Environmental Management Plan Checklist and Format for Low-risk Topologies

For low-risk topologies, an alternative to the commonly used "full text" EMP format is to have a checklist approach. The goal is to provide a more streamlined approach to preparing EMPs. This checklist-type format ("EMP Checklist," see Annex 3) has been developed to provide "pragmatic good practice" and designed to be user friendly and compatible with safeguard requirements. A blank sample is attached as Annex 3.

The checklist-type format attempts to cover typical mitigation approaches to common low-risk topologizes with temporary localized impacts. It is anticipated that this format provides the key elements of an Environmental Management Plan (EMP) to meet World Bank Environmental Assessment requirements under OP 4.01 (see Annex 1).

The EMP (Annex 2) format has two sections:

- **Part I:** constitutes a descriptive part ("site passport") that describes the project specifics in terms of physical location, the institutional and legislative aspects, the project description, inclusive of the need for a capacity building program and description of the public consultation process. This section could be up to two pages long. Attachments for additional information can be supplemented if needed.
- **Part II:** includes the environmental and social screening in a simple Yes/No format followed by mitigation measures for any given activity and the monitoring plan for activities during project construction and implementation. It retains the same format required for standard World Bank EMPs.

Application of the EMP-Checklist

The practical application of the EMP-checklist would include the filling in of Part I to obtain and document all relevant site characteristics and activities. In Part 2 the type of foreseen works, as obtained from the design documents, would be checked and the resulting provisions listed below highlighted (e.g. by hatching the field or copy pasting the relevant text passages into the special provisions of the tender documents.

The whole filled in tabular EMP is additionally attached as integral part to the works contract and, analogous to all technical and commercial terms, has to be signed by the contract parties.

For the monitoring of the Contractor's safeguards due diligence the designated construction inspector works with **Part C** of the EMP Checklist, the monitoring plan. This should be developed site specifically and in necessary detail, defining clear criteria and parameters which can be included in the works contracts, which reflect the status of environmental practice on the construction site and which can be observed/measured/ quantified/verified by the inspector during the construction works.

Part C would thus be filled in during the design process to fix key monitoring criteria which can be checked during and after works for compliance assurance and ultimately the Contractor's remuneration.

ANNEX 1: Documents generally required by World Bank's Safeguard Policies

Policy No.	Topic	Documents / deliverables required during preparation	implementation	operation
OP 4.01	Environmental Screening / Assessment (EA)	EA process, including EMF, EIA, EMP, MP	EMP / MP	(EMP) / MP
OP 4.04	Natural Habitats	included in EA under OP 4.01	compensation plan, included in EMP + MP, OP 4.01	included in EMP + MP, OP 4.01
OP 4.09	Pest Management	included in EA under OP 4.01	Pest Management Plan (PMP)	(reference in ISR/ICR)
OP 4.10	Indigenous Peoples	social assessment, IPP	IPP / RAP	(reference in ISR/ICR)
OP 4.11	Physical Cultural Resources	included in EA under OP 4.01	PCR management plan (part of EA)	(reference in ISR/ICR)
OP 4.12	Involuntary Resettlement	RAP (and other instruments)	RAP (and other instruments)	(reference in ISR/ICR)
OP 4.36	Forest	included in EA under OP 4.01	included in EMP + MP, OP 4.01	included in EMP + MP, OP 4.01
OP 4.37	Safety of Dams	dam safety report (DSR), TOR for PoE	DSR & emergency preparedness plan (ERP)	DSR & emergency preparedness plan[1], dam instrumentation & monitoring plan
OP 17.50	Disclosure	SIR	SCR, disclosure of ESIA & EMP	contd. information & consultation
OP/BP 7.50	International Waterways	notification of all affected riparian states		
OP/BP 7.60	Disputed Areas	legal / political negotiations		

Fields hatched in grey: no specific documents required at preparation stage

Acronyms:

DSR	dam safety report	EA	environmental assessment *process*
EIA	environmental impact assessment *report*	EMF	environmental management *framework*
EMP	environmental management *plan*	ESIA	environmental / social impact assessment
ERP	emergency response plan	IPP	indigenous peoples plan
ICR	implementation completion report	MP	monitoring plan
ISR	implementation status report	PoE	Panel of Experts
PCR	physical cultural resources	RAP	resettlement action plan
SCR	stakeholder consultation report	SIR	stakeholder identification report

[1] This is commonly not released to the Public.

ANNEX 1: Format for Environmental Management Plan

Environmental Management Plan (EMP)
Africa Centers of Excellence

January 2016

PART I: Activity Description

1. INTRODUCTION

The Centre of Excellence in Climate Smart Agriculture and Biodiversity Conservation is established to address challenges associated with the realization of sustainable agricultural intensification, utilization and conservation of biodiversity, and climate change adaptation and mitigation in Eastern and Southern Africa by enhancing the capacity of Haramaya University and the collaborating partners. It is intended to produce quality graduates and problem solving research outputs. This document outlines the environmental management plan of the Centre.

2. Project Description

Project Site

The Centre is located at Haramaya University (9° 26'N, 42° 03'E), Oromia National Regional State, Eastern Ethiopia.

Working Hours

The official operation hours of the centre are 8:00 am to 5:00 pm, with an hour's lunch break in between from Monday to Friday. Besides, field and laboratory research activities may take place as required during off hours, weekends, and holidays.

Environmental Management Plan Context

The project mainly focuses on curriculum development, postgraduate training and research, faculty and support staff development, and skill enhancement of national and regional partners. Civil works will be minimal, limited to construction of greenhouses, livestock barns, and development of small scale irrigation facilities. Also, the project involves the purchase and use of some ICT equipment, vehicles, laboratory chemicals, medicaments, glassware, and equipment. Appropriate precaution and mitigation measures will be implemented in compliance with national and international laws and regulations, and practices in order to manage any negative environmental and social impacts.

3. Environmental Footprint

The environmental footprint will be limited to the existing university campus.

4. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

Compliance will be made with national laws and regulations, such as National Environmental Policy 1997; Environmental Management Plan 2004; Environmental Impact Assessment Guideline Document 2000; Plant Quarantine Regulation 1992; National Biodiversity Conservation and Research Policy 1998; Conservation Strategy 1997; Biosafety Proclamation 2009; Proclamation

on access to Genetic Resources and Community Knowledge and Rights 2006; Drug Administration and Control Regulation 2008; Veterinary Drugs, Feed Administration and Control 2011; Radiation Protection Proclamation 2008; ICT Policy and Regulatory Environment 2010; Government Procurement and Property Administration Proclamation 2009.

Relevant approval and licensing requirements will be processed in collaboration with concerned regulatory bodies mandated to implement these laws and regulations. Furthermore, compliance will be made with pertinent international laws and regulations.

5. RELEVANT WORLD BANK POLICIES

The project triggers Operational Policy OP 4.01 – Environmental Assessment, due to potential impacts resulting from the works for upgrade of facilities (e.g. greenhouses, livestock barns, and development of small scale irrigation facilities) within Haramaya University.

6. IMPLEMENTATION ARRANGEMENTS

MONITORING ARRANGEMENTS

7. ENVIRONMENTAL SCREENING, ASSESSMENT AND MANAGEMENT

EMP Objectives

- To uphold and ensure compliance to national and international laws and regulations regarding environmental and social safeguard.
- To mainstream global best laboratory, farm management, and field practices
- To put in place functional mechanisms for monitoring and periodic review of environmental management practices

8. Environmental Management Approach

The environmental management makes sure that the EMP objectives are met. The objectives will be realized through ensuring compliance with relevant laws and regulations, mainstreaming best practices, and establishing monitoring and review mechanisms.

9. MONITORING AND REPORTING

The practical application of the EMP-checklist would include the filling in of Part I to obtain and document all relevant site characteristics and activities. In Part 2 the type of foreseen works, as obtained from the design documents, would be checked and the resulting provisions listed below highlighted (e.g. by hatching the field or copy pasting the relevant text passages into the special provisions of the tender documents. The whole filled in tabular EMP is additionally attached as integral part to the works contract and, analogous to all technical and commercial terms, has to be signed by the contract parties. For the monitoring of the Contractor's safeguards due diligence the designated construction inspector works with Part C of the EMP Checklist, the monitoring plan. This should be developed site specifically and in necessary detail, defining clear criteria and parameters which can be included in the works contracts, which reflect the status of environmental practice on the construction site and which can be observed/measured/ quantified/verified by the inspector during the construction works. Part C would thus be filled in during the design process to fix key monitoring criteria which can be checked during and after works for compliance assurance and ultimately the Contractor's remuneration.

Part II : EMP Checklist for Activities

PART A: INSTITUTIONAL & ADMINISTRATIVE				
Country	Ethiopia			
Project title	Environmental Management Plan (EMP) for ACE Climate Smart Agriculture and Biodiversity Conservation (Climate SABC) at Haramaya University, Ethiopia			
Scope of project and activity	The project mainly focuses on curriculum development, postgraduate training and research, faculty and support staff development, and skill enhancement of national and regional partners. Civil works will be minimal, limited to construction of greenhouses, livestock barns, and development of small scale irrigation facilities. Also, the project involves the purchase and use of some ICT equipment, vehicles, laboratory chemicals, medicaments, glassware, and equipment. Appropriate precaution and mitigation measures will be implemented in compliance with national and international laws and regulations, and practices in order to manage any negative environmental and social impacts.			
Institutional arrangements (Name and contacts)	WB (Project Team Leader)	Project Management	Local Counterpart and/or Recipient	
Implementation arrangements (Name and contacts)	Safeguard Supervision	Local Counterpart Supervision	Local Inspectorate Supervision	Contactor
SITE DESCRIPTION				
Name of site	Haramaya University, Ethiopia			
Describe site location			Attachment 1: Site Map [ ]Y [X] N	
Geographic description	It is located 5 km from Alemaya, next to Lake Haramaya, a town in the East Hararghe Zone, about 17 kilometers from the city of Harar and 40 kilometers from Dire Dawa.			
LEGISLATION				
Identify national & local legislation & permits that apply to project activity	Compliance will be made with national laws and regulations, such as National Environmental Policy 1997; Environmental Management Plan 2004; Environmental Impact Assessment Guideline Document 2000; Plant Quarantine Regulation 1992; National Biodiversity Conservation and Research Policy 1998; Conservation Strategy 1997; Biosafety Proclamation 2009; Proclamation on access to Genetic Resources and Community Knowledge and Rights 2006; Drug Administration and Control Regulation 2008; Veterinary Drugs, Feed Administration and Control 2011; Radiation Protection Proclamation 2008; ICT Policy and Regulatory Environment 2010; Government Procurement and Property Administration Proclamation 2009.			
PUBLIC CONSULTATION				
Identify when / where the public consultation process took place	Public consultation workshop was organized on the University campus by the project team on January 14, 2016.			
INSTITUTIONAL CAPACITY BUILDING				
Will there be any capacity building?	[X] N or [ ]Y if Yes, Attachment 2 includes the capacity building program			

PART B: ENVIRONMENTAL /SOCIAL SCREENING			
Will the site activity include/involve any of the following potential issues and/or impacts:	**Activity and potential issues and/or impacts**	**Status**	**Additional references**
	1. Building rehabilitation • Site specific vehicular traffic • Increase in dust and noise from demolition and/or construction • Construction waste	[X] Yes [ ] No	See Section **B** below
	2. New construction • Excavation impacts and soil erosion • Increase sediment loads in receiving waters • Site specific vehicular traffic • Increase in dust and noise from demolition and/or construction • Construction waste	[ ] Yes [X] No	See Section **B** below
	3. Individual wastewater treatment system • Effluent and / or discharges into receiving waters	[ ] Yes [X] No	See Section **C** below
	4. Historic building(s) and districts • Risk of damage to known/unknown historical or archaeological sites	[ ] Yes [X] No	See Section **D** below
	5. Acquisition of land[2] • Encroachment on private property • Relocation of project affected persons • Involuntary resettlement • Impacts on livelihood incomes	[ ] Yes [X] No	See Section **E** below
	6. Hazardous or toxic materials[3] • Removal and disposal of toxic and/or hazardous demolition and / or construction waste • Storage of machine oils and lubricants	[X] Yes [ ] No	See Section **F** below
	7. Impacts on forests and/or protected areas • Encroachment on designated forests, buffer and /or protected areas • Disturbance of locally protected animal habitat	[ ] Yes [X] No	See Section **G** below
	8. Handling / management of medical waste • Clinical waste, sharps, pharmaceutical products (cytoxic and hazardous chemical waste), radioactive waste, organic domestic waste, non-organic domestic waste • On site or off-site disposal of medical waste	[ ] Yes [X] No	See Section **H** below
	9. Traffic and Pedestrian Safety • Site specific vehicular traffic • Site is in a populated area	[ ] Yes [X] No	See Section **I** below
ACTIVITY	**PARAMETER**	**GOOD PRACTICES MITIGATION MEASURES CHECKLIST**	

[3] Toxic / hazardous material includes and is not limited to asbestos, toxic paints, removal of lead paint, etc.

A. General Conditions	Notification and Worker Safety	(a) The local construction and environment inspectorates and communities have been notified of upcoming activities (b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) All legally required permits (to include not limited to land use, resource use, dumping, sanitary inspection permit) have been acquired for construction and/or rehabilitation (d) All work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. (e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
B. General Rehabilitation and /or Construction Activities	Air Quality	(a) During interior demolition use debris-chutes above the first floor (b) Keep demolition debris in controlled area and spray with water mist to reduce debris dust (c) Suppress dust during pneumatic drilling/wall destruction by ongoing water spraying and/or installing dust screen enclosures at site (d) Keep surrounding environment (side walks, roads) free of debris to minimize dust (e) There will be no open burning of construction / waste material at the site (f) There will be no excessive idling of construction vehicles at sites
	Noise	(a) Construction noise will be limited to restricted times agreed to in the permit (b) During operations the engine covers of generators, air compressors and other powered mechanical equipment should be closed, and equipment placed as far away from residential areas as possible
	Water Quality	(a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.
	Waste management	(a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities. (b) Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. (c) Construction waste will be collected and disposed properly by licensed collectors (d) The records of waste disposal will be maintained as proof for proper management as designed. (e) Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)
C. Individual wastewater treatment system	Water Quality	(a) The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities (b) Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment (c) Monitoring of new wastewater systems (before/after) will be carried out
D. Historic building(s)	Cultural Heritage	(a) If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, notify and obtain approval/permits from local authorities and address all construction activities in line with local and national legislation (b) Ensure that provisions are put in place so that artifacts or other possible "chance finds" encountered in excavation or construction are noted, officials contacted, and works activities delayed or modified to account for such finds.
F. Toxic Materials	Asbestos management	(a) If asbestos is located on the project site, mark clearly as hazardous material (b) When possible the asbestos will be appropriately contained and sealed to minimize exposure (c) The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust (d) Asbestos will be handled and disposed by skilled & experienced professionals

		(e) If asbestos material is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately (f) The removed asbestos will not be reused
	Toxic / hazardous waste management	(a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information (b) The containers of hazardous substances should be placed in an leak-proof container to prevent spillage and leaching (c) The wastes are transported by specially licensed carriers and disposed in a licensed facility. (d) Paints with toxic ingredients or solvents or lead-based paints will not be used
G. Affects forests and/or protected areas	Protection	(a) All recognized natural habitats and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all staff will be strictly prohibited from hunting, foraging, logging or other damaging activities. (b) For large trees in the vicinity of the activity, mark and cordon off with a fence large tress and protect root system and avoid any damage to the trees (c) Adjacent wetlands and streams will be protected, from construction site run-off, with appropriate erosion and sediment control feature to include by not limited to hay bales, silt fences (d) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.
H. Disposal of medical waste	Infrastructure for medical waste management	(a) In compliance with national regulations the contractor will insure that newly constructed and/or rehabilitated health care facilities include sufficient infrastructure for medical waste handling and disposal; this includes and not limited to: ▪ Special facilities for segregated healthcare waste (including soiled instruments “sharps”, and human tissue or fluids) from other waste disposal: a. Clinical waste: yellow bags and containers b. Sharps – Special puncture resistant containers/boxes c. Domestic waste (non-organic): black bags and containers ▪ Appropriate storage facilities for medical waste are in place; and ▪ If the activity includes facility-based treatment, appropriate disposal options are in place and operational
I Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activites	(b) In compliance with national regulations the contractor will insure that the consruction site is properly secured and construction related traffic regulated. This includes but is not limited to ▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards ▪ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. ▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement ▪ Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public. ▪ Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.

PART C: Monitoring Plan							
Phase	**What** (Is the parameter to be monitored?)	**Where** (Is the parameter to be monitored?)	**How** (Is the parameter to be monitored?)	**When** (Define the frequency / or continuous?)	**Why** (Is the parameter being monitored?)	**Cost** (if not included in project budget)	**Who** (Is responsible for monitoring?)
During activity preparation	Protecting soils against degradation; preventing eutrophication of water bodies; preventing soil erosion; safe disposal of used laboratory supplies and chemicals	At research sites; at experimental stations; in demonstration fields; in laboratories, glasshouses, lath houses; rivers, lakes and well water	Observation; absence of risks to animals, humans, and the environment	At least twice a year	To avoid risks and harms to humans, animals, and the environment	Included in the project budget:	Environment and Social Safeguard Officer (Dr. Lemma Wogi, Haramaya University)
During activity **implementation**	Water quality Air Quality Waste disposal	Near dwellings, laboratories, human settlements, rivers, lakes, well waters	Soil quality test; water quality test including nitrogen and phosphorus load lakes, and well water; toxic heavy metals in the soil	Once a year	Ensure safe water supply; ensure safe soil to grow crops; promote animal and human health through protecting the environment from hazardous materials	Included in the project budget	Soil quality experts; water quality experts; environment and Social safeguard Officer
During activity **supervision**	All monitoring issues arising during preparation and implementa-	At and near laboratories, research sites, demonstration	Inventory of mitigation measures and environmental management	At least twice a year	To ensure environmental and social safety	Included in the project budget	All the arising issues during preparation and implementation

	tion	plots, experi-mental stations	plans				

ESMP Monitoring table

Institution	EMP monitoring arrangements (name, title, contact information)
Haramaya University	Dr. Bulti Tesso, Head, School of Plant Sciences Tel 138 Dire Dawa, Ethiopia Tel.:+251968347931 Email:bulti-obsa@yahoo.com
	Mr. Admikew Haile, Director for Research Facilities P. O. Box 138 Dire Dawa, Ethiopia Tele.: +25191 Email: yadeniadmkew@gmail.com
	Mr. Tesfaye Guta, ICT Director P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251 911348072 Email:tesfayeguta2@gmail.com
	Mr. Tafesse Tsegaye, Director for Property Administration P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251 922379617
	Mr. Ewnetu Kebede, Dairy Farm Manager P.O.Box 138 Dire Dawa, Ethiopia Tel.: +251 912927403
	Mr. Birhanu Worku, Transport and Garage Team Leader P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251911852754
	Mr. Shimeles Felleke, Landscaping and Custodial coordinator P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251913851244
	Dr. Abebaw Adgo, Department of Chemistry , Director for research thematic area, Engineering and Information Technology P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251938238996

	Email:abebawadgo@gmail.com
	Dr. Abi Tadesse, Department of Chemistry , P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251912018750 Email:abi92003@yahoo.com
	Dr. Tesfaye Gemechu , Head of Higher Clinic P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251 912095067
	Dr. Biresaw Serda, Dean, College of Veterinary Medicine P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251 911052265 Email:biressawserda2011@gmail.com
	Mrs. Haimanot Bizuneh, Technical Assistant in Plant Pathology P.O.Box 138 Dire Dawa, Ethiopia Tel.: Tel.:+251 910822686
	Farm Management Coordinator
	Dr. Negussie Bussa, University Laboratory Management Director Dr. Biresaw Serda, Dean, College of Veterinary Medicine P.O.Box 138 Dire Dawa, Ethiopia Tel.:+251913498532 Email:negussiebussa@yahoo.com

Record of Public Consultations (attendees, date and place held, points raised, responses by the consultants)

Public consultation workshop was organized by the project team on January 14, 2016. To collect relevant information on EMP, the following guiding questions were distributed to the participants, and the responses were collected and recorded.

1. Indicate precautions to be made during procurement of items, import/export of genetic materials, handling, use and disposal of used items.
2. List the possible environmental concerns that may arise from handling/use and disposal of used items and wastes
3. List possible management and mitigation strategies for safe handling and disposal of hazardous materials/chemicals
4. Mention laws/rules/regulations pertinent to the above issues.
5. Other relevant issues related to environmental management while implementing ClimateSABC project

List of stakeholders participated and their views are indicated in the following table.

Stakeholders present	Issues raised	Response to the issues

▪ Environmental Science program Coordinator ▪ Head, School of Plant Science ▪ Director for Facilities Management ▪ ICT Director ▪ Director for Property Administration ▪ Dairy Farm Manager ▪ Transport and Garage Team Leader ▪ Landscaping and Custodial coordinator ▪ Department of Chemistry ▪ Head of Higher Clinic ▪ Dean, College of Veterinary Medicine ▪ Technical Assistant in Plant Pathology ▪ Farm Management Coordinator ▪ University Laboratory Management Director	▪ Existence of national EMP safeguard policy and regulation documents ▪ Existence of national regulation on import and export of genetic materials ▪ Safe and efficient utilization of purchased chemicals/reagents, medicaments and equipment ▪ Purchase,utilization, handling, maintenance and disposal of ICT materials, vehicles, medicaments, laboratory equipments, chemicals/reagents ▪ Existence of Procurement and property disposal service in the university ▪ Animal waste disposal methods ▪ Rules and regulations pertinent to animal welfare ▪ Maintenance and disposal of used vehicles, lubricant ▪ Mainstreaming of best environmental management practices	• Presence of relevant national environmental policy documents, guidelines and regulations • Presence of national bio-safety regulation and plant quarantine regulation • Formulation of environmental management plan • Compliance ICT policy and regulatory environment • Compliance with Government procurement and property administration proclamation 2009 • Compliance with relevant national policies and documents on disposal of used equipment, chemicals and vehicles are available. Moreover, the institute has procurement and property disposal service. • Animal waste will be used for Bio-feul, and organic fertilizer • Compliance with national and institutional regulations and procedures ▪ While purchasing different chemicals and reagents students, researchers and professionals should be consulted; proper logbook, storage and handling practice should be implemented ▪ The Center will ensure compliance to FAO/OIE standard for animal welfare and slaughtering procedures ▪ Awareness creation, training, strengthening environmental club, use of printed materials and University FM radio, website etc ▪ The importance of installation of newly purchased equipment by supplying company and training of technicians that are able to run and conduct minor maintain the new equipment smooth.