

NAVIGATING GLOBALG.A.P. IFA V6

NEW USA NIGL & TOOLS FOR A SMOOTH TRANSITION

SEPT. 18 2025







Housekeeping

Muted

All attendees are muted.

Q&A

Q&A after presentation.

Slides & Recording

Slides and recording will be available at **www.pjrfsi.com** after the presentation.

Inquiries

Reach out to **pjrfsi@pjrfsi.com** with any additional inquiries.



Our Presenter

Antonio Restrepo Producer Relationship Manager at GLOBALG.A.P. North America

With years of industry experience, Antonio is passionate about helping producers turn audits from a burden into benefits, showing how certification can enhance business opportunities, improve efficiency, and drive long-term success.

Antonio has an extensive background in food safety, quality assurance, and third-party certification, as well as development and implementation of social and sustainability programs. He has managed corporate-level food safety programs, conducted internal and supplier audits across the U.S., Central, and South America, and provided consulting to growers on compliance with international standards. He holds certifications in HACCP, SQF, GLOBALG.A.P., and ISO 9001 auditing and has been actively involved in technical working groups shaping industry benchmarks.





Agenda

- 1.Introduction
- 2.Objective
- 3. Brief overview of products
- 4.IFA Tools and resources
 - •GLOBALG.A.P. Educational Video Series
 - IFA V6 Transition Tool
 - •IFA V6 Guidelines
- 5. USA National Interpretation Guidelines



Objectives

- 1.Understand the basics of the USA National Interpretation Guidelines and how to use them
- 2. Know other resources available for implementing and meeting IFA requirements

Not and IFA training

GLOBALG.A.P. is a <u>brand</u> of smart farm assurance solutions that helps farmers ensure safe, socially and environmentally responsible farming practices worldwide.

We set **voluntary standards** for the certification of agricultural products around the world





SOLUTIONS FOR NORTH AMERICA MARKETS

GLOBALG.A.P. FAMILY OF PRODUCTS



CUSTOMIZED SOLUTIONS

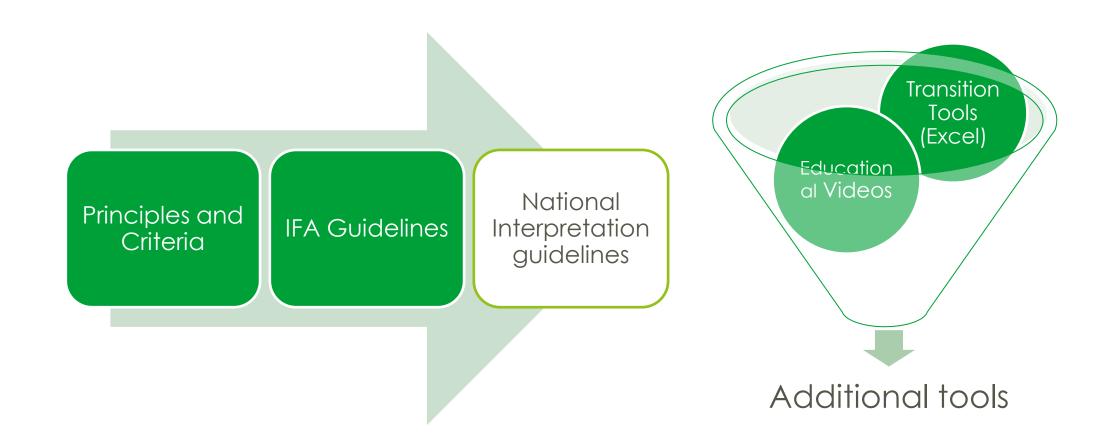
Any Customized Standard, localg.a.p., Add-on, etc.



IFA V6 GLOBALG.A.P. IFA Tools and Resources



IFA V6 Tools and Resources





IFA V6
GLOBALG.A.P.
Educational Video
Series



Educational Video Series

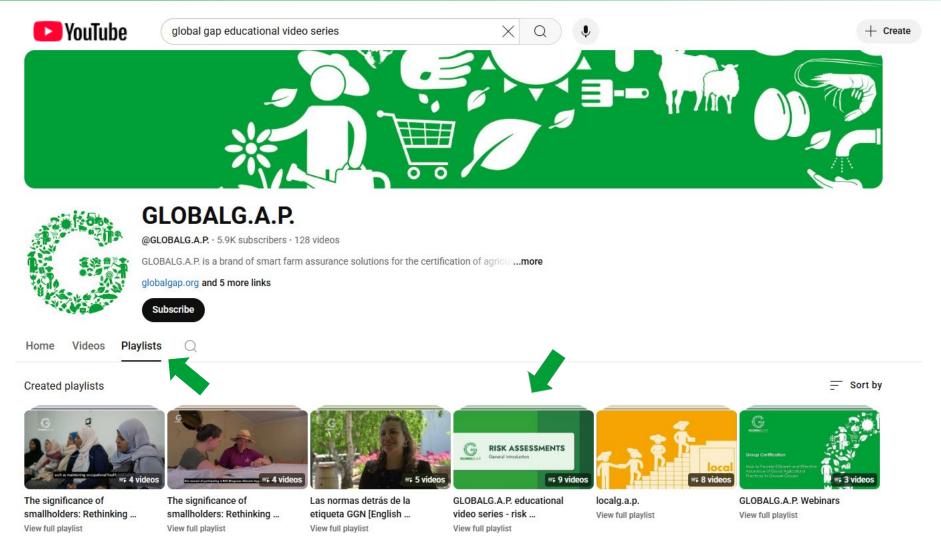
GLOBALG.A.P. Educational Video Series

- Free e-learning tool for understanding key agricultural practices
- Developed in response to stakeholder input & questions
- Tailored for producers and trainers to enhance on-farm knowledge
- Short, focused chapters (<6 min) on technical topics for quick learning





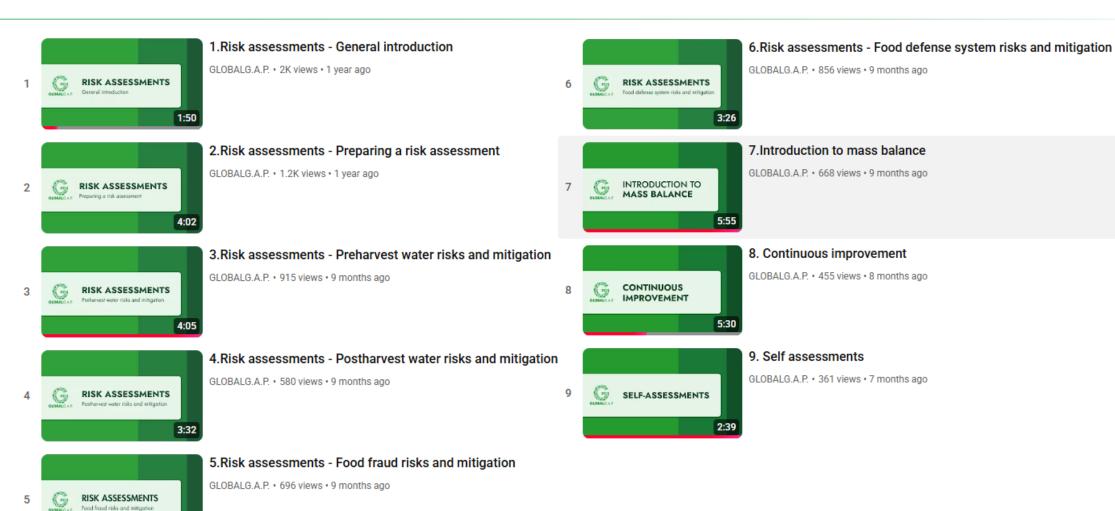
Educational Video Series





Educational Video Series

3:00





IFA V6 TRANSITION TOOLS



Producers

Certification bodies

Buyers

About GLOBALG.A.P.

What we offer

Capacity building

Document center

News and press

Events

Languages

obs (

Contact us

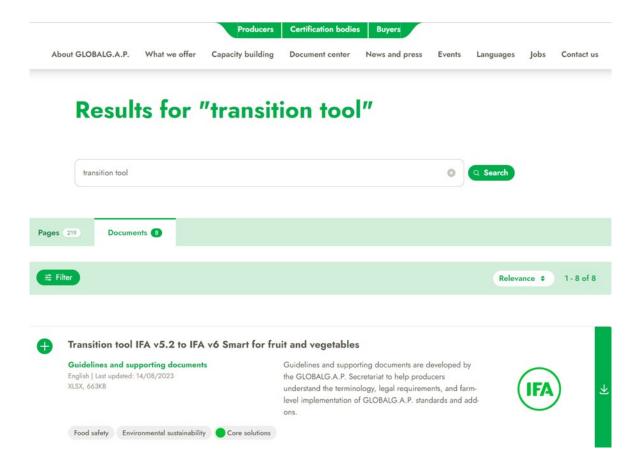
Transitioning from IFA v5 to IFA v6?

Our transition tools can help you cross-reference the requirements and support your transition to the newest version.

ACCESS THE TRANSITION TOOLS TODAY



Find the transition tools in the document center



Available in English for fruit and vegetables, aquaculture, and flowers and ornamentals

- Fruit and vegetables Smart
- Fruit and vegetables Smart Spanish
- Fruit and vegetables GFS → Produce USA Market
- Fruit and vegetables GFS Spanish
- Aquaculture Smart and GFS (2 in 1)
- Flowers and ornamentals Smart



Example: IFA v6 GFS for fruit and vegetables



Transition tool IFA v5.4-1-GFS to IFA v6 GFS for fruit and vegetables

Company/Site name:			
	0		

Date:

Section	N	IFA v6 Smart principle and Criteria	Level	-	Answer 🚽	Justification	
		IFA V5.2 Control Point and Compliance Criteria		Brid.	*	0.05,	<u> Ma</u>
EV 01INTERNAL DOCUMENTATION	FV-GFS 01.01	P: A procedure is in place to manage and control documents and records. C: Documents and records affecting implementation of the requirements shall be managed and controlled. A documented procedure shall describe: - How documents and records are created, reviewed, approved, and updated - How reviews are undertaken and changes or amendments are made - How version updates take place - How relevant documentation is made available to relevant staff Documentation shall be: - Identified with an issue number and/or date and appropriately paginated - Sufficiently detailed - Reviewed periodically to demonstrate ongoing compliance with the relevant requirements - Assigned to relevant staff	Major Must				
		Revised to incorporate relevant modifications of the standard or normative documents within the period given by GLOBALG.A.P. Approved by authorized staff prior to distribution Effectively rescinded when obsolete					
AF 02 RECORD KEEPING AND INTERNAL SELF- ASSESSMENT/INTE RNAL INSPECTION	AF 02.02	P: Is a procedure established, implemented, and maintained to manage and control documented information? C: A procedure describing the management of documented information shall be implemented and maintained. A method of tracking document changes shall be established, to ensure employees are	Major Must				
EV 01 INTERNAL DOCUMENTATION	FV-GFS 01.02	P: Records for auditing purposes are up-to-date. Records are kept for a minimum period of two years, unless a longer period is required. C: All records generated or kept by the producer for auditing purposes shall: - Be stored securely, readily accessible and kept up to date - Be retained for a minimum of two years, or longer if required by customers or prevailing regulations - Be valid and backed-up, if used in electronic format - Cover at least three months prior to the date of the initial certification body (CB) audit, or begin on the day of registration, whichever is longer - Reference full details of each area and all activities covered by the registration Where an individual record is missing, the respective principle addressing those records is not compliant. For example, if the date of application is missing on a single spray record, a non-conformance or non-compliance shall be issued against that principle.	Major Must				



Calculation Sheet



Transition tool IFA v5.4-1-GFS to IFA v6 GFS for fruit and vegetables Calculation sheet

IFA v5.4-1-GFS		IFA v6 GFS	
Major Must CPCCs	142	Major Must P&Cs	117
N/A Major Must CPCCs	0	N/A Major Must P&Cs	0
Applicable Major Must CPCCs	142	Applicable Major Must P&Cs	117
Compliance with Major Must CPCCs	0	Compliance with Major Must P&Cs	0
Non-compliance with Major Must CPCCs	0	Non-compliance with Major Must P&Cs	0
Major Must percentage	0% 💥	Major Must percentage	0% 🕽
100% required to pass		100% required to pass	
Minor Must CPCCs	80	Minor Must P&Cs	54
N/A Minor Must CPCCs	0	N/A Minor Must P&Cs	0
Applicable Minor Must CPCCs	80	Applicable Minor Must P&Cs	54
Compliance with Minor Must CPCCs	0	Compliance with Minor Must P&Cs	0
Non-compliance with Minor Must CPCCs	0	Non-compliance with Minor Must P&Cs	0
Minor Must percentage	0%	Minor Must percentage	0% 🕽
95% required to pass		95% required to pass	
Recommendation CPCCs	14	Recommendation P&Cs	20
N/A Recommendation CPCCs	0	N/A Recommendation P&Cs	0
Applicable Recommendation CPCCs	14	Applicable Recommendation P&Cs	20
Compliance with Recommendation CPCCs	0	Compliance with Recommendation P&Cs	0
Non-compliance with Recommendation CPCCs	0	Non-compliance with Recommendation P&Cs	0
Recommendation percentage	0%	Recommendation percentage	0%
No specific % required		No specific % required	
Answer pending	236	Answer pending	191
Nothing may be left unanswered		Nothing may be left unanswered	



What these transition tools are:

- Support tools to assist producers in transitioning to IFA v6 by aligning their current programs with the provided new checklist.
- They enable producers to address and compare requirements for both versions and obtain percentage calculations (results) based on their responses.
- These are complementary tools intended to be used alongside other supporting documents such as the IFA Guidelines



What these transition tools are not:

- These documents are not mandatory or required.
- They are not training tools. The documents are not designed as a training tool for producers to learn about IFA v6.
- They are not a comprehensive and detailed list of specific changes and differences.
- While the tools display equivalent control point and compliance criteria/P&Cs side-by-side, they do not highlight specific differences in requirements or criteria.
- The tools are not a "red line" document.

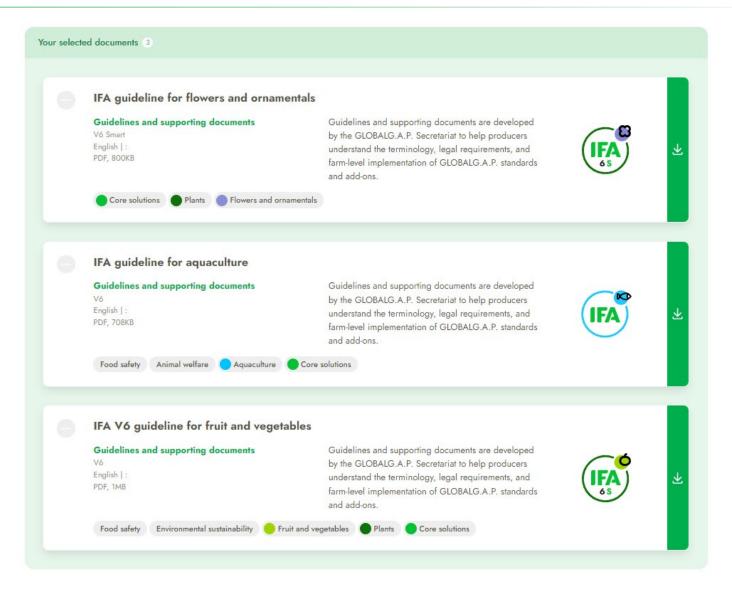


IFA V6 GUIDELINES FOR FRUIT AND VEGETABLES



IFA v6 guidelines are available in the <u>document center</u> for:

- Fruit and vegetables
- Aquaculture
- Flowers and ornamentals





IFA V6 TRANSITION SUPPORT

IFA v6 guideline for fruit and vegetables

22 topics for FV

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Code ref.: IFA guideline for FV; v6.0_Apr23; English version Integrated Farm Assurance guideline for fruit and vegetables Page 2 of 90 © GLOBALG.A.P. c/o FoodPLUS GmbH Spichernstrasse 55 | 50672 Cologne, Germany info@globalgap.org | www.globalgap.org



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IFA V6 TRANSITION SUPPORT

IFA v6 guideline for fruit and vegetables

Principle and Criteria

FV-GFS-193.05

Principle: Clean toilets are provided for workers, visitors, and subcontractors in the vicinity of their work.

Criteria: Toilets provided for production and handling activities (including stationary or mobile toilets) shall be:

- Designed and located so as to minimize the potential risk for product contamination
- Constructed of material that is easy to clean and maintain (also applies to pit latrines)
- Allow for direct accessibility for servicing
- Located in reasonable proximity to the place of work, i.e., accessible on foot or by a readily available mode of transportation

If production and/or handling takes place in a facility, the doors of toilets shall not open directly onto the production and/or product handling area, unless the door is self-closing. Toilets shall be appropriately cleaned, maintained, and stocked. Facilities shall also be available to visitors, where applicable.

→ Guidelines

9, PROVISION OF TOILETS TO WORKERS

Toilets can be in the form of stationary or mobile units. Where the establishment of structures for permanent toilets is not possible, the provision of mobile or portable toilet units (e.g., porta-potties) will suffice.

Regardless of the type of unit provided, it shall be designed and located in a way that facilitates cleaning, service, and maintenance.

Toilets and handwashing facilities shall be located in reasonable proximity to the place of work (wherever agronomic activities, including product handling, take place). This means that toilets shall be provided so as to allow everyone to use them without unreasonable delay. It is important that people can visit the toilet quickly, when necessary, as undue delay can lead to distress and health problems as well as posing a risk to the safety of products.

Where it is not possible to position either permanent or mobile toilets in reasonable proximity to the place of work, a mode of transportation to the nearest toilets shall be provided at reasonable frequencies.

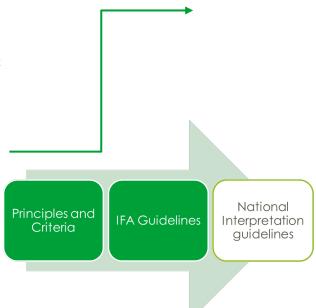
There is no specific parameter to quantify reasonable proximity (e.g., distance or travel time between the toilet and point of work), and compliance with this principle and the relevant criteria is based on risk.

Where personal dialogue or observation during audit reveals that the toilets that have been provided are used infrequently because of, e.g., restricted access or limited travel opportunities, this shall lead to a non-conformance.

→ NIG

Federal guidelines include For every 20 workers at least one restroom must be provided.

Regarding separate facilities for gender, this is left to state regulations when/if separate facilities must be provided. 29 CFR (1928.110 ©(1)(2)(3) and (4)); 21 CFR 117





USA National Interpretation Guidelines (NIG) for Fruit and Vegetables



USA National Technical Working Group

USA NTWG

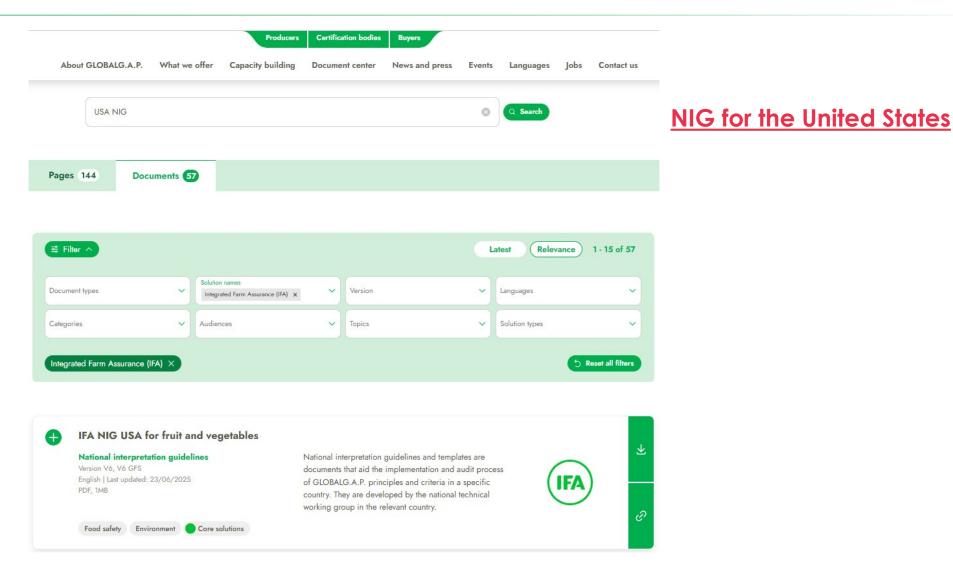
- Volunteer group of agricultural USA experts (producers, buyers, CBs, consultants, academia, associations, etc.)
- Brings GLOBALG.A.P. standards to practice and identify implementation challenges have tough conversations!
- Expertise necessary to ensure standards can be applied to local conditions and improve the audit process.
- Peer review of standards.
- 2 meetings/year
- <u>Join!</u> Expand your network, regular GLOBALG.A.P. communication, partner with us!



National Interpretation Guidelines (NIGs)

- Purpose: Make certification more relevant, clear, and achievable for local producers.
- Adaptation of GLOBALG.A.P. standards to local (Country) laws, regulations, and farming practices.
- **Align** with locally available resources such as USDA Natural Resource Conservation Service (NRCS), Stewardship Index for Specialty Crops (SISC), others.
- Reviewed and approved by GLOBALG.A.P./Agraya to ensure the GLOBALG.A.P. requirements are applied consistently in each country.









Section	Principle (Not to be changed or interpreted)	Criteria (Not to be changed)	Level	I	Country-specific interpretation of the criteria by NTWG
					ENGLISH
					CRITERIA
FV-GFS 22	BIODIVERSITY AND HAB	ITATS			
FV-GFS 22.01	Management of biodivers	ity and habitats			
FV-GFS 22.01.01	Biodiversity is managed to enable its protection and enhancement.	A documented biodiversity plan for the farm shall be available. This can be a generic plan that has been made farm-specific. This biodiversity plan shall: - Take into account local legislation and tailor the plan contents to the on-farm reality (open field, greenhouse, vertical farming, etc.) - Contain at least the following sections: Baseline: initial situation of biodiversity Measures: how to enable protection and enhance biodiversity based on the baseline Monitoring: summary of results of the implementation of the measures Adjustment: refining the measures based on monitoring results - While recognizing that the legal scope of the producer is on the farm, take into account the landscape beyond the farm and encourage implementation of actions with other stakeholders, for example via informal collaboration, formal projects, sector and network initiatives, etc. With regard to protection of biodiversity, the guideline provides reference. In Option 2 producer groups, evidence at quality management system (QMS) level is acceptable.	Minor Must		As example, the producer may show evidence of participation in voluntary federal programs from Natural Resource Conservation Service or Farm Service Agency programs as evidence of compliance; OR participation in State/County/Government programs of the similar nature. The producer may show evidence of assessments by Fish and Wildlife, NRCS or State/County/Government agency if it includes flora/fauna. Tools such as the SISC habitat and biodiversity or others that enable the producer to meet the requirements in this section, including "Baseline, Measures, Monitoring, and Adjustment" may also be used. Important that these tools track, understand situational performance, report, and improve.



External Resources in USA NIG

Principle	External Resource						
	Natural Resources Conservation Service	Stewardship Index for Specialty Crops	Cool Farm Tool	US Fish & Wildlife Service			
Continuous Improvement		SISC	CFT				
Biodiversity and Habitats	NCRS	SISC		USFWS			
Soil and Substrate Management	NCRS						
Energy Efficiency		SISC					
Greenhouse Gases		SISC	CFT				
Waste Management		SISC					
Fertilizers		SISC					
Crop Irrigation / Water Management		SISC					



The Stewardship Index for Specialty Crops (SISC)

- Is a multi-stakeholder initiative dedicated to developing tools for measuring performance of regenerative and sustainable practices across specialty crop (all fruit, nut and vegetable)
- SISC Calculator (CropTrak®): The SISC Stewardship Calculator is available for individual growers to use at no cost.
- "Easy" button for The Sustainability Consortium's THESIS KPI Scores for:
 - Energy / GHE
 - Nitrogen Use
 - Water Use









The Stewardship Index for Specialty Crops (SISC)

SISC Calculator (CropTrak®): Available Metrics

Applied Water

 Measure of as-applied water per crop as it applies to yield

Energy / GHG

 Measure of estimated on-farm use of fuel and GHG emissions for grid generated electricity

Food Loss

 Measure of on-farm losses using postharvest measurement technique

Habitat and Biodiversity

A whole farm holistic approach to measure ecosystem diversity

Nitrogen

 Measure of nitrogen application per crop as it applies to crop yield

Phosphorous

 Measure of phosphorous application per crop as it applies to crop yield and recommended phosphorous

Simple Irrigation Efficiency

 Measure of crop water use versus crop need

Soil Organic Matter

 Measure of organic matter and potential organic matter



USDA Natural Resources Conservation Service

- USDA natural resource conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damage caused by floods and other natural disasters.
- About 24 Programs and Initiatives: https://www.nrcs.usda.gov/





USDA Natural Resources Conservation Service Programs

- Environmental Quality Incentives Program (EQIP), Natural Resources Conservation Service, Regional Conservation Partnership Program (RCPP), Natural Resources Conservation Service Conservation Innovation Grants (CIG), Natural Resources Conservation Service Conservation Reserve Program (CRP), Natural Resources Conservation Service Conservation Stewardship Program (CSP), Natural Resources Conservation Service Voluntary Public Access and Habitat Incentive Program (VPA-HIP), Natural Resources Conservation Service Agricultural Management Assistance (AMA), Natural Resources Conservation Service Wetland Mitigation Banking Program (WMBP), Natural Resources Conservation Service Agricultural Conservation Easement Program (ACEP), Natural Resources Conservation Service+1Wetland Reserve Easements (WRE) Natural Resources Conservation Service Wetland Reserve Enhancement Partnership (WREP), Natural Resources Conservation Service Healthy Forests Reserve Program (HFRP).

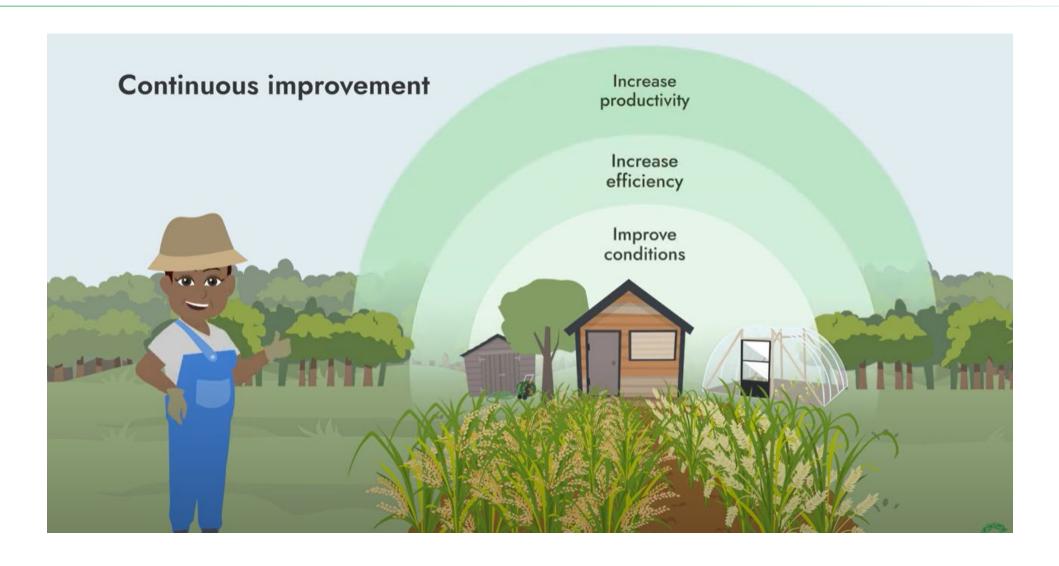


U.S. Fish & Wildlife Service

- Evidence of assessment by the U.S. Fish & Wildlife Service (USFWS)
- Generate an IPaC (Information for Planning and Consultation) Report:
 - Go to USFWS IPaC: https://ipac.ecosphere.fws.gov/location/index
 - Enter the farm address or map location.
 - Download the Official Species List PDF.
 - Keep it in records for audits, certification, or buyer requirements.



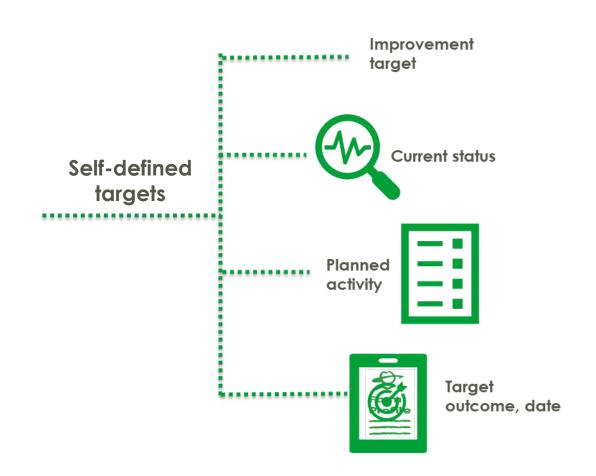






FV-GFS 02 Continuous improvement

- The producer chooses what the continuous improvement practices are, relevant to IFA.
- Evidence may be documented in P&C so long as the improvement or intention of improvement is evident.
 - However, corrective actions or tasks that have already been completed are not acceptable.
- Producer must establish a baseline: "measure to manage".
 - Tools such as the SISC Calculator or Cool Farm Tool, etc. can help!





FV-GFS 02 Continuous improvement

Additional non-exhaustive examples:

- Increased producer training
- Reduction in accidents based on employee training programs
- Increase in pack-out weights, e.g., less waste, due to production changes (variety, practices, employee training),
- Reduction of pests in traps, improving integrated pest management (IPM) practices
- Acquiring **energy efficient equipment**, or reducing overall consumption, introducing solar, increased recycling efforts.
- If the producer has had complaints **reduction** in annual complaints, etc.









FV-GFS 04 Outsourced Activities

Subcontractors

The entity furnishing labor, equipment, and/or materials to perform specific farm
operation(s) under contract with the producer (e.g., custom harvest, spraying, picking
the fruit).

Service provider

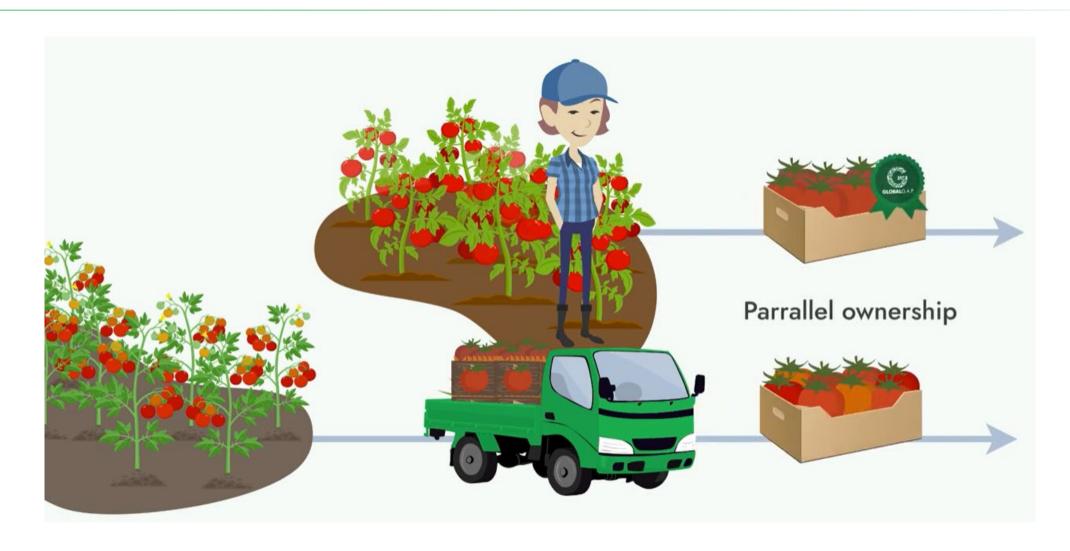
• A commercial entity that provides work performed in an expert manner by an individual or team for the benefit of the producer (e.g. crop consultant, IPM advisor).



The difference is that generally a **service provider** is included in a specific P&C for a task within an operation, whereas a **subcontractor** is an outsourced farming operation and applies to more than one to several P&Cs.

Farm Labor Contractors with a Farm Labor Contract (FL report and letter of conformance issued annually by a CB do not need to be reaudited by a CB







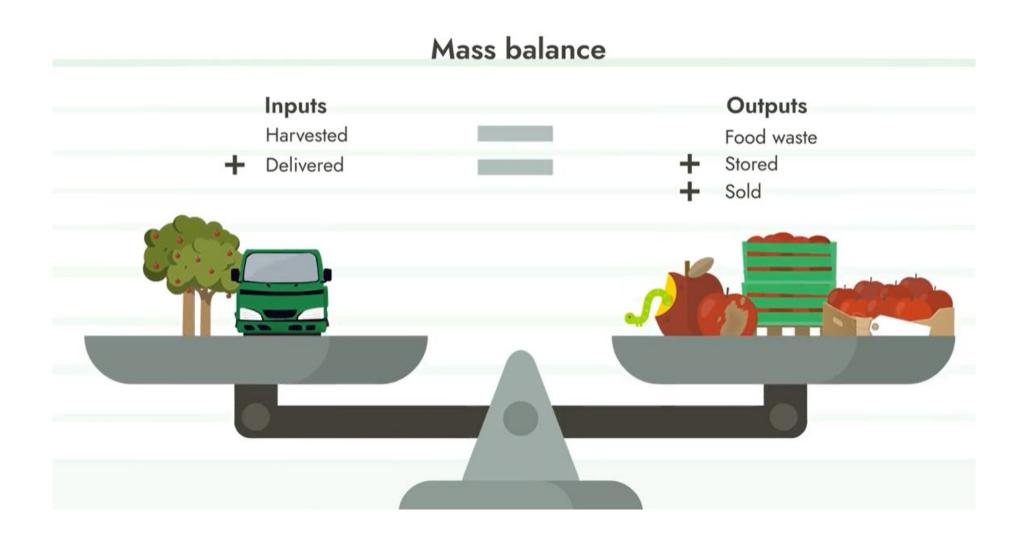
FV-GFS 07 Parallel Ownership (PO)

Production or purchase of the SAME product non-certified by GGAP.

E.g., tomato producer buys non-certified tomatoes from neighbor to fill sales orders.

- PO can be non-applicable N/A when
 - Not PO if all product is certified.
 - Not PO if PHU (Packing Handling Unit) is subcontractor for other growers.
- PO segregation and identification with GGN can be non-applicable N/A when:
 - Written agreement available between the producer/producer group and the buyer not to use the GGN on producer's final product packaging or
 - Market label specification that prevents the producer/producer group from using the GGN on the producer's final product packaging.
 - In all cases where the GGN is not used on final product when there is parallel ownership, there shall be **at minimum a system in place to identify the product originating from certified production**. There shall be written information in place between the buyer and the producer/ producer group which explains the system. All agreements and communication shall be documented and available during the CB audits.







FV-GFS 08 Mass Balance

- Mass balance is just a formal way of measuring inputs and outputs, accounting for any losses during the production process over a specific period of time.
- Mass balance is a calculation, not just records
- Business confidential information is kept with CB, not in final "public" report.
- A producer's "pack-out", or any documents which trace **volumes/weights** of products received, handled, shipped, loss, and current inventory, etc. and clearly show certified input to output values, are acceptable evidences.
 - Producers are not required to provide "pack-outs" as evidence., and may show evidence through other record keeping processes, such as inventory/sales software, or other producer recording forms that show product quantities from harvest to shipment.
- Mass balance frequencies shall be defined by the producer, such as daily/ weekly/ seasonal, etc.



FV-GFS 10 Complaints

- Relates to:
 - Food Safety
 - Environmental
 - Workers Health and Safety
- Does not need to cover quality
- Can be same SOP for quality, food safety, worker welfare, environment
- Likely different workflows
- Covers all aspects of standard, internal & external
- Workers' complaints and no retaliation are covered under OSHA and H2A





FV-GFS 11 Non-conforming products (Hold and Release)

- Defines non-conforming product as "final" product.
- Definition of non-conforming product is: "a product that does not fulfill food safety, legal, or a specified quality".



Food loss



Non-conforming products



FV-GFS 12 Laboratory testing

PPP: ISO 17025

 Water: ISO 17025 or equivalent standard approved for water testing by the local competent authorities, such as ELAP







FV-GFS 13 Equipment and Devices

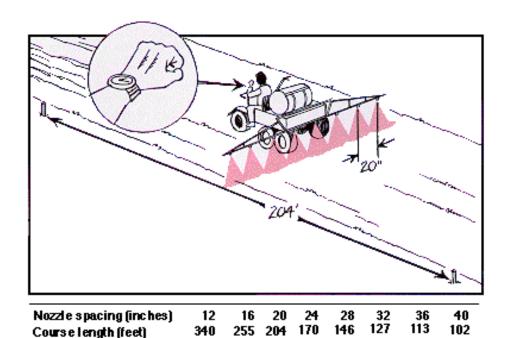
- FV-13-01 ..."Calibration shall be traceable to a national or international standard or method"...
- Industry Definition: Traceable calibration refers to the process of verifying and adjusting the accuracy of a measuring instrument or device using a known reference standard that is directly traceable to a national or international measurement standard. Such as such as those maintained by the National Institute of Standards and Technology (NIST)





FV-GFS 13 Equipment and Devices

- NIG: Calibrations refer to a widely used industryaccepted method, e.g., pesticide equipment calibration
- Example: Manufacturer provided, extension services best practices https://core.psep.cce.cornell.edu/Tutorials/core-tutorial/module19/index.aspx
- If **licensed commercial** applicator, or rented application equipment is used, the supplier can be considered as an independent calibrator.





FV-GFS 18 GLOBALG.A.P. status

• N/A when there is a statement issued by client/seller to producer not to use GGN or identify GGN status signed by marketing and/or packing company.





FV-GFS 19 Hygiene

 FV-GFS 19.05: For every 20 workers at least one restroom must be provided. Regarding separate facilities for gender, this is left to state regulations when/if separate facilities must be provided





FV-GFS 20 Hazards and first aid

- **FV-GFS 20.02.03:** At minimum, items to control: minor wounds; materials are available to clean, disinfect, protect, and cover.
- Where materials have printed expiration dates, all materials within expiration dates.
- First Aid 29 CFR 1910.151 and Summary of ANSI Z308.1–1998





FV-GFS 22 Biodiversity and Habitats

- Management, Protection, and Enhancement
 - Participation in voluntary federal programs such as **Natural Resource Conservation Service** or **Farm Service Agency** or similar State/County/Government programs.
 - Assessments by **Fish and Wildlife, NRCS** or State/County/Government agency if includes flora/fauna.
- Land conversion
 - Check national conservation areas, managed by Bureau of Land Management (e.g., wilderness area, forest reserve, etc.)
 - Check EPA "Bulletins Live! Two": areas require limited pesticide use for threatened or endangered species

Metrics

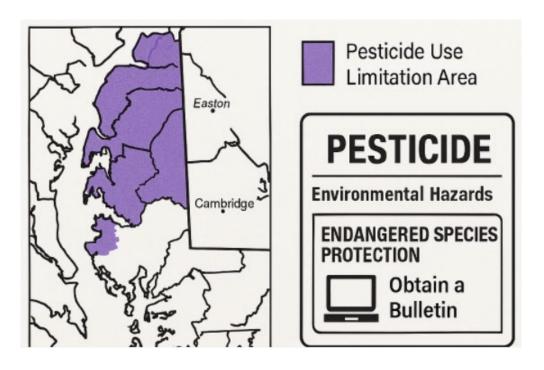
- SISC habitat and biodiversity metric
- Maps or land conversion metrics



FV-GFS 22 Biodiversity and Habitats

What are bulletins?

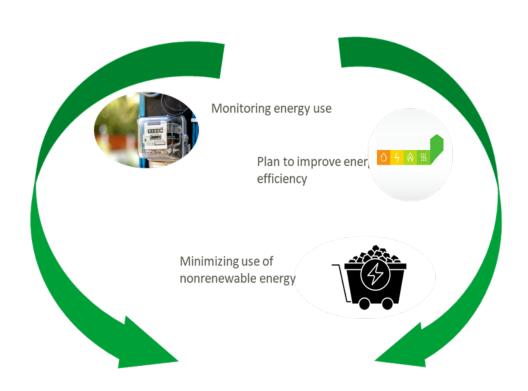
• Endangered Species Bulletins are an addition to some pesticide labels, requiring pesticide users to retrieve a Bulletin online. Bulletins show geographically specific areas where additional pesticide restrictions take place to protect listed species and their habitat. If a pesticide application falls into a highlighted area or Pesticide Use Limitation Area (PULA) limitations may apply such as application area, timing, or mitigation measures.





FV-GFS 23 Energy Efficiency

- Monitoring: Reviewing energy bills, not simply downloading them
- Improvement plan
- Reducing nonrenewable, increasing renewables
- Metric
 - The total energy use on the farm for each energy source/month
 - The proportion of renewable vs. nonrenewable energy in the energy source
 - Stewardship Index for Specialty Crops (SISC) energy use/GHG metric





FV-GFS 24 Greenhouse Gases

FV-GFS 24.03 Metrics

- Minimum total amount of energy use on the farm (in CO2e/ha/month and CO2e/kg/month)
- Stewardship Index for Specialty Crops (SISC) energy use/GHG Metric
- Cool Farm Tool



Greenhouse gas (GHG) emissions refer to carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. Due to their varying potential to contribute to global warming, they are sometimes calculated as CO_2 equivalents (CO_2e).



FV-GFS 25 Waste Management

FV-GFS 25.04 Holding areas for diesel and other fuel oil tanks

- Refer to EPA requirements for Spill Prevention, Control and Counter measurement (SPCC) for Agriculture
- For holding areas more than 55 gallons i.e., "bulk containers", but less than a total of 1,320 gallons, the producer shall have **steps prevent chemicals from being discharged** into navigable waters or adjoining shorelines. Additionally, the producer shall have the **ability to contain spills at or near their source** to minimize the potential for discharge, until such time as local spill and/or hazardous materials response agencies can intervene.
- Examples include dikes, curbs, berms, drain covers, and absorbent material, if allowed locally, etc.
- Permanent or semi-permanent, in place
- Buckets of sand not accepted



FV-GFS 25 Waste Management

FV-GFS 25.09 Food waste is prevented and managed

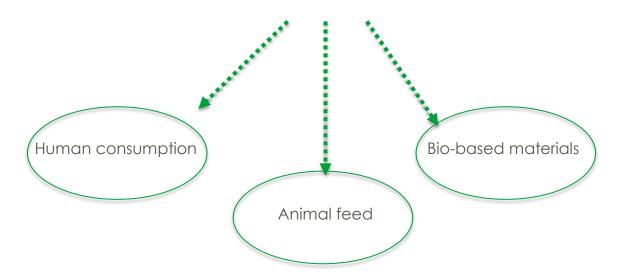
- **Surplus produce:** Produce of the farm that is grown and harvested (or unharvested and left in the field) but not distributed to customers.
 - Should be redirected
- **Food waste/loss:** Product that is not marketable but edible. Food that is not channeled for human consumption, animal feed, or bio-based materials.
- Calculation for both, can be done in house.
- Stewardship Index for Specialty Crops (SISC) Food Loss Metric or similar tools

Operational opportunity: understand where and why loss is occurring



FV-GFS 25 Waste Management

Surplus produce: produce of the farm that is grown and harvested (or unharvested and left in the field) but not distributed to customers



Food waste: food that is not channeled for human consumption, animal feed, or bio-based materials





FV-GFS 29 Fertilizers and Bioestimulants

FV-GFS 29.01.07 Management of fertilizer is supported by metrics

- The total amounts of potassium, nitrogen, and phosphorus applied on the farm (in kg/crop, kg/month, and kg/ha/month).
- Stewardship Index for Specialty Crops (SISC) Nitrogen Use Metric and Phosphorus Use metric

Operational opportunity: understand uses and increase nitrogen use efficiency



FV-GFS 29 Fertilizers and Bioestimulants

FV-GFS 29.02.02 Fertilizers storage

- Prevention of pollution of water sources:
 - consider the distance of fertilizer tank(s) from water sources
 - whether water sources are open or closed
 - if storage is long term/permanent or only used immediately before and during applications

Ventilation:

- if the main entrance to the facility allows sufficient air into the facility during use
- no observable odors are present upon walking into the storage



FV-GFS 30 Water Management

FV-GFS 30.02.01 Water permits

- Where district or water allotments are given by an entity or water district and a license or permit is not required, then this principle is Not Applicable
- Where the waters is controlled by the ware district, additional evidence can be in the form of payments, etc. District: allotments, payments
- Producers must show they observe the rate and annual total water allotments
- Water totals kept confidential with auditor/CB/Agraya



FV-GFS 30 Water Management

FV-GFS 30.03 Water efficiency

- May not be legal to collect water in all areas, states, e.g. drought conditions, emergency water declarations
- Optimization: crop water needs are based on data
- Stewardship Index for Specialty Crops (SISC) Simple Irrigation Efficiency Metric
- Metrics:
 - The total monthly amount of water used on the farm in agricultural production (in m3/site/month). The amount of water abstracted from specific sources should also be listed.
 - Stewardship Index for Specialty Crops (SISC) Applied Water Use Efficiency



FV-GFS 32 Plant Protection Products

- **FV-GFS 32.01.01:** Off-label uses with approval of EPA or local pesticide agency
- FV-GFS 32.07.02: MRLs: per crop, current year, known destination markets
 - Lab is ISO 17025 accredited for analysis conducted
- **FV-GFS 32.09.06:** Storage on pallets acceptable if containers are in original packaging. Open packages are on non-permeable shelving.
- **FV-GFS 32.10.01:** Health checks for workers handling PPP based on risk assessment and local legislation
 - Health questionnaire, physical examination, blood test, etc.



FV-GFS 33 Postharvest Handling

FV-GFS 33.01 Overnight field storage

- Produce that is harvested but is not field packed may be stored overnight in the field
 - E.g., onions in bags, apples in field bins
- The risk assessment and management procedures must address the overnight storage.
 - E.g., temperature variation, food defense such as theft, tampering, etc.



QUESTIONS?

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