Based on AFDC16 (4603) DTZS:2026
ICS 67.00

DRAFT TANZANIA STANDARD

Audit checklist for compliance with Good Agricultural Practices (GAP) for the sustainable production and post-harvest handling of cereals

TANZANIA BUREAU OF STANDARDS

1. Scope

This document describes the checklist used to guide the audit process for sustainable production and post-harvest handling of cereals based on AFDC 16 (4603) DTZS.

2. General information

S/No.	GENERAL INFORMATION	DETAILS
1	Legal name of Farm/company	
2	Physical address	
3	Name of representative	
4	Title/Position	
5	Official contact details	
6	Crop(s) and variety/varieties audited	
7	Area audited (farm/store/others)	
8	Unique field/block or facility identifiers	
9	Lead auditor/Auditor name	
10	Auditor contact details	
11	Audit date(s)	
12	Audit duration (hours)	
13	Certification validity (valid from to date)	

3. Audit methods

These highlights the main symbol for the aspects used while checking compliance of the Agronomic Practices:

V	Visual assessment
I	Interview with the personnel
D	Record or document review
X	Cross-check data and information (verify data, link records to confirm their accuracy)
C	Challenging the content and plausibility of the information

4. Compliance levels

Serial No.	Compliance level	Total Number of criteria	Compliance criteria
1	Major Must	202	100%
2	Minor Must	39	At least 85%
3	Recommendations	9	No score
	TOTAL	**250**	

N/A may be used only where the control is demonstrably outside the certified scope (for example, a rice-only requirement on a maize-only farm). The auditor records the justification in the Evidence/Recommendation column.

5. Audit checklist on compliance levels

Mark one outcome for each control and record sufficient objective evidence to support the decision. A blank response is not a completed audit.

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
4	**MANAGEMENT SYSTEM**				
4.1	**General requirements**				
4.1.1	The management system established, documented, implemented and maintained to ensure compliance of this standard.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
4.1.2	The management system audited at least annually by a competent internal or external auditor. The audit report documented and made available for inspection by recognized auditors upon request.	Major Mus	D I X	☐ Yes ☐ No ☐ N/A	
4.1.3	A documented procedure for addressing customer complaints established and implemented. Complaints be recorded and responded within 14 days of complaint receipt.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
4.1.4	Non-compliance with any requirement of this standard recorded using a non-conformance report (NCR). Corrective measures be implemented and verified within 30 days of identification.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
4.2	**Operator responsibilities**				
4.2.1	The operator legally responsible for compliance, day-to-day management, and implementation of this standard.	Major Must	I X	☐ Yes ☐ No ☐ N/A	
4.2.2	The operator conduct a review meeting at least once a year	Minor Must	D I X	☐ Yes ☐ No ☐ N/A	
4.2.3	The operator provide access to third parties including authorised inspectors and certification bodies to carry out verification of compliance	Major Must	I X	☐ Yes ☐ No ☐ N/A	
4.2.4	The operator comply with applicable customer requirements, such as aflatoxin-free, organic or fair-trade certification and, for wheat, specified protein and deoxynivalenol (DON) limits.	Major Must	I X	☐ Yes ☐ No ☐ N/A	
4.2.5	The operator develop, document, and implement an environmental management plan covering soil conservation, water use, waste disposal, and biodiversity protection.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
4.2.6	The operator ensure that all employees, outgrowers, and seasonal workers receive information, instruction, and training necessary to implement this standard. Training records retained for at least two years.	Major Must	D I X	☐ Yes ☐ No ☐ N/A	
4.3	**Input procurement**				
4.3.1	The operator have a procedure for procure all agricultural inputs (seed, fertilizer, pesticides, fuel) from suppliers registered and/or licensed by the relevant authority.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
4.3.2	The operator maintain a policy regarding the use of Genetically Modified Organisms (GMOs).	Major Must	D I	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
5	**TRACEABILITY**				

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
5.1	The operator implements and maintains an effective traceability system that links the following elements: Seed source and batch number. Field (with unique identifier). Harvest lot (by field and date). Drying batch. For maize: Shelling batch. Storage bin or warehouse. Transport consignment. Final product shipment.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
5.2	**Recall and withdraw procedures**				
5.2.2	The farm establish, document, maintain and test procedures for the recall and withdrawal of cereals that may be unsafe, nonconforming or otherwise subject to removal from the supply chain	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
5.2.3	Recall procedures tested at least annually through a documented mock recall. Test results, identified gaps and corrective actions be recorded.	Major Must	D X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
5.3	Growers, aggregators, and storage operators maintain programs for effective lot identification to trace the sites and agricultural inputs involved in primary production and the origin of incoming grain in case of suspected contamination.	Major Must	V I X	☐ Yes ☐ No ☐ N/A	
5.4	Grower information (name, village, field code, harvest date, variety) be linked with storage operator information to enable traceability throughout the supply chain.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
5.5	For exported cereal, traceability extended to the port of entry in the destination country.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
6	**RECORD KEEPING**				
6.1	The operator ensure that all records are accurate, retrievable, legible, and up to date.	Major Must	D I	☐ Yes ☐ No ☐ N/A	
6.2	Records protected from damage (e.g., due to water, fire, pests) or loss.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
6.3	Records of cereal production and distribution be retained for at least two years (or longer if required by specific customers) to facilitate recall and food safety investigations.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
6.4	The operator keep records of all agricultural activities in paper and/or electronic format, including: a) Production site information (field code, area in hectares or acres, GPS coordinates, altitude, soil type). b) Supplier information for agricultural inputs (seed, fertilizer, pesticides), including receipts, batch/lot numbers, and certificates of analysis. c) Planting records: date, variety, seed rate (kg/ha), planting method, spacing. d) Fertilizer application records: date, field code, product name, N-P-K grade, batch number, application rate (kg/ha), method of application, applicator name, weather conditions. e) Pesticide application records: product name, active ingredient, target pest, application date, rate, pre-harvest interval (PHI), applicator name, equipment used, weather conditions. f) Pest and disease monitoring logs: scouting dates, pest/disease identified, population levels or severity score, action taken. g) Irrigation records (if applicable): water source, date, volume applied (mm or m^3/ha), method. h) Harvest records: date, field code, area harvested, yield (tons/ha), moisture content at harvest (%), harvest method. i) Post-harvest records: drying method, drying duration, final moisture content (%), storage bin number, storage temperature (°C) and humidity (%). j) Mycotoxin: date, lot number, test method, result (ppb or ppm), laboratory name. k) For wheat only: Grain quality records: protein content % (12% moisture basis), falling number (seconds), test weight (kg/hl), vitreous kernel percentage (%), foreign matter (%). l) Workers health safety records: training records, PPE issuance, medical check-ups, accident reports. m) Waste management records: waste types, quantities (kg or tons), disposal methods, collection receipts. n) Sales records: buyer name, quantity (tons), lot number, certificate of analysis, date of sale, transport details.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
6.5	Storage operators keep records for each lot, including: a) Incoming grain records: grower information, lot number, moisture content (%), test weight (kg/hl), foreign matter percentage (%), mycotoxin. For wheat: also protein content and falling number. b) Pest control programs: rodent and insect monitoring logs, bait station check records, fumigation dates, products used, concentration, exposure time. c) Storage conditions: daily temperature and humidity logs. d) Chemicals used in post-harvest treatments: grain protectants, fumigants, application dates, PHI before release for consumption. e) Cleaning schedules for premises, facilities, equipment, and containers. f) Workers' health, safety, and welfare records. g) Waste management records.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
7	**PLANTING MATERIALS (SEED)**				
7.1	**General requirements**				
7.1.1	The operator procure seed from registered seed companies or certified seed multipliers.	Major Must	D I	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
7.1.2	Farm-saved seed tested for germination (minimum 85%) and purity (minimum 98%) at an approved laboratory before use.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
7.2	**Seed treatments and dressings**				
7.2.1	When seed treatments are applied, the operator document the justification (e.g., control of seed-borne fungi, early season insect pests).	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
7.2.2	Seed treatment products registered for use on the specific crop by the relevant authority.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
7.2.3	Advice on seed treatment products obtained from a competent person (agronomist, or licensed agro-dealer).	Major Must	I	☐ Yes ☐ No ☐ N/A	
7.2.4	Where treatment products are used, all pest control product requirements in clause 12 apply, including PPE use, record keeping, and safe disposal.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
7.3	**Planting rates and spacing**				
7.3.1†	The operator comply with crop-specific planting rates per acre/ hector.	Minor Must	D V I X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
7.3.2	When using farm-saved seed with lower germination, the seed rate increased by 20–30% above the recommended rate.	Minor Must	X	☐ Yes ☐ No ☐ N/A	
7.3.3	Planting depth comply with the recommended depth per specific crop.	Minor Must	D V X	☐ Yes ☐ No ☐ N/A	
7.3.4	For rice only (transplanted system): Seedlings be transplanted at 15–30 days (4–5 leaf stage). Seedlings older than 40 days not be used. Seed soaking: seeds be soaked in clean water for 24 hours, then incubated (wrapped in moist jute bags) for 24– 48 hours until radicle emergence (1–2 mm).	Major Must	D V X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
8	**SITE HISTORY AND LAND PREPARATION**				
8.1	**Site selection and risk assessment**				
8.1.1	Before planting, the operator conduct and document a risk assessment for each field, taking into account: Potential contaminants (heavy metals, pesticide residues from previous crops). Soil type and drainage characteristics. Erosion risk (slope percentage). Prior use of land (history of pests, diseases, or contaminants). Proximity to water sources (buffer zones maintained).	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
8.1.2	Crop-specific site requirements: All findings recorded and maintained. Applicable crop-specific requirements: Maize — Soil pH 5.5–7.0; sandy loam to clay loam; no waterlogging; Paddy rice — Clay or clay-loam soil; pH 5.5–7.0; slope 1–2% for irrigated lowland; sustainable water source; Wheat — Altitude 900–2,500 m above sea level; loam to clay-loam; pH 5.5 –7.0; no waterlogging.	Minor Must	D V X	☐ Yes ☐ No ☐ N/A	
8.1.3	The operator establish a corrective action plan for identified controllable risks (e.g., liming for acid soils, drainage improvement, crop rotation).	Minor Must	D V I	☐ Yes ☐ No ☐ N/A	
8.1.4	The site not used for production when risk assessments identify non-controllable aspects critical to human health and the environment.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
8.1.5	The operato establish a field identification system with a unique code for each field or block (e.g., F01-M02 for farm 1, maize field 2).	Minor Must	V I	☐ Yes ☐ No ☐ N/A	
8.2	**Land preparation requirements**				
8.2.1	Conservation agriculture principles (minimum soil disturbance, permanent soil cover, crop rotation) implemented where applicable.	Minor Must	V X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
8.2.2	Land preparation comply with recommended crop-specific requirements: For maize: Conventional tillage: primary ploughing to 15–25 cm depth; secondary harrowing to achieve clod size <5 cm. Ridge-furrow system (75–90 cm spacing) for areas with erratic rainfall. Minimum tillage with planting basins (30 cm × 30 cm × 15 cm) for semi-arid areas. For paddy rice: Primary tillage to 15–20 cm depth. Secondary tillage: 2–3 passes of harrowing. Laser leveling to achieve slope <0.5% for uniform water distribution. Puddling: 2–4 passes of puddler or tractor in standing water (5–10 cm) to achieve water percolation ≤5 mm/day. Bund construction: bunds 50–60 cm high and 30–40 cm wide, plastered with mud to prevent leakage. For wheat: Fine, firm seedbed required. Conventional tillage: primary ploughing to 15–20 cm depth; secondary harrowing (2–3 passes) to achieve clod size <2 cm. Conservation agriculture: direct seeding into previous crop residue using no-till planter.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
8.2.3	Weed control before planting: Fields cleared of weeds at least 2 weeks before planting.	Minor Must	D V X	☐ Yes ☐ No ☐ N/A	

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9	**SOIL MANAGEMENT**				
9.1	**Soil analysis requirements**				
9.1.1	The operator carry out soil analysis before the first planting and every two years thereafter. Analysis conducted at an approved laboratory.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
9.1.2	Based on soil analysis, the operator develop and implement a soil management plan including: Lime application if pH is below the acceptable range. Organic matter addition (manure, compost, cover crop incorporation). For paddy rice: Iron toxicity management through drainage, organic matter addition, and use of tolerant varieties.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
9.2	**Soil erosion control**				
9.2.1	The operator implement measures to minimize soil loss, including: Contour ploughing on slopes >3%. Strip cropping with legumes along contours. Grass strips (e.g., vetiver grass) on contour lines. Terracing on slopes >10% gradient (only with approved Environmental Impact Assessment).	Minor Must	V I X	☐ Yes ☐ No ☐ N/A	
9.2.2	For paddy rice: Bund stabilization with grass and contour leveling in terraced fields.	Minor Must	V	☐ Yes ☐ No ☐ N/A	
9.2.3	The operator implement practices to improve soil drainage and prevent waterlogging: Raised beds in areas with high rainfall or poor drainage. Surface drainage channels at 50–100m intervals.	Minor Must	D V I	☐ Yes ☐ No ☐ N/A	
9.3	**Crop rotation**				
9.3.1	The same grain crop not planted on the same land for more than two consecutive seasons without a break crop.	Minor Must	D V	☐ Yes ☐ No ☐ N/A	
9.3.2	Where rotations are not practiced, the operator provide documented justification (e.g., land tenure constraints, documented market demand for continuous production).	Minor Must	D I	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
10	**PLANT NUTRITION AND FERTILIZER USE**				
10.1	**Fertilizer use plan**				
10.1.1	The operator develop and document a fertilizer use plan based on soil analysis and/or plant tissue analysis, following research recommendations.	Minor Must	D V I	☐ Yes ☐ No ☐ N/A	
10.1.2	Nitrogen (N) applied in three rounds as per recommendations.	Minor Must	X, D	☐ Yes ☐ No ☐ N/A	
10.1.3	Fertilizer placement requirements: Basal fertilizer be placed 5 cm below and 5 cm to the side of the seed. Fertilizer not contact the seed. Side-dress nitrogen placed 5–10 cm from the plant row and 5 cm deep.	Minor Must	D	☐ Yes ☐ No ☐ N/A	
10.1.4	Runoff water from land where fertilizer has been applied not drain directly to any water source (river, lake, dam). Buffer strips of 5–10 m width maintained along water bodies.	Major Must	V	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
10.1.5	The person responsible for fertilizer application be competent, having received training from relevant authority or an approved extension service.	Minor Must	V I	☐ Yes ☐ No ☐ N/A	
10.2	**Records of application**				
10.2.1	The operator maintain records of each fertilizer application including: date, field code, fertilizer type, batch number, application rate (kg/ha), method (broadcast, band, side-dress), applicator name, and weather conditions.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
10.2.2	A written work instruction for fertilizer application documented and signed by a competent person, specifying who, when, where, and how to apply.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
10.3	**Application equipment**				
10.3.1	Fertilizer application equipment (including spreaders and side-dress applicators) maintained, routinely verified and calibrated at the start of each season. Calibration records retained.	Minor Must	D V I X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
10.4	**Fertilizer storage**				
10.4.1	Fertilizers stored in structures that are dry, cool, well-ventilated, rodent-proof, with impermeable flooring.	Major Must	V	☐ Yes ☐ No ☐ N/A	
10.4.2	Fertilizer not placed directly on the floor; pallets or racks are used.	Minor Must	V	☐ Yes ☐ No ☐ N/A	
10.4.3	The fertilizer store located at least 50 m from water sources and from residential areas.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
10.4.4	An up-to-date fertilizer stock inventory be maintained, including incoming quantities, batch numbers, expiry dates, used quantities, and remaining stock.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
10.4.5	Fertilizers stored separately from pest control products, acids, produce, food and feedstuffs, planting materials, and any living quarters.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
10.5	**Organic fertilizers**				
10.5.1	Where organic fertilizer (compost, farmyard manure, poultry litter) is used, the operator conduct and document a risk assessment including testing for heavy metals, pathogens (such as E. coli, Salmonella), and weed seeds.	Major Must	D I	☐ Yes ☐ No ☐ N/A	
10.5.2	Organic fertilizer stored and covered on an impermeable surface to prevent environmental contamination.	Minor Must	V	☐ Yes ☐ No ☐ N/A	
10.5.3	Organic fertilizer application records include type, source, analysis results, application rate, incorporation method, and date.	Minor Must	D V	☐ Yes ☐ No ☐ N/A	
10.5.4	Human sludge (sewage sludge) not used on cereal farms under any circumstances.	Major Must	V	☐ Yes ☐ No ☐ N/A	
10.5.5	Green manure crops (e.g. Mucuna, sunn hemp, lablab, clover, vetch) grown during fallow periods and incorporated 2–3 weeks before planting.	Minor Must	D V	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
11	**WATER MANAGEMENT AND CONSERVATION**				
11.1	**General requirements**				
11.1.1	For irrigated grain production, the operator conduct and document a risk assessment of irrigation water, including: Water source sustainability (river flow, groundwater recharge). Microbiological contaminants (such as E. coli, coliforms). Chemical contaminants (such as heavy metals, pesticide residues). Salinity (electrical conductivity).	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
11.1.2	For rainfed grain production, the operator implement water conservation measures.	Minor Must	V I	☐ Yes ☐ No ☐ N/A	
11.1.3	The operator establish and implement a documented water management plan based on the risk assessment (for irrigated systems) or rainfall patterns (for rainfed systems).	Major Must	D I	☐ Yes ☐ No ☐ N/A	
11.1.4	The operator maintain water management records including: Rainfall data (daily if rain gauge available, or from nearest weather station). Irrigation dates, volume applied (mm or m^3/ha), and method. Observations of crop water stress (leaf rolling, wilting).	Major Must	D V I	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
11.1.5	Irrigation personnel are trained and competent. Training records maintained.	Major Must	D I	☐ Yes ☐ No ☐ N/A	
11.2	**Water requirements**				
11.2.1	For rainfed maize and wheat: Planting occur at the onset of the rainy season to ensure that the most sensitive growth stage coincides with peak rainfall. Early-maturing varieties used in areas with short rainy seasons.	Minor Must	D	☐ Yes ☐ No ☐ N/A	
11.3	**Irrigation methods (where applicable)**				
11.3.1†	For paddy rice, Alternate Wetting and Drying (AWD) be implemented where applicable. Fields be allowed to dry to 15–20 cm below the soil surface, measured using a perforated water tube, before re-flooding. AWD not be applied during flowering, and implementation dates recorded.	Minor Must	D V	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
11.3.2	For paddy rice only – Mid-season drainage: Fields drained for 10–14 days at maximum tillering. Drainage dates recorded.	Minor Must	D V X	☐ Yes ☐ No ☐ N/A	
11.3.3	Recommended water conservation measures for all grains (rainfed and irrigated) implemented; Additional requirement(s): Mulching (crop residue, straw, or plastic mulch) to reduce evaporation. Rainwater harvesting (farm ponds, roof catchment). Conservation tillage (minimum tillage, planting basins) for moisture conservation.	Minor Must	D V X	☐ Yes ☐ No ☐ N/A	
11.3.4	For irrigated systems: Drip irrigation is preferred for high-value grain (seed maize, seed wheat). Furrow irrigation: furrows be shallow (10–15 cm deep) between rows; over-irrigation and runoff are prohibited. Sprinkler irrigation: application during high winds or midday heat is prohibited.	Minor Must	V	☐ Yes ☐ No ☐ N/A	
11.4	**Quality of irrigation water**				
11.4.1	Water used for irrigation comply with TZS 2067 and be analyzed based on the risk assessment at least once per year. Analysis results be documented.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
11.4.2	Untreated sewage water and raw effluent not used for irrigation of grain for human consumption.	Major Must	V	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
12	**INTEGRATED PEST MANAGEMENT (IPM)**				
12.1	**General requirement**				
12.1.1†	The operator maintain a documented crop-protection plan specific to each grain grown and update it annually using the previous season's pest pressure.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
12.2	**IPM competence and documentation**				
12.2.1	The operator or designated IPM manager trained and demonstrate competence on Integrated Pest Management (IPM) for the relevant grain. Proof of training kept on record.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
12.2.2	The operator have a documented IPM plan including: Monitoring and scouting schedule (weekly during vegetative and reproductive stages). Action thresholds (economic injury levels) for key pests. Cultural, mechanical, biological, and chemical control options. Record keeping templates.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
12.2.3	The operator maintain a current list of major pests and diseases for each crop and demonstrate knowledge of their identification.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.2.4	The operator demonstrate IPM implementation through: Scouting records. Use of documented action thresholds. Conservation of natural enemies.	Major Must	D I	☐ Yes ☐ No ☐ N/A	
12.3	**Action thresholds for key pests**				
12.3.1	For maize – Fall armyworm (FAW): No control required for large larvae (>1.5 cm). Control triggered at 20% infestation with small larvae (1st–3rd instar) in whorl stage.	Major Must	X	☐ Yes ☐ No ☐ N/A	
12.3.2	For maize – Striga (witchweed): For fields with history of striga infestation, the following controls are mandatory: Grow striga-resistant/tolerant varieties. Intercrop with desmodium (push-pull technology). Rotate with non-host crops (cowpea, soybean, sunflower). Apply nitrogen fertilizer (striga suppresses in high N conditions).	Major Must	D V	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
12.3.3	For paddy rice – Stem borer: Control triggered at 2 egg masses per m².	Major Must	X	☐ Yes ☐ No ☐ N/A	
12.3.4	For paddy rice – Golden apple snail: Control triggered at 5 snails per m² in seedling stage.	Major Must	X	☐ Yes ☐ No ☐ N/A	
12.3.5	For wheat – Rusts: Control triggered when rust severity reaches 10% on flag leaves.	Major Must	X	☐ Yes ☐ No ☐ N/A	
12.3.6	For wheat – Fusarium head blight: Preventive application considered when flowering coincides with wet weather.	Recommend ation	V	☐ Yes ☐ No ☐ N/A	
12.4	**Pest and disease monitoring**				
12.4.1	The operator monitor pests and diseases using: Pheromone traps (for FAW, stem borer, and wheat aphids) with weekly counts. Sweep nets (for rice planthoppers and leafhoppers). Light traps (for stem borer moths). Yellow sticky traps (for leafhoppers). Visual inspection for egg masses, larvae, and leaf damage.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
12.4.2	Tools and equipment (sprayers, hoes) disinfected using 10% bleach solution after use in infested fields before use in clean fields.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.4.3	Water used for mixing crop protection products clean (pH of 6.5–7.5, free from sediment and microbial contaminants).	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.5	**Personal Protective Equipment (PPE)**				
12.5.1†	Every person involved in mixing, loading or applying crop-protection products use suitable PPE: long-sleeved shirt, long trousers, chemical-resistant gloves, boots, face shield or goggles, and a respirator where required by the label.	Major Must	V	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
12.6	**Pest control products – Selection**				
12.6.1	Pesticides registered by relevant authorities for use on the specific crop.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
12.6.2	The operator maintain documentation of pesticide restrictions	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
12.6.3	The technical person responsible for pesticide choice and application hold a valid training/pesticide applicator license.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.6.4	The operator maintain documented justification for each pesticide choice.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
12.6.5	The operator rotate among at least three different modes-of-action groups per season to prevent resistance. Use of the same mode of action group for more than two consecutive applications per season is prohibited.	Major Must	V I X	☐ Yes ☐ No ☐ N/A	
12.6.6	The application rate and dilution rate comply exactly with the product label. Where a choice exists, the product with lower toxicity and shorter environmental half-life selected.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.7	**Storage of pest control products**				
12.7.1	Pest control products stored in a store constructed to as per relevant authority guidelines with the following minimum specifications: Locked, with access restricted to authorized personnel only. Well-ventilated, dry, and cool (temperature ≤30°C). Impermeable concrete floor with bunding capable of containing 10% of total store volume. Fire-resistant construction (non-combustible walls).	Major Must	V I X	☐ Yes ☐ No ☐ N/A	
12.7.2	Only approved pesticides in original labelled containers held in the store. No other commodities (seed, fertilizer, food, fuel, animal feed) stored with pesticides.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.7.3	Warning signs in English/Swahili, and/or a local language displayed on the outside of the pesticide store, including: "NO SMOKING", "NO NAKED FLAMES", "DANGER – PESTICIDES", "KEEP OUT".	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.7.4	Stock inspected monthly for leakage, container damage, and expiry dates. Stock inventory records maintained.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
12.7.5	Written procedures for handling accidents, fire, spillage, or poisoning of personnel displayed in accessible areas.	Major Must	D I	☐ Yes ☐ No ☐ N/A	
12.7.6	The store equipped with firefighting equipment: dry chemical fire extinguisher (minimum 2 kg) and sand bucket. Extinguishers be inspected monthly and serviced annually; records be kept.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
12.7.7	Shelves made of non-absorbent, non-flammable material (plastic or coated metal). A spill kit (sand, shovel, broom, absorbent pads, empty disposal bin) be available.	Major Must	V	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
12.7.8	Adequate washing facilities (water, soap, paper towels) available within 10 meters of the store.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.7.9	The store bunded (raised lip at door, sloped floor to collection sump) to contain spillages.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.7.10	Drainage from the store directed to a sump or adequate wastewater area located at least 100 m from all water sources, with no discharge into riparian land.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.7.11	Personnel working in pesticide stores have access to suitable PPE stored adjacent to the store but outside the hazardous area.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.7.12	Pesticides and fertilizers stored separately with a minimum separation of 5 meters or a solid wall.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.7.13	The pesticide store located at least 100 m from wells, rivers, dams, and other water sources.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.8	**Application conditions**				
12.8.1	Pesticides not applied under the following conditions: Wind speed >10 km/h. Rain expected within 4 hours of application. During overhead irrigation. High mid-day temperatures (>30°C).	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.8.2	Application conducted in early morning or late afternoon.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.9	**Dispensing of pesticides**				
12.9.1	A separate area for dispensing pesticides provided with: Impermeable, easy-to-clean workbench. Running water supply within 5 meters. Emergency eyewash station. Accurate measuring equipment (graduated cylinders, syringes, scales dedicated for pesticides only). Suitable containers for pre-mixing (plastic, not for food use). Clear red colour coding on all dispensing equipment to indicate pesticide-only use.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.9.2	Personnel dispensing pesticides wear apron, chemical-resistant gloves, face shield, and rubber boots.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.10	**Worker protection during application**				
12.10.1	Signs restricting personnel access to areas under pesticide application displayed. Signs remain in place until the re-entry interval (REI) has elapsed.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.10.2	All spray operators and supervisors trained by a recognized institution. Annual refresher training is required.	Major Must	I	☐ Yes ☐ No ☐ N/A	
12.10.3	The employer provide all PPE to workers.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.10.4	Spray operators are not wearing personal home clothing when spraying. Separate lockers provided for personal clothing and work clothing/PPE.	Major Must	V I X	☐ Yes ☐ No ☐ N/A	
12.10.5	Dressing rooms and double individual lockers provided for each worker (one for street clothes, one for work clothes/PPE).	Major Must	V I X	☐ Yes ☐ No ☐ N/A	
12.10.6	All PPE cleaned after use (washing with soap and water, air drying). Contaminated PPE not taken out of farm site.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.10.7	All application equipment cleaned immediately after use. Chemical wastewater channeled to a soak pit or biobed located at least 50 m from water sources.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.10.8	Protective overalls laundered after each use and kept separate from other clothing. Laundering be done on-site or by a service that understands pesticide contamination risks.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.10.9	Staff involved in pesticide use have a medical check-up at least twice per year, including blood cholinesterase testing for organophosphate and carbamate exposure.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
12.10.10	Records maintained for: application logs, training certificates, PPE issuance, and medical check-up reports.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
12.10.11	Spray equipment inspected weekly, calibrated at the start of each season and every 10th use, and serviced annually. Defective equipment be repaired or replaced immediately.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.10.12	Each application accompanied by a written instruction signed by the farm manager or IPM specialist, specifying location, dosage, and technique.	Major Must	V I	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
12.10.13	All workers not wearing appropriate PPE vacate the area prior to spraying. Warning signs posted at field gates stating: date and time of application, pesticide common name and active ingredient, and re-entry interval.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.10.14	Material Safety Data Sheets (MSDS) for all pesticides used be kept on file and accessible to workers.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
12.10.15	Pregnant and nursing mothers and persons under age 18 not handle, mix or apply pesticides.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.10.16	Pesticides with high leaching potential or high aquatic toxicity not be used within 200 meters of open water sources.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
12.10.17	The operator establish a documented re-entry policy. Minimum REI 24 hours for most pesticides; 48–72 hours for highly toxic pesticides as per label.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
12.10.18	Spot spraying preferred over blanket spraying to protect non-target organisms (bees, fish, frogs, beneficial insects).	Recommend ation	V I	☐ Yes ☐ No ☐ N/A	
12.10.19	The pre-harvest interval (PHI) for each applied pesticide recorded, and the first harvestable date documented in the field log. No harvest occur before the PHI has elapsed.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
12.11	**Records of pesticide application**				
12.11.1	The operator maintain a dedicated pesticide register.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
12.11.2	Each spray record include: date, field code, target pest, product name, expiry date, active ingredient, concentration, application rate (L/ha or kg/ha), equipment used, weather conditions (wind speed, temperature, humidity), applicator name, and PHI.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
12.11.3	The operator maintain spray operator training records (certificates, refresher dates).	Major Must	D I	☐ Yes ☐ No ☐ N/A	
12.11.4	An accident and incident diary record all accidents, spillages, poisoning cases, sicknesses, and absences from work, with remedial actions taken.	Major Must	D	☐ Yes ☐ No ☐ N/A	
12.11.5	Emergency procedures, contact persons, and telephone numbers (fire brigade, hospital, poison control centre) posted.	Major Must	D	☐ Yes ☐ No ☐ N/A	
12.11.6	At least one trained First Aid personnel per 50 workers on the premises; training records kept.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
12.11.7	The operator maintain a record of obsolete or expired pesticides and empty containers, including quantities, dates, and disposal methods.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
12.11.8	Additional records required: Agrochemical stock record (running inventory). List of all chemicals used on the farm (updated annually). Disposal records for expired pesticides and containers (including receipts from licensed waste collectors).	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
12.12	**Disposal of surplus pesticides and containers**				
12.12.1	Written procedures for safe disposal of dilute pesticides and empty containers documented and communicated to all handlers.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
12.12.2	Obsolete and expired pest control products clearly segregated and marked "OBSOLETE AND EXPIRED – DO NOT USE".	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.12.3	Disposal of obsolete and expired pesticides done through return to supplier or approved incineration by Competent Authority, with records kept.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
12.12.4	Surplus spraying mix and tank washings disposed of by spraying onto a designated, non-cropped biobed area away from water sources.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.12.5	Disposal sites (biobeds, soak pits) securely fenced, locked, and labelled with warning signs.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.12.6	Where disposal services are outsourced, the disposal agent be approved by relevant authorities, and disposal records (receipt, certificate of destruction) kept.	Major Must	D	☐ Yes ☐ No ☐ N/A	
12.12.7	Empty pest control product containers not reused for any purpose.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.12.8	A secure storage point for empty containers (triple-rinsed, punctured) provided.	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.12.9	Containers awaiting disposal labelled "EMPTY PESTICIDE CONTAINER – DO NOT REUSE".	Major Must	V	☐ Yes ☐ No ☐ N/A	
12.12.10	Disposal done through registered recyclers or cement kilns.	Major Must	D	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
12.13	**Pesticide residue monitoring**				
12.13.1	The operator document a Maximum Residue Limits (MRLs) risk assessment considering the pesticides used, market requirements and national MRLs.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
12.13.2	MRL monitoring conducted based on the MRL risk assessment: For exported grain: testing done per shipment. For domestic grain: at least one test per season per variety.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
12.13.3	The operator maintain access to up to date MRL requirements as per National product standards	Major Must	I X	☐ Yes ☐ No ☐ N/A	
12.13.4	The operator provide evidence of residue testing conducted by an accredited laboratory.	Major Must	D I	☐ Yes ☐ No ☐ N/A	
12.13.5	The operator establish a written action plan for MRL exceedance, including: Immediate hold of affected lot. Investigation of cause. Disposal or re-routing of non-compliant grain (domestic market if legal, animal feed, or destruction). Corrective actions to prevent recurrence (increase PHI, change pesticide, retrain applicator).	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
13	**HARVESTING AND POST-HARVEST HANDLING**				
13.1	**Harvest timing**				
13.1.1	Grain harvested at the following moisture contents: Applicable crop-specific requirements: Maize — 18–25% for mechanical shelling; Paddy rice — 20–25% (80–85% of grains straw-yellow); Wheat — 13–18% for mechanical harvest; 16–18% for bread wheat to reduce shattering.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.1.2	For maize: Black layer formation at kernel base (physiological maturity) and dry, brown, loose husks indicate harvest readiness.	Major Must	D V	☐ Yes ☐ No ☐ N/A	
13.1.3	For paddy rice: Harvest not delayed beyond 30 days after flowering.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.1.4	For wheat: Pre-harvest sprouting management in areas prone to rains during harvest: Early-maturing varieties planted. Harvest occur as soon as grain moisture reaches 18%; immediate artificial drying is required.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
13.1.5	Measures in place to prohibit delayed harvest	Minor Must	V, D, X, I	☐ Yes ☐ No ☐ N/A	
13.2	**Harvest methods**				
13.2.1	Manual harvesting requirements: Applicable crop-specific requirements: Maize — Ears snapped from stalks by hand or corn snapper; placed in clean, dry bags or baskets; dropping on bare soil prohibited; Paddy rice — Cut with sickles at 15–20 cm above ground; placed in clean, dry bags or baskets; dropping on bare soil prohibited; Wheat — Cut with sickles at 10–15 cm above ground; tied into sheaves; placed in clean, dry bags or baskets; dropping on bare soil prohibited.	Major Must	V	☐ Yes ☐ No ☐ N/A	
13.2.2	Mechanical harvesting requirements: Combine harvester settings adjusted to minimize kernel damage. Maximum harvest losses: 3% of yield.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.2.3	Harvest records include: date, field code, variety, area harvested, yield (tons/ha), moisture content at harvest (%), harvest method, and operator name.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
13.3	**Post-harvest handling and drying**				
13.3.1	Cereal dried to safe moisture levels within the following time limits: Applicable crop-specific requirements: Maize — 48 hours; Paddy rice — 24 hours from threshing; Wheat — 24 hours.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.3.2	Target moisture levels for storage: Applicable crop-specific requirements: Maize — 13–14% (max 14%) — 12–13% (max 13%); Paddy rice — 14% — 12–13%; Wheat — 13–14% (max 14%) — 12–13% (max 13%).	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.3.3	Sun drying requirements: Drying be done on raised platforms, clean tarpaulins, or concrete drying floors. Drying on bare soil or roadsides is prohibited. Maximum layer thickness: 10 cm for maize, 5 cm for shelled grain; 5 cm for rice paddy; 5 cm for wheat grain. Grain turned every 2–3 hours. Cereals covered at night and during rain.	Major Must	V X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
13.3.4	Mechanical drying requirements: Applicable crop-specific requirements: Maize (shelled) — 60°C (lower for seed maize); Paddy rice (non-parboiled) — 42°C; Wheat — 45°C.	Major Must	V	☐ Yes ☐ No ☐ N/A	
13.3.5	Drying records include: method, start moisture (%), final moisture (%), duration, temperature (if mechanical), and operator name.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
13.4	**Shelling and threshing**				
13.4.1	For maize: Shelling done when grain moisture is at least 15% (lower moisture increases breakage).	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.4.2	For paddy rice: Threshing done within 24 hours of cutting. Manual threshing be done on clean tarpaulins. Mechanical threshers be cleaned between different lots.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.4.3	For wheat: Threshing done when grain moisture is at least 14%. manual threshing be done on a hard, clean surface.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.4.4	After shelling/threshing, grain cleaned (winnowed or aspirated) to remove dust, chaff, cob fragments, and light kernels.	Major Must	V	☐ Yes ☐ No ☐ N/A	
13.5	**Grain cleaning and quality testing**				
13.5.1	After threshing, grain cleaned to remove: Chaff, straw fragments, dust. Shrunken and broken kernels. Foreign material (stones, soil, weed seeds). For wheat: Ergot sclerotia (purple-black bodies larger than grain).	Major Must	V	☐ Yes ☐ No ☐ N/A	
13.5.2	The products comply to the respective product standards (such as TZS 437/EAS 51, TZS 438/EAS 2, TZS 1675/EAS 764).	Major Must	X	☐ Yes ☐ No ☐ N/A	
13.5.3	For wheat only – additional required tests: Applicable crop-specific requirements: Test weight — Weight per hectoliter — >72 kg/hl (bread wheat); >74 kg/hl (durum); Protein content — Near-infrared (NIR) — >12% (bread); >13% (durum); falling number — Hagberg falling number — >300 seconds.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
13.5.4	Test results by lot number recorded and maintained for at least 2 years.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
13.6	**Mycotoxin management**				
13.6.1	The operator implement a recommended mycotoxin management plan including but not limited to: Use resistant varieties where available. Avoid drought stress during grain fill (maize, wheat). Control insect pests (insect damage provides entry points for Aspergillus and Fusarium). Dry to safe moisture within specified time limits (refer clause 13.3.1). Sort out visibly damaged, discolored, shriveled, or moldy kernels (hand sorting or color sorting machines). Store in hermetic conditions (low oxygen inhibits fungal growth).	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
13.6.2	Testing requirements: Each lot tested for the relevant mycotoxins (refer section 6.4(j)). Testing done at an accredited laboratory.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
13.6.3†	Mycotoxin limits: Applicable crop-specific requirements: Aflatoxin (total) — Maize, Paddy rice — ≤10 ppb (domestic); Aflatoxin B1 — Maize, paddy rice, wheat — ≤ 5 ppb; Fumonisin — maize, paddy rice and wheat — ≤2 (unit not stated in the source draft; technical confirmation is required); Ochratoxin A — Wheat — ≤5 µg/kg.	Major Must	V X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
13.7	**Storage**				
13.7.1	Storage facilities : Be registered with relevant authorities. Be rodent-proof, bird-proof, waterproof, with proper flooring. Have good ventilation (or be hermetic for sealed storage). Have a dedicated mycotoxin management zone for suspect lots.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	
13.7.2	Warehouse hygiene requirements: Cleaning schedule: weekly sweeping, monthly disinfestation. Pesticides, fertilizers, and other chemicals not stored in the grain storage area. First In, First Out (FIFO) system used for stock rotation.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
13.8	**Transport**				
13.8.1	Transport vessels (trucks, trailers, carts) : Be clean, dry, and free from previous cargo residue (especially fertilizers, chemicals, animal products, and moldy grain). Be covered during transport to prevent rain, dust, and bird contamination. Have a dedicated grain transport policy (no mixed loads with chemicals, manure, or strongly odorous products).	Major Must	D V	☐ Yes ☐ No ☐ N/A	
13.8.2	Loading and unloading done on clean, dry surfaces (concrete or tarpaulin).	Major Must	V	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
13.8.3	Transport records include: vehicle registration, driver name, origin, destination, lot numbers, certificate of analysis number, quantity (tons), and date.	Major Must	D V X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
14	**WORKER'S HEALTH, SAFETY AND WELFARE**				
14.1	**Machinery safety**				
14.1.1	Machinery with internal combustion engines (tractors, threshers, pumps, dryers) not used in confined areas without ventilation.	Major Must	V	☐ Yes ☐ No ☐ N/A	
14.1.2	Only trained operators operate machinery. Training records be kept.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
14.1.3	All machinery have safety guards in place (power take-off shafts, belts, cutting blades, roll-over protection structures on tractors).	Major Must	V	☐ Yes ☐ No ☐ N/A	
14.2	**Health requirements**				
14.2.1	Personnel who come into direct contact with grain during or after harvest not have infectious diseases or open wounds without waterproof covering.	Major Must	V I	☐ Yes ☐ No ☐ N/A	
14.2.2	Potable water available to staff at all times. Containers or outlets of water unsuitable for drinking marked "NOT DRINKABLE".	Major Must	V I	☐ Yes ☐ No ☐ N/A	
14.2.3	First aid kits (one per 50 workers, plus at each field site) provided and stocked. At least one trained first aid personnel per 50 workers on hand.	Major Must	V I X	☐ Yes ☐ No ☐ N/A	
14.2.4	Written accident and emergency procedures displayed permanently and prominently, with contact telephone numbers for hospital, clinic, and ambulance.	Major Must	D	☐ Yes ☐ No ☐ N/A	
14.2.5	Workers' changing rooms, eating and resting areas, clean toilets (minimum 1 per 20 workers), hand washing facilities, and food-grade soap provided.	Major Must	V I X	☐ Yes ☐ No ☐ N/A	
14.2.6	The operator conduct health examination at least after every six months to personnel (waterborne diseases, skin conditions, respiratory issues).	Major Must	I X	☐ Yes ☐ No ☐ N/A	
14.3	**Safety measures**				
14.3.1	The operator document a worker health and safety risk assessment covering: pesticide exposure, machinery accidents, heat stress, snake/insect bites, ergonomic hazards (bending, lifting).	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
14.3.2	The operator document an occupational health and safety policy and communicate it to all workers (posted in English and/Swahili).	Major Must	D I	☐ Yes ☐ No ☐ N/A	
14.3.3	Machinery equipped with operational safety devices (emergency stop buttons, guards).	Major Must	V	☐ Yes ☐ No ☐ N/A	
14.3.4	Fire extinguishers (dry chemical type, minimum 2 per storage facility), sand buckets, and fire blankets easily accessible and maintained (monthly visual check, annual professional service).	Major Must	V X	☐ Yes ☐ No ☐ N/A	
14.3.5	Fire alarms fitted to exit doors. Evacuation drills be conducted at least once per year and documented.	Major Must	D X	☐ Yes ☐ No ☐ N/A	
14.3.6	Emergency exits clearly marked and fitted with fire safety break locks or remain unlocked during working hours.	Major Must	X	☐ Yes ☐ No ☐ N/A	
14.3.7	Relevant safety rules and precautionary safety measures clearly displayed in Swahili/English and/or pictograms in production, storage, and handling areas.	Major Must	V	☐ Yes ☐ No ☐ N/A	
14.3.8	The emergency plan and accident procedures displayed on common noticeboards.	Major Must	D	☐ Yes ☐ No ☐ N/A	
14.4	**Worker welfare**				
14.4.1	The height of grading tables, threshing stations, and other work facilities appropriate for worker comfort (adjustable stools, anti-fatigue mats).	Minor Must	I	☐ Yes ☐ No ☐ N/A	
14.4.2	Food provided to workers (if any) meet public health requirements (clean preparation, covered storage, no cross-contamination).	Major Must	V I	☐ Yes ☐ No ☐ N/A	
14.4.3	Suitable resting areas (shaded, with seating) and where possible a canteen provided, separated from working areas (minimum 10 m).	Minor Must	X	☐ Yes ☐ No ☐ N/A	
14.4.4	Employees whose work requires standing for long periods (sorting, bagging) provided with chairs or stools.	Minor Must	I	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
14.4.5	Occupational health & safety, first aid, and hygiene training be provided at induction and annually thereafter.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
14.4.6	Employees working with machinery or processes likely to cause bodily injury fully instructed as to dangers and precautions, with signed acknowledgement.	Minor Must	V I	☐ Yes ☐ No ☐ N/A	
14.4.7	All machinery fully guarded and well maintained. Maintenance records (dates, actions, person responsible) kept.	Minor Must	D V	☐ Yes ☐ No ☐ N/A	
14.4.8	Signs displayed regarding: All sores and cuts covered with waterproof dressing. Handwashing facilities with soap and paper towels (not cotton) available. Powder not used on hands. Fingernails clipped short. Protective clothing (overalls, head coverings) worn in packing, storage, and handling areas. PPE laundered weekly minimum and kept separate from personal clothing. Smoking, eating, and drinking are prohibited in all grain handling areas. No false nails, nail varnish, watches or jewellery (except plain wedding ring), chewing gum, or open shoes (sandals, slippers) allowed in packhouse, store, or handling facility.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
14.5	**Crop-specific worker safety additions**				
14.5.1	For maize and wheat: Workers handling grain wear dust masks when cleaning, shelling/threshing, or handling dusty grain to reduce inhalation of fungal spores (including Aspergillus and Fusarium).	Major Must	V I	☐ Yes ☐ No ☐ N/A	
14.5.2	For maize: Workers sorting fungal-damaged kernels wear gloves and wash hands thoroughly after work.	Major Must	I	☐ Yes ☐ No ☐ N/A	
14.5.3	For wheat: Workers fumigating wheat (e.g., with phosphine) trained and competent, wear appropriate respirators and work in teams of at least two.	Major Must	I X	☐ Yes ☐ No ☐ N/A	
14.5.4	For wheat: Workers sorting ergot-infected grain wear gloves and wash hands thoroughly after work (ergot alkaloids are toxic).	Major Must	V I	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
15	**LABOUR, EMPLOYMENT AND SOCIAL ISSUES**				
15.1	A clearly designated, named member of management have documented responsibility for ensuring compliance with the national Employment and labour legislation and implementation of the worker welfare policy.	Major Must	D I X	☐ Yes ☐ No ☐ N/A	
15.2	In addition to Labour Institutions Act and Labour Relations Act; the operator meet the following minimum requirements: i. Wages: At least minimum wage per sector as published by the relevant Ministry of responsible for employment and Labour, paid on time (monthly or weekly). ii. Staff recruitment and promotions: Transparent, non-discriminatory process. iii. Induction and training: All workers receive written or verbal induction on safety, hygiene, and rights. iv. Work contracts: Written contracts for permanent workers; written terms for seasonal workers (duration, wages, tasks). v. Work hours and leave days: Maximum 48 hours per week, 8 hours per day; overtime paid at 1.5x; annual leave of at least 28 days; sick leave with pay. vi. Expectant and nursing mothers: No heavy lifting, no pesticide exposure, 12 weeks paid maternity leave, nursing breaks. vii. Termination: In accordance with labour law (notice period, severance where applicable). viii. Workers' compensation: Insurance coverage for workplace injuries (Workers Compensation Act). ix. Freedom of association and participation: Right to join unions or worker committees. x. Grievance and disciplinary procedures: Written, accessible and without retaliation. xi. Forced labour: Prohibited. No retention of identity documents, no recruitment fees charged to workers. xii. Discrimination/harassment: Prohibited based on race, gender, religion, ethnicity, pregnancy, HIV status, disability. xiii. Child labour: No person under 15 years (or minimum school-leaving age) employed. No person under 18 handle pesticides or operate heavy machinery. V. Record keeping: Personnel files with contracts, attendance, pay records, training, and disciplinary actions maintained.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
15.3	Where a collective bargaining agreement is negotiated, it comply with the Labour Institutions Act and Labour Relations Act.	Major Must	X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
15.4	Separate sanitary facilities (toilets with water, soap, sanitary disposal bins) provided.	Major Must	V	☐ Yes ☐ No ☐ N/A	
15.5	For paddy rice - pregnant women not assigned to transplanting or harvesting in flooded fields (risk of schistosomiasis and falls).	Major Must	D V	☐ Yes ☐ No ☐ N/A	
15.6	For contract farming schemes (outgrowers): The contracting company provide written contracts in Swahili or English specifying: Seed variety and input credit (seed, fertilizer, pesticide). Technical support. Buy-back price with minimum guaranteed price. Quality standards (moisture, aflatoxin level for maize; protein content, falling number, DON for wheat; broken grain percentage). Payment terms.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
16	**ENVIRONMENTAL MANAGEMENT**				
16.1	The operator have a documented environmental risk assessment covering: Soil erosion and degradation. Water pollution (fertilizer runoff, pesticide drift). Greenhouse gas emissions (methane from flooded rice; nitrous oxide from fertilizers; CO2 from machinery). Deforestation or grassland conversion (if applicable). Biodiversity loss. Waste (crop residues, plastic, pesticide containers). For paddy rice: Methane emissions from flooded fields.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
16.2	An environmental management plan be developed based on the risk assessment, including:	Major Must	D	☐ Yes ☐ No ☐ N/A	
16.2.1	Soil conservation: Minimum tillage or conservation agriculture. Contour ploughing and strip cropping on slopes. Crop rotation with legumes.	Minor Must	V X	☐ Yes ☐ No ☐ N/A	
16.2.2	Crop residue management (stover/straw): Burning of maize stover, rice straw, or wheat straw in the field is prohibited. Residue incorporated into soil, used for mulch, animal feed, mushroom substrate, briquetting, or composting.	Major Must	V	☐ Yes ☐ No ☐ N/A	
16.2.3	Water conservation: Rainwater harvesting. Mulching to reduce evaporation. Irrigation runoff prohibited.	Minor Must	V	☐ Yes ☐ No ☐ N/A	
16.2.4	Buffer zones: Maintain 20 m buffer from rivers, lakes, and dams where no fertilizer or pesticide is applied. Maintain 50 m buffer from human dwellings for pesticide application.	Major Must	V	☐ Yes ☐ No ☐ N/A	
16.2.5	Greenhouse gas reduction (rice only): Mid-season drainage (10–14 days at maximum tillering). Alternate wetting and drying (AWD) implementation. Use of low-emission rice varieties.	Minor Must	V X	☐ Yes ☐ No ☐ N/A	
16.3	The environmental management plan reviewed and updatedas per relevant regulations..	Major Must	D X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
17	**ENERGY MANAGEMENT**				
17.1	The operator have an energy management policy committing to: Reducing fossil fuel use. Improving energy efficiency. Using renewable energy where feasible.	Recommend ation	D I	☐ Yes ☐ No ☐ N/A	
17.2	The operator have a written energy management plan including:	Recommend ation	D I	☐ Yes ☐ No ☐ N/A	
17.2.1	Tractors and field machinery: Regular maintenance (clean air filters, correct tyre pressure) to reduce fuel consumption by 5–10%. Minimum tillage to reduce tractor passes.	Recommend ation	V X	☐ Yes ☐ No ☐ N/A	
17.2.2	Irrigation pumps: Regular servicing (quarterly) to maintain efficiency. Solar-powered pumps preferred where feasible.	Recommend ation	V I	☐ Yes ☐ No ☐ N/A	
17.2.3	Dryers and shellers: Use of biomass (maize cobs, rice husk) as fuel where applicable. Maintain dryer insulation.	Recommend ation	V I	☐ Yes ☐ No ☐ N/A	
17.2.4	Transport: Route optimization for grain collection. Avoid partially filled trucks.	Recommend ation	V	☐ Yes ☐ No ☐ N/A	
17.3	The operator monitor energy use (litres of diesel, kWh of electricity, kg of biomass fuel) per ton of grain produced or handled. Records kept quarterly.	Recommend ation	D V I X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
18	**WASTE MANAGEMENT**				

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
18.1	The operator have a documented waste management plan.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	
18.2	The operator provide separate disposal bins for different waste types (colour-coded: green for organic, yellow for hazardous, black for general).	Major Must	V I	☐ Yes ☐ No ☐ N/A	
18.3	Holding areas for fuel and oils bunded, roofed, with impermeable floor, and labelled.	Major Must	V	☐ Yes ☐ No ☐ N/A	
18.4	Wastewater treatment and disposal systems comply with National regulations.	Major Must	V X	☐ Yes ☐ No ☐ N/A	
18.5	Hazardous waste disposed of using a licensed waste contractor. Records (consignment notes) kept for five years.	Major Must	D V I	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
19	**BIODIVERSITY CONSERVATION**				
19.1	The operator have a documented conservation policy complying with national legislation (Wildlife Conservation Act, Environmental Management Act).	Major Must	D I X	☐ Yes ☐ No ☐ N/A	
19.2	All non-cropped areas (field margins, contours, roadsides, bunds, irrigation channel banks) managed to encourage biodiversity: Native grasses or flowering plants planted to support pollinators and natural enemies. Vegetation strips (minimum 2 m wide) maintained along water bodies. Clearing of trees or shrubs on field boundaries without a permit is prohibited.	Minor Must	D V X	☐ Yes ☐ No ☐ N/A	
19.3	The operator practice activities that promote conservation: Maintain or restore at least 5% of farm area as natural habitat (grassland strips, hedgerows, field corners, riparian zones). Protect and maintain trees (agroforestry where applicable). For maize: Use push-pull technology (desmodium + brachiaria grass) for pest control without pesticides. Protect beneficial organisms: spraying during flowering is prohibited; reduce broad-spectrum insecticides.	Minor Must	D V I X	☐ Yes ☐ No ☐ N/A	
19.4	Conversion of native grasslands, wooded grasslands, or natural wetlands to grain cultivation not occur without Environmental Impact Assessment (EIA) approval for areas >50 hectares.	Major Must	V	☐ Yes ☐ No ☐ N/A	
19.5	For existing grain fields in wetlands (rice): minimum 20 m buffer of natural vegetation maintained.	Major Must	V X	☐ Yes ☐ No ☐ N/A	

Section	Standard compliance principle	Level	Audit method	Compliance (Yes/No/N/A)	Evidence / recommendation
20	**LEGAL AND CONTRACTUAL OBLIGATIONS**				
20.1	**Legal compliance**				
20.1.1	The operator comply with all applicable national laws and regulations.	Major Must	I X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
20.2	**Contractual obligations**				
20.2.1	Operators in contract farming (outgrower schemes) : Provide written contracts in Swahili/English , input credit (seed, fertilizer, pesticide), technical support, purchase price (with minimum guaranteed price), quality parameters, and payment terms.	Major Must	D V I X	☐ Yes ☐ No ☐ N/A	
20.2.2	The operator identify, document and comply with all applicable specific buyer requirements.	Major Must	D I X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.
20.3	**Non-compliance**				
20.3.1	Non-compliance with legal or contractual obligations recorded, and corrective action implemented and verified within specified time frame, consistent with clause 4.1.4.	Major Must	D X	☐ Yes ☐ No ☐ N/A	Committee confirmation required before final issue.

6. Summary of compliance and calculations

Calculate compliance using applicable controls only. Recommendations are reported separately and do not affect the conformity decision.

Item	Major Must	Minor Must	Recommendations
Total controls in checklist	202	39	9
Non-applicable controls (N/A)			
Applicable controls (Total − N/A)			
Compliant controls (Yes)			
Non-compliant controls (No)			
Compliance percentage	**(Yes ÷ Applicable) × 100**	**(Yes ÷ Applicable) × 100**	**Not scored**
Required threshold	**100%**	**≥85%**	**No limit**

Audit conclusion

Major Must compliance	_____ %
Minor Must compliance	_____ %
Overall decision	☐ Conforms ☐ Does not conform ☐ Follow-up required
Auditor's conclusion and basis	

Corrective action follow-up

Control No.	Non-conformity	Corrective action / owner	Due date	Verification / closure

Lead auditor		**Date**	
Operator representative		**Date**	