Initiative for Open Ag Funding

Proposals for standard developments

https://www.interaction.org/project/open-ag-funding/overview

Draft proposal

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Executive Summary

Investments in agriculture are critical to reducing poverty and improving food security and nutrition. Although billions of dollars are spent on these investments every year, comprehensive and detailed information on these investments is still largely unavailable.

The Initiative for Open Ag Funding is working to improve the standards for sharing data on agricultural investments and to increase the number and types of organisations doing so. We are also working on community building, and improving tools and technical assistance available to data publishers and users.

This paper builds upon data landscape analysis and user-need consultations carried out by the Initiative for Open Ag Funding. These found that the International Aid Transparency Initiative (IATI) provides a solid foundation for collecting and managing data on agricultural investments, but that increases in data quality are required, and that some specific agriculture sector user needs may require additional guidance or adaptation of the standard, as well as action to develop better intermediary tools for access to data. Additionally, wider awareness of IATI is needed amongst all organisations, regardless of whether they currently publish data with the standard.

In this report we look primarily at actions for **data publishers** and **data standard providers**, with an emphasis on the IATI standard, setting out extensions to core codelists and fields, and changes to core standard guidance. We also set out a complementary data quality framework for agriculture, which can be layered on top of the IATI standard to ensure data produced is fit to meet user needs.

Recommendations

We have set out six focus areas for action covering:

1. **A detailed data quality framework**
2. **Extending sector classification codelists**
3. **Transaction-level sector classification**
4. **Improved organisation identification**
5. **Extended and improved location information**
6. **Improved guidance on traceability**

To deliver these we have set out recommended actions for data publishers and the IATI secretariat and technical community. We have also identified areas for wider engagement that can improve the data landscape, and have set out a number of activities that the Initiative will continue to pursue.

Data publishers should:

- Commit to using **20 core components** of IATI data to describe their agricultural investment activities.

  Publishers will need to identify approaches to capture and regularly report this information, including collecting any additional information from implementing

partners, or supporting partners to also publish data using the IATI standard.

- Pilot classification of their activities with additional codes from **AGROVOC** and the **Agricultural Technology Ontology**.

The IATI Secretariat and technical community should:

- Update the Sector Vocabulary codelist to include **AGROVOC** and the **Agricultural Technology Ontology**.

- Allow the **contact-info** element as a child element of **participating-org** in order to allow partner organisation contact information to be collected, and supporting easier disambiguation of organisations.

- Update schema guidance to allow **sector classification at both activity and transaction level.**

- Update schema guidance to **allow secondary sector classifications to add up to less than 100%**.

- Update schema guidance to **allow sector classifications on some transactions, but not mandated for all**.

- Update standard **guidance** to reflect good practices on **traceability**, and **subnational geocoding**.

- Clarify the guidance on which **organisations** should be listed under participating-org.

- Enable **validation and dashboard tools** to support assessment against the 20 highly recommended components.

The Initiative for Open Ag Funding will:

- Provide detailed guidance on application of the 20 highly recommended components, with a focus on participating organisations, transactions, geography and traceability.

- Provide a quality assessment framework and method, and engage with the IATI Secretariat to see this made available within core validation tools.

- Work to support the development of tools for improved publication of organisation identifiers, better geocoding and data quality assurance.

- Feed into proposed updates to the agriculture-relevant sector codes within the DAC CRS Sector codelist.

- Work with other stakeholders to advocate for better authoritative and open reference resources for sub-national geodata.

Next steps

These recommendations will be explored through a set of feasibility and utility consultations and feasibility tests during Summer/Fall 2016.

In parallel, and informed by these tests, more detailed guidance for data publishers will be developed, resulting in:

- A guidance resource for publishers of Open Ag Funding data.
- A finalised list of proposals submitted into the IATI upgrade process.

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Introduction & context

About the initiative

Investments in agriculture are critical to reducing poverty and improving food security and nutrition. Although billions of dollars are spent on these investments every year, comprehensive and detailed information on these investments is still largely unavailable.

We want to see a world where all stakeholders have access to timely, comprehensive, and comparable information in order to make good decisions about where to invest resources for agricultural development.

The Initiative for Open Ag Funding is working to improve the standards for sharing data on agricultural investments and to increase the number and types of organisations doing so. We are also working on community building, and improving tools and technical assistance available to data publishers and users.

The diagram below sets out our theory of change.

Figure 1: What are we trying to accomplish[1]

Funding, partners and participants

The Initiative for Open Ag Funding is funded by grant OPP1136006 from the Bill and Melinda Gates Foundation, and runs for two years from November 2015 to the end of 2017.

The project is led by InterAction, working in partnership with Development Gateway, the Foundation Center, Publish What You Fund, and the CGIAR Research Program on Policies, Institutions, and Markets.

Open Data Services Co-operative have provided consultancy support for the landscape analysis and standards development components of the project.

The project has established the **IATI Agriculture Working Group** and the **Open Ag Funding Community of Practice** to provide opportunities for wider partner engagement.

[1] From https://www.interaction.org/project/open-ag-funding/overview

Key definitions

Agriculture Investments
As a starting point, we have adopted a definition of agricultural investments as:

> *public and private funding into agriculture, forestry and fisheries development, including policy development, research, land and water resources, agro -industry and extending to nutrition- sensitive agricultural interventions and developmental and emergency food aid funding.*

A further qualifier on this also contributes:

> *In addition, the term "agriculture" is used broadly. It is meant to capture funding for agriculture, forestry and fishery, as well as food security- related sectors, such as food aid. Nutrition is included only to the extent to which interventions falling under the sectors just listed are nutrition- sensitive.*

Data Standard

> *A specification which sets out in detail how data should be published. This may cover issues of the fields to provide, and how they should be represented.*

Data standards come in many forms, and often one standard incorporates others. For example, the date format 'YYYY-MM-DD' is a data standard, and in turn is used within standards like the International Aid Transparency Initiative (IATI) which set out that aid activities should be described with start-date and end-date fields which use this data format.

Open Data

> *Open data is data that anyone can access, use or share.*

When we talk about Open Ag Funding, we are referring to the provision of open data on funding flows. In practice, this means the data should be digital, in standard formats, and under licenses or legal conditions that permit anyone to re-use it.

IATI

> *The International Aid Transparency Initiative was launched in 2008 to encourage greater publication of forward-looking and detailed aid information. It has produced the IATI Standard, and XML schema designed to make information about aid spending easier to access, use and understand.*

In our work we engage with IATI both as a technical standard, and as a political initiative.

Connecting data supply and demand

Over the last six months we have worked to understand the current landscape of data on agricultural investments, and the data that different users need in order to plan, deliver and evaluate improved investments in agriculture and food security.

Stakeholder analysis

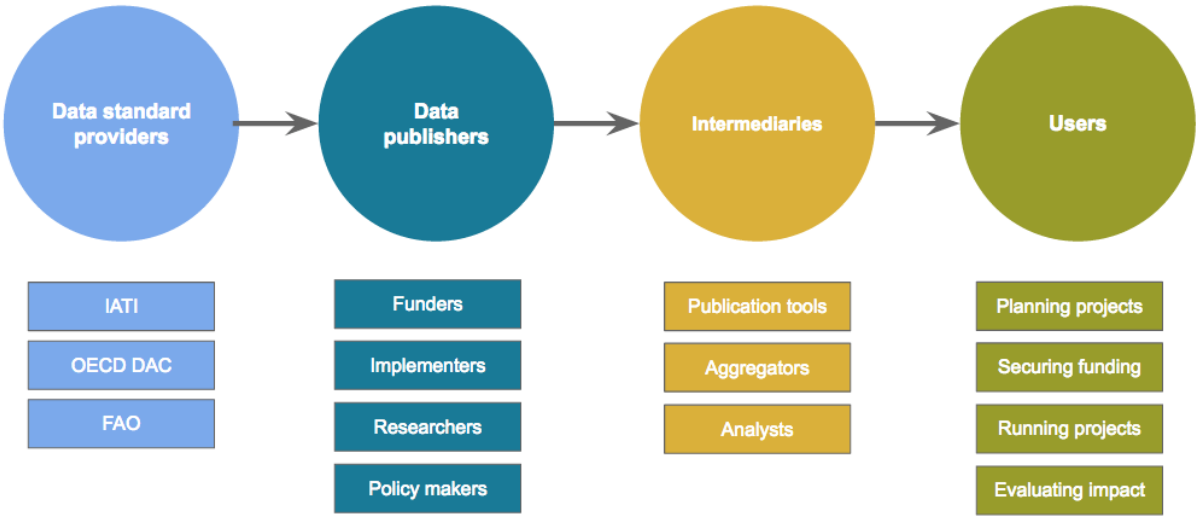


Figure 2: Summary of Open Ag Funding Stakeholders

There are many actors involved in provision and use of agricultural investment data.

- **Data standard providers** set out the frameworks for reporting, publication and collation of data on agricultural investments. These may be in terms of classification schemes, general requirements, or technical formats for data disclosure.

- **Data publishers** (and potential publishers) include governments, traditional aid donor organisations, NGOs, research institutions and the private sector. Some data publishers are wholly focussed on agriculture, whilst for others, agriculture is only a small part of their work.

- **Intermediaries** take data and make it more accessible for others. This may be a technical process, involving the provision of databases and digital platforms, or it may be more research-driven, producing periodic reports.

- **Users** have questions that require data on agricultural investments in order to be answered. Our research has found that many potential users of open data on agriculture funding do not know where to look for information, and currently rely on informal information gathering networks. Additionally, we found many organisations spend significant time and resources to gather data.

A single organisation or individual may play a number of different stakeholder roles: for example, acting as a data publisher and also an intermediary or user.

To improve the landscape of data on agricultural investments, change is needed in each stakeholder group. In this report we focus on recommendations for **data standard providers** and **data publishers**, with an emphasis on stakeholders around the International Aid Transparency Initiative.

Data supply: why IATI?

We carried out a detailed Landscape Analysis to evaluate the current provision of data on agricultural **investments**, and the availability of intermediary tools. In this we found that, although many different sources of data exist, the IATI Standard and associated IATI ecosystem is the best developed source of timely and detailed data.

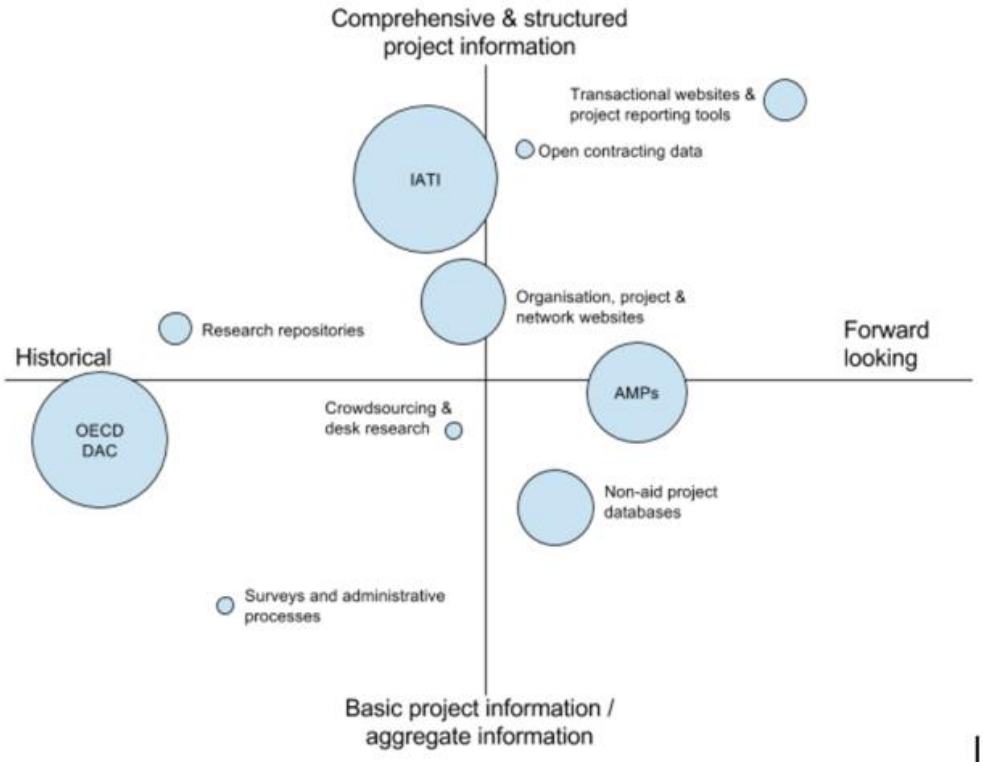


Figure 3: Mapping of project-level data sources. Size provides a rough estimate of coverage of the data source in terms of value of agricultural investments described. Source: Landscape Analysis.

This validated a starting assumption of the project that building on the International Aid Transparency Initiative should be a core focus – strengthening an existing and widely adopted open data programme and ensuring it meets the specific needs of the agricultural investment community.

Although IATI provides a comprehensive starting framework for publication and use of data on aid activities, and, within that, agricultural investments, we found that the majority of project level information available through IATI currently covers only basic fields (project names, dates, values, and broad categorisation) with just a few investors providing more detailed information. Tooling to enrich data with geographic information and detailed classifications does exist, but often this data enrichment does not feed back into improvements in the general data ecosystem.

We also recognise, however, that not all publishers will provide data via IATI, and so part of our later work will involve identifying how intermediaries may draw on a majority of

agricultural investment data through IATI sources, and then complement this with interoperable data from other routes.

IATI: Vision and mission

The International Aid Transparency Initiative (IATI) was launched in 2008 to increase the availability and timeliness of data on aid flows, driven by demand from aid recipient countries for a clearer forward-looking picture of resources available for development. The initiative consulted widely, and developed a technical standard that donors can use to provide detailed, structured and interoperable data on their projects and budgets. The standard has been widely adopted with hundreds of governments and NGOs providing data.

In June 2016, the IATI Members' Assembly met in Copenhagen to chart the path forward for the initiative. Amongst several discussions and outcomes agreed by the multi-stakeholder body was an updated mission and vision for IATI (emphasis added):

> **Vision**:
> Transparent, **good quality information** on development resources and results is **available** and **used** by all stakeholder groups to help achieve sustainable development outcomes.
>
> **Mission**:
> The IATI community works together to 1) ensure **transparency** of data on development resources and results; 2) ensure the **quality** of IATI data is continually improved and **responds to the needs of all stakeholders** and 3) facilitate access to effective **tools** and **support** so that IATI data contributes to the achievement of sustainable development outcomes.

The Initiative for Open Ag Funding is working in support of this vision and mission, and welcomes the increased focus on information quality and user needs.

Data demand: filling the gaps

Through our user consultations we identified the key questions that donors, NGOs and project partners are asking about agricultural investments, and the data they need.

Put simply, organisations need detailed information on what is being funded, the location of activities, the populations being served, which organisations are involved, how much is being provided and spent, and the results achieved.

In addition, when talking to interviewees, a clear user need was to be able to access data in an easy way, with the confidence that this was timely, comprehensive and reliable.

In a broad sense, the IATI standard already includes the components to address data supply needs. However:

- **Additional attention is needed to make sure that publishers provide data that is of adequate quality to answer these questions,** for example, through publication of better organisation, location and results data.

- **The IATI Standard needs to be extended with agriculture-specific classifications, and some additional general fields, in order to allow more detailed agriculture-specific analysis and data use.**

  and

- **To increase trust in and use of data, publishers should provide clearer information on the provenance, quality, and timeliness of their IATI data, and consider establishing feedback loops with users.**[2]

Furthermore, IATI is a standard, not a single database. This means that, even when data quality and its relevance for agricultural investment is improved, there will still be a need for tools to support easier access to data. These needs are beyond the scope of this document.

Appendix 1 provides details each of the user needs we considered, and either how the IATI standard already meets these, or how additional data quality requirements or standard extensions are required.

[2] In their final report on *Use of IATI in Country Systems*, Development Gateway recommends that publishers provide "a brief publication narrative or FAQs, explaining: How data are collected, calculated, and selected for publication; What quality assurance methods are in place; and What potential differences between HQ and country office-level data exist and why."

Enhanced standards for agricultural investment data

In this section we outline proposals for changes to data standards and their application in order to better meet the needs of data users.

These recommendations are targeted at **standard providers** and **data publishers.** We consider their implications for other actors.

Our approach

There have been a number of recent projects to improve reporting standards related to aid and agricultural investments:

- **The International Aid Transparency Initiative** is itself an initiative building on the OECD DAC Creditor Reporting System standards, but promoting a new technical format and publishing approach for data.

- **The Humanitarian Extension to IATI** introduced a new field in version 2.02 to describe the 'humanitarian-scope' of development co-operation activities.

- **The Transparency for Nutrition** campaign has called for the OECD WP-STAT group to modify the definition and use of Sector Codes in the DAC Creditor Reporting System (a codelist also used in IATI) to better track 'nutrition sensitive' and 'nutrition specific' investments. To date, the campaign has been unsuccessful in changing codes and coding practices.

We want to learn from, and build upon, initiatives like these. As a result, we have developed a set of principles to guide any standard extensions we propose. Our proposals will be:

- **User-driven**: We will only make recommendations that respond to real world needs identified through user research.

- **Practical**: We will prioritise solutions that build upon existing frameworks.

- **Interoperable**: We will propose solutions that make agricultural investment data published to IATI more interoperable with other standards.

- **Replicable:** We will place emphasis on approaches that can work across sectors, rather than being unique to our sector.

- **Feasible:** We will be mindful of the overheads on both data producers and data users, so as to avoid unnecessary resources being required.

- **Documented**: We will provide clear and accessible documentation and guidance to support adoption of our proposals.

Extending IATI

There are three ways to extend and adapt the IATI Standard.

1. **Introducing additional codelists**. Many fields in the standard use values from a codelist. A number allows the codelist vocabulary to be specified, allowing use of new codelists.

   Official adoption of a new codelist within the standard requires the vocabulary to be registered with IATI.

   For non-embedded codelists, this can take place at any time and at the discretion of the technical secretariat. For embedded codelists, this can only take place through the upgrade process for the standard[3].

2. **Namespaced fields**. Any publisher can introduce new fields within their own XML namespace. For example, the initiative could publish an extended schema which introduces new fields prefixed with 'ag', so that publishers are encouraged to produce data such as <iati-activity> <ag:crop-focus>Wheat</ag:crop-focus> </iati-activity>

   This data would pass validation, as it does not affect the main IATI namespace used to validate IATI data. However, it is complicated for systems to produce namespaced data, and there are few examples of this approach in action.

3. **Standard upgrades**. New or revised fields to be included in the core standard can be proposed through the periodic IATI upgrade process.

   These will extend the standard for all publishers.

In these proposals we focus on approaches (1) and (3): proposing new codelists, a number of extended fields for the standard, and improvements to existing fields and documentation.

Focus 1: A detailed data quality framework

Version 2.02 of the IATI Standard specifies a small number of required fields (nine elements in total – see Appendix 2). If a publisher only provides these required fields, then many of the questions that users of agricultural investment data may have cannot be answered.

We have identified **20 components** that publishers should provide for all their agricultural investments in order to better meet the needs of data users. These are listed in the table below.

Component	Quality requirements & user needs
Reporting Organisation	Constant value. Including an organisation identifier.
Metadata	Default currencies and languages used in reporting.

[3] Codelists in IATI are governed via their status as either embedded or non-embedded. Embedded lists are centrally managed by the IATI Secretariat. Non-embedded lists are either managed by external agencies or determined to be less in need of central governance.

Activity ID	Activities should be described at a suitable level of granularity. For example, different projects in the same country should not be bundled together in reporting.
Activity Title	A clear and comprehensible project title that indicates the focus of the activity.
Activity Status	Information about activities should be regularly updated
Activity Dates	Start and end dates, either planned or actual.
Activity Descriptions	Distinct descriptions should be provided for: ● Description of activity ● Objectives of activity ● Target groups of activity
Aid classifications	Classifications against core IATI fields for: Collaboration Type, Default Flow Type, Default Finance Type, Default Aid Type and Default Tied Status. Note: *These will **often** be set as constant values for any given reporting organisation if they are not otherwise recorded for ODA reporting.*
Sector Classification	Classification against OECD DAC Sector codes, plus additional taxonomies, including (tbc): ● AGROVOC ● Agricultural Technology Ontology
Participating Organisations	Details on **all** participating organisations, including partners. This information should be kept updated as new partners are engaged with a project.
Contact details	At least one contact address for more information on the specific project.
Documents	Any relevant and associated project documents should be published and linked to. Examples of useful documents include: project plans, monitoring data, interim reports and evaluations.
Location (Country/Region)	Including information on the percentage of total project budget in each country or region (when more than one is present).
Sub-national location	Detailed information on the on-the-ground location where activities are taking place. Where possible, this should be to the geographic precision of second order administrative division (ADM2).
Budget	Year by year project budget information.
Transaction	Information on the major transactions associated with the project, particularly commitments and disbursements to partners.
Transaction classification	Where possible, transactions should be classified against relevant sector codes (see Focus 3)
Transaction parties (participating	Transactions should clearly identify the partner receiving funding, and the relevant organisation should be detailed under participating

organisations)	organisations.
Transaction Traceability	Where possible, transactions should link onwards to related IATI activities (sometimes published by other organisations).
Results information	Project should publish information on any indicators and benchmarks the project is oriented towards meeting, as well as any structured results data that is available. Even when results data is not available, the indicators by which a project impact will be measured should be published in a structured form, and associated results documents linked to via the document section.

Due to the way IATI data is structured, a single component, such as an activity description, may consist of multiple fields and attributes (description text, language, description type). In most cases, publishers will be able to set a number of fields as constant values across all the activities they report, often meaning no requirement for additional data entry or collection. The table below summarises this.

Component	Total fields	Constants	Variables
Reporting Organisation	4	4	
Metadata	2	2	
Activity ID	1		1
Activity Title	1		1
Activity Status	1		1
Activity Dates	2	1	1
Activity Descriptions	3	2	1
Aid classifications	5	5	
Sector Classification	4	2	2
Participating Organisations	4		4
Contact details	8		8
Documents	6	2	4
Location (Country/Region)	5	2	3
Sub-national location	15		15
Budget	6	3	3
Transaction	6	2	4
Transaction classification	3	1	2
Transaction parties (participating organisations)	6	3	3
Transaction Traceability	2		2
Results information	10	1	9

To provide the priority fields listed above involves a total of 94 unique fields, of which 30 are constant values (i.e. 60 distinct fields requiring some level of user-input or detailed mapping from internal systems).

In practice, many fields can be repeated, to support one-to-many relationships. Assuming an activity is classified against two additional agriculture-specific vocabularies, has two

documents, three participating organisations, four detailed descriptions, two years budget, and four transactions, this would involve approximately 98 data points to be provided, or extracted from existing systems.

To help exploration of the data requirements, we have prepared two example spreadsheets:

- **Priority Fields – Single Table** presents the priority fields in a single table. One-to-many values can be expressed through repeating rows.

- **Priority Fields – Multi-table** presents the priority fields split across tables, broadly one table for each one-to-many components.

These sheets provide a step towards data entry and analysis templates. For human users, some mapping between the codes used in IATI, and codelists values, would be useful to increase the accessibility of these tools.

These templates could also be used as the basis for a data entry template or tool for non-IATI publishers, supporting the goal of capturing information from potential agricultural investment data publishers who do not engage with the aid transparency agenda. A well designed template would support conversion of data from these non-IATI sources into IATI data, maximising data interoperability.

Actions

- The Initiative for Open Ag Funding will provide further guidance on the **20 highly recommended** components identified above, and will provide automated and manual quality tests that can be used as part of both technical assistance and data quality assessment processes with publishers to ensure data meets user needs.

Recommendations

Publishers should:

- Commit to publish high quality data covering the **20 highly recommended components** for all their agriculture-related investments.

- Commit to investigating and testing methods to provide clear provenance and update information alongside datasets – above and beyond that already added to the IATI Registry.

The IATI Secretariat should:

- Consider updating the IATI Validator and Dashboard tools to include specific sector-relevant quality assessments, including an agriculture-sector relevant assessment building on the highly recommended components, and quality assessment work of the Initiative for Open Ag Funding.

Implications & actions

For Open Ag Funding	The initiative will need to further maintain documentation of the priority fields, quality framework, guidance, and use-cases for open ag funding data. The initiative should consider developing self-assessment or supported data validation and quality assessment tools and processes.
For IATI	Consider whether the priority fields should be made required in the IATI schema, or indicated as highly recommended in the documentation and associated quality assurance tools (validator, dashboard). As a stated principle of the Initiative for Open Ag Funding is interoperability, these fields would also support adoption in other sectors.
For data publishers	Data publishers may need to collect additional data, and identify how this can be managed in their systems. Adaptations may be needed to existing publishing workflows. Data publishers may need to improve descriptions, classifications, organisation and location data in their existing systems.
For intermediaries	Intermediary systems that are compatible with the full IATI standard would not need to make any adjustments.
For data users	Data users will gain access to improved data.

Focus 2: Extended sector classifications for agriculture

IATI enables organisations to classify activities through a specific <sector> code function. The default sector codelist is drawn from the OECD-DAC list, directly sourced from the CRS Purpose Codes. Our initial analysis (see Landscape Analysis) has confirmed that a subset of these codes related to Agriculture are in use by publishing organisations. However, this default list is somewhat limited in terms of enabling granularity and/or specificity around the domain of Ag funding. For example, it does not enable detail of specific crop types or intervention methods.

Adding new sector codes

There are a number of ways to add new sector codes:

- **Feed into proposals for inclusion of new codes in the OECD DAC CRS Sector codelist**. Changes to the OECD DAC CRS codelists feed through into IATI, and donors within the Official Development Assistance (ODA) system are likely to adopt new codes for future data, although they may not reclassify past data. Non-ODA donors may choose not to use the new codes, or may take considerable time to adopt them.

  There is a window of opportunity around the creation of metrics for the SDGs to re-align sector coding, and a number of groups are considering advocacy on this.

Modifying the DAC CRS Sector codelist is the approach that has been taken by the Transparency for Nutrition campaign, although their initial proposal to WP-SAT was rejected.

- **Create a new IATI vocabulary code**. Each sector code consists of a vocabulary (i.e. an identifier to indicate which codelist is being used) and a code.

  IATI supports the creation of new vocabularies. Vocabularies can be proposed through the IATI upgrade process. Vocabularies are included in the relevant IATI codelists and in the main documentation.

  Candidates for new sector coding vocabularies include the detailed AGROVOC vocabulary, or the General Agricultural Concept Scheme (GACS) currently under development (see Landscape Analysis).

  During project discussions, the Agricultural Technology Ontology has also been raised as a possible way to address gaps in existing classification schemes such as AGROVOC when answering user needs related to the nature of agricultural investments.

- **Use 'publisher' vocabularies.** Organisations can use their own vocabularies as well (vocabulary codes 98 and 99). In that case, publishers should add a "vocabulary-uri" to specify where to find information about that vocabulary, and to give tools consuming the data the ability to distinguish one publisher's '99' codelist from another's. This offers a way to share a vocabulary across organisations without the need to adapt the IATI codelist, by adopting a shared vocabulary-uri value.

  Currently, organisations can only use two vocabularies of their own choosing, and so may not have "room" to add an extra vocabulary of sectors for their Ag projects.

The IATI Standard guidance states:

> *Note that if multiple sector codes are used in multiple vocabularies, then each vocabulary's percentages should add up to 100%.*

However, there may be cases in which publishers cannot assert precise percentages for secondary vocabularies. During testing we will explore whether there is a case to ask for this guidance to be relaxed, requiring only 100% sum of percentages on primary sector classification vocabularies.

Actions

We will:

- Work with partners, including the IATI Agriculture Working Group, to pursue refinements to the Agricultural sector codes within the DAC CRS Sector codelist.

Recommendations

Data publishers should:

- Pilot the use of AGROVOC as an additional classification for crop type and intervention type using a publisher vocabulary.

- Pilot the use of the **Agricultural Technology Ontology** using a publisher vocabulary.

The IATI Secretariat should:

- (Subject to early pilot findings) Add AGROVOC and the Agricultural Technology Ontology as entries in the Sector Vocabulary codelist.

- Update all vocabulary related codelists to the **status of non-embedded**, to ensure that these are updated in line with community requests.[4]

Implications & actions

For Open Ag Funding	The initiative will need to develop an advocacy strategy to work with partner on DAC CRS Sector codes. The initiative will ensure that any proposed vocabularies have a resolvable URI. The initiative should evaluate opportunities to develop tools to automatically classify activities based on documents and descriptions.
For IATI	IATI may be asked to add one or more new codes to the SectorVocabulary codelist
For data publishers	Data publishers will need to provide additional classifications of their agricultural activities. This may require adaptations to data management systems.
For intermediaries	Data production and use tools which are configured to only use DAC CRS Sector codes will need to be updated to produce and consume data in the new vocabularies.
For data users	Data users will need to understand how to use the more detailed classifications.

Focus 3: Transaction-level sector classification

Providing classifications at the activity level can provide a general picture of the purpose and focus of a project. However agricultural investments (and aid projects) are often complex and multi-sector.

[4] This observation has been raised in the IATI discussion forum: http://discuss.iatistandard.org/t/vocab-codelists-make-non-embedded/495

Whilst IATI sector codes can include a 'percentage' to indicate how far an activity is focussed on one sector over another, this information is often based on estimates at the time a project is designed, via a split of the total indicative budget, rather than information as the project is executed.

Example markup for an activity split between two sectors:

```
<sector vocabulary="2" code="111" percentage="50" />
<sector vocabulary="2" code="112" percentage="50" />
```

The IATI standard allows individual **transactions** to be classified with information on the sector and the recipient country and region. Transactions – particularly commitments and disbursements – can also identify the recipient organisation.

This offers the opportunity to collect very rich data which would identify when a particular partner received funds, in which country, and which sector those funds were directed towards. With this data, many user questions could be better answered.

However, IATI guidance currently states that[5]:

> *Sector can also be reported at the transaction level rather than the activity level. Sector must only be reported at EITHER transaction level OR activity level.*

This suggests that, if a publisher provides transaction-level sector codes, they should not provide activity-level sector codes (and vice versa). This introduces a lot of complication both for publishers and data users, and makes wide adoption of transaction-level classification unlikely.

Additionally, where a publisher provides detail on many and varied transactions within an activity, a sector coding may not always be possible or relevant. However the IATI guidance states that[6]:

> *If this element is used then ALL transaction elements should contain a transaction/sector element and iati-activity/sector should NOT be used.*

Again, the currently published guidance may deter some organisations from adding structured classifications. It may be the case that some organisations are able and willing to classify disbursements to partners, but find no effective way to codify expenditure, for example. However, the current standard steers people away from this scenario, even though it *can* result in *more* useful data.

Our analysis found that some publishers are already doing this. The IATI schema does not enforce these particular written guidance notes, meaning that data is also "valid".

Actions

We will:

[5] http://iatistandard.org/202/activity-standard/iati-activities/iati-activity/sector/#attributes
[6] http://iatistandard.org/202/activity-standard/iati-activities/iati-activity/transaction/sector/#iati-activities-iati-activity-transaction-sector-code

- Make transaction-level sector classification an optional component of our data quality framework, and provide guidance on how to use this, particularly for commitments and disbursements.

Recommendations

The IATI Secretariat should:

- Update IATI standard guidance to allow **both** activity and transaction level sector classifications;

- Update IATI standard guidance to enable transaction-level sector classifications on **some** transactions, rather than all.

Implications & actions

For Open Ag Funding	The initiative should pilot collection of transaction level classification information (focused on commitments and disbursements) with one or more publishers.
For IATI	A proposal needs to go into the next IATI upgrade process to amend the guidance.
For data publishers	Data publishers will need to consider whether transaction level classification information should be produced through finance systems, or as part of a data publishing workflow.
For intermediaries	Intermediary tools that can infer information from transaction-level classifications will be required (e.g. tools that can associate organisations with sectors and countries on the basis of transactions).
For data users	Data users will have a richer picture to draw upon in identifying potential partners, and understanding the sectors into which funds are flowing. Data users will need to be aware that this data is unlikely to have 100% coverage over the short to medium term, and so will not give a complete picture.

Focus 4: Improving Organisation Identification

Many use cases focus on knowing who is active in a given sector and country. In order to find potential partners for projects, data users need good quality organisation information, including unambiguous identification of local NGOs and delivery partners in a wide range of countries.

IATI contains the function to provide a unique reference identifier for any organisation. Guidelines as to how to arrive at a relevant organisation identifier are published within the documentation. Implementation, however, is varied, with publishers often omitting the

reference identifier, or providing different references than other publishers. Additionally, existing identifiers are difficult and cumbersome to discover, meaning an additional overhead on publishers and higher chance of poorer quality data.

The IATI organisation identification methodology relies on the re-use of existing identifiers. Where no such identifiers are provided, or they are not openly available, a further problem exists for publishers to converge on a common identifier to use.

Organisations can be identified at the activity level (via participating-org) and at the transaction level (via provider-org and receiver-org). However, only an identifier and name for organisations can be given, meaning that if it is not possible to look up the organisation in another source, it is difficult to locate how to contact them.

Extending the standard with a contact-info block for each participating-org would make it easier for users to locate the website and contact details of organisations and potential partners.

Use of the participating-org element to name all the partners to a project is limited right now. Often the full list of partners involved in a project is not known at the time the project starts – so publishers may need to be encouraged to collect better information on partners involved in project delivery, and to re-publish this, subject to appropriate risk-assessment and confidentiality policies and processes. In addition, this may go against an established method to do IATI "correctly", with publishers only being concerned with partners immediately around their part of the "chain". However, this is an ambiguity that could benefit from clarification - as some publishers include all partners in any activity, regardless of their role in the delivery chain.

Actions

We will:

- Work with the IATI Secretariat, and other standards groups, to improve the Organisation Registration Agency codelist by developing tools to assist publishers and users to find registration agency prefixes to use, and to increase the coverage of agriculture related organisations.

- Add guidance to our quality framework to ensure all relevant and identifiable partners are clearly included in published data, subject to any confidentiality and risk provisions. This will recommend that when publishing open data on Ag investments, organisations should provide at least the name and identifier for their partners.

Recommendations

The IATI Secretariat should:

- Extend the participating-org element to include address details via addition of the contact-info block.

- Clarify the guidance on which organisations should be listed under participating-org.

Implications & actions

For Open Ag Funding	The Initiative should work on tooling to support publishers to make better use of organisation identifiers.
For IATI	The TAG will need to consider the proposed update to participating-org for 2.03 IATI will need to work with other open data standards partners on maintenance of the Organisation Registration Agency codelist.
For data publishers	Publishers will need to develop their systems for recording and publishing organisation identifiers. Publishers may need to evaluate their policies regarding the publication of partner names, identifiers and contact details. Publishers may need to improve their processes for regularly updating information on the partners involved in projects.
For intermediaries	Intermediary systems will need to adapt to any new contact-info fields introduced to the standard. Infomediaries should consider how to make use of improved organisation identifiers.
For data users	Data users will have access to improved information on the organisations active in partner countries and sectors.

Focus 5: Extended and improved location information

Agriculture data users want detailed subnational location information that will support analysis of the particular areas where activities are being delivered, and will enable cross-referencing to data on projects in particular agro-ecological zones, for example. To support this, activity location information should be provided at at least ADM 2 level (second level administrative boundaries), which is expressed using the IATI GeographicalPrecision code 3.

IATI has a sophisticated set of fields for subnational geographic information, allowing publishers to indicate the geographic precision of the information provided. However, at present, IATI publishers lack clear guidance and implementation reference material on how to effectively describe sub-national geographies. This all places a barrier on data quality and effective use of geographic references. This may be one factor for the current lack of widespread subnational location data in published IATI files, as highlighted in the landscape analysis.

Organisations relying on existing sources of subnational location codes face two major challenges: (1) the sources are out of date, and do not reflect the most current administrative divisions of a country, and/or (2) the licensing of the data limits who can use it and/or how it can be used. Publishers should include administrative level location information, even when

providing exact coordinates, as most geo-analysis and use of geodata is conducted using administrative level data.

Development Gateway have developed pilot geocoding tools to make it easier for publishers to add IATI-compatible geographic classifications to their activities. However, this tooling still faces limits from the lack of authoritative and open administrative geocodes and/or boundaries.

There have been some suggestions during our consultations that it would be useful to have explicit location information on agro-ecological zones, although no clear use cases have surfaced. This would be possible to introduce through use of the <location-id> field in IATI which supports a GeographicalVocabulary codelist.

Actions

We will:

- Develop improved user-focussed guidance to assist publishers to produce high quality geodata. This may include the provision and promotion of tooling to support geocoding.

- Explore the creation of lookup tools that can convert general location data into information on agro-ecological zones, and other agriculture relevant geographies.

- Work with the IATI community to advocate for better provision of open sub-national geographic reference data.

Implications & actions

For Open Ag Funding	The Initiative has a role working on lookup tools, and advocating for better provision of sub-national geographic reference data.
For IATI	IATI should consider incorporating guidance developed by the Initiative within the main documentation. IATI TAG members should be engaged in advocacy on improved geographic reference data.
For data publishers	Data publishers should consider the collection of detailed location data, and ensure their data collection systems make use of the IATI geocoding methodology.
For intermediaries	Intermediary tools to map between sub-national locations and agro-ecological information are required. Intermediary tools should be able to interpret a range of geographic vocabularies.
For data users	Data users will have access to more detailed location information.

Focus 6: Improving guidance on traceability

A core design of the IATI standard is to enable data users to find, discover and analyse connections between different datasets. Key to this is the idea of traceability, the ability to chart the flow of funds from organisation to organisation in any development co-operation "chain".

When detailing transactions between two organisations in IATI data, a function exists to detail and identify both the organisation involved, and the existing IATI activity that provides more information. Proper traceability is crucial to be able to aggregate data across publishers: without taking traceability into account, double-counting of budgets is inevitable. In turn, this has also impeded efforts to use IATI data thus far.

Additionally, traceability information supports work to understand the wider network of organisations, either involved in a specific activity or linked through different projects, meeting many key user needs.

Although these features exist in IATI, there is limited guidance on how to make use of them, and consequently there is a lack of good quality data. Particularly, this centres on data *from different publishers* being provided and harmonised, which can be tricky when contrasting logics or implementation patterns are adopted.

The Netherlands Ministry of Foreign Affairs[7] have recently developed clear guidance on traceability, whilst members of the IATI community are also actively and openly discussing this[8]. These provide a foundation to build on.

Actions

We will:

- Pilot existing guidance on traceability to identify its applicability to agricultural investment data.

Recommendations

The IATI Secretariat should:

- Provide improved guidance on traceability in the core IATI documentation.
- In line with recommendations around organisation identification, revise documentation to encourage publication of all partner organisations, at any step of the "chain".

Implications & actions

For Open Ag Funding	The feasibility tests stage of the Initiative should consider opportunities to pilot traceability.

[7] https://www.government.nl/documents/publications/2015/12/01/open-data-and-development-cooperation
[8] http://discuss.iatistandard.org/c/community-zone/traceability

For IATI	Improved guidance should be included in the IATI documentation.
For data publishers	Data publishers may need to adapt their operational processes to better capture traceability information.
For intermediaries	Intermediary systems may need to be adapted to display traceability information.
For data users	Data users will gain an increased ability to trace, track and see the connections between projects and organisations.

In summary: extending and improving IATI for agriculture

Through this analysis we have identified a range of actions including actions for data publishers, extensions to IATI codelists and schema, advocacy needs to improve and extend external data resources, and tool requirements to be filled by intermediaries. We have not focussed on data access tool requirements, which are addressed elsewhere in the Initiative.

Our recommendations for action are summarised below.

Actions for data publishers

- Data publishers should commit to using **20 core components** of IATI data to describe their agricultural investment activities.

  Above and beyond the basic data quality requirements of the IATI standard, the initiative will provide a data quality framework that calls for detailed project descriptions, subnational location information, detail on all the participating organisations in a project, sectoral classification of transactions, and details on results indicators targeted by the project.

  Publishers will need to identify approaches to capture and regularly report this information, including collecting any additional information from implementing partners, or supporting partners to also publish data using the IATI standard.

- Data publishers should pilot classification of their activities with additional codes from:

  - **AGROVOC** – which supports identification of crop-types, and intervention types

  - **The Agricultural Technology Ontology** – which supports detailed classification of the agricultural technologies involved in an investment.

Actions for the IATI Secretariat and technical community

- The Sector Vocabulary codelist should be updated to include **AGROVOC** and the **Agricultural Technology Ontology**

- The **contact-info** element should be allowed as a child element of **participating-org** in order to allow partner organisation contact information to be collected, and supporting easier disambiguation of organisations.

  This will improve the ability of users to identify and contact potential partners.

- Schema guidance should be updated to allow **sector classification at both activity and transaction level.**

  This will improve the granularity of information on the focus of funding.

- Schema guidance should be updated to **allow secondary sector classifications to add up to less than 100%**. I.e. when AgroVoc or other classifications are used, they would not need to be applied to specific percentages of an activity.

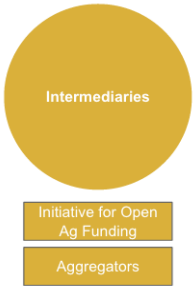
  This will help increase adoption of more detailed classifications, and will allow the use of secondary classifications as 'tags'.

- Standard **guidance** should be updated to reflect good practices on **traceability**, and **subnational geocoding.**

  This will ensure publishers can produce higher quality data.

- **Validation and dashboard tools** should support assessment against the 20 highly recommended components

Initiative actions



In addition, the Initiative will undertake a number of activities, including:

- Providing detailed guidance on application of the 20 highly recommended components, with a focus on participating organisations, transactions, geography and traceability.

- Provide a quality assessment framework and method, and engage with the IATI Secretariat to see this made available within core validation tools.

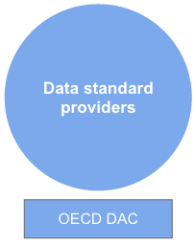
- Work to support the development of tools for improved publication of organisation identifiers, better geocoding and data quality assurance.

Wider engagement

We will work with partners and other stakeholders to:

- Feed into proposed updates to the agriculture-relevant sector codes within the DAC CRS Sector codelist.

  This will improve the high-level identification of agriculture relevant activities.



- Advocate for better authoritative and open reference resources for sub national geodata.

  This will improve the ability of intermediary tools to map between subnational data and agro-ecological zone information.

Next steps

These recommendations will be explored through a set of feasibility consultations and feasibility tests during Summer 2016.

In parallel, and informed by these tests, more detailed guidance for data publishers will be developed, resulting in:

- A guidance resource for publishers of Open Ag Funding data
- A finalised list of proposals into the IATI process.

Appendix 1: Meeting user needs with IATI

In a broad sense, the IATI standard can address many of the data needs identified from user research. Our challenge – highlighted in this document – is to understand and chart a course of action for organisations to publish and maintain data using the IATI standard which is high enough quality to meet those user needs. This section explores a range of user stories and how IATI can meet those needs

User need: What is being funded?	
User story	*As a field worker in an implementing organisation, I want to access detailed information on the portfolio of investments undertaken by a set of donors, so that I can work with our partners on effective responses.* *As a resource development staff in an NGO, I need information on what donors have funded, so that I can better understand their priorities and identify synergies with our own work.*
Observation	Donors, foundations, and NGOs all expressed a need for more details about the work being done in the sector in order to better understand other organisations' priorities or plan their own activities. This includes data on which value chains other organisations are focusing on, or the approaches being used.
How can IATI meet this?	The IATI standard has at its core an "**activity-based**" mechanism to enable organisations to share data on the specifics of delivery of programmes, projects and initiatives. The definition of these activities is open to the publishing organisations, meaning that differences in approach may not always lend themselves well to data being comparable. IATI also includes functions for **classification of activities** – using a central sector codelist, but also enabling the utilisation of external taxonomies and vocabularies. Additionally, any IATI activity can include a link to one/many **published documents**, that can in turn provide access to further information, including provision of important contextual frameworks and concepts.

User need: Where are interventions taking place?	
User story	*As a government official, I want to access detailed data on agricultural investments, so that I can discover which organisations may already be working in our districts*
Observation	Donors, foundations, and NGOs agree that just knowing the country where programs are being implemented is insufficient. Although some individuals would like the exact locations of project activities, many indicated that having data down to the second administrative level (equivalent to a municipality) would be sufficient. This information is crucial to leveraging existing programs, avoiding duplication, or even preventing the implementation of conflicting programs.
How can IATI meet this?	Alongside fields for describing a specific region or country, IATI has a whole function to detail **sub-national geography**. This can enable both data producers and consumers to utilise existing GIS systems to help describe and map sub-national geography.

User need: Who is involved?	
User story	*As the head of an international research program on sustainable farming practices, I would like to know who else is engaged in NRM practices in Western Africa (e.g. drip irrigation, agroforestry, fertilizer micro-dosing, conservation agriculture), incl. NGOs, national research programs, and private sector.*
Observation	Donors, foundations, and NGOs want to know which organisations are involved in a given project, and particularly the organisations they should be funding, consulting, or working with at the local level. Local NGOs provide important information on the best practices for working in a community and can be key to the success of some programs.
How can IATI meet this?	IATI has a specific function to describe the **organisations participating** in a particular activity, alongside their **specific role**. Furthermore, a function also exists to detail parties involved in a specific financial transaction within an activity. A key aspect for organisation data is to also provide a **unique identifier** for entities, enabling data to be effectively shared.

User need: How much is being provided and how are funds spent?	
User story	*As an advocate for conservation agriculture in Zambia I would like to track the funds and sources of investments allocated in the past decade and relate these efforts against data on technology adoption and land degradation.*
Observation	Organisations need to know the budget of agricultural investments, in part to determine the scale of those efforts. For donors and foundations, this data is also helpful for identifying which organisations they should talk to.
How can IATI meet this?	The IATI standard has **several ways of providing financial information,** including budgets, commitments and transactions within any activity. Additionally, a transaction can be codified with sector codes and some geographic information, which can be of value to the user need – particularly in wide ranging activities.

User need: Which populations are being served?	
User story	*As an analyst for the Ministry of Rural Development in Nigeria I need to estimate the number of households that have been reached by food supplementation programs in the past 5 years (from international donors). To do so I need at least state-level but possibly also district-level details on the geographic reach of these programs.*
Observation	Both donors and NGOs want more information on the intended beneficiaries of assistance to better target their own programs. Organisations mentioned a need for data on the *number* of individuals being served, as well as details about the groups being targeted.
How can IATI meet this?	There is no structured method to declare target groups in IATI, but it is possible to publish a **specific description text** that details this. Additionally, several **documents** can be "attached" to an IATI activity, which can be also be categorised

User need: What have projects achieved, and how have they done it?	
User story	*As an implementing organisation, I want to access detailed data on agricultural investments, so that our project can build on has been done/what is being done*
Observation	To improve the effectiveness of agriculture and food security interventions, organisations need information on results. This includes data on outputs and outcomes, as well as information on *how* and *why* interventions succeeded so that organisations can fund or replicate successful approaches and avoid those that have achieved less positive results.
How can IATI meet this?	IATI contains a whole set of fields and options around the **results** of any activity. These can vary across activities and organisations, but the opportunity remains to produce data that details achievements. Additionally, IATI enables organisations to link activities to **published documents** that can provide further information on results, such as evaluation reports.

User need: Easy access to good, reliable and curated data	
User story	*As a person using IATI data, I'd like to get access to a simple and reliable query form to access relevant activities, so that I can undertake my own analysis* *As a technical advocate, I'd like data standards to be interoperable, to avoid duplicate of time and effort*
Observation	Only a handful of the respondents had heard of IATI, and even fewer had tried using the data. Those who had done so said the data were complicated and unfriendly to use, and that the API was unreliable. Some said they might use the data if the data were easier to extract in a way similar to the World Bank Data website, or if they could use the API confidently to pull data out.
How can IATI meet this?	The whole IATI corpus currently contains over 500,000 different activities from over 400 publishing organisations. This represents access to a **large corpus of data**, which is being updated and maintained at a variety of levels. Conversely, for many people it is often difficult to filter, segment, compile or parse out specific subsets of data from the whole. Currently, the **tools and services** around the IATI ecosystem to effectively query and request data are in their infancy, with performance and sustainability issues ahead.

Appendix 2: Measuring data quality within the IATI Standard

The IATI Standard consists of a schema, several codelists and various guidance notes for implementation. The standard has been modified through different versions, with the latest iteration – 2.02 – being the seventh version available (1.01; 1.02; 1.03; 1.04; 1.05; 2.01; 2.02). Publishers are encouraged to utilise the latest version of the standard, although there is no inherent penalty for publishing with earlier alternatives.

When organisations prepare and publish their data, they should aim to ensure that this meets – *or even exceeds* – the standard. To do so, there are a number of steps to take, which include:

- Checking data against the **IATI schema**. The schema provides the structural "rules" for data, including: the formatting of data points (dates, values); the naming conventions for elements (e.g. <iati-identifier> rather than <iatiidentifier>) and the order expected in any dataset.
- Checking that any **codes** used in data are consistent with the codelists published by IATI, or relevant vocabularies being referenced.
- Ensuring that any **guidance notes or logical rules** are adhered to. For example, start dates are before end dates, or countries and regions are not inadvertently mixed.
- Finally, publishers are encouraged to undertake a "**content check**". Does the data express and describe their work, projects and investments as expected?

Hence, any publisher using the IATI standard should pull together a series of processes to obtain and maintain data quality, in line with the above steps. The IATI Secretariat provide two tools to assist with this, alongside a helpdesk support system However, this is not definitive with regards to the steps needed. In terms of tooling, it is worth referencing what checks a publisher can access:

- The IATI Validator: this service enables testing of any IATI formatted dataset. The validator **only checks data for schema compliance**. It provides indications and references in terms of where a file may "fail" these tests, but does not provide feedback on codelists, logic rules or content checking.[9]

- The IATI Dashboard: this service undertakes a nightly check on available published IATI data, and provides a series of analysis points and reports. The IATI Dashboard is a useful tool to undertake quality checks on data which may not be picked up by the IATI Validator. However, this is a **"passive" service** – the Dashboard does not instigate or maintain any dialogue with publishers or users.

Against this context, it is useful to then discuss the issue of **mandatory and recommended fields** within the standard.

[9] The Initiative are encouraged by recent news that the IATI Secretariat plan to enhance the coverage of checks via the IATI Validator: http://discuss.iatistandard.org/t/work-towards-an-improved-iati-validator/524

At the schema level, there are a minimum number of fields that are designated as **mandatory**. Without evidence of these, the schema would reject any data:

Mandatory IATI field	Notes
<iati-activities>	The "parent" element for any data file. Must declare the version of IATI in use
<iati-activity>	The "parent" element for any activity
<iati-identifier>	
<reporting-org>	Must also include a @ref; @type and name
<title>	
<description>	
<participating-org>	At least one Must also include the @role
<activity-status>	Must include the @code
<activity-date>	At least one Must also include the @type

Table: Mandatory fields – according to version 2.02 of the IATI standard, Fields in **bold** are those that determine content, rather than provide structure/context

Additionally, some IATI fields have mandatory child elements, even though they themselves may not be required. For example:

Optional IATI field	Usage notes
<sector>	If used, must include a @code
<budget>	If used, must include the child <period-start>, <period-end> and <value> elements
<document-link>	If used, must include the @url and @format codes, and the <title> and <category>/@code data points

Table: Example optional fields – according to version 2.02 of the IATI standard

The issue that arises from this – which the Initiative may wish to further discuss and progress – is that it can be perfectly possible to present IATI data that is valid, but is in fact very brief in detail.

To counter this, some organisations – namely bilateral donors – have instigated their own set of **recommended fields**:

- The **UK government**, via the Department for International Development (DfID), published a set of guidelines and references for the DfID Publishing Requirements, detailing the expectations on DfID partners when providing data in the IATI format

- The **Netherlands government**, via the Ministry of Foreign Affairs, have also produced implementation guidance and rules for their partners (Open Data and Development Co-operation), including a detailed overview of expectations for traceability.

These recommended fields are a useful addition to the mix, although can cause some issues when organisations have to bridge between them (when receiving funding from UK and Netherlands governments, for example). As of the time of writing, there are also no publicly available validator or dashboard tools specifically in service for these initiatives.

Appendix 3: Core components and quality framework

To provide data that meets user needs, data publishers should provide the following components.

Component	Quality requirements & user needs
Reporting Organisation	Constant value. Including an organisation identifier.
Metadata	Default currencies and languages used in reporting.
Activity ID	Activities should be described at a suitable level of granularity. For example, different projects in the same country should not be bundled together in reporting.
Activity Title	A clear and comprehensible project title that indicates the focus of the activity.
Activity Status	Information about activities should be regularly updated.
Activity Dates	Start and end dates, either planned or actual.
Activity Descriptions	Distinct descriptions should be provided for: ● Description of activity ● Objectives of activity ● Target groups of activity
Aid classifications	Classifications against core IATI fields for: Collaboration Type, Default Flow Type, Default Finance Type, Default Aid Type and Default Tied Status. These will often be possible to set as constant values for any given reporting organisation if they are not otherwise recorded for ODA reporting.
Sector Classification	Classification against OECD DAC Sector codes, plus additional taxonomies, including (tbc): ● AgroVoc ● Agricultural Technology Ontology
Participating Organisations	Details on **all** participating organisations, including partners. This information should be kept updated as new partners are engaged with a project.
Contact details	At least one contact address for more information on the specific project.
Documents	Associated project documents should be published and linked to. Examples of useful documents include: project plans, monitoring data, interim reports and evaluations.
Location (Country/Region)	Including information on percentage of project in each country or region.
Sub-national location	Detailed information on the on-the-ground location where activities are taking place.

Budget	Year by year project budget information.
Transaction	Information on the major transactions associated with the project, particularly payments to partners.
Transaction classification	Where possible, transactions should be classified against relevant sector codes (see Focus 3)
Transaction parties (participating organisations)	Transactions should clearly identify the partner receiving funding, and the relevant organisation should be detailed under participating organisations.
Transaction Traceability	Where possible, transactions should link onwards to related IATI activities (sometimes published by other organisations).
Results information	Project should publish information on any indicators and benchmarks the project is oriented towards meeting, as well as any structured results data that is available. Even when results data is not available, the indicators by which a project impact will be measured should be published in a structured form, and associated results documents linked to via the document section.

Data should be structured using the following IATI fields.

Component	**Field name**[10]
Reporting Organisation	Reporting Org Name
	Reporting Org Ref
	Reporting Org Type
	Secondary Reporter
Meta-data (iati-activity)	Default Lang Default Currency
Activity ID	Activity ID
Activity Title	Activity Title
Activity Status	Activity Status Code
Activity Dates	Activity Date
	Activity Date Type
Activity Descriptions	Activity Description
	Description Language
	Description Type Code
Participating Organisations	Participating Org Name
	Participating Org Ref
	Participating Org Type
	Participating Org Role
Location (Country/Region)	Country Code
	Region Code

[10] Please note that this table does not include all possible fields for some components (for example transactions and results). This illustrates the fields that the initiative would place most focus on. However, publishers would also be welcome to investigate other available fields.

	Country Region Percentage
	Region Vocabulary
	Region Vocabulary URI
Aid classifications	Collaboration Type
	Default Flow Type
	Default Finance Type
	Default Aid Type
	Default Tied Status
Sector Classification	Sector Code
	Sector Percentage
	Sector Vocabulary
	Sector Vocabulary URI
Documents	Document Title
	Document URL
	Document Category Code
	Document Language Code
	Document Format Code
	Document Date
Budget	Budget Type
	Budget Start Date
	Budget End Date
	Budget Value
	Budget Currency
	Budget Value Date
Transaction	Transaction Type
	Transaction Date
	Transaction Value
	Transaction Currency
	Transaction Value Date
	Transaction Description
Transaction parties (participating organisations)	Transaction Provider Name
	Transaction Provider Type
	Transaction Provider Ref
	Transaction Receiver Name
	Transaction Receiver Type
	Transaction Receiver Ref
Transaction Traceability	Transaction Provider Activity Ref
	Transaction Receiver Activity Ref
Transaction classification	Transaction Sector Code
	Transaction Sector Vocabulary
	Transaction Sector Vocabulary URI
Sub-national location	Location Ref
	Location Reach Code
	Location ID Code
	Location ID Vocabulary
	Location Name

	Location Description
	Location Activity Description
	Location Admin Code
	Location Admin Vocabulary
	Location Admin Level
	Point srsName
	Pos
	Exactness Code
	Location Class Code
	Feature Designation Code
Results information	Result Type
	Result Title
	Result Description
	Indicator Title
	Indicator Measure
	Indicator Ascending
	Indicator Description
	Indicator Reference Code
	Indicator Reference Vocabulary
	Indicator Reference Vocabulary URI
Contact details	Contact Info Type
	Contact Organisation
	Contact Person Name
	Contact Job Title
	Contact Telephone
	Contact Email
	Contact Mailing Address
	Contact Website

Appendix 4: Organisations Consulted on Agricultural Investment Data Needs

NGOs

- ACDI/VOCA
- CARE
- Global Communities
- Heifer International
- The Hunger Project
- Land O'Lakes International Development
- Lutheran World Relief
- Mercy Corps
- National Cooperative Business Association, CLUSA International (NCBA CLUSA)
- World Vision

Bilateral and Multilateral Donors

- African Development Bank
- International Fund for Agricultural Development (IFAD)
- Millennium Challenge Corporation
- U.S. Agency for International Development
- UK Department for International Development
- World Bank
- World Health Organisation

Foundations

- Rockefeller Foundation
- Bill and Melinda Gates Foundation (SpatialDev)
- McKnight Foundation
- David and Lucile Packard Foundation
- American Jewish World Service
- ABILIS Foundation
- *over 20 Kenyan foundations were also part of the discussion via a focus group