COP 2: Final Draft for consultation

CoRE Stack Partner Data Governance & Data Sharing Agreement

Version 1.0 (Draft for Consultation)

1. Purpose

The CoRE Stack is a collaborative digital public infrastructure that supports community-led natural resource management through participatory data collection, geospatial analytics, and decision-support tools. As the platform grows, it is essential to establish a shared governance framework that protects community rights, promotes responsible data stewardship, and enables ethical and lawful use of data.

This Agreement sets out the principles, roles, and responsibilities governing the collection, management, storage, access, sharing, publication, and use of data generated through the CoRE Stack. This is meant to ensure mutual accountability amongst all partners, including CommonsTech Foundation, to operate in the service of communities and landscapes.

2. Scope

This Agreement applies to all organizations developing, implementing, or using the CoRE Stack, and covers:

- Community-generated primary data collected through Commons Connect;
- Secondary datasets integrated into the CoRE Stack;
- Derived datasets, analytics, reports, and dashboards;
- Personal information collected from community members and landscape stewards;
- Data shared through APIs, downloads, or other digital services.

3. Guiding Principles

Partners agree to uphold the following principles:

1. **Community First:** Community-generated data should serve the interests of the communities from whom it is collected.
2. **Transparency:** Communities should be informed about what data is collected, why it is collected, how it will be used, and who may access it.
3. **Purpose Limitation:** Data shall only be used for the purposes communicated to the community unless additional consent is obtained or another lawful basis exists.
4. **Privacy by Design:** Privacy considerations shall be incorporated into the design of digital tools, workflows, and data publication processes.

5. **Accountability:** All participating organizations share responsibility for ensuring ethical and responsible data governance.
6. **Open by Default for Non-Personal Data:** Wherever appropriate, non-personal datasets generated through the CoRE Stack may be made openly available to advance research, planning, and public benefit.

4. Governance Roles

Community (Data Owner)

The participating community, represented through the Gram Sabha or another locally recognized institution, retains decision-making authority over the sharing and publication of community-generated primary data.

Implementation Partner (Data Steward)

Implementation partners are responsible for:

- obtaining informed consent;
- ensuring data quality;
- explaining community data rights;
- maintaining supporting documentation;
- complying with this Agreement.

CommonsTech Foundation (Technical Custodian)

CommonsTech Foundation acts as the technical custodian of the CoRE Stack and is responsible for:

- Maintaining the digital infrastructure;
- implementing security safeguards;
- maintaining backups and recovery systems;
- implementing governance decisions approved by the CoRE Stack community.

CommonsTech Foundation does not claim ownership of community-generated primary data.

Landscape Stewards

Landscape Stewards are authorized data collectors responsible for collecting data ethically, accurately, and in accordance with approved community consent procedures.

5. Data Categories

For governance purposes, data shall be classified into the following categories:

Primary Community Data
Data collected directly from communities through Commons Connect, including resource mapping, natural resource management demands, and planning information.

Secondary Data
Publicly available datasets obtained from government agencies, satellite imagery, or other open sources.

Derived Data
Maps, indicators, analytical outputs, models, and reports generated using primary and secondary datasets.

Personal Data
Information relating to an identified or identifiable individual.

6. Community Consent

Partners shall ensure that informed community consent is obtained before collecting primary community data.

Communities should be informed about:

- the purpose of data collection;
- how the data will be used;
- whether the data may be published;
- who may access the data;
- available options regarding sharing and publication.

Partners shall maintain appropriate records of consent. Evidence may include digital consent, Gram Sabha resolutions, approved DPRs, signed consent forms, or other locally accepted documentation. *(Refer Annexure 1: Community consent work flow and Annex 2 for community consent form)*

7. Data Access and Sharing

Community-generated primary data shall only be accessed or shared in accordance with permissions provided by the community and applicable governance decisions.

Partners shall not disclose or share community-generated data with third parties in a manner inconsistent with this Agreement or with community permissions.

Requests for data sharing beyond the agreed purpose should be evaluated in consultation with the community and the CoRE Stack governance process. *(Refer Annexure 4: Data Sharing & Access Matrix)*

8. Publication of Data

Prior to publishing community-generated information through CoRE stack dashboards, reports, or public portals:

- detailed personal information like phone number, Khasra number, etc. will be masked;
- identifying personal information like name will be available for transparency;
- publication should align with community permissions.

Secondary datasets and derived non-personal datasets may be published under their respective open licences, subject to applicable licence conditions.

9. Personal Data Protection

Partners shall process personal data responsibly and in accordance with applicable laws and regulations, including the Digital Personal Data Protection Act, 2023, where applicable.

Partners should implement appropriate administrative, technical, and organizational safeguards to protect personal information against unauthorized access, disclosure, alteration, or loss.

10. Steward Information

Information relating to Landscape Stewards—including photographs, profiles, educational background, skills, and contact information—shall only be published after obtaining explicit consent from the individual concerned. *(Refer Annexure 3: Steward consent work flow)*

11. Data Security

CommonsTech Foundation will maintain appropriate security measures, including access controls, system monitoring, backups, and disaster recovery procedures.

Implementation partners shall adopt reasonable safeguards to protect any copies of CoRE Stack data held within their own systems.

12. Intellectual Property

CommonsTech Foundation does not claim any ownership of data. All data and software are open source; only republication of processed data will carry the original license.

13. Monitoring and Compliance

Partners agree to cooperate with periodic governance reviews and provide information reasonably required to assess compliance with this Agreement.

Where non-compliance is identified, the parties shall work collaboratively to implement corrective measures.

14. Review and Amendment

This Agreement may be reviewed periodically through the CoRE Stack Community of Practice to reflect evolving legal requirements, community expectations, technological developments, and lessons learned from implementation.

15. Acceptance

By signing this Agreement, the Partner acknowledges that it has read and understood the CoRE Stack Data Governance Principles and agrees to implement them in good faith throughout its participation in the CoRE Stack ecosystem.

Signatories

Partner

Organization:

Authorized Representative:

Designation:

Signature:

Date:

CommonsTech Foundation

Authorized Representative:

Designation:

Signature:

Date:

==========

Annexure 1: Community Consent Workflow

Community Awareness & Information Sharing *(Steward)*

(Purpose of data collection, types of data collected, intended use, community rights, data sharing, publication)

▼

Obtain Community Consent

(Commons Connect displays a mandatory consent screen. Steward cannot proceed with resource mapping until consent is recorded from the community/settlement)

▼

Record & Store Consent form

(Digital consent is securely stored in the CoRE Stack platform)

▼

Resource Mapping & DPR Preparation

▼

Community Review & Demand Prioritization

(Gram Sabha Validation)

(The draft DPR is presented to the Gram Sabha for review and approval. Approved DPR - Gram Sabha resolution or Gram sabha meeting photo uploaded to commons connect.)

▼

Publish / Share Community Data

(Data is published or shared only in accordance with consent shared)

▼

Periodic Review / Consent Renewal

(Consent and data-sharing permissions reviewed periodically, such as every 2–3 years or at the start of a new project phase, or when there is a significant change in the intended use of the data.)

▼

Modify or Withdraw Community Consent

(The community may request to modify or withdraw previously granted permissions through the implementation partner. The request shall be documented, permissions updated in CoRE Stack where applicable, and future data sharing or publication shall follow the revised community decision)

Annexure 2: Community Consent Form

1. Does the community **consent to the collection of resource mapping and planning data** through Commons Connect?

◉ Yes ☐ No

Note: If No is selected, resource mapping cannot proceed.

2. Does the **community permit the data to be shared** with implementation partners working on this project?

☐ Yes ☐ No

3. Does the **community permit DPR to be published on the CoRE Stack** Landscape Stewardship Dashboard?

☐ Yes ☐ No

4. Does the **community permit its data (without personal information) to be used for research, learning, and policy purposes**?

☐ Yes ☐ No

*Note: **To review, modify, or withdraw consent, the community may submit its request to the Implementation Partner.** The Implementation Partner shall document the request, verify the community's decision through the appropriate community process (e.g., Gram Sabha or other locally accepted mechanism), and update the permissions in the CoRE Stack platform.*

Any withdrawal or modification of consent shall apply prospectively and will not affect data that has already been lawfully shared, published, or used prior to the request, unless otherwise required by applicable law or mutually agreed.

Only community-approved information will be published. Detailed personal information (such as phone number, Khasra number, etc.) will not be disclosed.

Annexure 3: Steward Consent Workflow

Steward Registration
(Steward onboarded by the Implementation Partner)
|
▼
Obtain Steward Consent
(Digital consent is recorded during steward registration using CoRE stack Project dashboard.)
|

▼

Record & Store Consent

(Consent is securely stored in the CoRE Stack platform.)

▼

Publish on the Landscape Stewardship Dashboard

(Only the information for which the Steward has provided explicit consent will be published.)

▼

Review / Modify / Withdraw Consent

(The Steward may request the Implementation Partner at any time to review, modify, or withdraw consent. The Implementation Partner shall update the permissions in the CoRE Stack platform accordingly.)

Annexure 4: Data Sharing & Access Matrix

The following matrix defines the ownership, access, sharing, publication, and consent requirements for the four categories of data managed through the CoRE Stack.

Data Category	Examples	Data Owner	Data Custodian	Publicly Published	Access	Consent Required	Consent Mechanism
Primary Community Data	Resource Mapping, Natural Resource Management (NRM) Demands, DPRs, Gram Sabha resolutions	Community (Gram Sabha)	Commons Tech Foundation	Only community-approved information	Community, Implementation Partner, Authorized Government Agencies and CoRE Stack Administrators	Yes	Digital Community Consent recorded in Commons Connect and validated through Gram Sabha/community approval
Secondary Data	LULC, Terrain, Rainfall, Watersheds, MGNREGA assets, CGWB wells, Soil Maps, Aquifer Maps and other government/	NA	NA	Yes (subject to applicable licence)	Public	No	Not Applicable

	open datasets						
Derived Data	Dashboards, Analytics, Reports, Landscape Indicators, AI/ML outputs, Maps and Insights generated using CoRE Stack	NA	NA	Yes, provided no personal information or restricted community data is disclosed	Public	No (subject to permissions applicable to the underlying primary data)	Not Applicable
Personal Data	Beneficiary Name, Father's/Husband's Name, Mobile Number, Steward Name, Photograph, Contact Details and other identifiable personal information	Individual	CoRE Stack	No, unless explicit consent has been obtained	Yes, only in masked form.	Yes	Digital Community Consent (for community members, where applicable) and Digital Steward Consent (for steward profiles) recorded in Commons Connect

Partner Reflections

Reflections from the 11th CoP Session (31 July 2026)

The following aspects emerged for further discussion on community data governance and consent mechanisms:

Handling of personal information

1. **Data Protection Compliance:** Does the platform need to comply with the Digital Personal Data Protection Act, 2023 (DPDP Act) before publishing community-generated data to ensure that privacy and legal requirements are adequately addressed.
2. **Masking of Personal Information:** Should personally identifiable information such as beneficiary names and fathers'/husbands' names, be masked before Detailed Project Reports (DPRs) are published on the public India Landscape Stewardship Network dashboard;

Suggestions to indicate explicit community consent

3. **Strengthening the Consent Mechanism:** It was proposed that a consent form should automatically appear in the Commons Connect application before a Steward begins resource mapping, ensuring that settlement-level consent is obtained prior to data collection.
4. **Evidence of Community Consent:** To strengthen the audit trail and provide verifiable records, participants suggested incorporating features to:
    - Upload the community-approved (consented) copy of the DPR.
    - Capture and upload photographs of the Gram Sabha meeting where the DPR was discussed and approved.
    - Maintain these records as evidence for government officials and other stakeholders to verify that informed community consent was obtained before publication and use of the data.

COP1: CoRE stack: Data sharing norms

CoRE stack: Data sharing norms
July 2026

Dear all,

Thank you for being a partner in **co-creating and shaping the CoRE stack**. The stack has come a long way and it is very exciting that a public good created in a collaborative and consultative manner is now supporting many communities and stakeholders to streamline natural resource management planning and analysis of geospatial data. With this increasing usage, it is important to also step back and reflect on the data infrastructure and agree upon **governance processes**, especially those surrounding the data, much of which is collected from the ground in consultation with the communities we collectively serve. We have broken this into a few dimensions to make it easier to engage in a discussion in the next Community of Practice meeting. **Point (3) is most important** but all of the below aspects will be useful to discuss for everyone to get a deeper view on what goes in the research, development, and infrastructure processes of the CoRE stack.

1. **Infrastructure reliability:** The geospatial analysis to generate most datasets runs on a combination of Google Earth Engine and local high performance computing infrastructure at IITD, and the final datasets are hosted and served via AWS.
    a. **Availability:** Use of AWS gives us high availability (status) barring occasional maintenance downtimes or server crashes which we constantly monitor during daytime hours and are working to strengthen this further.
    b. **Backup process:** All production data, including primary data collected via Commons Connect (resource mapping and planning), secondary computed data, and the database to track these, is backed up to a secure Amazon S3 bucket once a day. Each backup also undergoes an integrity verification process by being restored to a separate test environment to confirm that it is complete, consistent, and recoverable. Documented backup and recovery procedures are in place to enable quick restoration as and when needed.

2. **Open-ness of secondary datasets:** All datasets built from secondary data are openly published in standard geospatial formats under the CC-BY-SA 4.0 license. This includes:
    a. **First time created datasets** such as Land Use Land Cover (LULC), terrain, micro-watershed delineation, water balance, etc. built by the CoRE stack using machine learning or geospatial algorithms that in turn operate on other openly available data which is available under similar open licenses.
    b. **Processed and re-distributed datasets** such as MGNREGA geo-tagged assets, CGWB well measurements, etc. which were downloaded from publicly available government websites, cleaned and re-formatted, and published in standard geospatial data formats for easy use by others.
    c. **Re-distributed datasets** such as aquifer maps and soil maps, which were downloaded and collated in one place and published in standard formats to ensure availability in case the host site goes down.

3. **Open-ness of primary datasets:** This includes two main datasets created using Commons Connect - resource mapping and NRM demands - which are included in the DPRs submitted for approvals. **These are the most crucial datasets to discuss and agree upon.** We want to propose the following for handling of this data:
    a. **Ownership:** The data should belong to the community. It is anyway included in hard copy in the Gram Sabha registers, and can be officially recognized at the time of data entry itself as being owned by the village Gram Sabha.
    b. **Usage rights:** The community should reserve the right to decide whether the data can be published openly such as on the Landscape Stewardship dashboard, whether it can be provided for open download by anyone, whether a use-restriction should be applied on it (such as to restrict it for non-commercial or research purposes only), and the ability to export it out and delete it from the CoRE stack servers. Any use of the data should acknowledge the communities and facilitators involved with the data collection.
        i. Commons Connect should be enhanced to seek explicit permission from the communities for the above at the time of data collection itself.
        ii. Appropriate online/offline/phone-based mechanisms should be developed to also continually refresh the permissions on a regular basis from the communities, like every 2-3 years.
    c. **Role of facilitators:** Often the data is collected with the help of implementation organizations. Their role must be acknowledged as having supported the collection of the data, and to have communities understood their right over the data. Facilitators are expected to function as interlocutors on behalf of the communities they work with and to represent the interests of these communities.
    d. **Information of stewards:** Explicit consent should be sought from stewards to make their information (such as photograph, gender, educational background, specific skillsets) visible on the Stewardship Network dashboard. The dashboard is meant to improve visibility of the plans built by stewards, and to bring attention to the concept of stewardship, help external stakeholders understand who these stewards are, what they do, and potentially help build an income stream for them.
    e. **Formal agreement:** Upon the start of any project, the facilitator organizations should endorse a data statement with the above conditions. The data statements should be made publicly available via relevant CoRE stack dashboards. The role of the CoRE stack as being a technical custodian of the data should also be explicitly stated, with actual ownership of the data residing with the community.
        i. In case this conflicts with an organization's own internal policies or requirements from their donors, the organization should ensure that all stakeholders are brought on the same page with the CoRE stack community's data governance principles. Participation in the CoRE stack requires recognition that ownership of primary community-generated data rests with the community, and that decisions regarding its access, sharing, licensing, and publication should be made by the community through the agreed governance process stated here.

ii. Where conflicts persist, they should be discussed transparently at the project outset itself and resolved before data collection is initiated.

4. **Task prioritization:** All partners are co-creators of the CoRE stack, with some having played a significant role in the research, some on the software development, and many on providing technical feedback on the usage of the CoRE stack datasets and tools. Efforts are made to recognize the efforts of all partners and it is also understandable that various partners will have different expectations from the CoRE stack, such as promptness on bug fixes, servicing of new feature requests, building new datasets and pipelines, etc. Internally, the lead research and development teams do follow a prioritization logic, somewhat on the following grounds:
    a. **Blockers**, such as a broken form on Commons Connect, or server downtime, are immediately addressed. Typical turnaround time is a few hours within day hours if the problem is straightforward, or a day or two if it requires developer support.
    b. **Layer generation requests for new locations**. Typically for single locations, the requests are serviced within 3-4 days. Bulk requests for many locations are spread out over 7-14 days but we try to close all requests within a week. This process is likely to reduce significantly with new optimizations we are in the process of building in the June-July timeframe.
    c. **New feature requests**, such as making a specific data layer available on Commons Connect, or the ability to download PDFs of certain reports, are added to a roadmap queue mostly prioritized on the basis of whether the feature will be of utility for many partners and how easy it is to build the feature. Features of mass utility and if they can be handled by junior developers without requiring any large changes to the overall stack, are taken up quickly and generally handled within a month or two. The timeline is mostly dictated by other tasks that the developer team might already be engaged in, so as to not have them thrash between multiple different threads at the same time.
    d. **New dataset and pipeline requests**, such as to add new classes in the LULC, or to build a new pipeline that creates groundwater contour maps, are also added to a roadmap queue but typically take a year or so to build out. The reason is that such requests often require significant research in identifying the right datasets, formulating a methodology, validating the results, and once the pipelines are built then additional work is needed to transition them to the engineering team for integration into the CoRE stack. Consequently, being able to take up a new research problem depends on student and faculty interest and time availability, and requires broadening of the research team beyond a few core groups that have been contributing to the CoRE stack so far.

5. **Software licensing:** All the CoRE stack code repositories are licensed openly under the AGPL 3.0 license. This requires that anyone modifying or improving the codebase for their use must also release their modifications openly. This ensures that the digital commons are not eroded by private capture. So far, all independent apps built using the

CoRE stack have also followed a similar thinking, of keeping their contributions in the open (apps gallery), and our developer calls regularly reinforce this aspect.

We look forward to discussing this initial governance architecture in the next CoP as a minimal but essential start, and any feedback on other governance elements to add and their timing.

sincerely
Lead research and engineering team
CoRE stack