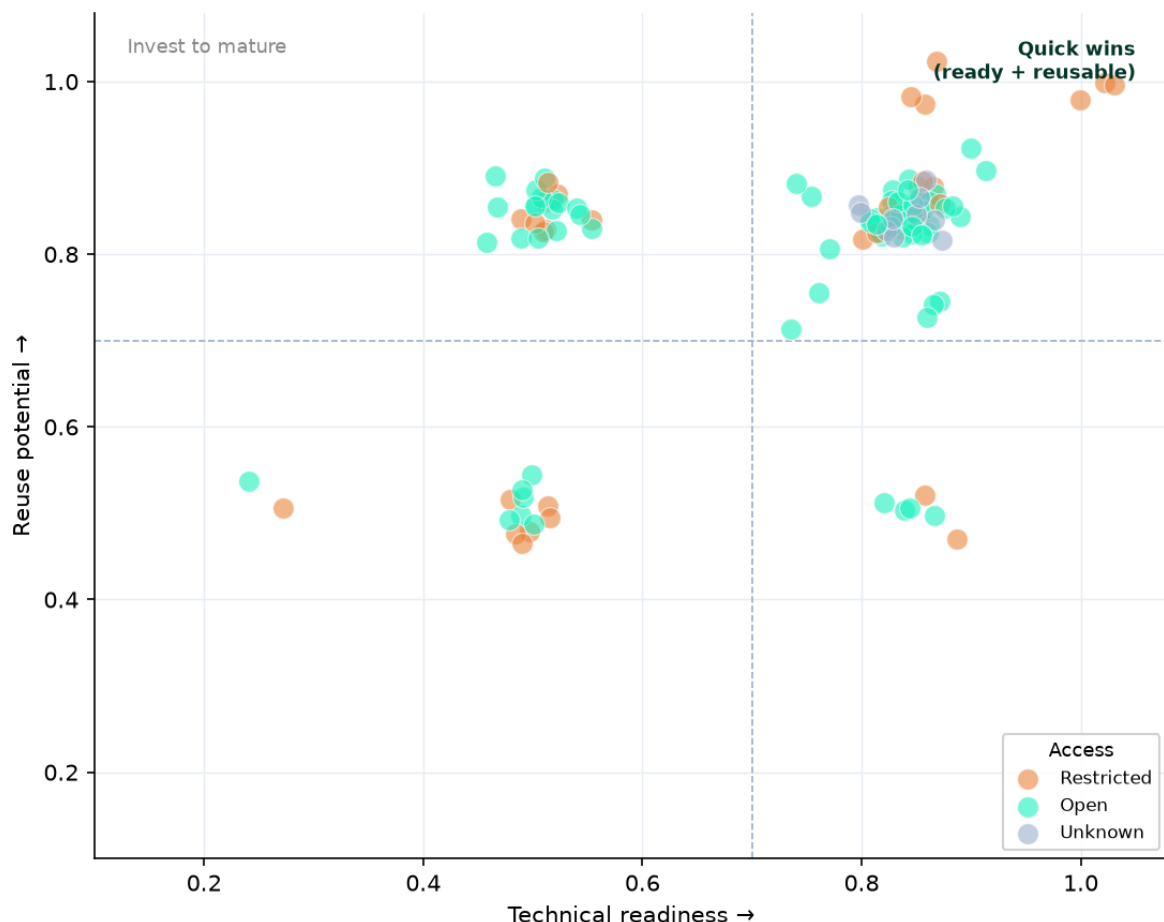


Figure 7. Priority quadrant. Each point is an asset placed by its submitter-rated technical readiness (x-axis) and reuse potential (y-axis); colour shows access status (green = Open, orange = Restricted, grey = Unknown). **Hover any point** for the asset’s name, centre, domain, access, and priority score. The shaded top-right zone holds the natural ‘quick wins’ — assets that are both ready and broadly reusable. Reuse potential and access are independent criteria, so high-reuse Restricted (orange, upper) points are not a contradiction — they are the prime candidates for an access negotiation to unlock that value.

Why are several **Restricted** assets rated **high reuse**? The two are measured independently. *Reuse potential* is the submitter’s judgement of how broadly the asset’s **content** could serve other programmes, countries, or analyses; *access status* is whether it can be **obtained** today under current licensing or permissions. A dataset can be scientifically reusable while still gated — these are exactly the assets where a short access conversation converts latent value into usable value (see [Section 6.6](#)).

6.4 Suggested integration pathway

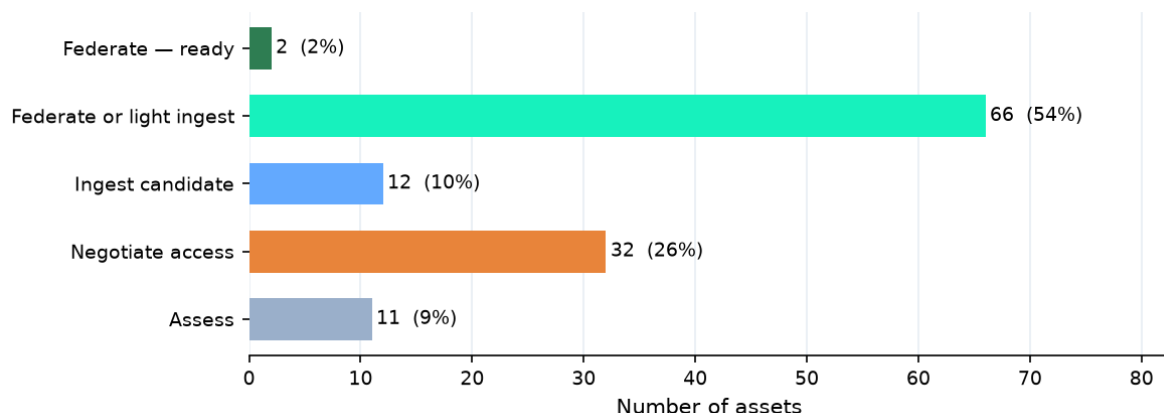


Figure 8. Suggested integration pathway. Each asset is classified by a heuristic combining its access status and file format into a starting pathway — federate (ready, or with light ingest), ingest candidate, negotiate access, or assess. Hover a bar for the file formats driving that pathway and example assets. The classification is advisory and should be verified per asset before committing.

A heuristic combining access status and file format suggests a starting integration pathway per asset. **68 assets** look federation-ready or close to it; **32** are gated behind an access conversation; **12** are open but need ingestion to become interoperable. These labels are advisory — verify format and licence per asset before committing.

Of the 123 assets, **80** are Open access, **32** Restricted, and **11** unspecified. **78** are flagged foundational to ongoing CGIAR work and **80** are reported as actively maintained.

6.5 Act now — ready, open, high value

28 assets combine Open access, high technical readiness, and a priority score of 75+. These are the recommended near-term targets for federation or ingestion (all listed below; sort or filter the table in the HTML edition):

Table 2 — ‘Act now’ shortlist: Open-access, high-readiness assets (sortable / filterable in HTML; asset names link to the data source).

Centre	Asset	Domain	Score	Pathway	Rationale
IFPRI	Global MapSPAM 2020	Exposure	89	Federate or light ingest	Global spatial dataset of crop production, area, and yield at ~10 km resolution using data fusion methods
IWMI	Africa Flood Hazard	Exposure	89	Federate or light ingest	The Africa flood hazard dataset utilizes Earth Observation (EO) data to deliver continent-wide flood monitoring at a 500 m spatial resolution. It is developed using moderate-resolution NASA MODIS data spanning 2001 to 2025 and is available
CIFOR-ICRAF	National Mountain Peatland Maps of Colombia	Mitigation	86	Federate or light ingest	Strategic peatland mapping asset supporting restoration, conservation planning, and emissions mitigation
WorldFish	FishBase	Sensitivity	86	Federate or light ingest	Foundational Climate Action enabler. FishBase underpins climate impact models, exposure assessments, and adaptation analyses by providing species-level biological and ecological traits. Its interoperability and long-term maintenance make it
CIFOR-ICRAF	The potential of Indonesian mangrove forests for global climate change mitigation	Mitigation	85	Federate or light ingest	Foundational mangrove carbon dataset supporting climate mitigation planning, carbon accounting, and restoration policy in Indonesia and globally
IITA	PlantVillage Nuru	Adaptation Analytics	85	Ingest candidate	Nuru: In-field Pest and Disease Diagnosis has strategic value as a digital agricultural support asset designed to assist with rapid field-level identification of crop pests and diseases. Its relevance remains high in the context of increasing Advisory, Investment, Decision making
IWMI	Africa Drought Hazard	Hazard	85	Federate or light ingest	Advisory, Investment, Decision making
IWMI	Irrigated Area Map	Multi-domain	85	Federate or light ingest	Research, Modelling
IWMI	River Discharge	Hazard	85	Federate or light ingest	Advisory, Investment, Decision making, research
IWMI	Population Impact on Flood	Multi-domain	85	Federate or light ingest	Research, Decision making

Centre	Asset	Domain	Score	Pathway	Rationale
IWMI	South Asia Climate Risk Map	Hazard	85	Federate or light ingest	Research, Decision making
Alliance	CCAFS-Climate data portal (MarkSim, CMIP5/6 downscaling, bias correction)	Hazard	84	Federate or light ingest	An ecosystem of global, foundational climate data and associated tools widely used in adaptation analytics, climate and crop modelling. It strategically fills multiple gaps between direct GCM outputs and more ready-to-use data products for
CIP	ILCYM – Insect Life Cycle Modeling Platform for Pest and Natural Enemy Risk Modeling	Hazard / Climate Services	84	Ingest candidate	ILCYM is the highest-priority candidate in this submission because it is a CIP-developed climate-risk modelling platform that directly links temperature-driven insect biology with pest and natural enemy risk assessment. It supports developm
IITA	AKILIMO	Adaptation Analytics	84	Ingest candidate	Akilimo translate data on climate–soil interactions into actionable insights for farmers and systems. Enables targeting, climate vulnerability assessment, and segmentation for scaling climate-smart interventions. Used by extension agents to
CIP	Lateblight Advisor / SIMCAST Digital Advisory Platform for Potato Late Blight	Hazard / Climate Services	82	Federate — ready	Lateblight Advisor / SIMCAST is a top strategic Climate Data Hub candidate because it directly connects climate data to real-world advisory decisions for potato late blight management. The platform converts observed and forecast weather int
IITA	Predicted aflatoxin risk in maize	Sensitivity	82	Federate or light ingest	This asset provides strategic value as a data-driven tool for anticipating aflatoxin contamination risk in maize, a major food safety and public health concern in East and Southern Africa. By translating climate and environmental signals in

Centre	Asset	Domain	Score	Pathway	Rationale
CIFOR-ICRAF	Evaluating the restoration of the commons: LDSF field data	Adaptation Analytics	81	Federate or light ingest	Strong adaptation and restoration relevance with reusable LDSF methodology and operational restoration monitoring applicability
IITA	Plant species of Drabo Gbo Forest Benin	Multi-domain	80	Federate or light ingest	This asset represents a detailed floristic dataset of plant species in a restored forest ecosystem in Benin, which may hold value for biodiversity monitoring and ecological restoration research. Its strategic value likely lies in documentin
IITA	SoySA10	Adaptation Analytics	80	Federate or light ingest	SoySA10 provides national-scale 10 m soybean distribution maps for South Africa from 2018–2025, offering a recent and spatially detailed dataset for monitoring soybean cultivation dynamics. Its strategic value lies in supporting agricultura
IITA	Pan-African Soybean Variety Trials (PAT)	Adaptation Analytics	80	Federate or light ingest	Dataset is valuable for advancing research on genotype $\times$ environment $\times$ management interactions and adaptation of soybean germplasm, supporting genetic evaluation, environmental modeling, and informed decision-making for soybean expansion in
Alliance	Observed Climate Data - AgERA5	Hazard	79	Federate or light ingest	Modelling, Advisory, Monitoring
CIFOR-ICRAF	REDD+ Country Profiles Indicators	Mitigation	78	Federate or light ingest	Supports comparative REDD+ policy analysis, governance assessment, and climate policy planning
CIP	PISCO SENAMHI Gridded Hydro- Meteorological Products for Peru	Hazard / Climate Services	78	Federate or light ingest	Strong foundational national hydro-meteorological dataset for Peru. It remains highly relevant because it provides precipitation, temperature, evapotranspiration and dew point-related variables used in GeoSIMCAST and other climate-risk work

Centre	Asset	Domain	Score	Pathway	Rationale
ILRI	DEFRA Climate and Health Daily Projection Dataset for Kenya, Ghana and Zambia	Hazard	78	Federate or light ingest	This asset is strategically valuable because it provides harmonised, monthly, multi-variable climate projection data for Kenya, Ghana and Zambia under SSP245 and SSP585 for two future periods. It is directly relevant to climate-health and l
Alliance	MODIS NDVI	Climate Policy / Finance	76	Federate or light ingest	Policy, intervention/decision-support, research
CIFOR-ICRAF	Wet chemistry data for a subset of AfSIS: Phase I archived soil samples	Adaptation Analytics	76	Federate or light ingest	Foundational African soil chemistry and spectroscopy dataset with broad reuse potential across land health and restoration analytics.
Alliance	Copernicus Global Flood Monitoring	Hazard	75	Federate or light ingest	Advisory, Research
IITA	Crop sowing date optimization	Adaptation Analytics	75	Federate or light ingest	Research, Modelling, Policy

6.6 Next cycle — high value, currently blocked

26 assets score 70+ but are held back by restricted access or sub-‘High’ technical readiness. These warrant an access conversation or a readiness investment before the next mapping cycle (top 12 shown):

Table 3 — ‘Next cycle’ queue: high-value assets blocked by access or readiness. Asset names link to the data source.

Centre	Asset	Domain	Blocker	Rationale
AfricaRice	AfricaRice-processed ENACTS climate datasets (enhanced and q	Multi-domain	Restricted access	Essential input for most climate applications and models
AfricaRice	Climate information service datasets used in digital advisor	Multi-domain	Restricted access	Direct farmer-facing climate services
AfricaRice	AfricaRice Data Sharing Tool (DST) for climate services	Multi-domain	Restricted access	Enables institutional climate data sharing and integration
AfricaRice	RiceAdvice	Multi-domain	Restricted access	Widely deployed agronomic advisory platform
Alliance	IPR Tool	Adaptation Analytics	Readiness below High	The IMPACT model is a multimarket economic model for the agriculture sector widely used for assessing climate impacts on global food price, production, trade, a

Centre	Asset	Domain	Blocker	Rationale
AfricaRice	AfricaRice AgDataHub climate database (integrated agrometeor	Hazard / Climate Services	Restricted access	Backbone climate dataset enabling modelling, advisories, and risk analytics
AfricaRice	Mali Disaster Risk Management (DRM) Maproom	Multi-domain	Restricted access	Supports drought/flood risk management and response
AfricaRice	Climate risk indicators datasets (drought, flood, heat stres	Hazard	Restricted access	Key for hazard monitoring and resilience planning
AfricaRice	RIICE satellite-derived rice monitoring and climate impact d	Multi-domain	Restricted access	Supports production monitoring and policy decisions
IFPRI	Global hamonized cropland	Exposure	Restricted access	Advisory, Invesment, Decision making
AfricaRice	Flood risk and submergence hazard datasets for inland valley	Hazard	Restricted access	Critical for flood risk management in inland valleys
IFPRI	High resolution national crop type maps	Exposure	Restricted access	Research, Investment and policy

6.7 Shared dependencies and reuse signals

Duplication of climate inputs. Of the **19 assets** that reported their underlying climate inputs, several inputs recur across multiple submissions — **CHIRPS** (8), **Station / observational** (7), **CMIP6** (4), **ERA5** (4). Shared upstream inputs are prime candidates for **once-only Hub preprocessing** (a stated aim of the mapping: detecting duplication in climate inputs and pipelines) rather than each centre reprocessing the same source independently.

Climate input	Assets relying on it
CHIRPS	8
Station / observational	7
CMIP6	4
ERA5	4
WorldClim	2

Only 19 of 123 assets recorded their climate inputs; enforcing this field next cycle would complete the dependency picture.

Cross-programme reuse. **114 assets** name the CGIAR programmes already using them — direct evidence of reuse beyond the originating team, which the strategy treats as a core signal for Hub inclusion.

National relevance. **68 assets** are rated High or Very High for national relevance — the datasets most important for country engagement, policy dialogue, and partner buy-in. The strategy flags these as priorities even where they are not globally standardised or openly accessible.

7. Discussion

Stepping back from the numbers: what does the portfolio tell us, how far can we trust it, and what should happen next?

7.1 Coverage and gaps

This mapping captures a substantial and decision-relevant slice of CGIAR’s climate data portfolio, but by design it is neither exhaustive nor a complete census. The picture it paints should be read as *what the engaged centres consider their strongest assets*, not the full universe of CGIAR climate data. Two coverage caveats matter most when interpreting the gaps below.

First, **two centres are absent**: CIMMYT and ICARDA had not submitted at the time of this build ([Section 4.1](#)). This is consequential, not cosmetic — CIMMYT anchors much of CGIAR’s South Asian wheat and maize adaptation analytics (including the ACASA atlas, [Section 5.4](#)), and ICARDA anchors dryland and West Asia / North Africa systems. Several apparent gaps below will narrow once they engage.

Second, within the assets that *were* submitted, three gaps are robust enough to act on. **Adaptive Capacity** is essentially absent (0 assets) — the portfolio is strong on hazard and

adaptation analytics but weak on the social and institutional capacity to respond, a recognised blind spot for climate targeting. **Latin America & Caribbean** and **Asia / South & SE Asia** are thin relative to Africa and Global coverage, concentrating geographic risk. And **2 domain(s)** currently rest on a single centre ([Section 5.2](#)), so the system-wide picture in those areas is one withdrawal away from a hole. Each of these is an outreach target rather than a finding about CGIAR’s true capability — the mapping surfaces where to look next, not a verdict on what exists.

7.2 Data quality observations

The submissions are usable and rich, but several recurring data-quality issues shape how far the analysis can be pushed, and each has a concrete fix for the next cycle.

Incomplete assessment fields. Asset rank, intended Hub role, and the qualitative ratings were left blank for a non-trivial share of assets, and only **19 of 123** recorded their underlying climate inputs — which limits the duplication analysis ([Section 6.7](#)) more than any other gap. Mandating the Hub-role and climate-input fields would sharply increase the analytical value of the next round.

Inconsistent ranking. The strategy intends a clean 1..N ordering per centre, but AfricaRice, ICRISAT, IITA, ILRI submitted tied or duplicate ranks (e.g. several assets all ranked ‘1’ or ‘2’), so their strategic nominations were capped at the three lowest-ranked assets; IRRI submitted no ranks at all. Ranking is the single most important field for prioritisation, so a brief validation step with each focal point before the next submission would pay off directly.

Free-text variability and AI-drafted fields. Domain, type, and access were submitted as free text and normalised to controlled vocabularies ([Section 2.2](#)); a handful of entries also carried template example text or GPT-drafted descriptions that required scrubbing or validation. This is expected given the strategy’s allowance for GPT drafting, but it reinforces that externally-researchable fields must be expert-checked, and that internal-use and strategic-importance fields should never be GPT-generated.

Finally, **1 asset(s)** had no climate domain specified and could not be classified from context; they are retained in the inventory but excluded from the domain figures.

7.3 Hub integration approach

CDH operates **federation-first** model. Many CGIAR data products already reside in well-maintained platforms (CGIAR Library, data.cgiar.org, institutional repositories). Hub preference is to register and link these rather than duplicate them.

Where data is not cloud-optimised, not accessible by API, or not in standardised format compatible with other CDH datasets, Hub may work with data owner to improve format or —

where necessary — ingest copy. In all cases, CDH will notify data owner and, where permissions do not already allow federation, agree approach before proceeding.

Many CDH data products will be open access. CDH intends to link back into existing portals and platforms so that Hub amplifies rather than duplicates those investments.

What the mapping implies for sequencing is concrete. Roughly **68 assets** look federation-ready or close to it and can be registered with little engineering; **32** are gated behind an access conversation and should enter a parallel, relationship-led track rather than block the technical work; and the shared upstream inputs identified in [Section 6.7](#) (CHIRPS, station data, CMIP6, ERA5) argue for the Hub preprocessing these **once**, centrally, rather than each centre repeating the work. Federation-first keeps stewardship with the originating centres while still delivering cross-CGIAR discovery — the central tension the Hub is designed to resolve.

7.4 In short

Returning to the questions this report set out to answer: CGIAR’s catalogued climate data is **strong on hazard and adaptation analytics, deepest in Africa and at global scale, and anchored by a core of foundational, multi-programme, nationally-relevant datasets** — but **thin on adaptive capacity, in Latin America and Asia, and dependent on single centres in several domains**. For the Hub, the immediate move is clear: act on the 28 open, ready, high-value assets now; use the centres’ 28 strategic nominations as the primary starting set rather than the only filter; open access conversations for the high-value-but-restricted assets in parallel; preprocess shared climate inputs once; and run a targeted next-round outreach to close visible gaps, especially where current submissions likely under-represent important domains such as adaptive capacity. The detail sits in Sections 5 and 6; this is the throughline.

8. Next Steps

1. **Complete outstanding submissions** — follow up with ICARDA and centres with incomplete assessment fields.
2. **Run targeted gap-filling outreach** — use the Q2 workshop and other CGIAR channels to identify strong but currently under-represented assets in missing domains or geographies, especially adaptive-capacity assets and gaps in Latin America and Asia. A next round of outreach with ILRI and IFPRI could also usefully broaden thematic coverage, helping ensure that the current submissions are complemented by a wider range of climate-relevant assets from across each centre.

3. **Prioritise assets for Hub integration** — use centre rank and Hub role to sequence technical work, but do not limit Phase 1 consideration strictly to the current top-three nominations where wider strategic value or obvious submission gaps suggest additional assets should be reviewed.
4. **Agree federation vs ingestion for each priority asset** — work with data owners to determine appropriate integration pathway.
5. **Publish asset catalogue** — make inventory available to CGIAR partners via CDH portal.
6. **Iterate mapping annually** — re-run pipeline as new submissions arrive.

Acknowledgments

This mapping exists only because colleagues across the centres took the time to nominate, describe, rank, and justify their strongest climate data assets — a substantial effort on top of busy research agendas. We are sincerely grateful to every contributor, and in particular to the centre focal points and nominators listed below.

Coordinator names are shown in bold in the table below.

Centre	Contributors
AfricaRice	Aboubacar Diallo; Ali Ibrahim; Elliott Dossou-Yovo ; Geoffrey Onaga; Mohamed Diallo; Paul Iboko
Alliance	Alcade Segnon; Alejandro Ruden; Camilo Barrios; Carlos E. Navarro Racines; Carlos Gonzalez; Kaue De Sousa; Robert S. Andrade; Shalika Vyas; Tosin Akingbemisilu; Xiaojing Wei
CIFOR-ICRAF	Ardhani, Trialaksita; Brockhaus, M.; Ickowitz, A.; Sufet Erlita ; Tamba, Yvonne; Winowiecki, Leigh Ann; Winowiecki, Leigh Ann (ICRAF)
CIP	David Ramirez; Heidy Gamarra; Henry Juarez ; Robert Hijmans
ICRISAT	Mamta Sharma ; Raman Babu
IFPRI	Zhe Guo

Centre	Contributors
IITA	Eduardo Garcia Bendito; Francis Muthoni ; Harun Murithi; James Legg; John Omondi; Julius Adewopo; Peter Neuenschwander; Rhys Manners; Siyabusa Mkuhlani; Thompson Ogunsanmi
ILRI	Teferi Demissie
IRRI	Anton Urfels; Emma Quicho-Diangkinay
IWMI	Giriraj Amarnath ; Niranga Alahacoon
WorldFish	Michelle Tigchelaar; Thomas Kirina

IRRI note: Emma Quicho-Diangkinay coordinated the IRRI submission. The current submission records list Anton Urfels as nominator on the catalogued items, but broader IRRI contributor attribution is being checked and may be updated after review.

Coordination of the asset-mapping exercise is led by the Alliance of Bioversity International & CIAT under the Climate Action Program (Critical Capacity PoD2), in collaboration with the Climate Data Hub team and AoW1. Thanks also to the centre contacts who fielded follow-up questions on access, format, and provenance. Any errors of consolidation or normalisation are the compilers', not the contributors'.

Data Access and Reproducibility

This report is generated programmatically: every figure, table, and statistic is computed from the normalised data, with no hand-typed numbers. The data and the code that produces this document are version-controlled and open.

Data

- Normalised catalogue (one row per asset): [data/normalized/assets.json](#)
- Raw centre submissions (Excel, one per centre): [data/submissions/](#)
- Consolidation/merge log: [data/merge_log.json](#)
- Researched contact overrides: [data/contact_overrides.json](#)

Code that generates this report

- [src/ingest.py](#) — reads the Excel submissions, normalises fields, writes [data/normalized/assets.json](#)
- [src/figures.py](#) — generates the static figures
- [src/report_common.py](#) — computes all statistics and builds the narrative, tables, and figure captions

- [report.qmd](#) — the Quarto source for this document (the interactive figures and tables are defined here)
- Full repository: <https://github.com/CGIAR-Climate-Data-Hub/cdh-asset-mapping>

Reproduce this report

```
pip install -r requirements.txt
python src/ingest.py          # Excel submissions -> data/normalized/assets.json
python src/figures.py        # static figures -> outputs/figures/
quarto render report.qmd --to html # or: --to docx
```

Feedback and Review

Feedback — corrections, additions, and questions

Spotted an error, or know of an asset that should be included? We want to hear it. **No GitHub account is needed** — use the feedback form; responses are routed automatically into the project’s GitHub issue tracker so every item is triaged and resolved (pipeline documented in [FEEDBACK.md](#)).

[Give feedback / suggest a correction or asset](#) — 2-minute form, no login.

If you do use GitHub, you can instead open a pre-filled issue directly: [correct a record](#), [suggest a missing asset](#), or [general feedback](#).

The HTML edition of this report also carries a comment thread at the bottom of the page (GitHub login required), backed by the repository’s GitHub Discussions — handy for quick remarks that don’t warrant a full issue. The same thread is embedded in the interactive dashboard.

Review participation

Review of this work is tracked as part of programme participation. To date: **5 reviewers** across **4 review events**, generating **14 tracked feedback items**. The log is maintained in [data/review_log.json](#) and covers all channels (feedback form, GitHub, email, documents).

Date	Reviewer(s)	Affiliation	Channel	Scope	Feedback items
2026-06-17	Brayden Youngberg	Alliance of Bioversity International and CIAT	GitHub issue	Report	#1
2026-06-18	Brayden Youngberg	Alliance of Bioversity International and CIAT	GitHub issue	Report	#4
2026-06-29	Michelle Tigchelaar	Stanford University	GitHub issue	Report	#5 , #6
2026-07-08	Alcade Segnon, Franck Tonle, Robert Zougmore	Alliance of Bioversity International and CIAT	Email + PDF document	Dashboard	#7 , #8 , #9 , #10 , #11 , #12 , #13 , #14 , #15 , #16

i Current review feedback themes

Last updated: 9 July 2026. This internal-review note summarises the current open feedback themes logged in GitHub. It is included for transparency and may change as comments are resolved; it is **not** part of the asset statistics above. Some points from this feedback have already been incorporated into [Section 8](#) (Next Steps).

- **Resolved** — the Alliance team’s systematic dashboard review (8 July 2026) logged ten issues covering navigation, filter consistency, coverage-map totals, responsiveness, and accessibility; eight are fixed and closed, and two data-completeness items (missing data links, unconfirmed contact emails) remain open pending centre outreach ([#12](#), [#13](#)).
- **Implemented in the revised recommendations** — targeted gap-filling outreach and a broader prioritisation approach that does not treat current top-three nominations as the only candidates for Phase 1 review ([#5](#), [#6](#)).
- **Still open for discussion** — complement this catalogue of assets produced with evidence on which climate datasets, boundaries, and crop or land-use maps people actually use across CGIAR ([#4](#)).
- **Still open for discussion** — clarify governance for inclusion decisions, consider whether restricted-access assets should receive lower near-term priority, and distinguish underlying datasets from tools or catalogues ([#1](#)).

Interested readers can view the live GitHub discussion: [all open feedback issues](#) or [#6](#), [#5](#), [#4](#), [#1](#).

Annex A — Full asset list

All 123 catalogued assets, sortable and filterable in the HTML edition. Use the search box to find a centre, domain, or asset.

Centre	Asset	Domain	Geography	Type	Score	Access	Pathway
AfricaRice	AfricaRice-processed ENACTS climate datasets (enhanced and quality-controlled)	Multi-domain	Africa	CGIAR-produced	97	Restricted	Negotiate access
AfricaRice	Climate information service datasets used in digital advisories	Multi-domain	Africa	CGIAR-produced	95	Restricted	Negotiate access
AfricaRice	AfricaRice Data Sharing Tool (DST) for climate services	Multi-domain	Africa	CGIAR-produced	93	Restricted	Negotiate access
AfricaRice	RiceAdvice	Multi-domain	Africa	CGIAR-produced	93	Restricted	Negotiate access
Alliance	IPR Tool	Adaptation Analytics	Global	CGIAR-produced	92	Open	Ingest candidate
AfricaRice	AfricaRice AgDataHub climate database (integrated agrometeorological datasets)	Hazard / Climate Services	Africa	CGIAR-produced	90	Restricted	Negotiate access
IFPRI	Global MapSPAM 2020	Exposure	Global	CGIAR-produced	89	Open	Federate or light ingest
IWMI	Africa Flood Hazard	Exposure	Global	Co-produced	89	Open	Federate or light ingest
AfricaRice	Mali Disaster Risk Management (DRM) Maproom	Multi-domain	Africa	CGIAR-produced	88	Restricted	Negotiate access
AfricaRice	Climate risk indicators datasets (drought, flood, heat stress) for rice systems	Hazard	Africa	CGIAR-produced	88	Restricted	Negotiate access
AfricaRice	RIICE satellite-derived rice monitoring and climate impact dataset	Multi-domain	Multi- regional	CGIAR-produced	88	Restricted	Negotiate access
IFPRI	Global hamonized cropland	Exposure	Global	Co-produced	87	Restricted	Negotiate access
AfricaRice	Flood risk and submergence hazard datasets for inland valley landscapes	Hazard	Africa	CGIAR-produced	86	Restricted	Negotiate access
CIFOR-ICRAF	National Mountain Peatland Maps of Colombia	Mitigation	Latin America & Caribbean	Co-produced	86	Open	Federate or light ingest
IFPRI	High resolution national crop type maps	Exposure	Africa	CGIAR-produced	86	Restricted	Negotiate access
WorldFish	FishBase	Sensitivity	Global	External	86	Open	Federate or light ingest
CIFOR-ICRAF	The potential of Indonesian mangrove forests for global climate change mitigation	Mitigation	Asia / South & SE Asia	Co-produced	85	Open	Federate or light ingest
IITA	PlantVillage Nuru	Adaptation Analytics	Africa	CGIAR-produced	85	Open	Ingest candidate
IWMI	Surface Water Extent	Hazard	Africa	Co-produced	85	Unknown	Assess
IWMI	Africa Drought Hazard	Hazard	Africa	Co-produced	85	Open	Federate or light ingest

Centre	Asset	Domain	Geography	Type	Score	Access	Pathway
IWMI	Irrigated Area Map	Multi-domain	Asia / South & SE Asia	Co-produced	85	Open	Federate or light ingest
IWMI	River Discharge	Hazard	Africa	Co-produced	85	Open	Federate or light ingest
IWMI	Population Impact on Flood	Multi-domain	Multi- regional	Co-produced	85	Open	Federate or light ingest
IWMI	South Asia Climate Risk Map	Hazard	Africa	Co-produced	85	Open	Federate or light ingest
AfricaRice	Mali Climate Suitability for Crop Maproom	Multi-domain	Africa	CGIAR-produced	84	Restricted	Negotiate access
AfricaRice	Rice yield gap decomposition dataset with climate, resource and management components	Multi-domain	Africa	CGIAR-produced	84	Restricted	Negotiate access
Alliance	CCAFS-Climate data portal (MarkSim, CMIP5/6 downscaling, bias correction)	Hazard	Global	CGIAR-produced	84	Open	Federate or light ingest
CIP	ILCYM – Insect Life Cycle Modeling Platform for Pest and Natural Enemy Risk Modeling	Hazard / Climate Services	Global	Uncategorise d	84	Open	Ingest candidate
IITA	AKILIMO	Adaptation Analytics	Africa	CGIAR-produced	84	Open	Ingest candidate
IITA	Soybean rust (SBR) risk hotspot	Sensitivity	Africa	CGIAR-produced	83	Unknown	Assess
IRRI	Temperature-Related Stress Maps	Adaptation Analytics	Global	Not specified	83	Unknown	Assess
IRRI	Country-level DSR Suitability Assessment Maps	Adaptation Analytics	Asia / South & SE Asia	Not specified	83	Unknown	Assess
IRRI	NDVI-Anomaly based Drought Maps	Adaptation Analytics	Asia / South & SE Asia	Not specified	83	Unknown	Assess
IRRI	AWD Suitability Maps	Adaptation Analytics / Mitigation	Global	Not specified	83	Unknown	Assess
IRRI	NDFI-based Flood Risk Assessment	Adaptation Analytics	Asia / South & SE Asia	Not specified	83	Unknown	Assess
IRRI	Rice Mitigation Hotspots and Mitigation Pathway Maps (currently being developed)	Mitigation	Not specified	Not specified	83	Unknown	Assess
Alliance	CGIAR Africa Agricultural Adaptation Atlas	Adaptation Analytics	Global	Co-produced	82	Open	Federate or light ingest
CIP	Lateblight Advisor / SIMCAST Digital Advisory Platform for Potato Late Blight	Hazard / Climate Services	Asia / South & SE Asia	Uncategorise d	82	Open	Federate — ready
IITA	Predicted aflatoxin risk in maize	Sensitivity	Africa	CGIAR-produced	82	Open	Federate or light ingest

Centre	Asset	Domain	Geography	Type	Score	Access	Pathway
CIFOR- ICRAF	Evaluating the restoration of the commons: LDSF field data	Adaptation Analytics	Global	Co-produced	81	Open	Federate or light ingest
IITA	Plant species of Drabo Gbo Forest Benin	Multi-domain	Africa	CGIAR-produced	80	Open	Federate or light ingest
IITA	SoySA10	Adaptation Analytics	Africa	CGIAR-produced	80	Open	Federate or light ingest
IITA	Pan-African Soybean Variety Trials (PAT)	Adaptation Analytics	Africa	CGIAR-produced	80	Open	Federate or light ingest
Alliance	Observed Climate Data - AgERA5	Hazard	Global	CGIAR-produced	79	Open	Federate or light ingest
CIFOR- ICRAF	REDD+ Country Profiles	Mitigation	Global	External	78	Open	Federate or light ingest
CIP	PISCO SENAMHI Gridded Hydro- Meteorological Products for Peru	Hazard / Climate Services	Global	Uncategorise d	78	Open	Federate or light ingest
ILRI	DEFRA Climate and Health Daily Projection Dataset for Kenya, Ghana and Zambia	Hazard	Africa	External	78	Open	Federate or light ingest
IRRI	Rice-GEM	Adaptation Analytics / Mitigation	Not specified	Not specified	78	Unknown	Assess
IRRI	IRRI's LTCCE	Mitigation	Asia / South & SE Asia	Not specified	78	Unknown	Assess
IRRI	RCMAS	Mitigation	Asia / South & SE Asia	Not specified	78	Unknown	Assess
Alliance	MODIS NDVI	Climate Policy / Finance	Global	External	76	Open	Federate or light ingest
CIFOR- ICRAF	Wet chemistry data for a subset of AfSIS: Phase I archived soil samples	Adaptation Analytics	Africa	Co-produced	76	Open	Federate or light ingest
Alliance	Global multi-crop agricultural trial data (tricot data)	Adaptation Analytics	Global	Co-produced	75	Open	Ingest candidate
Alliance	Alliance Crop Observatories	Adaptation Analytics	Global	Co-produced	75	Open	Ingest candidate
Alliance	Copernicus Global Flood Monitoring	Hazard	Global	External	75	Open	Federate or light ingest
IITA	Crop sowing date optimization	Adaptation Analytics	Africa	CGIAR-produced	75	Open	Federate or light ingest
Alliance	World Bank Open Data	Climate Policy / Finance	Global	External	74	Open	Federate or light ingest
Alliance	Observed Climate Data - CHIRPS	Hazard	Global	CGIAR-produced	74	Open	Federate or light ingest
CIP	SOLANUM / Spatial Solanum / SWEETPO Crop Growth Modeling Tools	Sensitivity / Adaptation Analytics	Global	CGIAR-produced	74	Open	Ingest candidate

Centre	Asset	Domain	Geography	Type	Score	Access	Pathway
IITA	Citizen-H2D3	Multi-domain	Africa	CGIAR-produced	74	Open	Federate or light ingest
ILRI	Bias-corrected climate dataset for East Africa	Hazard	Africa	External	74	Open	Federate or light ingest
ILRI	Operational Onset, Cessation and Length of Growing Season Forecast Dataset	Hazard	Africa	External	74	Open	Federate or light ingest
ILRI	District-Level Climate Projection Time-Series Dataset for Kenya, Ghana and Zambia	Hazard	Africa	External	74	Open	Federate or light ingest
WorldFish	Bio-Oracle	Hazard	Global	External	74	Open	Federate or light ingest
AfricaRice	Simulated rice yield datasets under current and future climates	Adaptation Analytics	Africa	CGIAR-produced	73	Restricted	Negotiate access
CIFOR-ICRAF	Improved Knowledge of the Role of the Forests for Food Security and Nutrition in Congo Basin Phase 2: Cameroon	Multi-domain	Africa	External	73	Open	Federate or light ingest
CIFOR-ICRAF	Biophysical baseline assessment within the KCEP- CRAL action areas in Kenya, using the LDSF Carob	Adaptation Analytics	Africa	Co-produced	73	Open	Federate or light ingest
IITA		Adaptation Analytics	Global	CGIAR-produced	73	Open	Federate or light ingest
CIP	WorldClim v2.1 Global Climate Surfaces	Hazard	Global	External	72	Open	Federate or light ingest
IITA	Nutrient omission, planting window, crop arrangement, and management data in Chinyanja Triangle	Not specified	Africa	CGIAR-produced	72	Open	Federate or light ingest
CIFOR-ICRAF	Dataset for the evaluation of forest and landscape restoration in Northern Ethiopia	Adaptation Analytics	Africa	Co-produced	71	Open	Federate or light ingest
IFPRI	Seasonal Crop type map from Foundation model	Exposure	Africa	Co-produced	71	Restricted	Negotiate access
Alliance	Tortilla Platform Off the Griddle -TOR 2-	Adaptation Analytics	Latin America & Caribbean	Co-produced	70	Open	Federate or light ingest
ILRI	Extreme Climate Indices Dataset for Drought, Heat and Heavy Rainfall	Hazard	Africa	External	70	Open	Federate or light ingest
ILRI	Administrative Boundary Climate Extractor Outputs	Hazard	Africa	External	70	Open	Federate or light ingest
Alliance	climatrends	Sensitivity / Adaptation Analytics	Global	CGIAR-produced	69	Open	Ingest candidate

Centre	Asset	Domain	Geography	Type	Score	Access	Pathway
Alliance	FinAccess Household Survey (KNBS)	Climate Policy / Finance	Africa	External	69	Open	Federate or light ingest
IFPRI	Crop specific suitability layers	Exposure	Global	Co-produced	69	Restricted	Negotiate access
IITA	HFCEP Nigeria	Adaptation Analytics	Africa	CGIAR-produced	69	Open	Federate or light ingest
AfricaRice	Climatic water balance datasets for rice-based systems (derived: rainfall-ET-irrigation)	Multi-domain	Africa	CGIAR-produced	68	Restricted	Negotiate access
CIFOR-ICRAF	Spatial Assessments of Changes in Soil Health Indicators (Benin, Kenya)	Adaptation Analytics	Africa	Co-produced	68	Open	Federate or light ingest
CIP	WeatherAPI — Operational Real- Time and Forecast Weather Data Service for SIMCAST / Lateblight Advisor	Hazard / Climate Services	Global	External	68	Open	Federate or light ingest
IFPRI	Global subnational agricultural statistics	Exposure	Global	CGIAR-produced	68	Restricted	Negotiate access
AfricaRice	AquaCrop-ready climate datasets for rice and off- season crops (current and future yield and adaptation solutions)	Multi-domain	Africa	CGIAR-produced	67	Restricted	Negotiate access
CIFOR-ICRAF	Mitigating risks of disease transmission in the wild meat food chain from forest to fork in Cameroon	Multi-domain	Africa	External	67	Open	Federate or light ingest
IFPRI	Time series of global harmonized cropland extent from 2011 to 2020	Exposure	Global	Co-produced	67	Restricted	Negotiate access
ILRI	C3S Multi-Model Seasonal Forecast Processing Dataset for Ethiopia	Hazard	Africa	External	67	Open	Federate or light ingest
WorldFish	FishStatJ	Exposure	Global	External	67	Open	Federate or light ingest
AfricaRice	Climate-induced agricultural land suitability change dataset	Multi-domain	Africa	CGIAR-produced	66	Restricted	Negotiate access
CIFOR-ICRAF	Biophysical Soil and Land Health Assessment in the Gambia	Adaptation Analytics	Africa	Co-produced	66	Open	Federate or light ingest
IITA	System dynamics model for exploring synergies, trade- offs, and resilience	Adaptation Analytics	Africa	CGIAR-produced	66	Open	Ingest candidate
WorldFish	FishScores	Mitigation	Global	Co-produced	66	Open	Federate or light ingest

Centre	Asset	Domain	Geography	Type	Score	Access	Pathway
Alliance	Climatologies at High resolution for the Earth's Land Surface Areas (CHELSA)	Hazard	Global	External	65	Open	Federate or light ingest
CIP	TIPCIP – Thermal Image Processor for Crop Water Stress and Irrigation Management	Sensitivity / Adaptation Analytics	Global	CGIAR-produced	65	Open	Ingest candidate
ICRISAT	Climate change impacts on crops yield and Nutrition	Adaptation Analytics	Global	Not specified	65	Open	Federate or light ingest
IITA	HarvestStat Africa	Adaptation Analytics	Africa	External	65	Open	Federate or light ingest
ILRI	VECTRI Malaria Model Dataset (climate forcing inputs + model outputs, Ethiopia)	Hazard	Africa	External	65	Open	Federate or light ingest
WorldFish	Future fish biomass projections (DBEM / FishMIP)	Adaptation Analytics	Global	External	65	Restricted	Negotiate access
AfricaRice	Farmers' climate risk perception and drought mitigation dataset (survey + climate linkage)	Multi-domain	Africa	CGIAR-produced	64	Restricted	Negotiate access
Alliance	CCAC Columbia livestock and agriculture sector GHG emission data for National DNC	Mitigation	Latin America & Caribbean	CGIAR-produced	64	Restricted	Negotiate access
IITA	Maize-Yield-in-Ghana-and-Malawi	Adaptation Analytics	Africa	CGIAR-produced	64	Open	Federate or light ingest
IITA	Extreme rainfall indices in Ghana	Hazard	Africa	CGIAR-produced	64	Open	Federate or light ingest
ILRI	S2S AI/ML Model-Ready Training Dataset for East Africa	Hazard	Africa	External	64	Open	Federate — ready
WorldFish	Sea Around Us	Exposure	Global	External	62	Open	Federate or light ingest
Alliance	JRC Global River Flood Hazard Maps (v2.1)	Hazard	Global	External	61	Open	Federate or light ingest
ICRISAT	Pest & disease risk distribution & hot spot mapping tool	Adaptation Analytics	Global	Not specified	61	Restricted	Negotiate access
WorldFish	Aquatic Food Composition Database	Exposure	Global	Co-produced	61	Open	Federate or light ingest
ILRI	Bias-Corrected SEAS5 Seasonal Forecast Dataset for Agricultural Onset Applications	Hazard	Africa	External	60	Open	Federate or light ingest
IFPRI	Global Irrigation map	Exposure	Global	Co-produced	59	Restricted	Negotiate access
CIFOR-ICRAF	Dataset for supporting the net agronomic assessment of yield limiting factors in maize production in Machakos county, Kenya	Adaptation Analytics	Africa	Co-produced	56	Open	Federate or light ingest

Centre	Asset	Domain	Geography	Type	Score	Access	Pathway
CIP	Image Canopy – Digital Canopy Cover Estimation Software	Sensitivity / Adaptation Analytics	Global	CGIAR-produced	56	Open	Ingest candidate
AfricaRice	Mid-season drainage × iron toxicity × water productivity dataset (irrigated rice)	Multi-domain	Africa	CGIAR-produced	55	Restricted	Negotiate access
AfricaRice	Alternate wetting and drying × weed infestation × water productivity dataset (irrigated rice)	Multi-domain	Africa	CGIAR-produced	55	Restricted	Negotiate access
IWMI	Africa Multi-hazard risk maps	Adaptation Analytics	Global	Co-produced	55	Open	Federate or light ingest
AfricaRice	Biochar × nitrogen × no- tillage greenhouse gas and yield dataset in rice systems	Mitigation	Africa	CGIAR-produced	53	Restricted	Negotiate access
CIFOR-ICRAF	Oil Palm and Diets in Indonesia: Papua	Multi-domain	Asia / South & SE Asia	External	53	Open	Federate or light ingest
CIP	CIP Peru Experimental Station Historical Meteorological Records — La Molina, La Victoria & San Ramón	Hazard / Climate Services	Latin America & Caribbean	Uncategorise d	51	Open	Federate or light ingest
AfricaRice	Rice brown spot climate risk projection dataset under climate change scenarios	Sensitivity	Asia / South & SE Asia	CGIAR-produced	48	Restricted	Negotiate access
WorldFish	Illumating Hidden Harvests	Exposure	Global	Co-produced	48	Open	Federate or light ingest
IFPRI	Global Farming system data	Exposure	Global	CGIAR-produced	46	Restricted	Negotiate access
IFPRI	Global crop specific intensity data	Exposure	Global	CGIAR-produced	45	Restricted	Negotiate access
IITA	Sims	Adaptation Analytics	Not specified	CGIAR-produced	40	Open	Ingest candidate
ILRI	AI/ML Flood Forecasting Model- Ready Dataset and Outputs	Hazard	Global	External	40	Open	Federate or light ingest

Annex B — Submission completeness

Centre	Assets	Has Rank	Has Hub Role
AfricaRice	20	20/20	2/20
Alliance	16	16/16	3/16
CIFOR-ICRAF	13	13/13	1/13
CIP	9	9/9	1/9
ICRISAT	2	2/2	0/2
IFPRI	10	10/10	10/10
IITA	17	15/17	6/17
ILRI	11	11/11	11/11
IRRI	9	0/9	9/9
IWMI	8	2/8	2/8
WorldFish	8	8/8	8/8

Annex C — Merge log

C.1 Applied consolidations

Centre	Original entries	Consolidated name	Entries removed	Rationale
Alliance	CCAFS-Climate data portal - statistical downscaling CIMP5; CCAFS-Climate data portal - statistical downscaling CIMP6; CCAFS-Climate data portal - MarkSim v2.0; CCAFS-Climate data portal -temporal bias correction of daily data	CCAFS-Climate data portal (MarkSim, CMIP5/6 downscaling, bias correction)	3	Four sub-products of the same CCAFS-Climate platform submitted as separate entries
WorldFish	Future fish biomass projections (DBEM); Future fish biomass projections (FishMIP)	Future fish biomass projections (DBEM / FishMIP)	1	Two model runs of the same product submitted as separate entries
CIFOR-ICRAF	Spatial Assessments of Changes in Soil Health Indicators in Benin; Spatial Assessments of Changes in Soil Health Indicators in Kenya	Spatial Assessments of Changes in Soil Health Indicators (Benin, Kenya)	1	Same dataset applied in two countries submitted as separate entries

Centre	Original entries	Consolidated name	Entries removed	Rationale
ILRI	VECTRI Climate Forcing and Preprocessed Dataset; VECTRI Malaria Model Output Dataset for Ethiopia	VECTRI Malaria Model Dataset (climate forcing inputs + model outputs, Ethiopia)	1	Model inputs and outputs from same pipeline submitted as separate entries

C.2 Recommended for catalogue

The following additional consolidations are recommended when building public catalogue, but were not applied to analysis inventory:

- **IWMI:** Africa Flood Hazard and Africa Drought Hazard are component layers of Africa Multi-hazard Risk Maps — consider cataloguing as one entry with sub-layers ($3 \rightarrow 1$)
- **IFPRI:** ‘Global harmonized cropland’ and ‘Time series of global harmonized cropland extent 2011-2020’ are static and temporal versions of the same product — consider one catalogue record ($2 \rightarrow 1$)