



No Irrigation Cultivated Ethically

Production
Standard V. 5.0.1





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PRINCIPLE 1. INTERNAL CONTROL SYSTEM & CONTINUOUS IMPROVEMENT

Internal control system & Continuous improvement practices are linked with business integrity. People often define integrity as doing the right thing even when no one else is around. It is the ability to act with honesty and be consistent in whatever it is you are doing based on moral value and all possible legislature (national and local legal compliance).

1.1: Internal Control System (ICS) shall be developed.

Compliance: **Mandatory**

Guidance:

- The processes established by the management shall be sufficient to develop an effective internal control system (ICS) that ensures that all member farmers meet all applicable regulations with respect to crops under certification.
- ICS shall define standard operating procedures for contracting farmers, training, internal audits, sanction procedures grievance procedures, roles and responsibilities, communication of policies, emergency response, etc.

1.2: ICS shall appoint adequate employees and resources to implement NICE Production Standard requirements.

Compliance: **Must**

Guidance:

- ICS shall define and clearly document the roles and responsibilities of the employees appointed.
- Overall responsibility and authority for the ICS manager's compliance with all applicable requirements of this standard.
- The ICS manager shall demonstrate knowledge of and compliance with NICE Production Standard requirements.
- ICS shall ensure that appointed employees are adequately trained.

1.3: ICS shall conduct risk assessment at least once in a year in accordance with NICE Production Standard

Compliance: **Mandatory**

Guidance:

- Risk assessment shall be conducted to identify, monitor, and mitigate risks.
- Risk assessment of each farm will be used by the ICS manager to calculate the frequency of internal audits required for each farm, giving the ICS manager assurance that all farms are still in compliance with all principles applicable under NICE Production Standard requirements.

- The ICS manager shall have the authority to remove a group member if the farm is not in compliance with the requirements of the NICE Production Standard or issue corrective actions in case of non-compliance.

1.4: Internal audits and Internal Audit procedures to be done and established to ensure compliance with NICE Production Standard requirements.

Compliance: **Mandatory**

Guidance:

- ICS shall define internal audit procedures and appoint adequate internal auditors to perform internal audits.
- Internal audits shall be conducted at least once a year by qualified and trained internal auditors.
- ICS shall maintain the Internal audit report, audit findings, and corrective action reports.
- The ICS personnel do not have any conflict of interest that may hinder the Internal Audits and Reports. All possible conflicts shall be in a written statement.

1.5: ICS should maintain an updated map that demonstrates the locations of all the participating farms.

Compliance: **Mandatory**

Guidance:

- An overview map (village or community map) showing the location of each member's farm to understand the scale of operations by ICS.
- ICS must draw its own map or can use a satellite map. The map(s) should at least contain the following information:
 - Location of ICS (Name and GPS Co-ordinates)
 - Location of farm and production area. (GPS Co-ordinates)
 - Satellite maps of production areas (.kml file format)
 - Water bodies
 - Storage area
 - High Conservation Value (HCV) areas
 - Native forest
 - Riparian Vegetation
 - Natural wetland
 - Steep slopes.

1.6: No Irrigation Cultivated Ethically (NICE) and ICS requirements shall be followed by participating farmers.

Compliance: **Mandatory**

Guidance:

- Farmers shall be committed to following the No Irrigation Cultivated Ethically (NICE) Production Standard and ICS requirements in their farms.
- ICS shall provide periodical training to the farmers on the requirements of the NICE Production Standard.
- Training records shall include:
 - Date of the training,
 - Trainer name,
 - Training theme/topic
 - Training description,
 - Trainee delegate with signature.

1.7: ICS shall keep the updated record with respect to NICE Production Standard and record shall be maintained for at least 5 years.**Compliance: Mandatory****Guidance:**

- ICS shall retain the document of procedure at head office for at least 5 years but if the local legal requirement is of more than 5 years then the records shall be maintained for a longer period as per the legal requirement.
- Records shall include:
 - Membership applications for Farmers
 - Contract with farmers
 - A list or database of farmers/sites, including for each member:
 - Name and contact details.
 - Total size of farm
 - Area to be certified,
 - Area under cultivation
 - Total production (Volume)
 - A farm map.
 - Geographical coordinates of farm(s) / sites.
 - The level of risk assigned by the internal inspector.
 - Results from the internal audit report along with corrective action report.
 - Records of total crop volumes produced by the farm and sold as NICE-certified and updated every year.

PRINCIPLE:2. LEGAL COMPLIANCE

2.1: Awareness of and compliance with all local and national laws and regulations.

Compliance: **Mandatory**

Guidance:

- ICS members and farmers should demonstrate awareness and compliance with the applicable legal requirements.
- For small farms, ICS should identify applicable local and national laws and provide training to group members on applicable laws and legal compliance.

2.2: ICS and group member should keep copies of updated national and local legislation, on-site or demonstrate access to the same.

Compliance: **Must**

Guidance:

- The ICS must update the legal requirement documents, it should incorporate the future amendments and documentation of newer regulations coming into action. The appointed employees should be trained.

2.3: The farmer should demonstrate the right to use land and water.

Compliance: **Mandatory**

Guidance:

- Farmers shall maintain documented evidence of the right to use land.
- Evidence of ownership and/or use rights to the land includes land title, legal evidence of ownership, or notarized lease agreement of the land.
- ICS Should also maintain a copy of ownership records of land that is registered under ICS.
- Farmers shall demonstrate the right to use water either from the surface or underground. Wherever necessary, a license shall be obtained to demonstrate the right to use. (Applicable if the water is applied manually)
- In the absence of the ability to demonstrate legal rights, farmers shall confirm that there is no dispute on water rights (applicable if the water is applied manually). Employees are aware and trained.

PRINCIPLE 3. SOCIAL PRACTICES

Agriculture has a significant influence on social responsibilities. Farmers, farm laborers, their families and communities are part of society. This principal intends to eliminate unethical social practices, to promote social wellbeing in society and extend reasonable benefits to farmers.

3.1: Minimum wages and working hours shall be followed as per local and national regulations.

Compliance: Mandatory

Guidance:

- Legal requirements for working hours shall be followed.
- Farmers shall pay at least minimum wages as per local regulations to the farm laborers.
- Normal working hours shall not exceed more than 48 hours per week.
- Overtime is voluntary and paid as per local regulations.
- Overtime shall not exceed more than 12 hours per week.

3.2: Child labour forced and bonded labour should not be employed at any stage of production on the farm.

Compliance: Mandatory

Guidance:

- Farmers shall not engage children on the farm as labour. Minor shall not conduct any hazardous work.
- Children may accompany their parents/ elders to the farm however they shall not be engaged in any hazardous or productive work on the farm.
- Farmers shall not engage in forced, bonded, or involuntary labour.

3.3: Discrimination and harassment are not supported or encouraged.

Compliance: Mandatory

Guidance:

- Farmers shall not discriminate against workers based on religion, caste, creed, colour, gender, or political beliefs.
- Farmers shall pay equal wages and benefits for work of equal value.
- Workers shall not be subjected to punishment, verbal or physical abuse, or any harassment.
- Salary, personal identification, or any documents shall not be retained.

3.4: Farmer ensure healthy and safe workplace for the workers working on the farm.

Compliance: Mandatory

Guidance:

- Farmers shall provide potable water at free of cost.
- Hygiene stations, washing facilities and toilets shall be provided wherever necessary.
- Farmers shall provide personal protective equipment (PPE) to farm workers as per need and situation. PPE shall be given free of cost.
- First aid kits shall be maintained on the farm.
- ICS or farmers shall train farm workers on health and safety requirements.

3.5: Workers have the freedom to form or join unions of their choice.

Compliance: Mandatory

Guidance:

- Farmers shall allow workers to join or form any union and it should not affect their employment status.
- The group/farmer shall respect the right of all workers to establish and/or join a worker organization of their choice.
- The group/farmer shall not in any way block the effective functioning of such organizations or groups.

3.6: Complaint mechanism defined, communicated and implemented.

Compliance: Mandatory

Guidance:

- ICS shall develop a complaint and grievance redressal mechanism.
- ICS shall inform farmers, workers, or any other interested stakeholders regarding the complaint and grievance redressal mechanism.
- Complaint and grievance shall be recorded and resolved timely.

3.7: ICS must provide social training to farmers and workers.

Compliance: Must

Guidance:

- ICS must develop a training module for farmers and workers. Training must cover:
 - Local and National legal requirements related to principles defined in this standard.
 - Social requirements.
 - Health and Safety measures.
- ICS must maintain records of training delivered to farmers and workers.

PRINCIPLE 4. SOIL CONSERVATION AND MANAGEMENT

Soil is a basic essential resource for successful agriculture and is the source of the nutrients that we use to grow crops. Looking at the growing demands of agriculture produce it is essential to monitor and maintain soil health and quality. Good soil management practices enhance the ability of soil to store carbon and provide benefits such as more productivity, promote biodiversity, and are less susceptible to erosion and nutrient loss. Erosion results in the loss of plant nutrients and organic matter, and siltation of reservoirs and riverbeds thereby adversely affecting water availability for irrigation and drinking. Therefore, soil management and conservation practices need to be followed.

4.1: Soil management and conservation plan must be developed.

Compliance: Mandatory

Guidance:

- ICS must develop locally adaptable and suitable soil management and conservation plans.
- Soil management and conservation plan must include crop rotation, conservative tillage, cover crops, inter-cropping, soil erosion prevention & and compaction, soil moisture, and water level in soil.

4.2: Soil management and conservation plan are implemented on-farm.

Compliance: Must

Guidance:

- ICS must implement locally adaptable and suitable soil management and conservation plans on farms.
- Soil management and conservation plan must include crop rotation, conservative tillage, cover crops, inter-cropping, soil erosion prevention & and compaction, soil moisture, and water level in soil.
- Farmers must follow a soil management and conservation plan to maintain and improve soil health, soil fertility, and productivity.

4.3: ICS must provide training on Soil management and conservation.

Compliance: Mandatory

Guidance:

- ICS must provide training to the farmers on soil management and conservation plan.
- Training should be provided in the local language.
- Training records to be kept include:
 - Date of the Training,
 - Trainer Name,

- Training topic/theme
- Training description,
- Trainee delegate with signature.

4.4: Soil quality must be maintained or improved by following good soil management and conservation practices.

Compliance: Must

Guidance:

- Farmers must follow moisture management and follow practices to retain soil moisture in a field like minimal tillage, mulching, cover crop, crop rotation, intercrop.
- After sowing the rainfed crops, intercultural operations like light hoeing are essential in cropping systems, to break the upper crust of the soil and improve aeration and available water in the soil for proper plant growth.
- Soil analysis must be carried out once in 3 years. A soil analysis may include concentrations of available macro-nutrients, pH, soil organic carbon, salinity, micro-nutrients, heavy metals, pesticides etc.
- ICS must facilitate soil analysis for participating farmers.
- Farmers must ensure to adopt practices to improve soil organic matter content.
- The risk of soil erosion and compaction must be assessed and managed. Corrective action is taken where soils have been damaged by erosion, compaction, chemical degradation, contamination, or loss of organic matter.

4.5: The farmer must ensure that soil cover is maintained and improved.

Compliance: Must

Guidance:

- Farmers must maintain vegetation or crop residue to conserve soil moisture, reduce water evaporation, and avoid runoff.
- Overgrazing leads to soil erosion and land degradation hence farmers should avoid overgrazing.
- Native vegetation must be maintained.
- Farmers may also use synthetic mulching to conserve soil moisture and avoid water evaporation.

PRINCIPLE 5. WATER CONSERVATION AND MANAGEMENT

Water is a key input, which assists in developing crop germination and productivity. Plants need water continuously during their life cycle to absorb nutrients from the soil. Aim of “No Irrigation Cultivated Ethically (NICE)” Production Standard is to produce crops on rainwater and without using external sources for the application of water. Water conservation and management practices help farmers in rainfed areas to improve crop yields and reduce production risks and droughts. It is important to provide a sustainable water source for supplementing rainfed agriculture production.

5.1: ICS shall ensure that a rainfed production system is implemented on the farm.

Compliance: Mandatory

Guidance:

ICS and Farmers shall ensure that measures are in place to reinforce water-use efficiency including:

- Timely and appropriate crop establishment according to the native climate.
- Use of suitable system for native climate and high-water use efficiency cultivars.
- Use of natural mulch with crop residues.
- Use of improved cropping systems and agronomical practices, such as conservation tillage.

5.2: Water metrics system shall be implemented. (For Cotton crop Only)

Compliance: Mandatory

Guidance:

- ICS shall ensure that sowing and harvest dates are recorded.
- Rainfall data shall be recorded and maintained.
- Total Rainfall data shall be segregated as per stages of the crop (days).
- Irrigation numbers, quantity, and method of irrigation.

5.3: Water conservation and management practices must be implemented on the farm.

Compliance: Must

Guidance:

- ICS must develop and implement (wherever possible) a locally adaptable water conservation and management plan for farmers.
- Farmers must adopt On-farm water conservation practices such as rainwater harvesting, micro catchments, mulching, and farm ponds for water harvesting and storage.
- Excess runoff water must be, harvested and stored in the water harvesting ponds for use in the cultivated crop as per need.

- Amount of water conserved through management practices should be calculated and recorded.

5.4: Training on water management and conservation for Farmers and workers.

Compliance: Mandatory

Guidance:

- ICS shall provide training to the farmers on water management and conservation plan.
- Training shall be provided in the local language.
- Training record shall be included:
 - Date of the Training,
 - Trainer Name,
 - Training Theme/Topic
 - Training description,
 - Trainee delegate with signature

5.5: External water supply shall only be given in conditions like drought or water stress which can create a potential economic loss.

Compliance: Must

Guidance:

- Farmers shall ensure that external water is given only during drought or water stress conditions to avoid economic loss.
- Good irrigation management practices shall be followed to ensure sustainable use of water.
- Farmers or ICS should maintain records which shall include time, date, land area, the quantity of water used, and water supply methods.
- ICS shall maintain records of rainfall to substantiate claims of drought or less rainfall.
- Water in the agriculture production system shall be used efficiently. Farmers shall ensure that water infrastructure is in good working condition by inspecting nozzles and pumps regularly if any leaks/malfunctions are present.

5.6: Efficient Drainage management plan must be developed and implemented.

Compliance: Must

Guidance:

- ICS must develop a locally adaptable drainage management plan. E.g. village ponds restoration/ recharge, well recharging, groundwater recharging.
- Farmers must ensure that drain channel design is planned to capture excess runoff into water harvesting structures so that water must be used in future and to increase the water table.

- Farmers must ensure that drain design shall be used to maximize water retention in the field and minimize runoff.
- Drains must discharge into riparian areas rather than directly into surface waters.
- Drainage management practices must be recorded in water metrics to ensure water conservation.

5.7: Disposal of hazardous material or waste in and around water shall be prohibited.

Compliance: Mandatory

Guidance:

- Farmers shall not dispose off hazardous material like agrochemicals, nutrient packaging or empty containers, animal manure, oils, lubricants medical and veterinary waste in the water stream, river or other surface or groundwater.
- River, ponds lakes or any water body shall not be used as waste dumps/ waste disposal areas.
- Water bodies shall be protected from pollution by sewage and agricultural waste.
- Farmers shall ensure that applied nutrient does not leach out directly into the water body. Leaching of nutrient and agrochemicals and its over applications shall be minimized.

PRINCIPLE 6. PLANTING MATERIAL AND SEED

Crop status, growth and productivity largely depend on the quality of planting materials/ seed materials used for sowing. Varieties that are locally suitable and resistant to drought, pests and disease help farmers to reduce reliance on external resources such as agrochemicals and irrigation.

6.1: Seed or planting material compliance with, all state and national regulations, shall use.

Compliance: Mandatory

Guidance:

- Selected seed variety and planting material should comply with, all local, state, and national laws and regulations.
- Farmers shall source seeds from authorized/approved vendors and should keep purchase receipts/invoices.
- If ICS is purchasing and distributing GMO/non-GMO seeds, then receipt/invoice and distribution records shall be maintained.

6.2: Locally appropriate, commercially acceptable, and healthy varieties must be selected.

Compliance: Must

Guidance:

- Farmers must select varieties that are geographically suitable and commercially acceptable, drought, disease, and pest-resistant varieties.
- Seeds must not be treated with any harmful chemicals.
- Use of microbes as seed treatments such as rhizobium is allowed and is considered to be a best practice.
- Farmers must use pure quality and healthy seeds.

6.3: Use of Genetically modified seed.

Compliance: Mandatory

Guidance:

- Genetically modified seeds (GMO seeds) shall be allowed based on the legislation applicable in the country of production.
- Purchase receipt/invoice of seed shall be maintained.
- If ICS is purchasing and distributing GMO seeds to farmers, records are to be maintained.

PRINCIPLE 7. INTEGRATED CROP MANAGEMENT SYSTEM

(INTEGRATED MANAGEMENT- THIS PRINCIPLE INCLUDES ORGANIC AND SYNTHETIC FERTILIZERS PRODUCTS AND CROP PROTECTION PRODUCTS)

ICM is a method of farming that balances the requirements of running a profitable business with responsibility and sensitivity to the environment. It includes practices that avoid waste, enhance energy efficiency, and minimize pollution. For many farmers or growers, the adoption of ICM involves some changes to existing practices. However, for the producers it must ensure a continuing living, and for the consumer a continued supply of affordable, quality produce. ICM includes integrated Nutrient management and integrated Pest management.

Fertilizers from both natural and chemical formulations sources are essential to provide required macro and micro-nutrients to increase soil fertility, plant growth and productivity. Crop protection products help to control insects, diseases, weeds, fungi, and other undesirable pests on the crop.

Although fertilizers and crop protection products are beneficial in farming, it also has negative impacts on human health, soil health and environment if not applied judiciously.

Farmers should see fertilizers and crop protection products responsibly to minimize their impacts.

7.1: Local and national legal laws and regulations shall be complied.

Compliance: Mandatory

Guidance:

- Farmers shall demonstrate compliance with local and national legal laws and regulations related to fertilizers and crop protection products (CPPs) and their application.
- Farmers shall follow health and safety requirements while application of fertilizers and CPPs.
- Transportation and storage of agrochemicals shall be safe and all applicable health, environmental, and safety precautions are implemented.
- If there are no regulatory requirements, then guidance on the best available options available shall be in place.

7.2: ICS must develop an Integrated Crop Management Plan (ICM) and implement it on the farm.

Compliance: Must

Guidance:

- ICS must develop locally adaptable integrated nutrient management plan. The nutrient requirement of the crop and soil conditions should be considered while developing the integrated nutrient management plan and implementation on farm.

- The nutritional requirements of the crop to reach the desired yield and quality must be known and translated into locally specific operational targets for crop nutrition.
- ICS must develop locally adaptable Integrated pest management plan which is based on IPM principles (Prevention, Observation, Monitoring, and Intervention.)
- Key pests must be identified, their life cycle understood, and action thresholds established.
- Farmers must adopt On-farm IPM practices such as reducing agrochemical use, and implement ecologically sound, biological controls for target pests or diseases where possible.
- This includes biodiversity-based Integrated Pest Management as part of your crop protection activities.
- Farmers must use pure quality and healthy seeds.

7.3: ICS must provide training on integrated crop management requirements.

Compliance: Must

Guidance:

- ICS must provide periodical training to the farmers on integrated nutrient management plan and integrated pest management plan.
- Trainer must be competent and should have knowledge of Crop Nutrient and Pest management.
- Agrochemicals choice, Source, application rate, application method, storage, making calculations based on soil and crop characteristics, and managing the risk and use of PPE to minimize risks to themselves and the environment Should all be covered in training.
- Training should be provided in the local language.
- Training records to be kept include:
 - Date of the Training,
 - Trainer Name,
 - Training topic/theme
 - Training description,
 - Trainee delegate with signature.

7.4: Choice of agrochemicals, type, quantity, and application method according to crop needs and applied as per professional recommendations to reduce risk of contamination.

Compliance: Must

Guidance:

- Farmer must ensure that organic and inorganic agrochemicals are of high quality and from trustworthy sources.
- Farmers must apply fertilizers as per recommendation given in the soil analysis report.

- Farmers must follow label recommendations of agrochemicals.
- Using technologies such as deflector plates, incorporation/injection of slurry or urea-based fertilisers, spot or hand application, high-risk procedures should be eliminated or improved.
- Do not over apply agrochemicals, to avoid pollution of the environment (soil and water).
- Provide only recommended quantity of agrochemicals.
- Prohibit re-use of agrochemical containers for any purpose other than recycling (i.e. where a proprietary container is refilled professionally by the vendor)
- Prohibit applying banned agrochemicals, banned agrochemicals include products forbidden by local legislation as well as those covered by global bans

7.5: Farmer or worker shall use personal protective equipment (PPE) while handling hazardous materials.

Compliance: Mandatory

Guidance:

- Appropriate personal protective equipment (PPE) supplied to and used by farmer or workers while mixing, handling and application of nutrients and CPP.
- Farmer shall be provided with appropriate PPE.
- A complete suite of protective clothing should consist of the following:
 - Protective outer garment / overalls / hood / hat.
 - Rubber gloves made of materials impermeable to liquids.
 - Dust-proof goggles.
 - Boots.
 - Respiratory devices.

7.6: Farmer must consider weather conditions during application and are recorded.

Compliance: Must

Guidance:

- Farmers must consider weather conditions during application of agrochemicals and irrigation.
- Applications must be avoided during periods of heavy rain, snow, or frozen ground, cracked, waterlogged, or compacted soils, high temperature and wind speed.
- ICS must monitor weather conditions and record it.

7.7: Farmer shall store agrochemical and hazardous material securely.

Compliance: Mandatory

Guidance:

- Farmers shall store agrochemicals and hazardous material safely and securely to minimize risks to humans and the environment.
- Storage areas shall be adequately labelled so that the contents can be identified, and action taken in the event of an emergency.
- Farmers shall follow label instructions on storage.
- Agrochemicals and hazardous product shall be handled and transported safely.
- Agrochemicals and hazardous product shall be stored in safe place outside the living area.
- Fuel shall not store with fertilizer and pesticide to avoid risks and environmental contamination.
- Storage area shall be accessible to authorized persons only.

7.8: Farmer must ensure that application equipment is serviced and calibrated periodically.**Compliance: Must****Guidance:**

- It is important to keep application equipment in good working order and ensure that it is safe to use. After each use, it gets cleaned.
- Farmers must ensure that application equipment is serviced regularly and calibrated. Application Equipment may include but not limited to sprayer pumps, tractors, drip/sprinkler system.
- Records of service and calibration must be maintained.

7.9: Farmer must record the agrochemicals application.**Compliance: Must****Guidance:**

- Farmers should maintain a record of fertilizers and CPP in the farm diary or record book.
- The record should include the name of product, justification of application, date of application, quantity of application, area applied, formulated product name, active ingredient name, active ingredient concentration in formulated product, total amount of formulated product used, and type of sprayer used, method of application, and name of the applicator.

PRINCIPLE 8. WASTE MANAGEMENT PRACTICES

Agrarian waste is squandered because of different rural operations. It incorporates fertilizer and other squander from ranches, and poultry houses, harvest waste; fertilizer runoff from fields; pesticides that enter the water, air, or soils; and salt and residue depleted from fields. Agricultural waste is from confined animal operations and from surface runoff that may be contaminated by chemical fertilizer, pesticides, animal slurry, crop residues or irrigation water.

8.1: Local and national legal laws and regulations shall comply.

Compliance: **Mandatory**

Guidance:

- Farmers shall demonstrate compliance with local and national legal laws and regulations related to hazardous and agricultural waste disposal.
- Farmers shall follow Health and safety requirements while disposing of agricultural waste.
- If there are no regulatory requirements, then guidance on the best available options available shall be in place.

8.2: Farmer must implement waste management plan on the farm.

Compliance: **Must**

Guidance:

- Develop, document, and monitor various waste products in accordance with the waste management plan.
- Waste management plan includes identifying, store, segregate, and dispose of agricultural, non-hazardous, and hazardous wastes.
- Identity of various sources and types of waste materials, as well as their possibility for direct use or re-cycling into various usable products.
- Standard Operating Procedures (SOPs) have been established for the handling of used chemicals and their disposal should be as per the national legislations and regulations.
- Farmers should implement waste management plan on farms.

8.3: Training to farmers and workers must provide on waste management Plan.

Compliance: **Must**

Guidance:

- ICS must provide periodical training to the farmers on waste management plan.
- Minimisation, segregation, storage, and disposal of waste must all be covered in training.

- Training must provide in local language.
- Training record must include:
 - Date of the Training,
 - Trainer Name,
 - Training Topic/theme
 - Training description,
 - Trainee delegate with signature

8.4: On farm hazardous waste should be handled, stored, and disposal of safely.

Compliance: Mandatory

Guidance:

- Hazardous and non-hazardous waste identify on farm and shall be handle, store and dispose of hazardous wastes properly.
- Adequate spill-prevention facilities in place.
- Waste and residual agrochemicals are properly stored, triple-rinsed, with the rinsed added to the spray tank, or disposed of safely.
- If waste buried on-farm (including domestic waste) shall be covered with a layer of soil. the depth of the soil layer needed will depend on local conditions and regulations, but would normally be at least 50 cm
- Measures shall be in place that agrochemicals and any plastic waste and other litter shall not be left in fields and using streams and rivers as a waste dump is prohibited.
- No on-site waste burning.
- Agrochemical containers shall never be used to store food, water, or feed.

8.5: Farmer must maintain the record of waste Management.

Compliance: Must

Guidance:

- Farmers must maintain a record of following:
 - Estimations of major waste streams and routes of disposal.
 - Evidence of on-farm methods of waste disposal being fit for purpose.
 - List of landfills or on farm waste disposal area.
 - Training record.

PRINCIPLE 9. ENVIRONMENTAL PRACTICES

Some of the environmental issues that are related to agriculture are climate change, deforestation, dead zones, water scarcity due to excess flooding of the field by water, pollutions, soil degradation, loss of habitats and waste disposal. Intensive agricultural activities adversely affect biodiversity on and around the farm. Agricultural production is generally accompanied by wastes from the application of intensive farming methods and chemicals used in cultivation, remarkably affecting environments.

9.1: Biodiversity action plan shall prepare, and on-farm biodiversity is protected and improved.

Compliance: Mandatory

Guidance:

- ICS shall prepare a locally suitable and adoptable Biodiversity action plan.
- Farmers shall implement a biodiversity action plan on their farms and prevent the destruction of important biodiversity habitat in and around the farm.
- Farmers shall demonstrate awareness on, identified biodiversity issues in and around farms.
- Farmers shall follow good agricultural practices that support biodiversity and ecosystem.
- ICS should provide training to farmers and workers on Biodiversity management.

9.2: Poaching, collecting, and hunting of rare, threatened, or endangered species shall prohibit.

Compliance: Mandatory

Guidance:

- Farmers shall prohibit poaching, collecting, and hunting of rare, threatened, and endangered species.
- Farmers shall not destroy important habitats, on-farm, and off-farm, because of farming activities.

9.3: Land expansion shall not carry out in the protected and high conservation value areas.

Compliance: Mandatory

Guidance:

- Farmers shall ensure that the expansion of land is responsible, and no expansion is carried out in the native forest, riparian zones, natural wetlands, and grasslands.

- ICS shall identify and document protected and high conservation value areas in the biodiversity action plan

9.4: Agricultural waste must manage responsibly, and pollution is minimized.

Compliance: **Must**

Guidance:

- Farmers must ensure that all on-farm waste disposal is carried out responsibly and away from living area and water resources and does not contaminate any natural sources in and off-farm.
- Farmers must not use any agrochemical containers to store food, feed, and water.
- Hazardous agricultural waste is stored securely and dispose of responsibly.
- Farmers must not dispose of hazardous waste in protected areas, high conservation value areas, living areas and in the water resources.
- Farmers must not burn crop residues as a method of disposal. Crop residues should be used as natural mulching and farmyard manure.
- Farmers must prevent spillage of agrochemicals and other hazardous waste.

9.5: ICS must provide training to farmers and workers on biodiversity action plan.

Compliance: **Must**

Guidance:

- ICS must provide periodical training to the farmers on biodiversity action plan.
- Trainer should be competent and should have knowledge of biodiversity and environmental management practices.
- Land Expansion, Hunting, and Agricultural waste disposal should all be covered in training.
- Training must provide in local language.
- Training record to be kept include:
 - Date of the Training,
 - Trainer Name,
 - Training topic/theme
 - Training description,
 - Trainee delegate with signature.

9.6: ICS must ensure that farmers adopt farming practices that minimize greenhouse gas (GHG) emissions.

Compliance: **Must**

Guidance:

- Farmers must follow agricultural practices that minimize GHG emissions such as conservative or reduced tillage, use of crop residue for mulching or farmyard manure, judicious use of agrochemicals, implementation of IPM & INM, no expansion in protected or high-value conservation areas etc.
- Farmers must encourage the use of organic fertilizers and organic /natural pesticides.
- Farmers must maintain and enhance native vegetation.
- Farmers must maintain agriculture equipment and machinery in good condition to ensure optimum efficiency.

PRINCIPLE 10. ENERGY MANAGEMENT:

Across the globe, farmers are considering ways to save money through energy efficiency and renewable energy practices. Higher energy-related input costs will generally raise the overall production cost of agricultural products, therefore reducing farm income. By better understanding farm energy consumption and implementing best practices to manage energy on the farm.

10.1: Energy management plan shall be in place.

Compliance: Mandatory

Guidance:

- An energy management plan shall be in place, designed to reduce energy consumption and improve energy efficiency.
- ICS adopts strategies that reduce their consumption of non-renewable energy sources and increase their usage of renewable energy sources such as solar and wind, as well as local, recyclable materials

10.2: Farmer must ensure that energy management practices are implemented on the farm.

Compliance: Must

Guidance:

- Farmers must check diesel, petrol and electricity usage for sprayer, tractor, irrigation equipment.
- To increase energy efficiency, look for ways to enhance machinery schedules, and flow rates.
- Machinery calibration (sprayer, tractor, irrigation equipment's) must reported once in a year.
- Records or Estimation of the quantity of energy consumed or produced on farm are to be maintained.
- An energy management plan shall be in place, designed to reduce energy consumption and improve energy efficiency.
- ICS adopts strategies that reduce their consumption of non-renewable energy sources and increase their usage of renewable energy sources such as solar and wind, as well as local, recyclable materials.

10.3: ICS must provide training to farmers and workers on energy management.

Compliance: Must

Guidance:

- ICS must provide periodical training to the farmers on energy management.
- Training must be provided in the local language.
- Formats and records to be maintained in the local language as well as in English.
- Training records to be kept include:
 - Date of the Training,
 - Trainer Name,
 - Training topic/theme
 - Training description,
 - Trainee attendance with signature

ANNEX 1:

WHO classes 1a, 1b and II:

https://www.who.int/ipcs/assessment/public_health/pesticides/en/

Rotterdam Convention:

<http://www.pic.int/TheConvention/Chemicals/AnnexIIIChemicals/tabid/1132/language/en-US/Default.aspx>

Stockholm Convention:

<http://chm.pops.int/Convention/ThePOPs/The12InitialPOPs/tabid/296/Default.aspx>

<http://chm.pops.int/Convention/ThePOPs/TheNewPOPs/tabid/2511/Default.aspx>

<http://chm.pops.int/Convention/ThePOPs/ListingofPOPs/tabid/2509/Default.aspx>