Field to Market®

IMPACT CLAIMS VERIFICATION PROTOCOL

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VERSION HISTORY

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Introduction

Field to Market: The Alliance for Sustainable Agriculture® brings together a diverse group of grower organizations; agribusinesses; food, beverage, restaurant, and retail companies; conservation groups; universities and public sector partners to focus on defining, measuring, and advancing the sustainability of food, feed, fiber, and fuel production. Field to Market® (FTM) is committed to increasing sustainability within the agricultural industry, targeting commodity crops while assuring best practices amongst producers and enabling continuous improvement at the farm level. Field to Market members want to make claims about their participation in Field to Market projects that they are involved in, and, ultimately, the impacts of these collaborative efforts. Enabling supply chain sustainability claims is an important aspect of Field to Market's supply chain sustainability vision. **Impact Claims are the highest level of claim in the Field to Market system and thus require verification by a qualified Third-Party Verifier.** This document provides the requirements and procedures necessary to verify a Project-Level Impact Claim through Field to Market, which will be utilized by Third Party Verifiers accredited in accordance with the specified qualifications in the Verification Protocol Guidebook and approved by Field to Market to ensure that impact claims are valid. Protocols for claims beyond the project level are not included in this document and will be addressed by Field to Market at a later date.

Review Process

This document is Version 1.1 of the Field to Market Impact Claim Verification Protocol. It will be reviewed regularly to ensure its continued effectiveness and alignment with evolving industry standards, Field to Market will use examples of impact claims filed by members to identify and address potential areas of improvement, enhancing the overall efficiency of the claims process. Field to Market Members will be engaged in a transparent process similar to the comment period utilized for the approval of Version 1.0.

Definitions

Actors: A term used in this document to refer to all roles and parties that are a part of a Fieldprint® Project.

Algorithms: The process or set of rules followed in the calculation of Field to Market metrics.

API: The Fieldprint Application Programming Interface (API) connects our eight science-based metrics and associated algorithms directly to farm management software solutions, allowing growers to assess the environmental performance of their management practices against regional, state, and national benchmarks for key sustainability indicators. It is relevant for projects that work with a Qualified Data Management Partner to collect and store their data.

Continuous Improvement Plan (CIP): A Project-based plan for improvement in

environmental outcomes over time that includes continuous improvement goals and objective(s) relevant to addressing the identified natural resource concerns and how the project's continuous improvement strategies seek to address these concerns. This is a Field to Market requirement for Projects that intend to make an Impact Claim.

First Aggregator (FA): First aggregation or collection point of the commodity. Typically, the first aggregation points will be elevators or silos.

Fieldprint Platform® (FPP): A pioneering assessment framework that empowers brands, retailers, suppliers, and farmers at every stage in their sustainability journey, to measure the environmental impacts of commodity crop production and identify opportunities for continuous improvement. It encompasses the suite of technology available to Field to Market growers and members. Tool used by growers in a Fieldprint Project to store and compare their farm data inputs and outputs. All claims are based on one or more of eight metrics calculated by the FPP, frequently in relation to the volume involved in the project.

Grower: Farmer/producer involved in Field to Market projects, growing one of the crops recognized in the Field to Market scheme. Growers may also be Partners, Owners, or Leads of a project, depending on its set-up.

Impact Claim: A claim based on the comparison of metrics within the Fieldprint Platform related to a project. Quantifies actual sustained improvements or reductions against Field to Market's outcomes-based metrics. This type of claim requires a minimum of five years of recorded data. (Example: Brand X buys corn from farmers who have reduced their water usage by X% over the last five years).

Implementation Partner: Organizations (member and/or non-member) contracted by Project Leads to provide a variety of services including technical assistance, management of data, and/or serving as the Project Specialist. Field to Market has developed an Implementation Partner Agreement form to outline the rights and responsibilities of organizations serving in this role.

Late Actors: Project Partners who join a project after it has already been initiated. There is no deadline to enter a project, but to make a claim they must be registered as a Project Partner by the time the Project Owner sends the Impact Claims request. Must be approved to join the project by the Project Owner and all relevant paperwork must be submitted to Field to Market before making claims.

Measurement Claim: Measures progress in engaging growers and acreage in measuring continuous improvement in a Fieldprint Project. Documents intent to contribute sustained improvements or reductions against Field to Market's outcomes-based metrics and demonstrates a one-year snapshot of aggregate environmental outcomes from

Fieldprint Project.

Metrics: The Fieldprint Platform provides a Fieldprint Analysis which estimates field level performance on sustainability and/or regenerative indicators. Continuous Improvement Plans state which of these metrics to focus on, and impact claims may include sustained improvement in these areas where the data supports these changes. These indicators are:

- Biodiversity
- Energy Use
- Greenhouse Gas Emissions
- Irrigation Water Use
- Land Use
- Soil Carbon
- Soil Conservation
- Water Quality

Participation Claim: A claim that communicates participation in a Fieldprint Project, expressing support for and engagement in building solutions and advancing continuous improvement in the sustainability of commodity crop production. (Example: "Company X is engaged in promoting solutions for sustainability and continuous improvement in U.S. commodity agriculture," or "Company X is working with Field to Market to improve the sustainability of [crop A] across the U.S. through continuous improvement.")

Project Administrator: Employee or individual associated with Project Owner who oversees the project from beginning to end and participates in the project and communications. For Verification, this individual may also play the Project Specialist Role.

Project Lead Organization: A full member of Field to Market that invests in and guides the direction of the Project and is responsible for ensuring compliance with requirements. There is no limit to how many Leads can join a project.

Project Owner (PO): Field to Market member who is the primary Project Lead, or project starter. The PO selects the Verifier and Project Specialist of the project. The PO agrees to manage the project and to take responsibility for the implementation of and compliance with the Verification Protocol.

Project Partner: A Field to Market member or non-member who has contributed to a Project or has been contracted to provide service(s) to a Project, is officially listed in Project documentation, and has met licensing requirements. There is no limit on the number of partners that may be involved as long as their participation is documented according to Field to Market requirements.

Project Specialist: Employee(s) of Project Lead or Implementation Partner organizations

who provides one-on-one data collection assistance to farmers. The Project Specialist may provide and contribute to analysis and evaluation feedback. This role has particularly important responsibilities for supporting the verification requirements for Innovation Projects that seek to make impact claims.

Qualified Data Management Partner: Farm-management software solution providers that have been approved by Field to Market and whose software solutions connect to the eight outcome-based metrics and associated algorithms from the Fieldprint Platform via an Application Programming Interface (API).

Quality Management Approach: An administrative system outlining how to ensure the quality and integrity of the data gathered and entered into the Fieldprint Platform.

Retroactive Data Entry: When a Grower who is new to a Fieldprint Project enters historical field data that has been collected and stored in a reliable format.

Retroactive Product Enrollment: When a Grower enters field data for, and enrolls in, a Supply Chain Fieldprint Project for a given harvest after having delivered product to a First Aggregator so that the previously delivered volume for that harvest can be counted as enrolled Field to Market Product.

Verification Body: An organization accredited in accordance with the specified qualifications in the Verification Protocol Guidebook and approved by Field to Market.

Verifier: Person from a third-party verification body responsible for verifying a claim who meets the specified qualifications identified in the Field to Market Verification Protocol Guidebook.

Purpose and Scope of Verification

Purpose

This document provides the requirements and procedures necessary to verify a Project-Level Impact Claim through Field to Market. Protocols for claims beyond the project level are not included in this document and will be addressed by Field to Market at a later date.

Scope

Impact claims quantify actual sustained improvements or reductions against Field to Market's outcomes-based metrics, demonstrating an improved trend line and/or assessing performance against a Fieldprint Project's three-year benchmark. The Verification Protocol applies to Fieldprint Projects that seek to make an Impact Claim and describes the steps required to verify the claim. This document is supplemented by the Field to Market

Verification Protocol Guidebook that goes into further detail about how the verification assessment should be conducted, and provides tools for the Verifier to use during an assessment.

The verification process is based on the review and evaluation of the following documents sets and systems in place for a Fieldprint project:

1. Fieldprint Project documentation approved by Field to Market and required for making impact claims
2. Data input and output systems and documentation
3. Accounting System: Volume Proxy or True Mass Balance Systems (note that some projects, such as Demonstration projects, may decide not to have a volume-based project. This is therefore a requirement only for projects that have determined that claims will be tied to volumes)

Roles and Responsibilities

Table 1 below outlines the roles and responsibilities of Project Actors in the context of an Impact claims verification process. While each Actor may have additional responsibilities as defined in the Fieldprint Project Handbook, the roles below are requirements for supporting a claims verification assessment. The Verifier will require the information outlined in each box in order to properly complete the verification of any claim. It is expected that some responsibilities will fall under different roles based on how a Project is set up, and what is most important is that the responsibilities are covered.

Table 1: Verification Process Roles and Responsibilities

Grower	Project Specialist	First Aggregator (FA)*	Project Owner	Project Partner/Lead	Field to Market	Verification Body	Late Actors
Enter acres and associated data into FPP or equivalent Outline field boundaries for entered fields Engage with Project Specialist	Engage growers Facilitate input of data; some enter data directly Train in the FTM approach Manager Grower ID Registry (depends on	ManageGrower ID Registry (depends on the Project) Track volumes delivered from FTM growers if relevant to the Project* Track FTM volumes going out to downstream Actors if	Request Claim meeting FTM reporting requirements, and determine words for the Claim Provide FTM documents (Project registration, annual reports, CIP,	Provide Project Support Contribute resources Register with the Project	Manage FTM Registration (by Project) including acres entered, and enrolled information Initial Impact Claim screen Determine conversion factors	Check Claims Request Interview Project Specialist Review Claim data analysis methodology Crosscheck volumes between FA and downstream	Register with Project Provide Project support Pay Claim fee if a FTM associate member or non member File claim with Field to Market

	the Project) Report on progress to FTM and Project Actors	relevant to the Project* Demonstrate proof of accounting system to verification body	etc.) Facilitate grower engagement Buy product from the Project*			Actors* Interview FA and crosscheck FA registry*	

*These responsibilities apply specifically to supply chain projects that are tracking volumes. Physical Volumes delivered to a First Aggregator only need to be tracked for True Mass Balance projects. Volume Proxy Accounting Systems only need to track physical volumes sold at the First Aggregator level. See Section 5 for more details.

The following list includes project roles and associated responsibilities as defined previously by the Fieldprint Project Handbook or for the purposes of this protocol. In many project set-ups, one actor could play various roles, or projects may designate responsibilities differently. In these cases, the Project Owner must clearly define all Project Actors and their roles to ensure readiness for verification.

Grower - They are responsible for entering their data into the FPP (via an automated or manual process). Growers' farms can only be enrolled in one supply chain project per crop per year within a geographically distinct region. Examples are: A Grower can be enrolled in both a corn and soy project in Iowa in a given year, but not 2 corn projects in the same region in Iowa. A Grower can enroll in a soft white winter wheat and hard red spring wheat project in a given year, but not two hard red spring wheat projects in the same region in a given year. A Project may also decide that the grower is also responsible for delivering some physical product to the first aggregation points involved in the project, and communicating to the FA that they are involved with the Field to Market Project. Project Specialists and First Aggregators will have a Grower Registry so that they know which Growers are active participants in a project for a given year.

Project Specialist - The Project Specialist is hired by the Project Owner or by another Actor within the Project that is approved by the PO and must have the qualifications required by and included in this protocol. The role will differ based on how projects design data collection. In cases where growers input their own data, the Project Specialist is responsible for engaging with the growers for training the growers in using the FPP. In cases where the Specialist inputs data on the growers' behalf, they will have to show a consistent, quality-controlled method of entering data. Specialists should also be a point of support for the growers to contact with questions and concerns. They would report back to the PO or to the actor who hired them on progress or troubleshooting. They should keep records of farmer engagements per this protocol and provide the PO with updates on a mutually agreed-to schedule.

First Aggregator - The First Aggregator is responsible for documenting the volumes of the Field to Market commodity in Supply Chain projects that have chosen to track volumes. These volumes will later be cross-checked by the verifier, with documents provided by the PO. The PO may delegate much of the project coordination to the FA, i.e. hiring the project specialist or developing relationships with Project Lead. Reference Section 5 for definitions of the different accounting systems that are accepted by Field to Market.

Implementation Partner - Organizations (member and/or non-member) contracted by Project Leads to provide a variety of services including technical assistance, management of data, and/or serving as the Project Specialist. Field to Market has developed an Implementation Partner Agreement form to outline the rights and responsibilities of organizations serving in this role.

Project Owner - The PO selects the Verifier and Project Specialist of the Project. The PO may delegate some of the coordination and project management to other Actors in the project, but this must be decided upon and documented. The PO manages the Project and takes responsibility for implementation of and compliance with the verification protocol. For Projects that involve volume accounting, the PO is responsible for conducting its own volume reconciliation on an annual basis and should keep records, or assign record-keeping responsibility, for a Grower Registry, the FA registry, the estimated (or actual) registry of acres, and yields in the project. For all forms of projects, the PO is responsible for all necessary Field to Market forms and reports, and the impact claims request. The PO is also responsible for ensuring that the project specialist is engaging with the growers. Documents will be cross-checked by the Verifier, with documents supplied by the other Actors.

Project Lead Organization- A full member of Field to Market that invests in and guides the direction of the Project and is responsible for ensuring compliance with requirements. There is no limit to how many Leads can join a project.

Project Partner Organization - A Field to Market member or non-member who has contributed to a Project or has been contracted to provide service(s) to a Project, is officially listed in Project documentation and has met licensing requirements. There is no limit on the number of partners that may be involved as long as their participation is documented according to Field to Market requirements.

Field to Market - Field to Market is responsible for enabling the technology and transparency required for the verification of claims, via data stored in the FPP or obtained via the API. Field to Market also reviews the initial impact claims request and sends the Verifier project documentation that has been submitted and approved by Field to Market.

Verifier/Verification Body - Verifier's role is to verify that systems are in place to support a

given impact claim. Claims may be tied to supply chain volumes, directional movement of a specified metric over time, or other data analysis findings from Fieldprint Project data. The Verification Body must be accredited in accordance with the specified qualifications in the Verification Protocol Guidebook and approved by Field to Market. The Verification Body's responsibilities vary based on the claim that is submitted and may include the following, depending on the nature of the project:

All Projects:

- Interviews with Project Specialist and Project Owner
- Cross-checking Field to Market Fieldprint Project documents provided by PO with documents provided by Project Specialists.
- Cross-check Project Actors provided by PO with actual Project Actors (Leads/Partners).
- Report to Claimant and Field to Market upon completion of assessment

Specific to Claims tied to volumes:

- Determining if the accounting system is a Volume Proxy or a True Mass Balance system
- Cross-checking a FA registry list with actual FAs
- Cross-checking volumes declared by FAs with estimated/actual yields provided by PO for claims tied to volumes.

Late Actors – There is no deadline to enter a project and provide support, but to make a claim Late Actors must be registered as a Project Partner by the time the impact claim request is made. A Late Actor must be approved by the Project Owner before making claims and must support the project in some way. Late Actors that are associate members or not Field to Market members must follow the appropriate process for licensing before making a claim.

Non-Project Participant – Field to Market members that wish to support or amplify impact claim(s) made by a project, but who are not Project Leads or Partners, must work with the Project Owner to seek approval in order to share the progress that farmers are making in driving continuous improvement with a wider audience.

Making Impact Claims

Field to Market is an insight member of the ISEAL Alliance, a global non-governmental membership organization whose mission is to strengthen sustainability standards systems for the benefit of people and the environment, and used their guidance on credible sustainability claims to develop and implement its protocols.

> ISEAL's definition of a sustainability claim states: "Sustainability claims are the words and images used to set apart responsible products, processes, businesses or services. Many claims are carried through the supply chain and inform market sourcing, but stop before reaching the consumer, while other claims consist of a consumer-facing

label. It's important that these sustainability messages and labels are truthful, and that their language tells us what has actually been achieved." —*ISEAL Fact Sheet: Defining Credibility in Sustainability Claims and Labelling*

To maintain consistency in proper usage of Field to Market's trademarks and safeguard Field to Market's brand, prior written approval is required for all communications referencing Field to Market trademarks, which include Field to Market, Fieldprint Platform, Field to Market: The Alliance for Sustainable Agriculture, the Field to Market shopping cart logo, and use of the term Fieldprint. As such, the Claims Request Form must include the claim and any additional context about Field to Market that will accompany the claim.

This document provides the requirements and procedures necessary to verify a project-level impact claim through Field to Market. As such, these project-level claims can be made by Project Actors that have contributed to the impact of the project. Non-Project participants that wish to support or amplify impact claim(s) made by a project, but who are not Project Leads or Partners, must work with the Project Owner to seek approval in order to share the progress that farmers are making in driving continuous improvement with a wider audience.

Examples of Impact Claims

The project-level claims that can ultimately be made will be dictated by the findings of the project data set that is analyzed. Many impact claims will also include volumes or a volume proxy of raw material or co-products involved in the project.

Claims can include, but are not limited to:

- **Improvement or reductions in specific indicators over time:**
  - "In our project in the Fayetteville Watershed, growers reduced their GHG Emissions by 7% over 5 years."
  - Percent of growers that saw improvement: "In our project in the Fayetteville Watershed, 40% of enrolled farms had an improved HPI score over the 5-year period of engagement."
  - Improvement in the range: "In our project, growers had GHG Metric outcomes that ranged from 7.1-10.2 CO_2e/bu in Year One of the project and improved to a range of 6 -8 CO_2e/bu in Year Five."
- **Improvement vs. a project-generated benchmark for quantitative metrics:** Where five years of data exist, a project-level average over the first three years could be used as a project benchmark, with subsequent years being compared to this benchmark.
- **Volumes of raw material or co-products associated with measured continuous improvement** – "The volume of [Commodity Name] that we purchase reflects an equivalent volume of [Commodity Name] produced and delivered by growers in projects that saw a reduction in GHG Emissions over five years".
- **References to contributions to sustainable production** – "Our company contributes to the sustainable production of [Commodity Name] by supporting the production of

the equivalent of X% of our purchases through Fieldprint Projects in [Region Name] where we saw a reduction in GHG Emissions over five years."

Grower Claims:
These are claims made by growers, grower associations (as Non-Project Participants) or individual growers. For grower associations that wish to support or amplify impact claim(s) made by a project, but who are not Project Leads or Partners, they must work with the Project Owner to seek approval to share the progress that farmers are making in driving continuous improvement with a wider audience. In cases where these are not project-based and are instead focused on broader regional or national claims, they are out of scope for this document but will be explored by Field to Market in the future.

Co-Product Claims:
In cases where co-products from the same raw material are sold to multiple downstream Actors that seek to make claims, Actors making claims must use conversions provided by Field to Market to ensure that individual claims are not overstated, and these amounts will be checked during the verification process. See Appendix 1 for Conversion Tables.

Requirements for Making a Claim

To make claims based on a Fieldprint Project the following requirements must be met and be documented:

1. Actor making claim must be registered as part of the associated Field to Market Fieldprint Project at the time of making the claims request.
2. Claimant must be a Field to Market member or have gone through the appropriate licensing process for making a claim as a non-member.
3. Project must be approved by Field to Market with the following documents on file:
    a. Project Registration Form
    b. Annual Reports
    c. Continuous Improvement Plan
4. Verification required documentation that will be reviewed will vary depending on the project structure and the claim that a Claimant seeks to make.

    All projects need to be able to show project records of:
    a. Anonymized Grower Registry including acres per Grower per year
    b. Anonymized field boundary data for enrolled growers
    c. Documentation of the individuals and/or companies filling the responsibilities for the verification process including experience of the Project Specialists (including education and or years of experience, trainings completed, procedures with regard to grower outreach and rollout, approval of Project Specialists)
    d. Real-time access to anonymized Grower data during the Assessment so that

the Verifier can review randomly selected data sets during spot checks.

For projects with volume-based claims:

a. FA registry list: list of all FA involved in the project indicating which of the FAs involved in the project has sold product linked to the project to downstream Actors making a claim about the commodity. The FAs listed should be found only within the region specified by the project.
b. Records of volumes that have been purchased and sold in association with the project. These can include bills of Lading, invoices, purchase orders, real-time procurement system data, or other documentation to support volume reconciliation.
c. Project Owner should have estimated or actual yields of products from project and baseline data supporting this amount for confirmation.
d. FA must be able to demonstrate an accounting system that accurately tracks project volumes on a Volume Proxy or True Mass Balance basis as determined by the project.

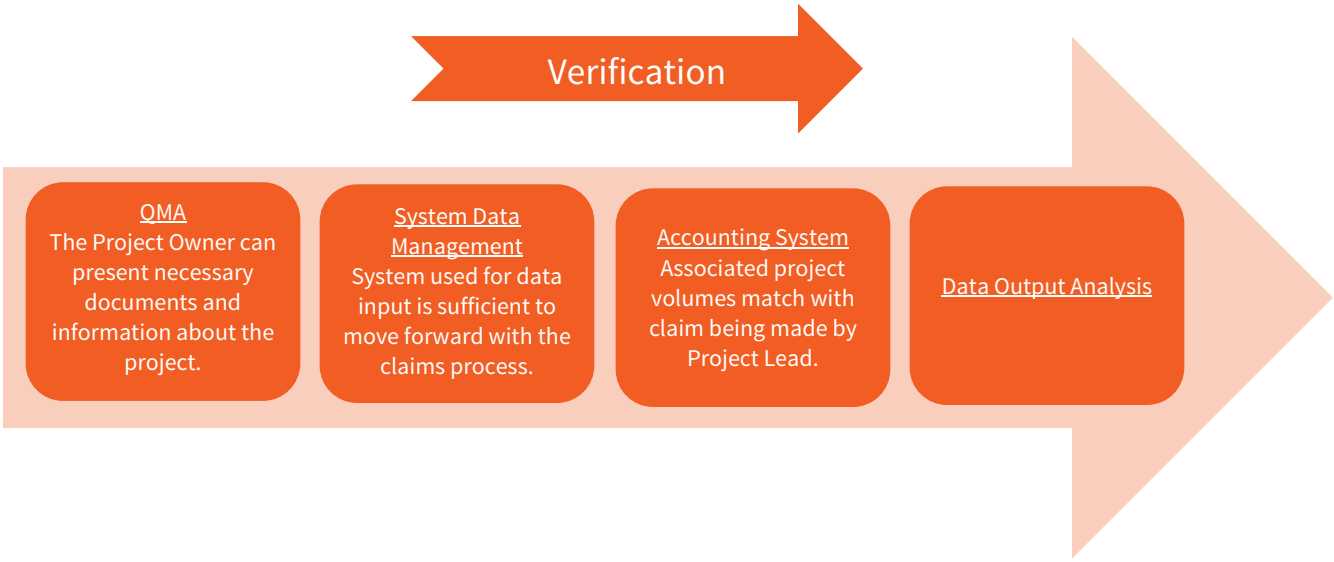
5. Claimant must define the verbiage of the claim they seek to make via the Impact Claim Request Form.

Process of Verifying Claims

The PO is responsible for communicating needs to the different Actors within the project so that the project collectively has all of the necessary documents.

Three systems will be verified: The Quality Management Approach (QMA), Data Management, and Volume Accounting System. See the diagram below. The QMA is outlined in Section 6. The Data Management System is described in Section 4. The Accounting Systems are outlined in Section 5 of this document.

Chart 1: Process of Verifying Claims



The verifier's role is verification of the systems in place by cross-checking Grower ID lists, FA registry lists, required Field to Market documentation, qualifications of project personnel, and conducting interviews with project technicians. For supply chain projects, it also includes verification of the volume of the commodity existing within the project by cross-checking actual yields presented by the PO based on the data input to the FPP for the project with the volumes recorded by the FAs involved in the project. The volume existing at the FA level cannot exceed the volume of actual yields calculated from the FPP. Note that yields for enrolled acres are not recorded in the FPP, but a grower's actual data from entered acres should be applied to enrolled acres for the final calculations, and as such will also be referred to as actual yields. Finally, the Verifier reviews the methodology employed by the project in analyzing the output data and determining what claim to file.

The verifier will not have access to interview individual growers, and will as such verify the quality and methodology of data collected and entered into the FPP (this data quality system is explained in Section 4). The verifier will have access to anonymized grower data sets.

The verifier is responsible for the following elements in verifying a claim:

- Interview Project Specialist with regards to data input, Project Leads engagement, grower engagement, and continuous improvement plans and actions.
- If volume-based claim:
    - Cross-check FA registry list with actual FAs.
    - Cross-check volumes declared by FA with actual yields provided by PO (based on grower data input).
    - Cross-check volumes declared by FA with actual yields, co-product volumes,

and Field to Market-published Conversion Rates.
    - Cross-check volumes associated with each project, as reported by PO and actor making the claim, with Field to Market records of project-specific volumes.
- Cross-check Field to Market documents provided by PO with documents provided by Project Specialists.
- Cross-check Project Actors provided by PO with actual Project Actors (Leads/Partners).
- Review data submitted to support stated claim and the methodology of analysis of the data.

Data Management Systems: Risk Assessment and Approval

Data Input:

Data is input into the FPP in various ways. Some growers enter data themselves manually while others rely on data input from Project Specialists who work with them on their Fieldprint Projects. A subset of data may be entered into the FPP or into a qualified data management partner's system automatically from farm technology. The Project Owner must provide a detailed description of methods of grower outreach, training, and workshops (i.e.: Was there a Help Desk made available to Growers in the project area? How many Growers are using this assistance?). The onus is on the Project Specialist to be able to show a consistent, reliable system. Some examples are:

- Project Specialist collects and enters data utilizing a consistent process. *For example, if data is collected on paper and entered into the system later, this approach is used consistently with any associated flags for possible errors.*
- Project Specialist is informed of the typical Fieldprint Platform data entry errors and has developed a methodology for assisting growers in addressing these areas so that the data is entered as accurately as possible. This could be a documented consistent system, or, at a minimum, a system that can be communicated verbally.

Data Output:

The Project Owner must describe the methodology of analyzing the data, including their method for identifying outlier data and their treatment of those data. For data that are flagged as data entry errors, the PO should make available to the verifier their steps in contacting growers for corrections and types of corrections made. The Project Owner or the entity contracted to analyze the project's data must also explain how the data was analyzed to arrive at any directional claim that is being filed. This explanation must include the identification and treatment of data impacted by extreme weather events.

Accounting systems: Volume Proxy and True Mass Balance

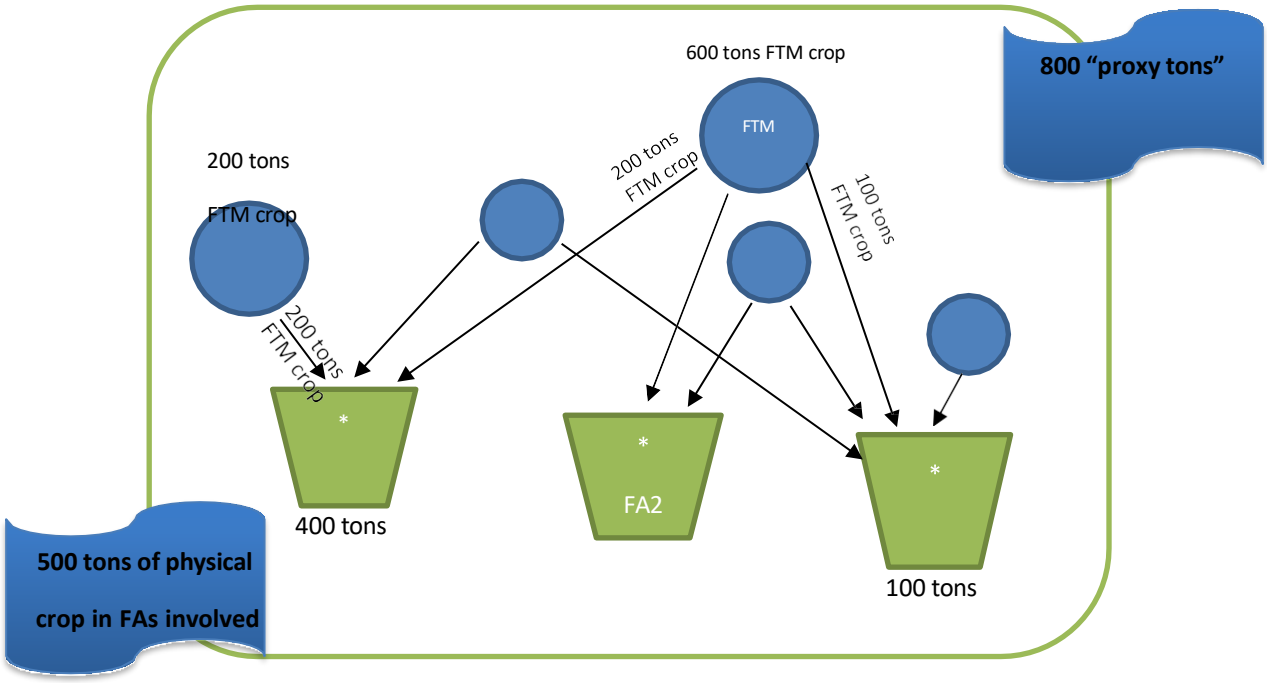
The two methods outlined below show options for how a Fieldprint Project could track the volumes associated with each project and how the claims could be traced back to these volumes.

Both methods track the volumes related to claims back to the FA level, however, the volumes on which claims are based vary in each method. **The first method (volume proxy) should be used for projects that only use calculated volumes as a method of tracking volumes. The second method (true mass balance) should be used for projects that can trace actual products back to the FAs.** The first method offers more crop per project on which to base claims while the second method offers a more direct link between the claim and the crop. *For the following methods and examples, we assume volume is tracked on a tonnage level. This could also be a bushel level or cotton bale level depending on the commonly accepted volume unit.*

Method 1: Calculated Yields and Volumes – "Volume Proxy"

In this method, a project keeps track of annual enrolled acres, with the understanding that growers' acres are only enrolled in one project per crop per year for geographically distinct areas. The acres are converted into proxy volumes using regional yield data, which should later be corrected using actual yields when they become available in the calculator. For enrolled acres that will not have actual yields, average actual yields per growers' entered acres should be applied to their enrolled acres. The volumes are captured at the FA, and the volume existing at a project level would be converted into a proxy amount from which the claims could be based. This system is a hybrid area mass balance and (closed) credit system. A project may decide that it wants growers to deliver a small amount of product to a designated FA to be able to have some connection between the impact claim and the physical product, but this is not necessary.

Chart 2: Volume Proxy Accounting Example



There are 800 tons of FTM crop at the project level but
500 tons of physical product at the registered FTM FA level.
Total volume (of project) = 800 tons
800 tons= 800 proxy tons
The First Aggregator can claim 800 FTM proxy tons and sell conventional crop from any of their registered FTM aggregation points within the region (i.e.: FA1, FA2, FA3).

Chart 2 illustrates the first method.

- The FA marked with a * shows all of the FAs registered in this project.
- The blue circles represent growers, and the circles with Field to Market show all the growers involved in this particular Fieldprint Project.

(I) Tracking the volumes:

Yield x acreage = volume

Growers that are enrolled in Fieldprint Projects are not required to sell their crop to the FAs involved in the project, but those proxy volumes are accounted for in the system.

The FA should keep track of which downstream Fieldprint Project Actors they are selling to, as this list will later be cross-checked with the list that the PO supplies, showing which FAs are in the region and/or registered with the project.

The claims that downstream Actors can make are based on the actual yields that exist for that project on a project level. For example, although a grower may only sell one-third of their product to the registered FAs in the region, the claims can be based on the total amount of that grower's acreage involved in that project. This is where the volume proxy becomes necessary.

(I) Translating Volumes to Proxy tons:

Yield x acreage = volume
Volume = Volume Proxy tons

Projects must keep track of their "Volume Proxy" volumes and be prepared to show evidence during a claims assessment. The volume that they are claiming cannot exceed the amount estimated to exist at the project level.

- Only Project Owners, Leads, and Partners can make claims on the volumes involved in the project.
- If a Late Actor wishes to join a project to make claims on volumes, they will only be able to use volumes not previously accounted for.
- Field to Market members that wish to support or amplify impact claim(s) made by a project, but who are not Project Leads or Partners, must work with the Project Owner to seek approval to share the claim with a wider audience.

Accounting System for Co-Products in a Volume Proxy Example:

How do we account for the soybean meal if only the soybean oil is being used by a project?

Field to Market has defined conversion tables for typical commodities that Field to Market works with. For a given year a project can calculate the co-products that are associated with a particular volume utilizing these conversions. See Appendix 1 for Conversion Tables. In a Volume Proxy, the resulting volumes represent that amount of product that is eligible for sale by the First Aggregator.

Method 2: Tracking Actual volumes – True Mass Balance (not physically traceable)

In this method, the volumes behind each claim can be tracked back to the FA level. This method uses a true mass balance system to determine the volumes related to each claim. The FAs must flag and record the amount of volume coming in as well as the amount of volume sold to each downstream project Actor. Claims made under this method have an actual tie between the claim and the volumes existing at the FAs. Although the Fieldprint Project-specific crop becomes mixed with the non-Field to Market crop at the FA level, the mass balance system allows downstream Actors to be able to make claims on crops bought from these FAs.

Downstream Actors can only buy as much Field to Market volume as was delivered by Project Growers.

1. Tracking the volumes:

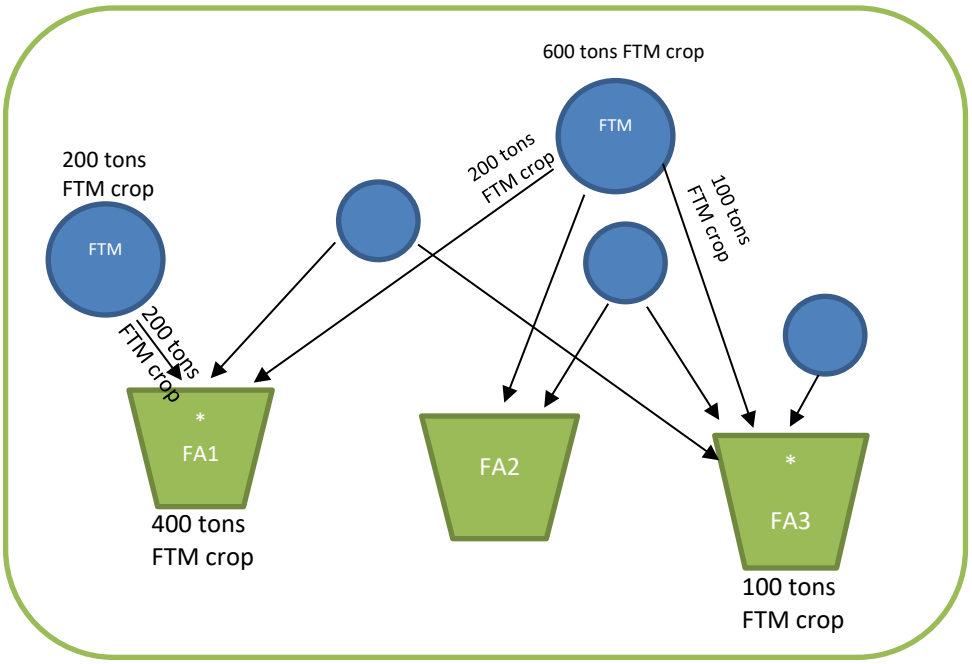
Volume out ≤ Volume in

When the grower sells the crop to the FA, they must inform the FA to flag their volume as part of that particular Field to Market project. In this way, the FA can track how much incoming Field to Market crop they are receiving. The FA should record which grower delivered Field to Market crop as well as record how much Field to Market crop they have received over the course of the year.

Note that the FA does not need to disclose names to Field to Market or other Project Leads but will need to be able to show an anonymized Grower ID list and related volumes of Field to Market projects to the verification body.

The FA must also communicate to the PO how much crop related to that project is coming in, and the PO must also record it. The PO does not need to be informed of the names of the farmers volumes. Corresponding anonymized Grower lists would suffice.

Chart 3: True Mass Balance Accounting System Example



800 tons of physical product at grower level but 500 tons at FA Project level.

The verifier would cross-check:

A) The volumes coming into the FAs via documents supplied by the PO and the FA.
B) The volumes sold from the FAs to the downstream Actors making claims.

The value of B cannot exceed the value of A and must take into consideration the volumes associated with all other Actors wishing to make claims on that same product.

Double Counting

Double counting refers to the idea of counting volumes, acres or claims more than once, resulting in a discrepancy between reality and the claims.

Acres

To avoid fields being counted for multiple projects at the same time the following two requirements will be followed:

1. Growers are allowed to enter one crop per project per year into the FPP with the exception of cases where they may have multiple landholdings in different geographically distinct regions.
2. Geospatial technology will be used to flag cases where the same field boundaries are entered multiple times into the FPP. For data coming through an API, data calls will require boundary data to be sent disaggregated from underlying data sets so that data remains anonymous.

These steps will prevent double counting entered acres for each project. The boundary data will allow Field to Market to make sure that the same fields are not being used for multiple projects at the same time, thus continuing to ensure grower anonymity, while ensuring the integrity of the number of fields entered in each project.

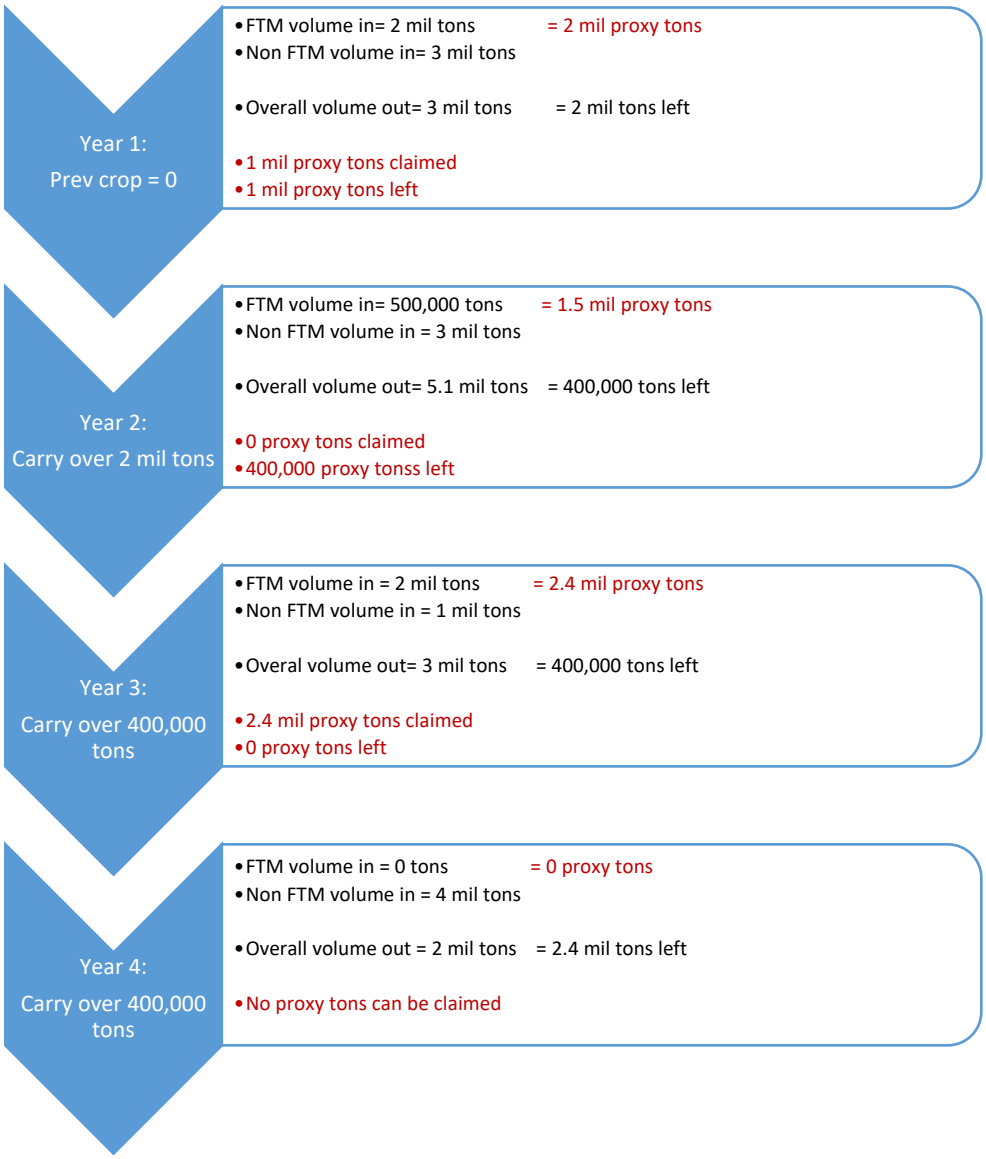
Products and Project Actors
To avoid double-counting impact by different Actors involved in the same project claiming the same volumes, Field to Market and the Verifier will have to ensure that claims are well-documented. Project Actors should agree at the start of projects how impact will be accounted for and be in agreement about project-level claims before making them public while respecting antitrust laws.

Volume Reconciliation

The process of volume reconciliation serves to ensure that no more product is traded than was actually included in the original accounting method of a project. Field to Market will not set a specific time limit for how soon after harvest product must be sold to be accounted for but does require project partners to exercise sound judgment in determining how long after harvest project can be rolled over so as not to jeopardize the reputation of the system and Project Actors. The volume reconciliation will be evaluated at the time of verification and should take place regardless of which method was used to track the volumes behind the claims. If the second method of tracking actual volumes is used, there will be no proxy volume to reconcile. In these cases, the volume reconciliation process will take into account only the actual volumes recorded coming into and out of the FAs on a yearly basis.

The PO must keep track of how much volume is being exchanged between the Actors involved in the project and the FAs. This should be checked on a yearly basis and compared every year to make sure that the volume being sold to (and claimed by) the Project Actors is equal or less than the total yields (volume) reported per project. Carry-over product is allowed but supply chain partners are encouraged to consider a reasonable time period between harvest and use. *Actors cannot claim volume proxy tons in system where no more Field to Market product exists.*

Chart 4: Annual Proxy Reconciliation Example



This chart shows an example of the reconciliation process, where the growers are selling all of the Fieldprint Project-specific crop to one FA.

The column on the left has the Project Year and the volume of raw commodity the FA has in its possession at the beginning of each year.

The black text follows the actual volumes existing at a project level and being sold to this FA.

The red text follows the proxy tons existing during every year. This amount is directly affected by the amount of raw commodity the FA has at the time of a downstream actor claiming proxy tons. Notice in year 2 how the proxy tons drop from 1.5 million to 400,000 because of the sale of 5.1 million tons, and no Actors claiming the attached proxy tons. Also notice how in Year 3 there are more proxy tons existing than actual FTM crop that came in.

For projects using Method 2 (tracking actual volumes): FA should have annual documentation on Field to Market project-specific product coming in and how much overall volume they have going out (to the specific Project Actors).

Special Circumstances for both Accounting Systems:

Field to Market will allow retroactive product enrollment on an exceptional basis. These cases, in which field data is entered after product has been delivered to a First Aggregator should not exceed 10% of the total project volume for a given year. In the event that a larger percentage of volume for a given year would be required, projects should contact Field to Market at claims@fieldtomarket.org for approval, explaining the circumstances leading to the request.

Data Analysis

Given the complexity of the methods used to derive the metric results, projects must analyze data appropriately, and limit claims statements to those that consider the uncertainty that applies when aggregating this information. Some examples of statements that analysis might support are:

- Sustained Improvement Claims - For all of the metrics, more qualitative and directional language can be used to describe outcomes. For example, rather than reporting the HPI scores numerically, a project could state that some percentage of their enrolled farms had an improved HPI score over the five-year period of engagement.
- Improvement vs. a Project-Generated Benchmark for quantitative metrics: Where five years of data exist, a project-level average over the first three years can be used as a project benchmark, with subsequent years being compared to this benchmark. The quantitative metrics are:
    - Land Use (acres per unit of production)
    - Irrigation Water Use (acre-inches of water applied per additional unit of production)
    - Soil Conservation (tons of soil loss per acre)
    - Energy Use (BTU of energy used per unit of production)
    - Greenhouse Gas Emissions (pounds of carbon dioxide equivalent (CO_2e) per unit of production)
- Improvement in the range of outcomes observed within a project over time: For example, a project with 20 fields entered could report the individual scores as a range (e.g. GHG Metric outcome ranged from 7.1-10.2 CO_2/bu in year 1 of the project) and then report having seen improvement in that range over time with the low scoring performers to a higher standard, if the data supports that claim.
- For qualitative metrics, projects may be able to reference the percentage of growers who have improved over time to convey project improvement.

Project Owners and the individuals responsible for the analysis of project data must be prepared to explain their data analysis methodology including how errors in input data were handled. Field to Market requires a review of all metric outcomes, not just those that will appear in the claim, and projects must show the analysis of how metrics that are not mentioned in the claim have performed.

Quality Management Approach

This section outlines the basic requirements and minimum qualifications that Project Specialists, Verifiers, and Verification Bodies must have before embarking on the project. These qualifications guarantee to the best of our ability that the Actors involved in the project are qualified and well prepared for their responsibilities. The Verification Protocol Guidebook contains templates for documenting that the Actors meet these basic requirements and minimum qualifications. The Verification Protocol Guidebook also has templates and documents and is available for project actors, verifiers, and verification bodies.

Personnel Qualifications

Project Owners employing Project Specialists, consultants, and/or organizations to assist with Grower engagement and data collection should aim to utilize individuals who have sufficient understanding of the Field to Market FPP, agronomy, and data collection to be able to provide ample grower support and accurate data collection. The following are provided as guidelines for qualifications:

Project Specialists

One of the Project Specialist's roles is to accurately input Grower data or ensure that project Growers are inputting accurate data into the Fieldprint Platform. Their responsibilities include fostering grower relationships and assessing the accuracy of the information recorded.

They should be able to demonstrate the following:

- Training in plant science, agronomy, soils, or other relevant field of study.
- Practical training by Field to Market about the Fieldprint Platform and instruction of use:
    - Account registration
    - Data entry
    - Metric interpretation
    - Platform deliverables
    - Project administration
- Knowledge of crop production, soil management, plant protection, fertilizer, irrigation technologies, and energy systems on farm, as either part of a formal qualification or through successful completion of a formal course.

- Ability to communicate effectively with Project Growers one-on-one and in a group setting.
- Training by the Project Owner to ensure understanding of the project claim and specific metrics.
- Knowledge of state and federal laws and regulations as they relate to the scope of the FPP inputs is recommended, but not required.

Project Owners should identify and minimize conflicts of interest for Project Specialists. Project Specialists involved in the verification process must have signed contracts or agreements committing them to:

- Declaring any potential conflicts of interest to the Project Owner and Field to Market members when assigned duties related to a Project Participant.
- Be free from any commercial, financial, or other pressures that might affect their judgment.
- Confidentiality - Maintain the confidentiality of all information acquired due to Fieldprint Project involvement.

While not a requirement, shadowing another Project Specialist in the field prior to working alone is ideal.

Verification Bodies and Verifiers

Field to Market has chosen to use the ISEAL Assurance Code requirements as a reference guidance for Verification Bodies and Verifiers. Any Verification Body seeking to perform verification assessments for Field to Market should be able to demonstrate that it has a management system in place to conduct assessments according to the ISEAL Assurance Code requirements. Verification Bodies will have to be authorized by Field to Market in order to conduct assessments on its behalf. Please contact Field to Market at claims@fieldtomarket.org if you are interested in learning more about becoming an accredited Verifier for Field to Market.

Verifier's Tools

A full list of Verifier tools and instructions for use is provided in the Field to Market Verification Protocol Guidebook.

The verifier will be able to qualitatively verify the method in which the data was entered into the FPP or Qualified Data Management Partner's systems and will be able to evaluate what was done to engage growers during the project. The Verifier will also have access to the Field to Market documentation:

- Impact Claims Request Form submitted by the project
- Project Registration including the initial Risk Management Plan and Grower Engagement Plan

- Annual Report(s) which include updates to the Risk Management Plan and the Grower Engagement Plan
- Continuous Improvement Plan which details the areas that will need to be checked for progress against plan
- Anonymized metric data

Additional Resources

Further detail on the process for verification is provided in the Impact Claim Verification Protocol Guidebook. For information on starting a Fieldprint Project, consult the Fieldprint Project Handbook.

For further information on Field to Market please visit www.fieldtomarket.org or contact us at claims@fieldtomarket.org.

Appendix 1: Conversion Tables

Crop	Conversion Factors	Reference Source
Soybeans	Soybeans = 79.2% soybean meal = 17.8% soybean oil = 3.0% waste 1 bushel of soybeans =10.7 pounds of crude soy oil = 47.5 pounds of soybean meal = 39 pounds of soy flour = 20 pounds of soy protein concentrate = 11.8 pounds of isolated soy protein	US Soybean Export Council http://ussec.org/resources/conversion-table/
Corn	1 bushel of corn = 31.5 pounds of corn starch	http://www.worldofcorn.com/#one-bushel-of-corn-can-provide

	= 22.4 pounds of PLA fiber/polymer = 33 pounds of sweetener = 2.8 gallons of fuel ethanol + 17.5 pounds of DDGS + 13.5 pounds of gluten feed + 2.6 pounds of gluten meal + 1.5 pounds of corn oil	
Cotton Fiber	Fiber 100% raw textile fiber with small amounts of impurities such as natural waxes and leaf trash. Conversion factors for textile products vary depending on end textile product	https://www.ers.usda.gov/data-products/cotton-wool-and-textile-data/raw-fiber-equivalents-of-us-textile-trade-data-documentation/
Cottonseed	Gin-run cottonseed Whole cottonseed as a dairy feed supplement 100% Processed Cottonseed = 8% cellulosic linters = 27% hulls = 45% meal (meal contains 41% protein) = 16% oil	http://www.wholecottonseed.com/ http://www.cottonseed.com/products/ Jones, L.A., C.C. King. 1990. *Cottonseed Oil.* National Cottonseed Products Association, Inc. and The Cotton foundation, Memphis, Tennessee. pp 7,8

	= 4% waste	
Rice	1 bushel of rice = 45 pounds of rice 100 pounds of rough rice = 82 pounds of brown rice = 67 pounds of milled rice = 3 pounds of brewers rice =10.9 pounds of rice bran =1.6 pounds of rice polish = 69.5 pounds of rice grits = 64.2 pounds of rice flour = 49.1 pounds of rice starch =66.5 pounds of puffed rice cereal = 61.5 pounds of rice flakes	1979 USDA source in USA Rice office.
Wheat	1 bushel of wheat = 42 pounds of white flour = 60 pounds of whole-wheat flour	http://www.wheatworld.org/wheat-101/wheat-facts/