

NORTH EAST RURAL LIVELIHOOD PROJECT (NERLP)

Guidelines for Environment Safeguard

North East Rural Livelihood Project (NERLP)

I. Background

North East Rural Livelihood Project (NERLP) is a multi state project under Ministry of Development of North Eastern Region (DoNER), GoI funded by World Bank and is being implemented by North East Livelihood Promotion Society (NELPS) formed under Ministry of DoNER. The project seeks to empower rural poor and improve livelihoods of about three lakh households in 1645 villages, 58 blocks across eleven districts in four states - Mizoram, Nagaland, Sikkim, and Tripura. The districts are Aizawl and Lunglei in Mizoram, Peren and Tuensang in Nagaland, South, and West Districts in Sikkim, West Tripura, Khowai, Sipahijala, Unokoti and North Tripura.

The objective of the project is *“to improve rural livelihoods especially that of women, unemployed youth and the most disadvantaged, in four North Eastern States”*. It aims at improving communities’ access to credit and other financial services by forming 26,000 SHGs and 1,645 VOs, sustainably increasing incomes of the poor by forming 275 producer organizations, improving natural resource management by local communities and converging with government programs by forming 1,645 Community Development Groups (CDGs), addressing unemployment by skilling 20,000 youth, and engaging in fruitful partnerships with expert organizations to focus on cluster development through value chains and natural resource management.

II. Project Components

The project has five components, namely, social empowerment, economic empowerment, partnership development and project management. The project components focus on improving livelihoods of the most disadvantaged people in the targeted areas by building community based organizations and developing partnership with Government and other institutions for knowledge, skill, credit, insurance, extension and market.

- **Social Empowerment:** This initiative seeks to empower rural communities by creating sustainable community institutions; improving inclusiveness and ensuring equity in social, gender and environment.
- **Economic Empowerment:** Increase livelihoods through diversification of income and employment opportunities by supporting SHG and SHG Federation with investment support; supporting Community Development Group for Community Development Plan; supporting Producer Organization for business activities based on value chain and supporting youth for skill development training and placement.
- **Partnership Development:** Development of partnership with various service providers including technical support institutions, public and private sector organizations, financial institutions, etc., with the aim of dovetailing further resources required for the success of the project.
- **Project Management:** This component includes governance, implementation, coordination, learning and quality enhancement efforts.
- **Livelihood Model & Value Chain Developments:** Replication & demonstration of successful livelihood model & complete value chain development in the areas of agricultural, livestock sector and non-farm activities.

III Environment Management Framework (EMF)

In order to ensure that any potential adverse environmental impacts due to the activities/ schemes are adequately taken care of, Environmental Assessment was conducted with the objective of understanding environmental conditions and the related legal and regulatory framework and thereby the Environment Management Framework (EMF) was prepared. NERLP under the World Bank classification of projects is defined as a Category-B project.

The project interventions therefore trigger some of the environmental and/or social safeguard policies of the World Bank. Therefore, as part of project preparation, an Environment Management Framework (EMF) was prepared to help address environment issues within the ambit of national and state level legislations and World Bank operational policies. The EMF suggests the ways to address the negative impacts as well as enhance the positive impacts. As part of the project design, the project activities like Community Development Plans (CDPs) as well as the livelihood activities undertaken by the SHGs, SHG federations, Producers Groups (PGs) are to be screened for any potential adverse environmental impacts, as well as to enhance their positive social, economic and environmental impacts.

Objectives of the EMF:

- To mitigate any possible adverse environmental impacts of the proposed livelihood activities by adopting better management of natural resources.
- To ensure that all promoted activities meet the regulatory requirements (Acts, Laws, Policies and Regulations of the concerned State Governments, Govt. of India as well as the Safeguard Policies of the World Bank).
- To promote only environmental friendly livelihood activities under “NERLP”.
- To build capacity of the community institutions as well as the “NERLP” project functionaries to enable them to efficiently implement the provisions of the EMF.

IV Environment Risks and Mitigation Guidelines

Environment Assessment conducted for the project has identified the potential negative impacts/risks and mitigation measures which are discussed in this section. This information will be utilized by the concerned people at the Block and District level for appraising the activities undertaken by the SHGs, SHG federations, CDGs and PGs and also for monitoring the activities. The guidelines are given for the potential activities; however the guidelines need to be revisited from time to time for new emerging activities.

Environment Management Framework (EMF) has laid down the set of procedures and processes to be adopted to minimize adverse impact of any livelihood intervention taken up by the project. However many new activities are being taken up which weren't covered in the EMF drafted during the inception of the project. Therefore there was a need to draft the Environment Guidelines incorporating these new livelihood activities of SHG/PO/PG members and also interventions under the new component of Value Chain Development.

1. Livelihood Interventions:

NERLP will provide livelihood support which will be aimed at enhancing income generation on a demand-driven basis taken up by individual SHG members or as a group, SHG federations, Producer Organizations (PO)/ Producer Groups (PG) or by CDG at village level. The EMF thus lays down a set of procedures and guidelines to deal with adverse environmental impacts of any supported livelihood activity promoted under SHG Micro-investment/Livelihood Plans, Business plans of SHG federations and PO/PGs. Producers Organisations (PO) and Producer Groups (PG) formed under the project and will be supported under the livelihood support component of the project. These organizations of primary producers will be formed on agriculture, agro horticulture, dairy, piggery, handloom & handicrafts etc. These organizations will mostly engage in activities such as collective procurement of inputs, processing and marketing. A template for Code of Practices (CoP) is provided in Annex- Suggested Environment guidelines for Pos for implementation of business plans following environmental measures are given as Annex-

Major sectors under livelihood interventions of the project lead institutions will broadly cover Agro Horticulture, Livestock Rearing, Agriculture, Fishery, Farm & Non-farm enterprises, Rural Infrastructures and value-added agricultural product units.

Agriculture

Activity	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
Crop Selection	Selected crop may lead to consumption of more water. Selected cropping pattern may lead to nutrient depletion. Traditional and nutritious crops may be disappeared.	Crop selection must be matching with availability of water. Crop rotation should be followed to ensure that crops with different root zones, different demands on nutrients and different pests and diseases are cultivated alternatively.
Selection of the variety	Variety may not be suitable to the area or may threaten local biodiversity.	Well adapted and high-yielding varieties recommended to the region with resistance to biotic stresses and improved nutritional quality should be chosen.
Seed treatment	Sowing of untreated seed may lead to pest and disease infestation demanding use of chemicals for control	Use of treated seed preferably with botanicals.
Irrigation	Excess use of water for intensive cropping depleting the surface water resource.	Use water efficient methods of irrigation like drip especially for horticultural crops.
Pest Management	Pest control measures without proper pest surveillance, without considering ETL levels and without proper advise may lead to high costs besides polluting the environment. Increased use of hazardous pesticides in more quantities than desired leading to runoff into water	Pest control measures should be taken based on pest surveillance based advisory only. Restrict to non chemical methods of pest management. Avoid use of pesticides under the classes Ia,

Activity	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
	<p>bodies and polluting them and polluting environment, leading to negative effects on biodiversity, health etc.</p> <p>Unscientific way of mixing, use of pesticides and disposal of pesticide containers or reuse may lead to health issues.</p>	<p>Ib and II as per the classification of World Health Organisation (WHO).</p> <p>Follow the precautions in use and disposal of pesticides.</p> <ul style="list-style-type: none"> • Mixing and transfer of pesticides should be undertaken in ventilated and well-lit areas, using containers designed and dedicated for this purpose • Use of Personal Protective Equipment (PPE) such as gloves, overalls, eye protection worn at all times when handling and applying pesticides. • Mixing and filling the pesticides should be done away from watercourses and drains. • Spray operation should be done in early mornings and evenings, avoid spraying on cloudy day or a windy day/direction of wind. • Rinsed water should be collected in a separate tank and disposed of as a hazardous waste, spills should be cleared. The spray equipment and containers should not be washed in water courses and drains • Collect rinse water from equipment cleaning for reuse (such as for the dilution of identical pesticides to concentrations used for application); • Empty pesticide containers should not be used for any other purpose (e.g. storing food, water containers). Contaminated containers should be handled as hazardous waste, and should be disposed safely • Expired chemicals should be disposed off immediately • Maintain records of pesticide use and effectiveness • Shower or bath at the end of every day's work and wear new clean clothes. • Wash overalls and other protective clothing at the end of every working day in soap and water and keep them separate from the rest of the family's clothes. If the insecticide touches the

Activity	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
		<p>skin, wash off immediately with soap and water.</p> <ul style="list-style-type: none"> • Change clothes immediately if they become contaminated with pesticides. Inform the supervisor immediately if one feels unwell. • In case of accidental swallow or exposure to the spray or pesticides the first aid should be administered immediately and medical help should be sought immediately
Soil erosion	Soil erosion and sedimentation due to cultivation of agriculture and horticulture crops like cereals, pulses, fruits, vegetables, spices <i>etc.</i> on the sloppy land	<p>Introduce contour plowing and/or terracing to minimize crop and soil losses</p> <ul style="list-style-type: none"> • Avoid growing crops on sloppy land • Use intercropping to protect soil from erosion, reduce risk of crop failure, mix food and fodder crop cultivation, maximize output per arable area • Use bunds for tree crops and fodder production
Soil Moisture	Reduction in Soil moisture due to unsustainable agricultural practices	<p>Introduce minimum/zero tillage to reduce water loss</p> <ul style="list-style-type: none"> • Add organic material to the soil through manure application and/or compost to increase water infiltration and water retention capacity
Soil Health & Nutrient Management	Soil degradation due to fertilizer use in more quantities and high uptake of nutrients due to high responding varieties.	Adopt organic manuring practices to the extent possible. Any chemical fertilizer application should be based on soil testing.
Drought proofing/mitigation	Given the fact that the droughts are a frequent phenomenon in the project districts the following drought proofing and mitigations strategies/measures need to be considered in the project in case of occurrence of drought.	<p>Drought proofing:</p> <ul style="list-style-type: none"> • Rain water harvesting, revival/repairs and maintenance (desilting) of ponds through convergence • Crop diversification and selection of less water intensive crops • Selection of drought resistant crop varieties in likelihood of drought • Mixed farming and crop rotation, inclusion of legumes in cropping system

Activity	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
		<ul style="list-style-type: none"> • Crop insurance • Watershed plan, promotion of agri-horti-silvi farming in tribal areas <p>Mitigation:</p> <ul style="list-style-type: none"> • Forecasting and early warning system, weather advisory for timely operations in crop production • Adopt micro irrigation methods and System of Rice Intensification (SRI) in rice • Judicious irrigation scheduling based on soil moisture deficit criterion • Measured supply of irrigation as per crop water demand • Practice mulching and other soil, moisture conservation techniques
Storage and Handling of Agri-inputs	<p>Poor storage, handling can lead to spills and leaks of fertilizers and pesticides leading to contamination of soil, water and the surroundings. In case of seeds, poor storage may lead to pest and disease infestation of seeds.</p>	<p>Safety measures are required that in storing agriculture inputs like fertilizer and other chemicals that leads to infect other input. Clean the storage areas daily or after each use.</p>
Drying	<p>Storage of grains and products like turmeric, ginger etc. needs drying to attain prescribed moisture level to avoid pest and disease infestation which may call for chemical use for management.</p> <p>Drying on open grounds may contaminate the produce with dirt; microbes etc. which will reduce the quality of produce will have an impact on health.</p>	<p>Dry the product to attain prescribed moisture level in a clean environment.</p> <p>Drying on cement platforms, mats etc. will protect the produce from contamination. Use solar dries wherever possible.</p>
Milling	<p>Non compliance with norms of Pollution Control norms.</p> <p>Noise pollution to the workers and in the neighbourhood due to milling.</p> <p>Fine dust during milling will lead to health issues like allergy, asthma in long run.</p>	<p>Ensure consent from PCB wherever required.</p> <p>Noise protective equipment should be provided to the operator of the machines. Silencer should be attached to the equipment to reduce noise from the equipment to surrounding areas. Person using these machines must wear mask for preventing the problem related to inhalation.</p>

Activity	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
Processing and value addition	<p>Processing and value addition may require high amount of energy and water depleting local fuel and water resources and increasing emissions due to energy use.</p> <p>Accidents and health hazards are possible during processing involving machinery.</p> <p>Unhygienic environment or practices at processing will contaminate the food products.</p>	<p>Use energy efficient equipment for processing (such as steam boilers in turmeric)</p> <p>Take safety precautions and use safety gear during processing.</p> <p>The processing environment should be kept clean and personal hygiene is must among the workers.</p>
Waste disposal	Disposal of wastes openly after milling or waste (water, seed coats, peels, etc.) after processing may create unhygienic environment due to decomposition.	Explore the alternate uses for the wastes (such as composting); in cases where they cannot be put to alternate use dispose the wastes as per the prescribed procedures.
Custom Hiring Centres	<p>Spread of weeds and pathogens from one field to other field through uncleaned farm machinery and implements. This will further encourage use of fungicides and weedicides.</p> <p>Use of some of the machinery such as Power Weeders, Power sprayers and Power tillers will increase use of fuels and will cause emission of GHGs (Green House Gases). The exhaust fumes from this farm machinery can pollute local environment quality.</p> <p>There can be some safety hazards owing to use of machinery.</p>	<p>Clean machinery and tools after every use to ensure no weed seed, pathogens etc. are carried over to next field.</p> <p>Ensure purchase of fuel efficient models of this equipment. Proper maintenance (regular cleaning and service) would lead to enhanced efficiency</p> <p>Awareness on safe use and first aid requirements to be ensured.</p>

1.1 Livestock: Dairy

Component	Possible Issue	Intervention, Best practice
<i>Interventions for Resource management and Productivity Enhancement</i>		
Breed selection	<ul style="list-style-type: none"> ▪ Selection of breeds that cannot adapt to the local climatic conditions will lead to loss of cattle or results in low 	<ul style="list-style-type: none"> ▪ Selection of breeds suitable to local climatic conditions and up gradation with the improved breeds suitable or acclimatized to

	productivity and health issues.	<p>local climate should be done under technical guidance.</p> <ul style="list-style-type: none"> Indigenous species should be promoted to the extent possible
Open grazing	<ul style="list-style-type: none"> Even though open grazing is a traditional practice and recommended for better health conditions of the animals, over grazing will lead to loss of pasture lands due to reduced regeneration capacity as a result of continuous grazing. The local biodiversity is also affected and soil becomes susceptible to erosion as the green cover is removed. This will also increase the strain on the animal to walk longer distances in search of fodder affecting the productivity. 	<ul style="list-style-type: none"> It is ideal to combine stall feeding with grazing for a limited time. The grazing should be done in rotational manner. Grazing lands can be improved by reseeded and manuring collectively by cooperatives and a system of rotational grazing can be designed. This can be done in convergence with programmes like NREGS. Graze animals only in authorized grazing land Stall feeding of animals need to be promoted. Undertake fodder management and plantation of fodder in wastelands/ fallow land.
Fodder cultivation	<ul style="list-style-type: none"> Exclusive dependence of fodder varieties like CO4 will not supply all vital nutrients to the cattle, besides it depletes soil nutrients and water resources as the water requirement for such crops is high. 	<ul style="list-style-type: none"> Green fodder should comprise of proper cereal grass and legume mix to provide complete nutrition. The fodder plots should also accommodate legume crops like cow pea, stylo and fodder trees like sesbania. This provides proper ration to the animals as well as maintains soil fertility. Azolla cultivation can also supplement the protein requirement. Use of chemical should be avoided/ minimized.
Chemical Fertilization	<ul style="list-style-type: none"> Over use of chemical fertilizers or use of pesticides will lead to biomagnifications and affect the quality of milk. Fodder scarcity in dry seasons or drought periods will create stress on available vegetation like trees and insufficient fodder affects animal health. 	<ul style="list-style-type: none"> Individual /Community fodder banks are to be maintained by the groups by procuring crop residues and storage, and maintaining supplementary feed units.
Tackling the fodder scarcity		
Stall feeding with unchopped green fodder	<ul style="list-style-type: none"> Stall feeding with unchopped green fodder will lead to wastage of fodder and feeding efficiency of 	<ul style="list-style-type: none"> Green fodder cut into small bits using chaff cutter or suitable tools will improve the feeding efficiency of the

	animal is decreased.	animal digestibility and reduce the wastage.
Shed spacing, sanitation and waste management	<ul style="list-style-type: none"> ▪ Congested and unclean sheds (without proper facilities for draining the urine etc, lack ventilation etc.) will lead to outbreak and spread of diseases. ▪ Open disposal of the shed leanings - fodder wastage, manure, urine etc. will create unhygienic environment in the surroundings. 	<ul style="list-style-type: none"> ▪ The sheds should be clean and should provide sufficient ventilation, enough space for the animal to move freely (recommended space is 4 sq mt per animals). There should be arrangements like slope and a pit for collection of urine which can be put to alternate uses like panchakavya preparation or can be added to manure pits). In general sheds are constructed outside the village required ventilation. ▪ The daily sweepings of the shed should be composted in a pit. However pit methods can be avoided in areas with high water table but the heap should be properly covered with palm leaves or gunny sacks to avoid leaching. ▪ The households having 2 cattle can plan for biogas plants. Composting the slurry provides enriched compost or vermicompost. ▪ The shed should be at least 15 m away from drinking water source.
Interventions for improving milk yield	<ul style="list-style-type: none"> ▪ Injecting hormonal substances like oxytocin under misconception that it increases milk yield will have negative impact on animal health and will make the animal go dry early. 	<ul style="list-style-type: none"> ▪ Practice of injecting hormones should be strictly avoided.
Milking	<ul style="list-style-type: none"> ▪ Unhygienic milking practices -milking without washing hands. ▪ Not addressing any injuries or disease of the animal will contaminate the milk 	<ul style="list-style-type: none"> ▪ Beneficiaries should be trained on hygienic milking practices.
Open disposal of carcasses	<ul style="list-style-type: none"> ▪ The dead bodies of calves or small ruminants that are dead due to epidemics will further spread the infection 	<ul style="list-style-type: none"> ▪ The carcasses should be properly buried or burned, after bio security measures. Package of Common

	when disposed openly.	Management Practices Recommended for Dairy is enclosed as Appendix 6 of Annexure 3.2.
<i>Environment Issues and Measures in Bulk Milk Cooling Units</i>		
Cleaning and maintenance of equipment in bulk milk cooling units	The chemical and acids used in cleaning the unit pollute the soil and water when discharged without being treated	Waste water after cleaning should not be released into the gutters leading to agriculture fields, or to the open area nearby. Drying ponds (with cement lining) can be constructed where water can be evaporated and residue can be collected and disposed of safely.

1.2 Culture Fisheries

NERLP will promote fish culture in existing ponds of beneficiaries. No new ponds will be constructed. Standard practices developed by CIFRI for renovating existing ponds following deweeding, dewatering & drying and desilting will be undertaken.

Component	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
Stocking of pond-selection of suitable fish species	Culture of Exotic Fishes- Loss of biodiversity and indigenous fish species.	The fish species suitable for culture are native major carps (Rohu, Catla & Mrigal) and minor carp (<i>L.calbasu</i> , <i>L.gonius</i> etc.) fishes, local fish species like Magur, Singhi, Murrels, Chital, Koi. In addition to these native fish species other exotic varieties such as Chinese carps viz. Silver, Grass carp and Common carp can also be cultured in confined water. Culture of exotic species such as Big head carps, Tilapia and Thai magur and any hybrid fish species shall not be taken up for production, strict monitoring is required to check their entry into the water bodies.
Quality fish seed, size and stocking density	Poor quality fish seed of inadequate size when cultured will have high mortality and stunted growth. Overall	Use of fish seed from certified hatcheries and use of fingerling size fish for culture. Number of fingerlings per hectare of

	productivity will be hampered if proper stocking density is not maintained.	farmers' ponds need to be scientifically worked out with assistance from state fishery department.
Water quality	Shortage of oxygen is the main cause of mortality of fishes under culture where the pond has been manured or fed too much. These leads to excessive growth of weeds and algal bloom decreasing water transparency and thereby lower the level of DO.	Regular monitoring of water quality for pH, DO level. Information must be disseminated to the farmers about measures to avoid oxygen deficiency. Application of fertilizers and feeds should be temporarily suspended in case of excessive algal growth. <ul style="list-style-type: none"> • Surface bloom can be removed by dragging a small-mesh sized net. • Chemicals such as CuSO4 Diuron, H2 SO4, Potash etc. can be applied to control bloom • The best way to control bloom is through biological means, i.e through introduction of Silver carp fishes, which primarily feed on phytoplankton
Use of fertilizers	Excessive use of fertilizers will lead to deterioration of water quality and growth of aquatic weeds and also algal blooms.	Use of fertilizers in recommended doses in coordination with authorized fishery officials for better fish production. Use of Organic manures should be encouraged.
Disease outbreaks	Fishes are vulnerable to diseases when the environmental conditions are poor and once the disease enters fish pond it is very difficult to eradicate it.	Common fish diseases prevalent in the water bodies include Epizootic Ulcerative Syndrome (EUS) and Argulosis. As a prophylactic measure, CIFAX is prescribed at 0.01 ppm. Diseases should be regularly checked to prevent any outbreak and large scale mortality.
Fish Seed Production & Management		
Brood Stock	Genetic deterioration due to lack of good quality brood stock and lack of scientific knowledge among the hatchery owners.	The lack of availability of good quality brood stock, hatchery owners often indulge in using the same female over and over again, breeding of closely related species and also use the milt of different species for breeding when the milt of same species is

		not available. Therefore, adequate brood stock of appropriate size must be made available.
Mini-hatchery design	Large scale mortality & genetic deterioration	In order to address the issue of gene pool contamination and large scale mortality in hatcheries, the size of the breeding pool should be of 6-8 mm diameter with facilities of artificial rain and river flow necessary for breeding.
Planning of breeding program	<p>Mixed Spawning is often practiced in hatcheries to meet the demand of fish seed which poses a serious threat to the native species of the region.</p> <p>Induced Breeding- often undersized fishes are injected with hormones which lead to low quality fish seed.</p>	<p>Proper brood stock should be maintained</p> <p>Brooders of sizes as prescribed by the Fishery dept. must be used in induced breeding.</p> <p>Awareness campaigns and workshops should be held to educate the fish seed growers about the outcomes of inbreeding, interbreeding and the necessity to maintain proper brood stock management. Local network for exchange of brood stock among the farmers should be established.</p>

1.2 Small Ruminants:

Component	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
Breed selection	Selection of breeds that cannot adapt to the local climatic conditions will lead to loss of animals or results in low productivity and health issues.	Selection of breeds suitable to local climatic conditions and up gradation with the improved breeds suitable or acclimatized to local climate should be done under technical guidance. Breeding villages should preferably be selected in breeding tracts of native species.
Grazing	Continuous over grazing will lead to degradation of grazing lands. In case of sheep as they graze close to the ground surface vegetation is removed exposing the soil for erosion.	Growing fodder trees, regulated grazing and stall feeding (partly or completely) will reduce pressure on grazing lands. Rotational grazing will be followed and pasture land development initiatives will

	The herd should not be allowed to graze along with other animals in breeding villages.	be taken up in convergence with NREGS. To the extent possible staff feeding will be promoted in breeding villages and in case of grazing rotational grazing will be followed and the herd will be grazed in a separated patch preferably fenced.
Cutting large branches from trees.	Regeneration of the trees will be affected if lopping is done extensively.	Only small twigs should be extracted, fodder trees can be grown in house premises as well.
Shed spacing	Congested, less ventilated sheds will lead to quick spread of diseases and affects animal health due to less scope for movement.	The sheds must have sufficient space and well ventilated and offer protection from heat, rain etc.
Stall feeding	Stall feeding with green fodder without chopping may lead to wastage.	Fodder should be properly chopped before feeding.
Shed cleaning and waste management	Open disposal of shed cleanings and feed waste create unhygienic conditions and leads to loss of manurial value	Wastes should be composted as pit, or heap covered with leaves and lined with bricks to avoid leaching or evaporation losses.
Measures during drought	Lack of drought management strategy may lead to loss of herds or poor performance.	<ul style="list-style-type: none"> • Management of commons and pasture lands, improved grazing practices like rotational grazing, protection of shrubs and trees • Fodder conservation through community fodder banks • Harvest and use the failed crop as fodder • Management of common pasture lands

1.3 Piggery:

Component	Possible Environmental Impacts	Mitigation Measures/Environmental guidelines
Breed selection	Selection of breeds that cannot adapt to the local climatic conditions will lead to loss of livestock or results in low productivity and might have health issues.	Selection of suitable species in order to have increased adaptability. Indigenous species should be promoted to the extent possible.
Use of growth promoters	Use of growth promoters for gaining weight may have implications on health	Prohibition of use of hormones for gaining mass, farmers should be made aware of the ill effects.
Shed construction and maintenance	Congested, less ventilated shed results in disease outbreaks.	Sheds should be well ventilated and spacious enough to provide healthy environment. Sheds should be cleaned every day and the liquid waste should not be let into any

		water bodies.
Feed and manure management	Over feeding results in wastage. Pig manure could be an environmental hazard when it is not disposed/stored in proper manner (storing it openly)	Recommended dosages of feed to be followed. Feed waste to be collected and disposed properly. The manure should be stored in a lined pit to avoid any leachates and properly covered (to be opened and stirred once in a while allow the heat to escape). Integrated farming practices (with fisheries) should be encouraged so as to promote effective use of feed waste and manure.
Disease outbreaks	Improper disposal of manure, carcasses may result in quick spread of diseases and will lead heavy losses.	An awareness program to farmer on precaution measures that needs to be adopted during epidemic/ spreading of infectious diseases in pig should be made available. Knowledge on the possible diseases that could be transmitted from pig to humans should be provided.

Use of antibiotics/growth promoters in livestock rearing (piggery, poultry, fishery):

Use of antibiotics as growth promoters (eg: tylosin, quinolone, tetracycline, gentamicin, amantadine) is one of the issues in livestock rearing especially in intensive farming. These antibiotics are used in low doses which are believed to improve the quality of the meat with low fat and high protein content. However there are ill effects associated with this and one of them is imposing selection pressure for bacterial strains that are resistant to antibiotics (eg: *Escherichia coli*, *Salmonella spp*). Over time the residues of antibiotics in the meat also affects human health leading to side effects. There are also chances of resistance build up in human pathogens. The project will create awareness among the beneficiaries on the side effects of using antibiotics along with food and water for growth promotion. The PGs and POs guidelines will include ban on using the antibiotics for growth promotion.

Slaughter-House

Component	Possible Issue	Intervention, Best practice
License and permissions	Waste water discharge, waste disposal and carcass disposal may not be adhered according to guidance without licence.	<ul style="list-style-type: none"> ▪ Permission of local municipality and Panchayat has to be taken for slaughter house establishment. The norms for waste water discharge; waste disposal; carcass disposal in slaughter house has to be adhered as per guidelines issued by the Pollution Control Board. ▪ Follow rules of the Prevention of Cruelty to Animals (Slaughter House Rules) 2001; under the notification issued by the Ministry of Environment and Forests, Climate Change; Govt. of

		<p>India.</p> <ul style="list-style-type: none"> ▪ Follow rules of the Prevention of Food Adulteration Act 1954 and Tamil Nadu shops and Establishment Act. ▪ Follow rules of the Food Safety and Standards (FSSAI) Act, 2006. And licence taken for sale of meat / processed meat for public consumption. Licence has to be obtained from the Municipality as per Municipal Corporation Act and also from Panchayat. ▪ Health Department of the Corporation is the regulatory body. ▪ The design and facilities of the slaughter house has to be approved. Standard design as per FAO may be followed. ▪ The Panchayat or Municipality shall publish a notice in a daily newspaper in the chief language of the locality having wide circulation in the area and in the notice board of the Panchayat office and in the places specified by the Panchayat, and shall given publicity through pamphlet and loudspeakers and giving a period not being less than 30 days for filing objections and after considering the objections in detail received within the period and the Panchayat shall take decision on it. ▪ Animals shall be slaughtered only in places specially allotted for them in the slaughter house. Meat of animals slaughtered to be inspected and stamped. The Veterinary Surgeon of the Animal Husbandry Department of the village panchayat area specially authorised by that village panchayat in this behalf, shall inspect whether the meat of the slaughters animal is fit for sale for human consumption, and if he finds it fit, stamp it thereof accordingly. No one shall sell or keep for sale meat without such a stamp. ▪ Slaughter house licence has to be renewed annually. ▪ Meat stall shall be one covered with glass, inaccessible to insects like houseflies and also having abundant air circulation and meat shall be kept in a manner not visible to the lay public and the License of the stall shall exhibit a
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		board in front of the stall visible to others, specifying his name number of the stall and price chart.
License of Butchers	Butchers without liscence may contain contagious diseases and corntain health problem which will further cause infections.	<ul style="list-style-type: none"> ▪ Licensing of butchers. No person shall be permitted for slaughtering animals in the slaughter houses except with a license in Form issued by the Secretary, Public Health. ▪ Butcher should not be a person that he is not a person infected with any contagious diseases or having any health problems warranting refusal of license for slaughtering animals
Site location	Slaughter houses near to residential and public places can create public nuisance and compromise public health safety issues.	<ul style="list-style-type: none"> ▪ A slaughter house shall not be within 90 metres of any dwelling house or within 150 metres from Hospitals with inpatients treatment or Public Educational institutions or places of worship. ▪ No door of any slaughter house shall open directly into any street or lane or other public place and no such door shall be situated that the slaughtering of animals can be seen from any public place, public street or from any adjacent dwelling house or occupied place outside the slaughter house. ▪ A sign board marked 'public slaughter house' or 'licensed slaughter house' shall be exhibited in front of the building used for slaughtering.
Stamping of animals for butchering	Meat from animals' witous stampling and without examination may spread diseases.	<ul style="list-style-type: none"> ▪ Stamping of animals. No animal shall be admitted into a slaughter house for slaughter unless it is examined, certified and stamped by the Examining Authority that the animal is free from contagious diseases and other diseases. Such certificate shall contain the time and date of the examination of the animal and it shall be valid for 48 hours only. ▪ The person in charge of the slaughter house shall maintain register showing the particulars of animals thus examined and stamped. ▪ The person who brings animals for slaughter shall keep the animals clean and shall see that they are kept in-charge of a keeper and secured by ropes to prevent them from injuring one another, and shall provide them with 12 hours

		rest and water prior to their being led to slaughter.
Meat sales	Meat from slaughter houses cannot be directly sold to customers.	<ul style="list-style-type: none"> ▪ No meat to be sold in slaughter house. No person shall be permitted to sell meat in the slaughter house or in its premises, but the uneatable animal part, horn, skin etc. may be sold within the yard to the purchasers to whom permits have been issued. ▪ However, after butchering and cleaning of meat; it may be sent to permit meat stalls.
Waste management and health control in slaughter house; maintenance of machinery and premises.	Improper disposal of wastes from slaughter houses will lead to health issues due to animal disease.	<ul style="list-style-type: none"> ▪ Destruction of meat unfit for use.-The Inspecting Authority may at any time inspect the meat of a slaughtered animal and if find the same as diseased or unfit for human consumption, it shall not be allowed to be removed by the owner and shall be seized and destroyed. The expenses incurred for the same shall be realised from the owner. ▪ The Panchayat shall have the right to cancel the licence of an owner who sells or stores such meat unfit for consumption. ▪ Separate receptacles to be provided for putting refuse and allowing blood to flow. No person shall put refuse from the slaughter house in or allow the blood there from to flow into the receptacle other than those provided in this behalf and shall uncover the receptacles for a longer time than is absolutely necessary to put the refuse into it and to flow the blood. ▪ The inflation or blowing of carcasses shall not be done in the slaughter houses. ▪ Offal, skin, horn, entrails, etc. for which provision is made for sale in the slaughter house shall not be brought to the stall or kept in for sale. ▪ The meat shall be suspended by means of hooks in such a way that they do not come into contact with the roofs, walls or pillars of the stalls. ▪ The balance of meat taken for weighing shall be suspended and not placed on the table. ▪ All article inside the slaughter house shall be kept clean, Provision shall be made for an abundant supply of water to

		<p>keep the slaughter house clean.</p> <ul style="list-style-type: none"> ▪ Spittoons to be provided in the slaughter house. Necessary spittoons shall be provided in suitable places in the slaughter house and no person shall spit in the slaughter house
Management of visitors		<ul style="list-style-type: none"> ▪ No person shall take or admit any child below ten years of age into the slaughter house. ▪ No person shall be allowed to bring dogs in the slaughter house. Crows and other birds shall not be allowed to get into the slaughter house. Any person who is found drunk, begging, loitering or misconducting himself should be removed from the premises.
Workers safety	Lack of proper facilities to workers may result in health issues. Lack of proper facilities at work place (drinking water, toilet etc.) may cause inconvenience to workers.	<ul style="list-style-type: none"> • Decent working condition should be provided
Possibility of using child labour	There is a risk of hiring child labour	Engagement of children below 14 years will be avoided
Fair and equal wages	Possibility of discrimination in the wages	Fair (not below minimum wages)/ equal wages that will be paid to all workers
Women Participation	Exclusion of women workers	Increase the participation of women, especially those from the poor families; strengthen women in decision making
Including disabled beneficiaries	Exclusion of disabled beneficiaries	Enabling the possibility of involving disabled beneficiaries wherever they can
STANDARD PLANS FOR A SMALL ABATTOIR as per FAO guidelines may be followed for design of slaughter house and energy efficiency.		

1.4 Non Timber Forest Produce:

Hill brooms, Bamboo shoot, honey are major forest products which are collected in the project villages. Processing of such NTFP products may also be taken up by SHG/PG members as forest based enterprise.

Activity in the value chain or steps in the process	Possible Environmental Impacts	Interventions, Best practices
Permissions for collection of NTFP, or cultivation near forest areas	Issues regarding use of forest land, ownership rights, regulations from forest departments.	Required permission should be taken from Forest Department (differs from produce to produce) for collection and cultivation near forest areas (wherever applicable)
Harvesting of NTFP	NTFP are precious resources and unsustainable harvesting lead to loss of biodiversity.	Training on sustainable harvesting will check the loss of biodiversity. <ul style="list-style-type: none"> • For seed and pod collection, pods should be allowed to

		<p>ripen on the tree until the outer shell is dry and can be separated from the pulp easily</p> <ul style="list-style-type: none"> • Pods should be harvested by shaking the branches or climbing the tree or using sickles. They should not be beaten down with sticks as this injures the blossoms and buds of future leaves • All the pods/seeds should not be harvested, at least 25% should be left for natural regeneration
Method of Collection of Raw material.	<p>Destructive methods of collection such as cutting the branches, uprooting the plants, etc. damages the resource. Unscientific methods of collection may affect the quality of product there by leading to less revenue and thus over exploitation. Each forest product has some prescribed norms for collection.</p>	<p>Collection period and season of harvesting and tools used for collection should be as per standards prescribed. Trainings on these will help the communities to follow sustainable harvesting methods.</p>
Processing of forest produce, preparation of herbal products.	<p>Improper drying (drying on bare earth) and storage may contaminate the produce.</p> <p>Processing using machinery for grinding, mixing, boiling etc. may lead to injuries.</p> <p>Energy use in boiling, drying etc. will required fuel wood.</p> <p>Sometimes due to lack of knowledge on mixing of different ingredient led to health issues.</p> <p>Wastes from processing should not be let into open.</p>	<p>Drying of produce should be done on cemented platform.</p> <p>Care to be taken while processing using machinery to avoid injuries and members to be trained on use of machinery.</p> <p>Energy efficient devices should be promoted.</p> <p>The members should be trained in preparation and use (to offer guidance to retailers or consumers).</p> <p>Date of processing and use and precautions of final products should be mentioned on the packets.</p> <p>Waste disposal should be as per the prescribed methods.</p>

2. Farm & Non-farm Enterprise

Majority of such activities will be taken by members of SHG/SHGF and also taken up for selected cluster interventions under Value Chain component (VCC) of the project. The farm and non-farm enterprises that the project may deal with are presented below:

Farm Based Enterprises	Non-farm based enterprises
Cereal milling plant	Handloom and handicrafts
Ginger based value added products	Candle making
Turmeric powder	Tailoring
Juice, Jam	Petty shop
Pickles	Soap and detergent making
Bamboo Round stick unit	
Bamboo based products	
Banana fibre products	
Puff rice making units	

2.1 Farm –Based Enterprises

Activity	Possible issues	Interventions, Best practices
Registration, licenses and permissions	Manufacturing and selling of chemical products without registration and license is illegal. Food processing units also need licenses along with small scale industries.	Registration of unit under District Industries Centre (DIC) is required. Pollution Control Board (PCB) permissions are required based on type of activity. Food processing units should obtain licenses.
Storage of raw materials and finished products.	Improper storage of raw materials i.e. in moist, unclean conditions leads to spoilage or contamination of the products and chemical raw materials poses health risks to the people around. Few materials lead to explosions and fire hazards when not stored in required manner.	Raw materials should be properly stored in containers with lids in clean and dry place (prescribed standards are to be followed for each material). Finished products should be properly labeled with manufacture and expiry dates and stored in proper storage place.
Manufacture	Manufacture without following prescribed standards under health and hygiene affects the quality of produce.	The machinery should be kept clean and the workers should follow the prescribed standards of hygiene such as bathing, hand washing, using gloves, masks and hair caps etc
Use of additives, preservatives	Use of non permitted additives and preservatives is illegal and pose health risks to the	Natural agents and permitted agents should only be used

	workers and consumers	
Energy use	Energy is required for heating, boiling, grinding, extraction, drying etc	In case of cooking fuel efficient devices should be used. Biomass or solar devices can be promoted to conserve energy wherever possible.
Use of water	Water is required for washing, cleaning, boiling etc.	Use of water efficient devices.
Maintenance and upkeep of machinery	Irregular cleaning or maintenance will lead to contamination and improper functioning. Possibility of accidents during handling machinery	Regular upkeep should be followed as per the prescribed standards. Personnel should be well trained and first aid kit should be available.
Waste disposal	Open disposal of decomposable wastes leads to contamination of surroundings though decomposition, attracting insects, leaving chemical residues etc.	Using the food by-product as an animal feed. Composting or land spreading the food by-product. .
Facilities at processing and manufacture units.	Lack of required basic amenities will affect health of workers.	The work space should be ventilated to the extent possible. Should have drinking water and toilet facilities.
Adoption of environment guidelines	Lack of awareness may lead to non adoption of the guidelines. Lack of proper facilities at work place (drinking water, toilet etc.) may cause inconvenience to workers.	Awareness training both for the workers and the unit owners need to be given.
Workers safety	Lack of proper facilities to workers may result in health issues.	Decent working condition should be provided
Possibility of using child labour	There is a risk of hiring child labour	Engagement of children below 14 years will be avoided
Fair and equal wages	Possibility of discrimination in the wages	Fair (not below minimum wages)/ equal wages that will be paid to all workers
Women Participation	Exclusion of women workers	Increase the participation of women, especially those from the poor families; strengthen women in decision making

2.1.2 Food Processing Units (Ginger based value added products, Turmeric Powder, Pickles, Bakery):

Activity	Possible issues	Interventions, Best practices
Registration and licenses	Manufacturing and selling of food products need license depending on the scale of activity.	Manufacturing and selling of food products need license depending on the scale of activity. License should be acquired as per Food Safety and Standards Act (FSSAI) 2006 if required.
Drying the raw materials, products	Drying on unclean floor will contaminate the produce by inducing microbial growth.	Clean and dry cement floor or mats should be used for drying. Solar dryers can be used depending on feasibility.
Use of machinery (for grinding spice mixes and ingredients for pickle)	Use of unclean machinery for grinding raw materials may contaminate food.	Machinery (small mills and grinders) used for grinding ingredients should be cleaned and dried regularly.
Use of cook stoves (in bakery and snacks, sweet and milk products)	Use of LPG or fuel wood will lead to degradation of the resource and increase the fuel costs	Fuel efficient cook stoves or bio gas should be considered.
Use of preservatives, colour and flavor agents	Use of synthetic agents may have adverse effects.	Natural agents and permitted agents should only be used.
Handling and packing	Handling the food products with bare hands or un washed hands will contaminate the products through microbial attack.	Personnel involved in processing, packing etc. should wash hands with soap before and after work and use aprons, gloves, hair caps for handling, packing etc. Use of eye goggles is recommended while handling pungent items like spices.
Packing and labeling	Edible products beyond the shelf life may lead to illness when consumed.	The product labeling should include the expiry date and should be marked with in the shelf life period.
Storage	Storage in improper conditions like moist, dusty floor, walls etc. will spoil the produce due to mold infestation.	Raw materials and produce should be stored in clean and dry conditions.
Facilities at processing centre	Poor facilities will have impact on worker's health	The place should be well ventilated, should have drinking water and

		sanitation facilities.
Waste management	Open disposal of waste from food processing unit will give bad odour and create unhygienic environment due to decomposition.	Any waste or waste water should be disposed properly by composting or diverting to waste water drains.
Workers safety	Lack of proper facilities to workers may result in health issues. Lack of proper facilities at work place (drinking water, toilet etc.) may cause inconvenience to workers.	Decent working condition should be provided
Possibility of using child labour	There is a risk of hiring child labour	Engagement of children below 14 years will be avoided
Fair and equal wages	Possibility of discrimination in the wages	Fair (not below minimum wages)/ equal wages that will be paid to all workers

Construction Activities:

Activity	Environmental Impact	Mitigation Measures
Site selection	Choosing the site for construction, which is covered under forest, or notified under land preservation act, or area which is rich in biodiversity with nationalized species or site with highly undulating terrain may cause disturbance to the surrounding natural environment. Construction in a site close to the streams and rivers can cause water quality degradation and contamination of surface water resources.	The site should be within the developed area and which is not under purview of Forest Conservation Act. No Objection Certificate (NoC) will be obtained from the Forest Department before initiating any activity on the site if the site falls in under forest area. Site close to stream and river will not be selected for the proposed building. In case of unavoidable situation, the building design will include wastewater treatment and disposal arrangements.
Site clearance	Cutting the trees with biodiversity value leads to loss of important species and affects the surrounding environment.	Removal of mature trees should be avoided during construction. If unavoidable, compensatory tree plantation with same species or suitable local species will be carried out in consultation with Forest Department.
Design	Lack of features for natural ventilation leads to consumption of high amounts of energy for artificial	Solar passive construction will be adopted which is mandatory as per the HP Energy Conservation Building Code

Activity	Environmental Impact	Mitigation Measures
	<p>lighting and air conditioning, heating etc.</p> <p>As the State has vulnerability to multiple disasters (earth quakes, landslides, floods, avalanches, cloud bursts), lack of disaster proof design may lead to damage during disasters and may prove hazardous to the human lives.</p> <p>Lack of water source in the premises may lead to over extraction from nearby sources and may involve transportation cost.</p> <p>Absence of toilets may lead to use of the premises for the purpose leading to unhygienic environment and causes inconvenience to the staff. Lack of solid waste disposal system leads to open disposal or disposal in drains causing clogging.</p> <p>Absence of ramps and railings may cause inconvenience to differently abled persons.</p> <p>Absence of safety measures like parapet walls, and grill to stairs, balconies and roof may lead to accidental falls.</p>	<p>(ECBC) and National Building Code (NBC).</p> <p>Disaster proof design will be made mandatory. Disaster mitigation features proposed in the State Disaster Management Policy will be duly followed.</p> <p>Rain water harvesting, sewage system and waste management facilities will be part of the design.</p> <p>All buildings will be equipped with toilets and receptacles and a system should be established for collection and recycling of non-biodegradable wastes</p> <p>Wherever necessary provide ramps.</p> <p>Provide all safety measures as necessary.</p>
Construction stage		
Excavations	<p>Excavations for construction particularly in the hilly terrain can destabilize the land and may lead to soil erosion and land sliding.</p> <p>The borrow pits may lead to soil degradation and erosion.</p>	<p>The contractor will ensure the prevention of soil erosion and destabilization by employing batched excavation technique wherever required.</p> <p>Diggings, if required for foundation, will be carried out only in specified area, as per the engineering drawings and excavated earth material should be used for filling and compaction.</p> <p>Tree plantation will be carried out, around the periphery of building to enhance soil stability and control erosion.</p>
Raw material procurement or	Possibility of use of illegally mined or	Raw materials will not be sourced

Activity	Environmental Impact	Mitigation Measures
extraction.	<p>low quality materials affecting the sustainability of environment and the infrastructure.</p> <p>Water withdrawal in excess for construction activities may deplete the local water resource.</p>	<p>illegally from nearby locations</p> <p>All raw materials (sand, stone, timber etc.) will be sourced from authentic and approved vendors, possessing valid permits. Relevant supporting documents should be presented for scrutiny on request.</p> <p>Minimum quantity of water will be used to meet the essential construction requirements. The contractor will avoid wastage of water during construction. Required permissions should be taken for extraction or use of water from local sources.</p>
Storage of raw materials	<p>Open dumping and stockpiling of construction materials in nearby open spaces and streets can result in blocking of route and inconvenience for passersby, and residents.</p> <p>The materials like sand, cement when left uncovered will lead to dust pollution.</p>	<p>The contractor will ensure safe and covered stockpiling of the construction materials in separate place or a corner in the premises of building.</p> <p>Stockpiled materials should be covered to control dust emissions.</p>
Construction process	<p>The movement of vehicles, land excavations, structure demolitions, and onsite stacking of materials can lead to dust emissions and prolonged suspension of fine particulates in the ambient environment.</p> <p>Exhaustion from vehicles and machinery during construction may deteriorate the local air quality.</p> <p>The dust particulates may cause inconvenience and health problems to the workers.</p> <p>Lack of basic amenities like drinking water, toilets cause inconvenience to the workers</p> <p>During construction, the use of machinery that emits noise at night times leads to inconvenience to the people around.</p> <p>Moving vehicles and use of pressure</p>	<p>Speed of vehicles should be reduced to minimum possible (depending on the site) avoid blowing of dust.</p> <p>Water sprinkling will be carried out to reduce dust emissions, where necessary and feasible.</p> <p>Proper lubrication of vehicles and machinery will be ensured to reduce emissions</p> <p>Workers involved in mixing and handling of raw materials will use gloves and masks.</p> <p>Safe drinking water, temporary toilet facilities and shade area for rest will be provided at/near construction sites</p> <p>The contractor will ensure to avoid use of noise generating machinery, equipments during night time.</p>

Activity	Environmental Impact	Mitigation Measures
	<p>horns around the building/construction site could be a source of noise and vibrations. Demolition, excavations etc. may lead to dust pollution. Possibilities of injuries to the construction workers.</p> <p>Inconvenience to the by passers due to construction activities</p> <p>Possibility of engaging child labour for construction activities.</p> <p>Possibility of chance finds of archeological importance.</p>	<p>Contractors will make an effort to avoid the noise and frequent movement of vehicles to the extent possible.</p> <p>Demolition and excavation will be carried in batches to minimize dust emissions.</p> <p>The contractors will provide personal protective equipments such as gloves and boots to the laborers to avoid worksite hazards and accidents.</p> <p>Protective fencing should be used around the construction sites, excavated areas, and voids. Sign boards should be placed indicating work in progress.</p> <p>Use of child labour will be avoided.</p> <p>Any chance findings will be deposited with District Magistrate.</p>
Post Construction – disposal of construction debris	Improper disposal may cause inconvenience and leads to unaesthetic environment.	Construction debris should be put to alternate uses such as land filling. If not utilized it should be disposed off in nearby safe places.

Construction of Check Dams:

Activity	Environmental Impact	Mitigation Measures
Check-dam	Soil Erosion at downstream	<p>Construct Check dam or Sluice Gate on Straight portion of Stream. Avoid Curves portion of streams Construct longer Side wall or protection wall, providing Concrete blocks along D/S side of river banks untill Regime State of Stream achieved</p> <p>Emphasis should be given for D/S protection work in designing and estimating of checkdam or other hydraulic structures as it is the most critical part of any hydraulic structures</p> <p>Avoid Construction of check dam Adjacent to any important structures located on either bank of stream like Roads, Building, Railway line etc.</p>
Sluice Gate	Sedimentation of Silt on upstream side	Provide Gates or opening on Check dam and design check dam in such a way that a minimum self cleansing velocity of water in

		the stream is maintained , which will not cause silting or scouring.
Pick up Weir	Water logging or Stagnation of Water on u/s side resulting mosquito breeding	Provide optimum height of the check dam so that minimum amount of flow takes place during lean season which will not cause stagnation or Water logging
Diversion Weir	Scouring of stream Bed on D/s Side	Provide long Apron , intermediate Cutoff Wall on D/s side and depth of apron should be adequate in order to reduce hydraulic heads of water
	Flood in Heavy rain fall areas	Prior Survey of Rainfall data and HFL of respective areas are essential and taking into account all type Hydrological data in designing of any Hydraulic Structures is important

**ANNEXURE-
TEMPLATE FOR CODE OF PRACTICE (CoP) BY PRODUCER ORGANISATION (PO)**

The Code of Practice is a simple concise document which must be easy to understand and implement. This process will have to be developed through a participatory process involving the individual members of the Producer Organisation through the facilitation of the DMMU team and technical experts. Following things should be considered while preparing CoP :

1. Profile of the Producer Organisation (Name of the organization (if any), location, profile of members, Place, year of formation, Cost, etc.)
2. Environmental Guidelines for the Producer Organisation
3. Environmental Guidelines for the individual members of the Producer Organisation
4. Individual members' roles and responsibilities
5. Appraisal Worksheet
6. Non-compliance Guidelines i.e. Formats for 'Approvals' for non-compliance of individual members
7. Visits and Consultations may be conducted for Pos for developing better CoP.

Other necessary Guidance:

- The Participatory Organic Guarantee System for India is a useful reference for developing the CoP.
- The Environmental Guidelines provided in this EMF (annex) may be referred to for developing the CoP.

ANNEXURE-
ENVIRONMENT GUIDELINES (SAMPLES) FOR PRODUCERS ORGANISATION

AGRICULTURE

Compulsory actions

- Take license to sell, stock, exhibit and distribute pesticides from the competent authority.
- If pesticides are to be sold or stocked at more than one place, take separate licenses for every such place.
- Display the license in a prominent part of the premises that is open to public.
- Do not sell pesticides in classes Ia, Ib, and II (WHO Classification of Pesticides by Hazard) (see Annex).
- Do not sell pesticides without ISI Mark Certification.
- Do not stock or sell any insecticide unless it is: properly packed, properly labeled (including name of active ingredient, expiry date, toxicity level, etc.) and the package includes information leaflet (including safety guidelines).
- Do not change or remove any inscription or mark made by the manufacturer on the container, label or wrapper of any pesticide.
- For sale of the insecticide Sulphur and its formulations, maintain a separate register showing names and addresses of all the persons to whom it has been sold or distributed and the quantities to be sold or distributed.
- Do not sell or store pesticide in the same building where any articles consumable by human beings or animals are manufactured, stored or exposed for sale. Store in a separate room which is well built, dry, well-lit and ventilated and of sufficient size.
- Immediately after the date of expiry segregate and stamp all such stocks as 'not for sale' and keep in a separate place with clear sign displaying that it is date-expired pesticide. Dispose these stocks in an environment friendly manner taking advice from the Pollution Control Board.
- Take license to sell fertilizers from the competent authority (Dy. Director, Agriculture).
- Do not sell fertilizers without ISI Mark Certification.
- For seed production obtain license from the competent authority.

Good practices

- Maintain proper records of procurement and sale of pesticides specifying the brand name and name of active ingredients.
- Stock and promote sale of safety gear to be used while handling pesticides (for example, hand gloves, plastic masks, etc.).
- Stock and sell inputs/equipment for non-chemical pest management (neem oil, pheromone traps, etc.).
- Stock and sell bio fertilizers and organic manures such as neem seed cake, vermicompost, etc.
- Provide soil testing and fertilizer recommendation services to member farmers. Coordinate with Department of Agriculture and Krishi Vigyan Kendra to provide training to farmers on integrated pest and nutrient management suitable for the region.

LIVESTOCK REARING

Compulsory actions

- Take required permission from Pollution Control Board to establish and operate a milk processing unit.
- Coordinate with Forest Department for permission to member farmers for grazing of livestock in forest area (as per applicability).

Good practices

- Encourage fodder management practices among member farmers including – fodder cultivation, rotational grazing, fodder enrichment, etc.
- Encourage composting by member farmers.
- Ensure hygiene in the milk cooling / processing unit premises.
- Dispose waste water from the milk cooling / processing unit premises into a soak pit located atleast 15 metres away from any drinking water hand pump or tubewell.
- Coordinate with Department of Agriculture/Animal Husbandry for training/technical support to member farmers on fodder management and composting.

NTFP

Compulsory actions

- Take required permission from Forest Department for collection, storage, transport, sale, processing of forest produce including NTFP.
- Coordinate with Forest Department for permission to members for collection of NTFP if required.

Good practices

- Ensure proper storage of NTFP (ventilation, humidity control, etc.) to prevent wastage of produce and to avoid health risk.
- Encourage sustainable NTFP harvesting practices among members.
- Coordinate with Forest Department or other technical support a

**ANNEXURE
ENVIRONMENT APPRAISAL OF BUSINESS PLAN**

Name of the Enterprise:

Village:

Cluster:

Block:

District:

Activity proposed:

1. Screening was done or not (Yes or No):
2. Any activity that falls under negative list, if yes required permissions are taken or planned to be taken, (or) the particular activity is dropped or changed: (give details)
3. Categorization of activity high/medium/low/no impact
4. Details of environment guidelines integrated and support requested

Environment Issues Identified	Environment Guideline/Mitigation Measure Integrated	Support Requested Training/Budget etc	Remarks

ANNEXURE
ENVIRONMENT SAFEGUARD CHECKLIST-COMMUNITY DEVELOPMENT PLANS (CDP)

- 1) Check Dams
- 2) Irrigation Works
- 3) Construction Activities
- 4) Plantation Activities

1. Check Dams:

Village
District:

Block:
State:

Name of the CDP:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Site selection	Forest Land: No Objection Certificate (NoC) to be obtained from the Forest Department. Avoid Construction of check dam Adjacent to any important structures located on either bank of stream like Roads, Building, Railway line etc.				
Check-dam	Minimize soil erosion at downstream: Construct Check dam or Sluice Gate on straight portion of stream. Avoid curved portion of streams. Construct longer side wall or protection wall, providing Concrete blocks along D/S side of river banks until regime state of stream achieved. Emphasis should be given for D/S protection work in designing and estimating of checkdam or other hydraulic structures as it is the most critical part of any hydraulic structures.				
Sluice Gate	Sedimentation of silt on upstream side: Provide gates or opening on check dam and design check dam in such a way that a minimum self cleansing velocity of water in the stream is maintained, which will not cause silting or scouring.				
Pick up Weir	Water logging or stagnation of water on u/s side resulting mosquito breeding: Provide optimum height of the check dam so that minimum				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	amount of flow takes place during lean season which will not cause stagnation or water logging				
Diversion Weir	<p>Scouring of stream Bed on D/s Side: Provide long Apron , intermediate cutoff wall on D/s side and depth of apron should be adequate in order to reduce hydraulic heads of water</p> <p>Flood in Heavy rain fall areas: Prior survey of rainfall data and HFL of respective areas are essential and taking into account all type hydrological data in designing of any hydraulic structures is important</p>				

Date of Appraisal:

Station:

Signature of the NRM&E Coordinator:

Signature of Technical Consultant Engineer:

1) Irrigation works

Village, GP:

District:

Block:

State:

Name of the CDP:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Site preparation	Avoid clearing of vegetation to the extent possible. Dispose the excavated wastes in proper manner at the borrow sites or landfills. Sprinkle water to control dust during the progress of the work.				
Use of water	Need to follow the regulator measures that do not support the over-exploitation of water resources. Promotion of water saving technologies like sprinkler and drip irrigation.				
Pumping	Shift to solar pumps where feasible and regular maintenance of diesel and electric pumps.				
Irrigation	Plan the schedule based on weather data and follow efficient methods of irrigation like alternate row, micro irrigation etc. Drainage should not be let into potable catchment area but channeled separately.				
Maintenance of channels	Regular cleaning maintenance of the channels is important.				

Date of Appraisal:

Station:

Signature of the NRM Coordinator:

Signature of Technical Consultant Engineer:

2) Construction Activities – Buildings, market sheds etc:

Village _____ Block: _____ :

District: _____ State: _____

Name of the CDP/Infrastructure under VCC: _____

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Site selection	<p>Forest Land: No Objection Certificate (NoC) to be obtained from the Forest Department.</p> <p>Site close to streams and rivulets: avoid selection of such sites. In case of unavoidable situation, the building design will include wastewater treatment and disposal arrangements.</p>				
Site clearance	<p>Removal of mature trees should be avoided during construction. If unavoidable, compensatory tree plantation with same species or suitable local species to be carried out.</p>				
Design	<p>Solar passive construction to be adopted which is mandatory as per the Energy Conservation Building Code (ECBC) and National Building Code (NBC). Disaster proof design to be made mandatory. Rain water harvesting, sewage system and waste management facilities are to be part of the design for buildings.</p> <p>All buildings will be equipped with toilets and receptacles for collection and recycling of non-biodegradable wastes</p>				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>Provision of ramps wherever necessary.</p> <p>Provide fire safety measures as necessary.</p>				
Excavations	<p>Prevention of soil erosion and destabilization by employing batched excavation technique wherever required (in slopy areas).</p> <p>Diggings, if required for foundation, to be carried out only in specified area, as per the engineering drawings and excavated earth material should be used for filling and compaction.</p> <p>Tree plantation will be carried out, around the periphery of building to enhance soil stability and control erosion.</p>				
Raw material procurement or extraction.	<p>Raw materials will not be sourced illegally from nearby locations.</p> <p>All raw materials (sand, stone, timber etc.) will be sourced from authentic and approved vendors, possessing valid permits. Relevant supporting documents should be kept for verification.</p>				
Storage of raw materials	<p>Ensure safe and covered stockpiling of the construction materials in separate place or a corner in the premises of building.</p> <p>Stockpiled materials should be covered to control dust emissions.</p>				
Construction process	<p>Water sprinkling will be carried out to reduce dust emissions, where necessary and feasible.</p> <p>Workers involved in mixing and handling of raw materials will use gloves and masks.</p> <p>Safe drinking water, temporary</p>				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>toilet facilities and shade area for rest will be provided at/near construction sites</p> <p>To the extent feasible, avoid use of noise generating machinery, equipments during night time.</p> <p>Demolition and excavation (where required) will be carried in batches to minimize dust emissions.</p> <p>Providing personal protective equipments such as gloves and boots to the laborers to avoid worksite hazards and accidents.</p> <p>Protective fencing should be used around the construction sites, excavated areas, and voids. Sign boards should be placed indicating work in progress.</p> <p>Use of child labour will be avoided.</p> <p>Any chance findings will be deposited with District Magistrate.</p>				
Post Construction – disposal of construction debris	Construction debris should be put to alternate uses such as land filling. If not utilized it should be disposed off in nearby safe places (land fills).				

Date of Appraisal:

Station:

Signature of the NRM&E Coordinator:

Signature of Technical Consultant Engineer:

3) Plantation activities

Village:

District:

Block:

State:

Name of the CDP:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Site selection	Forest Land: No Objection Certificate (NoC) to be obtained from the Forest Department. It is advisable to get the soil testing done in-order to understand the nutrient status and required nutrient management practices.				
Selection of species	Select the species that are suitable to the local conditions, native to the region and those that meets some of the needs of the community like fodder, fuel, green manure, nutrition etc.				
Field preparation and layout	Prevention of soil erosion and destabilization by employing batched excavation technique should be followed wherever required (in slopy areas). In sloppy lands the plantation should be across the slope and trenches should be made for conserving water where possible. The spacing should be followed depending the on the species. Advice can be taken from Forest Department / Horticulture Department. Select healthy plants that are at right age of plantations and free of any pests and diseases.				
Management	Protecting the saplings till the establishment is critical. Make a fence around the saplings till they are established. Apply organic manure in the pit during planting and make a basin around it for application of manure, irrigation etc.				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>Manure application should be done one every year.</p> <p>Create a water source for irrigation to the extent possible, eg: small ponds</p> <p>It is advisable to take a non-competitive intercrop (eg: fodder) to prevent soil erosion and to arrest weed growth. This can also provide additional income.</p>				

Date of Appraisal:

Station:

Signature of the District NRM&E Coordinator:

ANNEXURE
ENVIRONMENT SAFEGUARD CHECKLIST- LIVELIHOOD INTERVENTIONS

- 1) Agri-Horti activity
- 2) Livestock-Dairy
- 3) Livestock-Piggery
- 4) Fishery
- 5) Food Processing Units
- 6) Slaughter House

1. Agri-horticulture

Village:

District:

Block:

State:

Name of the SHG/PG/PO:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Crop Selection	Crop selection must be matching with availability of water. Crop rotation should be followed to ensure that crops with different root zones, different demands on nutrients and different pests and diseases are cultivated alternatively.				
Selection of the variety	Well adapted and high-yielding varieties recommended to the region with resistance to biotic stresses and improved nutritional quality should be chosen.				
Seed treatment	Use of treated seed preferably with botanicals.				
Irrigation	Use water efficient methods of irrigation like drip especially for horticultural crops.				
Pest Management	Pest control measures should be taken based on pest surveillance based advisory only. Restrict to non chemical methods of pest management. Avoid use of pesticides under the classes Ia, Ib and II as per the classification of World Health Organisation (WHO). Follow the precautions in use and disposal of pesticides. • Mixing and transfer of pesticides should be undertaken in ventilated				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>and well-lit areas, using containers designed and dedicated for this purpose</p> <ul style="list-style-type: none"> • Use of Personal Protective Equipment (PPE) such as gloves, overalls, eye protection worn at all times when handling and applying pesticides. • Mixing and filling the pesticides should be done away from watercourses and drains. • Spray operation should be done in early mornings and evenings, avoid spraying on cloudy day or a windy day/direction of wind. • Rinsed water should be collected in a separate tank and disposed of as a hazardous waste, spills should be cleared. The spray equipment and containers should not be washed in water courses and drains • Collect rinse water from equipment cleaning for reuse (such as for the dilution of identical pesticides to concentrations used for application); • Empty pesticide containers should not be used for any other purpose (e.g. storing food, water containers). Contaminated containers should be handled as hazardous waste, and should be disposed safely • Expired chemicals should be disposed off immediately • Maintain records of 				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>pesticide use and effectiveness</p> <ul style="list-style-type: none"> • Shower or bath at the end of every day's work and wear new clean clothes. • Wash overalls and other protective clothing at the end of every working day in soap and water and keep them separate from the rest of the family's clothes. If the insecticide touches the skin, wash off immediately with soap and water. • Change clothes immediately if they become contaminated with pesticides. Inform the supervisor immediately if one feels unwell. • In case of accidental swallow or exposure to the spray or pesticides the first aid should be administered immediately and medical help should be sought immediately 				

Date of Appraisal:

Signature of the NRM&E Coordinator:

Signature of L&RM Coordinator

2. Livestock Rearing- Dairy Activity

Village:

Block:

District:

State:

Name of the SHG/PG/PO:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Breed selection	Selection of breeds suitable to local climatic conditions and up gradation with the improved breeds suitable or acclimatized to local climate should be done under technical guidance. Indigenous species should be promoted to the extent possible				
Open grazing	It is ideal to combine stall feeding with grazing for a limited time. The grazing should be done in rotational manner.				
	Graze animals only in authorized grazing land				
	Stall feeding of animals need to be promoted				
Fodder cultivation	Undertake fodder management and plantation of fodder in wastelands/ fallow land.				
	Green fodder should comprise of proper cereal grass and legume mix to provide complete nutrition. The fodder plots should also accommodate legume crops like cow pea, stylo and fodder trees like sesbania				
	Azolla cultivation can also supplement the protein requirement. Use of chemical				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	should be avoided/ minimized				
Shed spacing, sanitation and waste management	The sheds should be clean and should provide sufficient ventilation; enough space for the animal to move freely (recommended space is 4 sq mt per animals). The shed should be at least 15 m away from drinking water source				
	The daily sweepings of the shed should be composted in a pit. However pit methods can be avoided in areas with high water table but the heap should be properly covered with palm leaves or gunny sacks to avoid leaching				
	The households having 2 cattle can plan for biogas plants/ composting.				
Stall feeding with unchopped green fodder	Green fodder cut into small bits using chaff cutter or suitable tools will improve the feeding efficiency of the animal digestibility and reduce the wastage				
Interventions for improving milk yield	Practice of injecting hormones should be strictly avoided				
Milking	Beneficiaries should be trained on hygienic milking practices				
Open disposal of carcasses	The carcasses should be properly buried or burned, after bio security measures				

Date of Appraisal:

Station:

Signature of the District NRM&E Coordinator:
L&RM Coordinator

Signature of the District

3. Livestock Rearing- Piggery

Village:

Block:

District:

State:

Name of the SHG/PG/PO:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Breed selection	Selection of suitable species in order to have increased adaptability. Indigenous species should be promoted to the extent possible.				
Use of growth promoters	Prohibition of use of hormones for gaining mass, farmers should be made aware of the ill effects.				
Shed construction and maintenance	Sheds should be well ventilated and spacious enough to provide healthy environment. Sheds should be cleaned every day and the liquid waste should not be let into any water bodies.				
Feed and manure management	Recommended dosages of feed to be followed. Feed waste to be collected and disposed properly. The manure should be stored in a lined pit to avoid any leachates and properly covered (to be opened and stirred once in a while allow the heat to escape). Integrated farming practices (with fisheries) should be encouraged so as to promote effective use of feed waste and manure.				
Disease outbreaks	An awareness program to farmer on precaution measures that needs to be adopted during epidemic/spreading of infectious diseases in pig should be				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	made available. Knowledge on the possible diseases that could be transmitted from pig to humans should be provided.				

Date of Appraisal:

Station:

Signature of the District NRM&E Coordinator:

Signature of the District L&RM Coordinator

4. Fishery

Village:

Block:

District:

State:

Name of the SHG/PG/PO:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Quality fish seed, size and stocking density	Use of fish seed from certified hatcheries and use of fingerling size fish for culture. Number of fingerlings per hectare of farmers' ponds need to be scientifically worked out with assistance from state fishery department				
Water Quality	Regular monitoring of water quality, DO, PH level Control of weeds and water hyacinth in the fish Ponds need to be done. Use of fertilizers in recommended doses in coordination with authorized fishery officials for better fish production				
Exotic Fishes- Loss of biodiversity and indigenous fish species	Indigenous varieties suited to the region need to be cultured. Exotic fishes need to be avoided as far as possible.				

Date of Appraisal:

Station:

Signature of the District NRME Coordinator:
Coordinator:

Signature of the District L&RM

5. Food Processing Units:

Village:

Block:

District:

State:

Name of the SHG/PG/PO:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
Registration and licenses	Manufacturing and selling of food products need license depending on the scale of activity. License should be acquired as per Food Safety and Standards Act (FSSAI) 2006 if required.				
Drying the raw materials, products	Clean and dry cement floor or mats should be used for drying. Solar dryers can be used depending on feasibility.				
Use of machinery (for grinding spice mixes and ingredients for pickle)	Machinery (small mills and grinders) used for grinding ingredients should be cleaned and dried regularly.				
Use of cook stoves (in bakery and snacks, sweet and milk products)	Fuel efficient cook stoves or bio gas should be considered.				
Use of preservatives, colour and flavor agents	Natural agents and permitted agents should only be used.				
Handling and packing	Personnel involved in processing, packing etc.				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	should wash hands with soap before and after work and use aprons, gloves, hair caps for handling, packing etc. Use of eye goggles is recommended while handling pungent items like spices.				
Packing and labeling	The product labeling should include the expiry date and should be marked with in the shelf life period.				
Storage	Raw materials and produce should be stored in clean and dry conditions.				
Facilities at processing centre	The place should be well ventilated, should have drinking water and sanitation facilities.				
Waste management	Any waste or waste water should be disposed properly by composting or diverting to waste water drains.				
Workers safety	Decent working condition should be provided				
Possibility of using child labour	Engagement of children below 14 years will be avoided				
Fair and equal wages	Fair (not below minimum wages)/ equal wages that will be paid to all workers				

Date of Appraisal:

Signature of the District NRM&E Coordinator:

Signature of the District L&RM Coordinator

6. Slaughter House

Village:

Block:

District:

State:

Name of the CDP:

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
License and permissions	<p>Permission of local municipality and panchayat should be taken for slaughter house establishment¹.</p> <p>As per the rules of the Food Safety and Standards (FSSAI) Act, 2006, licence to be taken for sale of meat / processed meat for public consumption.</p> <p>Slaughter house licence has to be renewed annually.</p> <p>The norms for waste water discharge; waste disposal; carcass disposal in slaughter house has to be adhered as per guidelines issued by the Pollution Control Board</p>				
Location	<p>A slaughter house shall not be within 90 metres of any dwelling house or within 150 metres from Hospitals with inpatients treatment or Public Educational institutions or places of worship.</p> <p>No door of any slaughter house shall open directly into any street</p>				

¹ The Panchayat or Municipality shall publish a notice in a daily newspaper in the chief language of the locality having wide circulation in the area and in the notice board of the Panchayat office and in the places specified by the Panchayat, and shall give publicity through pamphlet and loudspeakers and giving a period not being less than 30 days for filing objections and after considering the objections in detail received within the period and the Panchayat shall take decision on it.

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>or lane or other public place.</p> <p>A sign board marked 'public slaughter house' or 'licensed slaughter house' shall be exhibited in front of the building used for slaughtering.</p>				
Design	The design and facilities of the slaughter house has to be approved. Standard design as per Food and Agriculture Organisation (FAO) ² may be followed to the extent possible (eg: disposal pits, soak pits, own water supply etc.)				
Operation and Management					
Admitting animals for slaughter	<p>Stamping of animals: No animal shall be admitted into a slaughter house unless it is examined, certified and stamped by the Examining Authority that the animal is free from contagious diseases and other diseases.</p> <p>The person in charge of the slaughter house shall maintain register showing the particulars of animals thus examined and stamped.</p> <p>The person who brings animals for slaughter shall keep the animals clean and shall see that they are kept in-charge of a keeper and secured by ropes to prevent them from injuring one another, and shall provide them with 12 hours rest and water prior to their being led to slaughter.</p>				
Slaughtering	Licensing of butchers: No person shall be permitted for slaughtering				

² <http://www.fao.org/docrep/003/t0034e/T0034E01.htm>

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>animals in the slaughter houses except with a license in Form issued by the Secretary, Public Health. Butcher should not be a person that he is not a person infected with any contagious diseases or having any health problems warranting refusal of license for slaughtering animals.</p> <p>Animals shall be slaughtered only in places specially allotted for them in the slaughter house.</p> <p>Meat stall shall be covered with glass, inaccessible to insects like houseflies and also having abundant air circulation.</p> <p>License of the stall shall exhibit a board in front of the stall visible to others, specifying his name number of the stall and price chart.</p>				
Meat sales, Waste management and health control in slaughter house; maintenance of machinery and premises.	<p>The Inspecting Authority may at any time inspect the meat of a slaughtered animal and if find the same as diseased or unfit for human consumption, it shall not be allowed for sale it should be destroyed.</p> <p>The meat shall be suspended by means of hooks in such a way that they do not come into contract with the roofs, walls or pillars of the stalls.</p> <p>The balance of meat taken for weighing shall be suspended and not placed on the table.</p> <p>The Panchayat shall have the right to cancel the licence of an owner who sells or stores such meat unfit for consumption.</p> <p>Separate receptacles to be</p>				

Activity	Mitigation Measures	Status (put a '√' mark)			Remarks (Details of action taken, reasons for action not taken, proposed plan to take necessary action etc.)
		Will be done	Cannot be done	Not applicable	
	<p>provided for putting refuse and allowing blood to flow.</p> <p>The inflation or blowing of carcasses shall not be done in the slaughter houses.</p> <p>All articles inside the slaughter house shall be kept clean, provision shall be made for an abundant supply of water to keep the slaughter house clean.</p> <p>Spittoons to be provided in the slaughter house.</p>				
Management of visitors	<p>No person shall take or admit any child below ten years of age into the slaughter house.</p> <p>No person shall be allowed to bring dogs in the slaughter house.</p> <p>Crows and other birds shall not be allowed to get into the slaughter house.</p>				
Worker safety	<p>Decent working condition should be provided with safe drinking water, toilets and rest area.</p> <p>Engagement of children below 14 years will be avoided</p>				

Date of Appraisal:

Station:

Signature of the NRM&E Coordinator:

Signature of Tech. Consultant Engineer/ L&RM Co.