

AGRO-ALLIED SMALL SCALE UNIT: ENVIRONMENTAL CHECKLIST

Name of Farmer Producer Company (FPC):				
Type of Common Facility Centre (facilities to be provided)				
Site location:	Village:	Block:		
	District	State:		
GPS Coordinates:	Latitude:	Longitude:		
Postal Address:				
Type of Industry as per PCBA Guideline	White	Green	Orange	Red

A. Geographical Features, Site Information and generic description of Environment of the Sub-Project Location. Write Tick mark (✓) in case of yes/No

Sl. No.	Type of Ecosystem/Land Status	Yes	No	Remarks
1.	Type of Terrain (<i>Plain/Hilly/Mountainous, etc.</i>)			
2.	Class of land (<i>Agriculture/Non-agriculture/Residential/Forest/ VGR /Jalatak/ any other water bodies/Barren land/open area, etc.</i>)			
3.	Total Area of land under the Sub-project			
4.	Land Document and other relevant NOC for setting up the unit <i>(Lease agreement copy, document from Circle office mentioning non-agricultural land, Trade License from Gaon Panchayat, or any other related document).</i>			
				<i>Attach copies of document(s)</i>
5.	Located within or near to Forest/ Environmentally sensitive or critical habitats areas within 500m of the sub-project location			
				<i>Specify Type of vegetation and Legal status of the Forest (Reserved, National Park, Sanctuary, unclassified, etc.)</i>

6.	Surroundings of the sub-project location (North, South, East, West)	
7.	Connectivity to the sub-project location <i>National Highway/State Highway/Any other Major Road/ Approach Road /Nearest Railway Station/Waterway, etc.</i>	
8.	Numbers of villages in the periphery of the sub-project location	
		<i>Mention the name of the villages</i>
**Note: Attach a Site Specific layout or sketch Photographs of the site (all directions/sides)		

B. Specific description of the Sub-project Location Environment

(Note: Question must be answered after discussion with the local community people)

Sl. No.	Parameter/Component	Yes	No	Explanation
1.	Are there any areas with landslide or erosion problems along or adjacent to the sub-project location? <i>(If yes, indicate the location)</i>			
2.	Are there any river, wetland/lakes/swamps/nallas/streams/ other water bodies beside or near to the sub-project location? <i>(If yes, indicate the location)</i>			
3.	Is the sub-project location or adjacent area prone to flooding? <i>(If yes, mention flood level and frequency)</i>			
4.	Are there problems of water stagnation or logging and other drainage issues on or near to the sub-project location?			
5.	In case of existing structure, if any, Is there any river/nalla/stream/any other water body connected to the drainage of the structure?			

6.	Are there any faunal habitat areas, faunal breeding ground, bird migration area or other similar areas within 100m of the sub-project?			
				<i>Name the species if there any evidence of floral and faunal species that are classified as Endangered species</i>
7.	Are there any utility structures within the sub-project location? <i>(If yes, mention the location)</i>			
8.	Are there any sensitive structures within or near to the sub-project? <i>(NoC to be obtained from adjoining sensitive structures like Hospital, PHC, School, Community hall, Religious structures, community hall, residing household, etc. if any)</i>			
				<i>If NoC already obtained, attach the copy of the document.</i>

C. Structure Details

For Existing Structure		Explanation
1.	Mention no. of units and specific uses of the utility of the existing structure/machineries), if any	
		<i>(Mention dimension of the unit/power of machineries in use) Also mention whether functional or non-functional or need improvement)</i>
3.	Source of water in case of existing structure	
		<i>Requirement of water/day</i>
4.	Source of Electricity in case of existing structure	
		<i>Requirement of electricity/day</i>
5.	Existing Facility(s) for Waste management <i>(Mention types of waste and quantity generated/day)</i>	
		<i>Mention quantity of dry or wet waste generate per day</i>

6.	Existing Drainage provision	
For New Structure		
1.	Infrastructure facilities (Mention type of facilities to be provided)	
		<i>(If yes, mention dimension of the unit)</i>
2.	If the sub-project requires earth filling for construction work, Mention the source of the earth excavated for the purpose?	
3.	Source of water <i>(Type of facilities to be made available)</i>	
		<i>Noc to be obtained for water sources in case of higher requirement of water uses, if source falls under legal jurisdiction. Attach copy of document.</i>
4.	Source of Electricity <i>(Mention type of facilities to be provided along with power capacity) (In case of Back-up power facility eg. Genset, etc, mention the power and type of fuel, provision for its safe keeping)</i>	
		<i>(For installing new Transformer for the unit, Certificate from APDCL is mandatory, document copy to be attached) (For solar power, mention the power capacity)</i>
5.	Facilities for safe storage of raw material and finished products <i>(Mention the facility(s) to be available)</i>	
6.	Waste Management <i>(Mention type of facility(s) to be provided)</i>	
		<i>(Mention type of solid/liquid waste)</i>
7.	Drainage provision <i>(If required, Mention type of system to be provided)</i>	

D. Operational Details

Sl. No.	Particulars	Explanation
1.	Total Amount of Investment of the Sub-project	
2.	Type of Raw material to be used and their source <i>(Mention requirement of quantity/day)</i>	
3.	What are the Machineries to be installed or used? <i>(Mention the type of machinery(s) to be used, capacity or power of the machinery(s))</i>	
4.	Requirement of water per day <i>(Mention specific purpose of water uses, whether domestic for office purpose/ or industrial uses eg. Cleaning/ washing/ boiling/etc.)</i>	
5.	Requirement of Electricity per day <i>(Mention specific purpose of water uses, whether heating/mixing/boiling/ grinding/extraction/drying/packaging, etc.)</i>	
6.	Waste generation <i>(Mention quantity of solid/liquid waste generated per day)</i>	
	<i>(In case of reuse of waste(s) such as animal feed for poultry, dairy, etc, mention the specific quantity generated/day)</i>	
7.	Is there any provision to control dust/ reduce heat/ noise, etc <i>(if generated, mention the measure(s) to be undertaken to minimize effect, if any)</i>	
		<i>(Mention any machinery(s) to be installed which generates excessive heat, dust or noise, if any)</i>
8.	Is there provision for safe-water effluent	

	<p>discharge? <i>(if yes, mention the discharge outlet or safe effluent management system, if any)</i></p>	
9.	<p>Is there any use of additives/preservatives/ chemicals for cleaning/ processing/storage, etc in the unit? <i>(If any, Mention the name of the additives/preservatives/chemicals, etc. and purpose of uses)</i></p>	
10.	<p>Is there any use of packaging material? <i>(If yes, mention the type of packaging material to be used)</i></p>	
11.	<p>What are the types of transporting vehicles to be used for transportation of unit's material or products? <i>(Is the unit having space for parking facility?)</i></p>	
12.	<p>Whether sub-project location has sufficient space for green belt?</p>	
13.	<p>Number of workers to be employed in the unit <i>(Mention no. of skilled and unskilled workers)</i></p>	
14.	<p>What are the provision and precautionary measures to be taken for Occupational health and safety of workers? <i>(If yes, mention the facilities to be provided and measures to be taken for safety of workers)</i></p>	

E. Annexures

E-1 List of trees indicating location (if any), within the Sub-project location

Side	Local name of the trees	Dbh (cm)	Particulars

Note: Trees which are less than 30cm dbh may not be considered in tree enumeration

E-2 List of utility Structure indicating location (If any)

Side	Type of Utility	Particulars

E-3 List of Sensitive structures indicating location (If any)

Sl. no.	Type of Structure	Side	Particulars

Please add extra sheet for the Annexures E-1, E-2 & E-3

Names & Phone numbers of the BoD Members/other members of FPC present:

Sl. no.	Names	Designation	Phone No.	Signature	Seal (If available)
1.					
2.					
3.					
4.					
5.					
6.					

Date:

Signature of Site Inspector(s)

SUB-COMPONENT: B.2.3: COMMON SERVICE CENTRE DEVELOPMENT (INCLUDING FLAKE ICE MANUFACTURING UNIT & COLD STORAGE)

ENVIRONMENTAL IMPACT AND MITIGATION MEASURE

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
A. Pre-Construction Stage					
1	Approvals/NOC Licences and Permits/ Insurance.	As per legal prevailing legal requirements	<ul style="list-style-type: none"> All necessary approvals, permits and licences required by the state and local legislation shall be obtained prior to commencing of the construction activity. All approvals, permits and licences shall be maintained and up dated before expiry, and complied with during the construction period. Should there be any changes to the project which would require additional permits or licences, these shall be obtained The contractor shall maintain Pollution Under Control (PUC's) Certificates for the construction vehicles and machineries used for this project. Contractors shall insure all workers covered under the group insurance or any other suitable insurance schemes against all forms of injuries sustained at the workplace. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
2	Land Requirement	<ul style="list-style-type: none"> Loss of land Socio economic Impacts 	<ul style="list-style-type: none"> No additional land will be required, as the construction will be carried out at in the government land. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
3	Clearing of trees/Removal of vegetation	<ul style="list-style-type: none"> Loss of trees and vegetation Soil erosion and 	<ul style="list-style-type: none"> All reasonable measures shall be undertaken to ensure that no native fauna is harmed or placed at risk during the course of the clearing activities 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom &

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
		surface runoff	<ul style="list-style-type: none"> Felling of trees is not envisaged at any stage of the project. However under unavoidable conditions if any of the trees are required to be cut/felled, then prior permission as per existing procedure from Forest, ensuring appropriate compensation including compensatory plantation as stipulated by the forest department shall be undertaken. Avoid earthworks/breaking of land during monsoon season. 		Textiles
4	Water Requirement	<ul style="list-style-type: none"> Exploitation of the water bodies. (both ground water and surface water) 	<ul style="list-style-type: none"> The required water will be sourced from the PWD/ PHE. In absence of the water supply, permission is required from the Central Ground Water Authority (CGWA) to abstract ground water. Permission to abstract ground water through any energized means i.e. for digging / installation of a bore well water connection in the site for drinking water, in a notified / non notified area for household/ industrial / infrastructure projects as per guidelines dated 15/11/2012 under Environmental Protection Act (EPA) (1986). 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
5	Drainage management	<ul style="list-style-type: none"> Drainage congestion due to garbage/waste dumping Water logging. Vector proliferation 	<ul style="list-style-type: none"> As per the topography of the project site, appropriate sediment control measures should be designed and implemented prior to commencement of construction. Design adequate drainage passage by following natural path Fill ditches/water logging areas in the buliding premises. Discharge drainage flow with proper downstream protection. Silt Trap shall be provided to prevent sediment runoff from the construction zone from entering and adversely affecting the natural drainages or areas of native vegetation downstream from the construction zone 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
B. Construction Phase					
1	Construction material requirement	Change in topography, land clearing etc.,	<ul style="list-style-type: none"> It is advised to procure construction materials from the authorised vendor. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
2	Slope stability	Landslide or gully erosion on slopes that may threaten infrastructure.	<ul style="list-style-type: none"> keeping in mind the fragile natural environment and site specific geological conditions Avoid or maintain adequate distance from erosion prone areas Adopt right angle of cut on slopes Stabilize slopes by measures Measures taken to avoid undercutting of hill toes that may cause slides Do not exert excess load on slopes by disposing spoil 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
3	Erosion and sediment	Loss of soil, water pollution	<ul style="list-style-type: none"> Temporary erosion and sediment controls like having vegetation, surface covering etc., shall be installed prior to the commencement of any works with the potential to cause soil erosion, including stockpiling of construction materials Wherever possible during the course of the works, exposed soil areas shall be progressively stabilized or protected by an appropriate method to minimize erosion potential. 4 cubic feet of Topsoil in the construction area shall be stripped and stockpiled later for re-spreading on all exposed areas when final shaping has been completed. Fill material shall not be placed around or pushed up against the base of the trees and shrubs that needs to be retained within the construction site. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
			<ul style="list-style-type: none"> Ground filling shall be sufficiently compacted to minimize erosion potential. All exposed soil areas shall be stabilized and re-vegetated as soon as possible on completion of works to prevent potential erosion. 		
4	Spoil Management	<ul style="list-style-type: none"> Drainage blockage causing localized ponding and/or slush/muddy runoff. Spoil tipped over slope may cause slide 	<ul style="list-style-type: none"> Minimize spoil disposal by balancing cut and fill wherever possible Manage spoil to reclaim land with proper landscaping and vegetation Do not dispose spoil on drainage path 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
	Water Pollution	<ul style="list-style-type: none"> Impact on existing water resources Contamination of ground water and other water bodies. Impact on drinking water sources. 	<ul style="list-style-type: none"> Domestic effluent/Sewage shall be discharged into soak pits. Total prohibition on direct discharge of sewage/sullage/solid waste into drains, open spaces, water bodies to ensure downstream settlement are not affected at any cost. Assess capacity and structural integrity of existing septic tanks. Take appropriate measures for augmentation of septic as per additional sewage generation. Awareness session on handling and storage of materials and waste management to be conducted for the construction workers. Water quality monitoring should be performed for the parameters including pH, BOD, COD, DO coliform count, total suspended solids, total dissolved solids, Iron, etc. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
5	Transportation and storage of construction materials	<ul style="list-style-type: none"> Nuisance to the general public Fugitive emissions 	<ul style="list-style-type: none"> The vehicles carrying the materials should be covered and secured to prevent loss or re-suspension of materials during travel. Construction materials should be stored in covered areas 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
			<p>to ensure protection of surrounding areas from dust and emissions</p> <ul style="list-style-type: none"> • Diesel and other lubricant oil shall be stored in a covered area provided with hard surface / paved surface to prevent soil pollution. • Any transportation of materials on local roads shall be done during day time. • All vehicle movements or other construction activities shall be restricted to the delineated construction zone, the existing road network or previously disturbed areas. • Construction vehicles, personnel and machinery shall not enter fenced off areas or areas beyond the delineated construction zone • Appropriate signage should be given to the designated areas (storage/ restriction of entries/ toilets etc.,) in the construction camp 		
6	Air and noise pollution and fugitive emissions	<ul style="list-style-type: none"> • Dust nuisance from construction works. • Dust and noise generated by vehicles passing. • Loud noise during construction. • Gaseous Emissions. 	<ul style="list-style-type: none"> • Labourers' use of masks and safety gears • Water needs to be sprinkled on work areas • Vehicles transporting construction materials to site must be covered to prevent dust pollution • Cover fine grain construction materials with tarpaulin or sheets. • Cover construction debris and waste prior to disposal. • Newly exposed surface areas shall be mulched and replanted as soon as possible in order to reduce the potential for erosion and suppress dust • All vehicles, construction machineries and equipment should possess Pollution Under Control Certificates (PUC's). • With respect to NAAQS, air quality monitoring should be 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
			<p>carried out for the key parameters: Sulphur Dioxide(SO₂) Oxides of Nitrogen (NO_x) Carbon Monoxide (CO) Particulate matter (PM₁₀& PM_{2.5}).</p> <ul style="list-style-type: none"> Noise generation should be monitored with respect to Ambient Noise Quality standards. 		
7	Hunting and Poaching activities by construction workers	Threat to wild animals/ fauna	<ul style="list-style-type: none"> Construction workers should not be involved in any hunting, poaching or fishing activities and should not disturb any natural resources, plants and animals (Including avifauna). 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
8	Waste management and minimization	Impacts on land and water	<ul style="list-style-type: none"> Recycled materials shall be used to the extent possible. Any construction waste generated from the construction site shall be contained within the boundary of the site and removed at regular intervals to an appropriate waste disposal or recycling facility. The Municipal Solid Waste (MSW) generated in the construction and labour camp shall be separated as organic and inorganic wastes. The worksite shall be left in a tidy and rubbish free state upon completion of the works There should be no burning of waste. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
9	Occupational Health and Safety	<ul style="list-style-type: none"> Lack of safety tools Lack of safe construction practices. Accidents occurring on site Site and task specific hazard 	<ul style="list-style-type: none"> Provide safety gears to workers working in hazardous areas and provide training in the use of these safety gears and compulsory use of PPE's as per as per EHS (IFC, World Bank Group) [Refer Sl.no. 32]. Keep first aid box ready at work areas and camps Provide adequate space with ventilation, clean toilets/ bio toilets (separate for Ladies and Gents), solid waste 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
			management, light. <ul style="list-style-type: none"> • Provide mosquito nets at labour camps • Separate covered / walled toilet rooms (including bathing platforms) shall be provided for male and female labours. • Keep camp and work area clean and without water logging • Fire fighting equipment like fire extinguishers will be provided in the camp as per fire safety standards. • Displays prominently telephone/contact number of nearest ambulance service, health units. • Provision of safe drinking water with respect to IS 10500:2012. 		
10	Use of wood as construction materials	Felling of trees	<ul style="list-style-type: none"> • Minimize use of wood for construction • Use local materials as much as possible 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
11	Cooking and heating with firewood by construction workers.	Felling of trees	<ul style="list-style-type: none"> • Contractor shall supply kerosene or LPG at camps and restrict cooking and heating using firewood. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
12	Influx of migrant Workers	<ul style="list-style-type: none"> • Health and safety risks • Chances of spread of sexually transmittable diseases like AIDS 	<ul style="list-style-type: none"> • Local labourer's to be given preference for job opportunities and each contractor should be bound by this commitment • Ensure labour-related regulations are met • In case of hiring labour from neighbouring villages or other states, ensure that their working conditions as well as camps meet local regulations. 	Line Department/ DLCC/Contractor.	Agriculture, Fishery, Piggery and Handloom & Textiles
C.	Post Construction/ Operation phase of CSC				

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
1	Grading and Sorting of agricultural products.	<ul style="list-style-type: none"> • Generation of wastes 	<ul style="list-style-type: none"> • Separation of biodegradable and non-biodegradable wastes and options for recover, reuse and recycle shall be explored. • Wastes like, leaves, roots and other biodegradable wastes can be used as feed cattle. • The waste shall be disposed in the designated location as identified by the local panchayat / municipalities. 	Line Department/ DLCC/Contractor.	Agriculture
2	Cleaning of products	<ul style="list-style-type: none"> • Exploitation of water resources. • Generation of liquid waste. 	<ul style="list-style-type: none"> • Reusing the water used for various purposes in the CSC to the possible extent. • Rain water harvesting units should be installed in suitable locations around the CSC vicinity. • Safe disposal of waste water through adequate drainage to designated location as identified by the local panchayat / municipalities. 	Line Department/ DLCC/Contractor.	Agriculture
3	Threshing/ Winnowing	<ul style="list-style-type: none"> • Generation of Dust. • Health hazard to the farmers. 	<ul style="list-style-type: none"> • Threshing and winnowing activities should be carried out in house, provided with roof turbine air ventilators. • Use of PPE's as per as per EHS (IFC, World Bank Group) [Refer Sl.no. 32], by the farmersinvolved in these activities. 	Line Department/ DLCC/Contractor.	Agriculture
4	Storage of vaccines, Feeds, Semen.	<ul style="list-style-type: none"> • Contamination and spoilage of the stored materials. 	<ul style="list-style-type: none"> • Separate storage facilities should be designed at the planning stage. • Vaccines and semen should be stored in temperature controlled unit like refrigerator. 	Line Department/ DLCC/Contractor.	Piggery
5	Swine slaughter	<ul style="list-style-type: none"> • Cruelty to animals 	<ul style="list-style-type: none"> • Maintenance of the slaughter house and Slaughter of swine as per the provisions of <i>Prevention of Cruelty to Animals (Slaughter House) Rules, 2001</i>. 	Contractor/Line Department/DLCC	Piggery
6	Storage of feeds, chemicals, pesticides, fertilizers etc.	<ul style="list-style-type: none"> • Contamination and spoilage of the stored materials 	<ul style="list-style-type: none"> • Separate storage facilities should be designed at the planning stage. • Proper training should be provided to the farmers for 	Line Department/ DLCC/Contractor.	Fishery

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
			storing and handling of the feeds, chemicals, pesticides, fertilizers etc.		
7	Use of machineries	<ul style="list-style-type: none"> • Generation of noise • Occupational health hazard • Mishandling and health hazard to the farmers operating the CSC. 	<ul style="list-style-type: none"> • The machineries should be operated in house. • Separate in-house area should be provided for installation of the machines at the planning phase. • Proper training should be provided to the farmers for the use and handling of machineries and equipment. • Use of PPE's as per as per EHS (IFC, World Bank Group) [Refer Sl.no. 32], by the farmersinvolved in these activities. 	Line Department/ DLCC/Contractor.	Agriculture, Handloom & Textiles
8	Packaging of products	<ul style="list-style-type: none"> • Use of non-biodegradable packing materials. 	<ul style="list-style-type: none"> • Use of environmental friendly packing materials. 	Line Department/ DLCC/Contractor.	Agriculture, Handloom & Textiles
9	Increased in vehicles use for transportation of goods and products.	<ul style="list-style-type: none"> • Generation of noise. • Increased emission of GHG's to the ambient air. • Increased risk of accidents. 	<ul style="list-style-type: none"> • Setting the route and timing of goods carrying vehicles so as to avoid residential areas or other sensitive human receptors (e.g. schools, hospitals). • Vehicles used for any transportation purposes should be of BS-IV emission standards. • Accessibility and road system conditions must be assessed during feasibility study, selecting the best routes to reduce impact and risk of accidents. 	Line Department/ DLCC/Contractor.	Agriculture, Handloom & Textiles, Piggery, Fishery
10	Use of Power	Over consumption of power used in various operations of the CSC.	<ul style="list-style-type: none"> • Use of Energy Efficient low loss – electrical ballast. • Solar lighting is considered partly for external lighting. • Use of energy efficient devices such as CFL and T5 bulbs instead of incandescent bulb. 	Line Department/ DLCC/Contractor.	Agriculture, Handloom & Textiles, Piggery, Fishery
11	Use of water	Exploitation of ground water resources.	<ul style="list-style-type: none"> • Reusing the water used for various purposes in the CSC to the possible extent. 	Line Department/ DLCC/Contractor.	
	Use of Lavatory (Toilets)	<ul style="list-style-type: none"> • Contamination of excrement with the 	<ul style="list-style-type: none"> • Maintenance of the lavatory septic tank and should be cleaned after a certain interval of time according to its 	Line Department/ DLCC/Contractor.	Agriculture, Handloom & Textiles,

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
		local water bodies and soil. • Generation of odour.	capacity and disposal of the waste in recognized area as referred by the Gram Panchayat or Municipalities. • Proper cleaning and maintenance of the lavatory.		Piggery, Fishery
12	Waste disposal	• Contamination of soil from toxic or hazardous waste materials • Decrease in water quality from sudden releases or gradual seepage of leachate into nearby water courses • Generation of foul and odour.	• The waste generated should be stored in a designated place having impervious layer to prevent leachate. • Separation of biodegradable and non-biodegradable wastes and options for recover, reuse and recycle shall be explored. • The waste shall be disposed in the designated location as identified by the local panchayat / municipalities.	Line Department/ DLCC/Contractor.	Agriculture, Handloom & Textiles, Piggery, Fishery
13	Handling of the stored items and maintenance of the CSC.	Occupational health hazards.	• Use of Personal Protective Equipment, as per EHS (IFC, World Bank Group): <ul style="list-style-type: none"> • Safety Glasses with side-shields, • Plastic Helmets with top and side impact protection. • Hearing protectors (ear plugs or ear muffs), • Safety shoes and boots for protection against moving & falling objects, liquids and chemicals, • Gloves made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc. • Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapours and gases). Single or multi-gas personal monitors, if available, • Portable or supplied air (fixed lines). On-site rescue equipment, • Insulating clothing, body suits, aprons etc. of 	Line Department/ DLCC/Contractor.	Agriculture, Handloom & Textiles, Piggery, Fishery

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
			<p>appropriate materials.</p> <ul style="list-style-type: none"> First aid kits, flashlights, fire extinguishers and other fire-fighting equipment should be provided both inside and outside the CSC. Establishment of Do's and Don'ts chart in local language. Training should be given to the employees handling CSC operations. Provision of quarterly health check-up. 		
D. Post Construction/ Operation phase of Flake ice manufacturing unit					
1	Installation of Flake ice manufacturing unit for Fishery.	Exploitation of ground water resources.	<ul style="list-style-type: none"> Reuse of the water to the possible extent. 	Line Department/ DLCC/Contractor.	Fishery
		Emission of GHGs.	<ul style="list-style-type: none"> Proper monitoring of the ambient air quality. Use of low carbon and other modern low GHG emitting technologies. Limitation in operation period to the possible extent. 	Line Department/ DLCC/Contractor.	Fishery
		High energy consumption,	<ul style="list-style-type: none"> Use of Energy Efficient low loss – electrical ballast. Solar lighting is considered partly for external lighting. Use of energy efficient devices such as CFL and T5 bulbs instead of incandescent bulb. 	Line Department/ DLCC/Contractor.	Fishery
		Generation of Wastes.	<ul style="list-style-type: none"> The waste shall be disposed in the designated location as identified by the local panchayat / municipalities. 	Line Department/ DLCC/Contractor.	Fishery
		Occupational health hazards	<ul style="list-style-type: none"> Proper training should be provided to the operating staffs. Use of PPE's as per EHS (<i>IFC, World Bank Group</i>). [Refer SI No. 32] Cleaning and washing should be carried out regularly. 	Line Department/ DLCC/Contractor.	Fishery
E. Post Construction/ Operation phase of Cold Storage& BMC					

Sl. No	Project Activity	Potential Impact	Mitigation Measures	Responsible for Implementation	Applicable sectors
1	Use of Power	Over consumption of power used in operations of the BMC.	<ul style="list-style-type: none"> Installation of renewable energy sources wherever possible, like solar energy etc. Use of energy efficient electrical appliances. 	Line Department/ DLCC/Contractor.	Dairy
	Use of water	Exploitation of ground water resources.	<ul style="list-style-type: none"> Reusing the water used to the possible extent. 	Line Department/ DLCC/Contractor.	Dairy
	Disposal of wastes	Leachate, Ground and surface water contamination, degradation of soil quality and generation of odour.	<ul style="list-style-type: none"> Installation of small scale effluent treatment plant. Proper disposal (both solid and liquid) and identification of disposal sites. 	Line Department/ DLCC/Contractor.	Dairy
	Emission of GHGs	Degradation of ambient air quality	<ul style="list-style-type: none"> Proper monitoring of the ambient air quality. Use of low carbon and other modern low GHG emitting technologies. Limitation in operation period to the possible extent. 	Line Department/ DLCC/Contractor.	Dairy
	Operation of the Cold storage	Occupational health hazards	<ul style="list-style-type: none"> Proper training should be provided to the famers. Use of PPE's like Apron, Gloves, Goggles, Masks, Boots. 	Line Department/ DLCC/Contractor.	Dairy

Environmental Clauses to be included in the Bid document (under Technical Specification) for Construction/ up gradation of Community Service Centres (CSC)**1. Protection of Environment****1.1 General**

1.1.1 The Contractor shall be responsible for implementation of environmental provisions outlined in the Environmental Management Plan (refer **Annexure – 11b**), in addition to adhering to all environmental provisions in the applicable specifications for the works will be adhered to as part of good engineering practices.

1.1.2 All works undertaken towards protection of environmental resources as part of the EMP and as part of good engineering practices while adhering to relevant specifications will be deemed to be incidental to works being carried out and no separate payment will be made unless otherwise specified explicitly. The costs towards environmental management as per EMP unless otherwise provided as a separate head, will be deemed to be part of the BoQ of the project. The scope of works of the Contractor towards the implementation of the environmental provisions shall be as follows.

- a. Abide by all existing environmental regulations and requirements of the Government of India and State Government of Assam, during implementation,
- b. Compliance with all mitigation measures and monitoring requirements set out in the EMP
- c. Submission of a method statement detailing how the EMP will be complied with. This shall include methods and schedule of monitoring.
- d. Monitoring of project environmental performance and periodic submission of monitoring reports
- e. Compliance with all measures required for construction activities in sensitive areas (if any), including protected areas, in line with the regulatory requirements adopted by MoEF&CC, Gol.
- f. Compliance of all safety rules at work, and provision of adequate health and safety measures such as water, food, sanitation, personal protective equipment, workers insurance, and medical facilities.

1.2 Construction Materials

1.2.1 The Contractor should procure construction materials from the licensed/ authorized agents/ dealers. Procurement of materials from the unauthorized sources shall be considered as illegal and appropriate measures shall be taken.

1.2.2 Quarrying, if required in the project will be only from approved quarries and no new quarries will be opened for the purpose of the project. Any deviation from the provisions will be immediately notified and approval of the Engineer is to be sought

1.2.2. The Contractor shall maintain all borrow sites, stockpiles, and spoil disposal areas so as to assure the stability and safety of the works and that any adjacent feature is not endangered, and to assure free and efficient natural and artificial drainage, and to prevent erosion. Stockpiling of materials (topsoil, fill material, gravel and other construction materials) shall not be allowed during rainy season unless covered by a suitable material. Storage on private property will be allowed if written permission is obtained from the owner or

authorized lessee

- 1.2.3 Spoils shall be disposed of at approved disposal sites prepared, filled, and restored in accordance with the related specification requirements

1.3 Protection of Environmental Resources

- 1.3.1 The Contractor shall ensure that construction activities do not result in any contamination of land or water by polluting substances.
- 1.3.2 Unless otherwise provided in the specifications, the Contractor shall ensure that no trees or shrubs or waterside vegetation are felled or harmed except those required to be cleared for execution of the works. The Contractor shall protect trees and vegetation from damage to the satisfaction of the Engineer (Line Department).
- 1.3.3 The Contractor shall not use or permit the use of wood as a fuel for the execution of any part of the works and to the extent practicable, shall ensure that fuels other than wood are used for cooking and heating in all camps and living accommodations. Any wood so used must be harvested legally, and the Contractor shall provide the Engineer with copies of the relevant permits, if required.
- 1.3.4 The Contractor shall take all precautions necessary to ensure that vegetation existing adjacent to the project site is not affected by fires arising from the execution of the contract. Should a fire occur in the natural vegetation or plantation adjacent to the project site for any reason, the Contractor shall immediately suppress it. Areas of forest, shrub, or plantation damaged by fire considered by the Engineer to have been initiated by the Contractor's staff or laborers shall be replanted or otherwise restored.
- 1.3.5 The Contractor shall confine operations to the dry season, use silt traps and dispose spoils/ debris in locations approved by the Engineer that will not promote instability and result in destruction of property, vegetation, irrigation and water supply. Disposal near wetlands/ beels, protected areas, and other areas that will cause inconvenience or deprive local residents of their livelihood shall not be allowed. Acidic and saline spoils shall not be spread into agricultural land.
- 1.3.6 The Contractor shall consult with local residents and local government before locating project offices, sheds, and construction plant. The work camps shall not be located near settlements, near drinking water supply intakes, protected areas, or wildlife habitats.
- 1.3.7 The Contractor shall maintain ecological balance by preventing felling of trees, water pollution and defacing of natural landscape. The Contractor shall, so conduct his cleaning operations, as to prevent any avoidable destruction, scarring or defacing of natural surroundings. In respect of ecological balance, the Contractor shall observe the following instructions.
- 1.3.8 In the conduct of cleaning activities and operation of equipment, the Contractor shall utilize such practicable methods and devices as reasonably available to control, prevent and otherwise minimize air/noise pollution.

1.4 Noise and Air Pollution

- 1.4.1 All works shall be carried out without unreasonable noise and air pollution. Subject and without prejudice to any other provision of the Contract and the law of the land and its obligation as applicable, the Contractor shall take all precautions outlined in the EMP to avoid the air and noise pollution.
- 1.4.2 The Contractor shall monitor the environmental parameters periodically as

specified in the monitoring plan and report to the Engineer.

- 1.4.3 The Contractor shall indemnify and keep indemnified the Employer from and against any liability for damages on account of noise or other disturbance created while carrying out the work, and from and against all claims, demands, proceedings, damages, costs, charges, and expenses, whatsoever, in regard or in relation to such liability

1.5 Occupational Health and Safety During Construction

- 1.5.1 The Contractor shall, in accordance with the safety and health provisions specified in the EMP, provide workers with a safe and healthy working environment, in the work areas, through application of preventive and protective measures consistent with international good practice, as reflected in internationally recognized standards such as **the World Bank Group's Environment, Health and Safety Guidelines** (http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/our+approach/risk+management/ehsguidelines). The borrower/client will take steps to prevent accidents, injury, and disease arising from, associated with, or occurring during the course of work by
- a. providing preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances;
 - b. providing appropriate equipment to minimize risks and requiring and enforcing its use;
 - c. training workers and providing them with appropriate incentives to use and comply with health and safety procedures and protective equipment;
 - d. documenting and reporting occupational accidents, diseases, and incidents; and
 - e. having emergency prevention, preparedness, and response arrangements in place.

1.6 Post Construction Clearance

- 1.6.1 On completion of work, wherever applicable, the Contractor shall clear away and remove from the sites all constructional plant, surplus materials, rubbish, scaffoldings and temporary works of every kind and leave the whole of the site and works in a clean condition to the satisfaction of the Engineer.
- 1.6.2 Construction camp sites post construction shall be cleared as specified in the EMP and handed over to the Owner. It will be ensured by the contractor that the site handed over is in line with the conditions of temporary acquisition signed by both parties.