



KENYA FORESTRY RESEARCH INSTITUTE (KEFRI)

TECHNICAL SUPPORT SERVICES PROCEDURES MANUAL

KEFRI/SOP/TSS/13

TABLE OF CONTENTS

PROCEDURE 1: KNOWLEDGE MANAGEMENT	1
PROCEDURE 2: STAKEHOLDER TRAINING	6
PROCEDURE 3: LIBRARY MANAGEMENT.....	9
PROCEDURE 4: PRODUCTION OF TECHNICAL PUBLICATIONS.....	14
PROCEDURE 5: PRODUCTION OF ACCOUNTABLE DOCUMENTS	16
PROCEDURE 6: IDENTIFICATION AND ASSESSMENT OF QUALITY RISKS AND ENVIRONMENTAL ASPECTS	22
PROCEDURE 7: EMERGENCY PREPAREDNESS AND RESPONSE PROCEDURE	27
PROCEDURE 8: OCCUPATIONAL HEALTH AND SAFETY PROCEDURE	36
PROCEDURE 9: COMPLIANCE TO LEGAL AND OTHER REQUIREMENTS	42
PROCEDURE 10: HANDLING AND DISPOSAL OF NON-HAZARDOUS SOLID WASTE	44

PROCEDURE 1: KNOWLEDGE MANAGEMENT**1.0 Purpose**

The Purpose of this procedure is to ensure efficient identification, maintenance and availability of knowledge in KEFRI.

1.1 Scope

This procedure shall be applicable to knowledge management in KEFRI.

1.2 Reference

- a) KEFRI Knowledge Management Strategy
- b) Current KEFRI Strategic Plan
- c) KEFRI Publications Policy
- d) KEFRI Knowledge Management Policy
- e) ISO 9001:2015 Standard
- f) ISO 14001:2015 Standard
- g) KEFRI ICT Policy Guidelines
- h) Service Delivery Charter

1.3 Terms, Definitions & Acronyms

- a) DD – Deputy Director
- b) HKM – Head of Knowledge Management
- c) HR – Human Resource
- d) ICT – Information Communication and Technology
- e) IMS – Integrated Management System (Quality and Environmental)
- f) KEFRI – Kenya Forestry Research Institute
- g) KM – Knowledge Management
- h) KM Focal Points – Knowledge Management champions in the Eco-Region programmes and Headquarters
- i) KM System – KEFRI Knowledge Management system consisting both manual and electronic means of managing knowledge
- j) RD – Regional Director
- k) SDD R&D – Senior Deputy Director Research and Development
- l) TSS – Technical Support Service

1.4 Responsibility

DD-TSS shall ensure this procedure is adhered to.

2.0 STEPS

This procedure shall be effectively implemented as follows:

2.1 Knowledge Creation

- 2.1.1 The DD-TSS in liaison with SDD-R&D shall identify relevant knowledge at the beginning of every financial year through KEFRI annual performance contracts.
- 2.1.2 KEFRI staff through RDs shall submit soft copies of new knowledge gained to KM System using the tools provided by the KM system.
- 2.1.3 RDs shall provide a list of all submitted reports to HKM through SDD-R&D annually using the submission form.

2.2 Knowledge Capture

- 2.1.4 HKM shall coordinate tacit knowledge capture interviews through KM focal points using tacit knowledge capture form.
- 2.1.5 HKM in liaison with KM focal points shall coordinate uploading the collected tacit knowledge.

2.3 Knowledge Storage

- 2.3.1 HKM shall ensure that knowledge management systems are developed and maintained as per the Systems Development and Maintenance Procedure.
- 2.3.2 HKM shall coordinate organizing, storing, accessing and securing knowledge in KM system.
- 2.3.3 Registered users shall ensure that their knowledge submissions are regularly updated.

2.4 Knowledge Sharing

- 2.4.1 HKM shall create and maintain tools and opportunities for sharing of knowledge both internally and externally as per KM policy.

2.5 Awareness Creation

- 2.5.1 HKM shall develop awareness creation programme on knowledge capture, sharing, access and use.
- 2.5.2 HKM and KM focal points in Eco-Region Research Programmes shall conduct awareness for all KEFRI staff.

3.0 APPLICABLE RECORDS

- a) KM system usage reports
- b) Attendance Register
- c) Reports Submission form
- d) Tacit knowledge capture form

KEFRI/F/TSS/01



KM SYSTEM USAGE STATISTICS

Month (Month/Year)	No. of Topic Views	No. of Updates	No. of File Uploads	No. of Users



REPORTS SUBMISSION FORM

Eco-Region Programme:

Date	Title report/publication	Author(s)	Uploaded (tick if uploaded to KM system)	Sign

KEFRI/F/TSS/03

**TACIT KNOWLEDGE COLLECTION FORM**

Name:	
Email:	
Phone no.:	
Qualifications:	
Academic	
Professional	
Professional/research Interests:	
Experiences/activities undertaken:	
Lessons learnt:	
Challenges:	
Key Publications:	

PROCEDURE 2: STAKEHOLDER TRAINING**1.0 Purpose**

The Purpose of this procedure is to ensure effective and efficient delivery of KEFRI stakeholder training.

1.1 Scope

This procedure shall cover all KEFRI stakeholder trainings geared towards dissemination of technologies in forestry and allied natural resources including: local, national and international training courses.

1.2 Reference

- a) Current KEFRI Strategic Plan
- b) ISO 9001:2015
- c) ISO 14001:2015
- d) Current KEFRI service charter
- e) A Manual for Public Service Training
- f) KEFRI current performance contracts
- g) Service Delivery Charter

1.3 Terms, Definitions And Acronyms

- a) DD TSS – Deputy Director Technical Support Services
- b) DD SCM – Deputy Director Supply Chain Management
- c) GoK – Government of Kenya
- d) KEFRI – Kenya Forestry Research Institute
- e) RD – Regional Director
- f) Stakeholder – KEFRI interested parties
- g) TM – Training Manager

1.4 Responsibility

The DD TSS shall ensure adherence to this procedure.

2.0 STEPS

TM and RD shall organize stakeholder trainings at various levels including; local, national and international as follows:

2.1 Local Training Courses

- 2.1.1 The RD shall identify training needs of stakeholders.
- 2.1.2 The RD shall develop course programme according to the needs of the stakeholders.
- 2.1.3 The RD shall prepare budget for the course.
- 2.1.4 The RD shall identify and invite different stakeholders to participate in the course.
- 2.1.5 The RD shall in liaison with the DD-SCM ensure procurement of training materials as per the Procurement Procedure.
- 2.1.6 The RD shall identify and invite relevant resource persons.
- 2.1.7 The RD shall implement the course as per the programme.
- 2.1.8 The RD shall prepare a course report to **DDTSS**

2.2 National Training Courses

- 2.2.1 The TM shall identify training needs of stakeholders.
- 2.2.2 The TM shall develop course programme according to the needs of the stakeholders.
- 2.2.3 The TM shall prepare budget for the course.
- 2.2.4 The TM shall identify and invite different stakeholders to participate in the course.

2.2.5 The TM shall in liaison with the DD-SCM ensure procurement of training materials as per the Procurement Procedure.

2.2.6 The TM shall identify and invite relevant resource persons.

2.2.7 The TM shall implement the course as per the programme.

2.2.8 The TM Shall Prepare Course Report and Submit To The DD-TSS.

2.3 INTERNATIONAL TRAINING COURSES

2.3.1 The TM shall develop a course programme.

2.3.2 The TM shall prepare a budget for the course.

2.3.3 The TM shall select/ identify and invite participants.

2.3.4 The TM shall identify and invite relevant resource persons.

2.3.5 The TM shall in liaison with the DD-SCM ensure procurement of training materials as per the Procurement Procedure.

2.3.6 The TM shall implement the course as per the programme.

2.3.7 The TM shall prepare course report and submit to the DD-TSS.

3.0 APPLICABLE RECORDS

3.1 Stakeholder Training Registration Form

3.2 Training Reports

3.3 Training Programme

KENYA FORESTRY RESEARCH INSTITUTE		
TITLE: TECHNICAL SUPPORT SERVICES PROCEDURES MANUAL	REF: KEFRI/SOP/TSS/13	ISSUE DATE: 12/02/2018

KEFRI/F/TSS/04



STAKEHOLDER TRAINING REGISTRATION FORM

Course Title:

Course Level:

Eco-Region/Centre:

Venue:

Date:

SNO.	NAME	Email/phone no.	SIGNATURE

PROCEDURE 3: LIBRARY MANAGEMENT**1.0 Purpose**

To ensure effective and efficient provision of library services

1.1 Scope

This procedure shall be applicable to all libraries within KEFRI.

1.2 Reference

- a) Current KEFRI Strategic Plan
- b) Knowledge Management Policy
- c) ISO 9001:2015
- d) ISO 14001:2015
- e) Service Delivery Charter

1.3 Terms, Definitions And Acronyms

- a) KEFRI – Kenya Forestry Research Institute
- b) IMS – Integrated Management System (Quality and Environment)
- c) DD – Deputy Director
- d) TSS – Technical Support Service
- e) RD – Regional Director
- f) ICT – Information Communication and Technology

1.4 Responsibility

DD-TSS shall ensure this procedure is adhered to.

2.0 STEPS**2.1 Collection Development**

- 2.1.1 KEFRI staff shall submit purchase suggestions of information materials to the Head Librarian.
- 2.1.2 DD-TSS shall approve information materials to be purchased with recommendation of Head Librarian.
- 2.1.3 Head Librarian shall in liaison with the DD-SCM ensure procurement of information materials as per the Procurement Procedure.
- 2.1.4 Head Librarian shall lobby and accept donations of information materials that are relevant to KEFRI mandate.
- 2.1.5 Head Librarian in liaison with Head KM shall ensure that KEFRI publications are deposited in the library.
- 2.1.6 Head Librarian shall undertake accession of information materials, and application of ownership marks.

2.2 Technical Services

- 2.2.1 Head librarian shall classify and catalogue information materials as per Dewey Decimal Classification (DDC) Scheme.

2.3 Information Services

- 2.3.1 Head Librarian shall develop appropriate user services.
- 2.3.2 Head librarian shall conduct training on retrieval and use of electronic and non-electronic information materials to KEFRI staff.
- 2.3.3 Head librarian shall conduct weeding regularly to ensure the collection is current and relevant to KEFRI's mandate.
- 2.3.4 Head librarian in liaison with Archivist shall determine information materials for disposal.

3.0 APPLICABLE RECORDS

- 3.1 Library Accession Register (Monographs)
- 3.2 Library Accession Register (Periodicals)
- 3.3 Borrowers Card



ACCESSION REGISTER FOR MONOGRAPHS

Accession Date	Accession No.	Author(s)	Title	Publisher	Date of Publication	No. of Copies	Source

KEFRI/F/TSS/06

**ACCESSION REGISTER FOR PERIODICALS**

Accession Date	Accession No.	Title	Publisher	Date of Publication	Volume No.	Issue No.	No. of Copies



LIBRARY BORROWERS CARD

Call No:

Accession No:

Author(s):

Title:

Due date	Borrower Name	PF No.

PROCEDURE 4: PRODUCTION OF TECHNICAL PUBLICATIONS**1.0 Purpose**

The Purpose of this procedure is to ensure effective and efficient production of KEFRI publications.

1.1 Scope

This procedure shall be applicable to production of technical publications within KEFRI.

1.2 Reference

- a) Current KEFRI Strategic Plan
- b) KEFRI Publications Policy
- c) Guidelines For Reviewing KEFRI Publications
- d) ISO 9001:2015
- e) ISO 14001:2015
- f) Service Delivery Charter

1.3 Terms, Definitions And Acronyms

- a) DD – Deputy Director
- b) IMS – Integrated Management System (Quality and Environment)
- c) KEFRI – Kenya Forestry Research Institute
- d) RD – Regional Director
- e) SCM – Supply Chain Management
- f) SDD R&D – Senior Deputy Director Research and Development
- g) TSS – Technical Support Service

1.4 Responsibility

DD-TSS shall ensure that this procedure is adhered to.

2.0 STEPS**2.1 Peer Review**

- 2.1.1 The Secretary of Editorial Committee in liaison with DD-TSS shall receive manuscripts for editing.
- 2.1.2 The Secretary of Editorial Committee shall coordinate review of the manuscript in accordance with KEFRI Guidelines for Reviewing Publications.
- 2.1.3 The Secretary of Editorial Committee shall forward comments/ suggestions from the Editorial Committee to the author through the RDs with copies to SDD R&D and DD-TSS

2.2 Publishing

- 2.2.1 Once the manuscript is ready for publishing the author shall send it to SDD R&D for approval for printing.
- 2.2.2 If approved the SDD R&D shall forward the final manuscript to Publication Office for final type-setting.
- 2.2.3 The author shall give final approval of the dummy version for publishing.
- 2.2.4 Publications Office in liaison with DD-SCM shall coordinate in sourcing for publishers in accordance with the procurement procedure.
- 2.2.5 Publishing of other internal documents including policy documents and annual reports shall be managed at respective responsible offices.
- 2.2.6 Information Office shall deposit two published hard copies to the Headquarters library.
- 2.2.7 Information Office shall submit a soft copy to Head KM unit for storage and archiving in the KM System.

2.2.8 Other hard copies shall be sent to the Eco-Region Research Programmes and DDs thematic areas for dissemination.

2.3 Externally Published Technical Publications

2.3.1 For externally published technical publications the author shall provide a soft copy or hard copy of the publication to Publication Office.

3.0 APPLICABLE RECORDS

3.1 List of produced publications per year.

3.2 Published Publications

PROCEDURE 5: PRODUCTION OF ACCOUNTABLE DOCUMENTS**1.0 Purpose**

The Purpose is to ensure effectiveness and efficiency in production of accountable documents.

1.1 Scope

This procedure is applicable to production of all accountable documents produced by Printing Unit to be used by various sections within KEFRI

1.2 References

- a) ISO 9001:2015 Standard
- b) ISO 14001:2015 Standard

1.3 Terms, Definitions And Acronyms

- a) DD – Deputy Director
- b) SP – Supervisor Printing Unit
- c) TSS – Technical Support Services

1.4 Responsibility

The DD-TSS shall ensure that this procedure is adhered to.

2.0 STEPS**2.1 Accountable Documents**

The accountable documents shall include:

- Vouchers FO 20
- Vouchers FO 22
- Imprest warrant
- PCA's
- S3 Ledger cards
- S5 Bin cards
- S11 Counter requisition & issue voucher (books)
- S12 Issues and receipt voucher (GRN books)
- Purchase requisition
- Delivery Notes
- Gate pass
- Fuel requisition books
- Invoices
- Receipt books
- Pension documents
- Clinic documents
- Seed documentation form
- Business cards
- Imprest register book
- Vote books
- Quotation forms
- Leave application forms
- Leave approval forms
- Letter heads

2.2 Production

- 2.2.1 The SP shall produce various accountable document based on demand from the users.
- 2.2.2 Production of the accountable documents shall be conducted as per the following sequence: Typesetting and proofreading; Graphic reproduction; Off-set printing; Gathering; Collating; Numbering; Binding/Lamination; and Trimming.

2.3 Issuing the Printed Documents

- 2.3.1 The SP shall issue the printed documents and record in the issue book.

2.4 Disposal of Waste

- 2.4.1 Waste from Printing Unit will be handled as per procedure for disposal of non-hazardous waste, and hazardous waste as applicable.

3.0 APPLICABLE RECORDS

- 3.1 Printing Request Form
- 3.2 Printing Issue Form

KEFRI/F/TSS/08

**PRINTING REQUEST FORM**

DATE	NAME	ITEM DESCRIPTION	QUANTITY	SIGNATURE

KEFRI/F/TSS/09



PRINTING ISSUE FORM

Date	ITEM DESCRIPTION	UNIT OF ISSUE	QUANTITY	DIVISION/SECTION	SIGN

PROCEDURE 6: IDENTIFICATION AND ASSESSMENT OF QUALITY RISKS AND ENVIRONMENTAL ASPECTS

1.0 Purpose

To identify quality risks and environmental aspects associated with KEFRI's operations and assessment of their significance.

1.1 Scope

This procedure shall be applicable to KEFRI and to all operations covered by the Integrated Management System.

1.2 Reference

- a) ISO 9001:2015 Standard
- b) ISO 14001:2015 Standard
- c) ISO 31000:2009 Standard

1.3 Terms, Definitions & Acronyms

- a) IMS - Integrated Management System
- b) KEFRI - Kenya Forestry Research Institute.
- c) HODs - Head of Divisions
- d) RD - Regional Director
- e) Risk - Effect of uncertainty
- f) Aspect - Activities that interact or can interact with the environment
- g) Significant aspect - is one that has effect on the environmental
- h) Impact - Effect of an aspect to the environment
- i) Likelihood - chance of something happening
- j) MR – Management Representative

1.4 Responsibility

- a) MR shall ensure that this procedure is adhered to.
- b) Divisional heads shall be responsible for identifying and assessing their respective activities and associated risks.

2.0 STEPS

2.1 To conduct quality risks and environmental impacts assessment, the following steps are to be completed:

- a) Identification of operational departmental processes and activities
- b) Identify quality risks and environmental aspects associated with these activities
- c) Determine the impact, likelihood and risk rating

2.2 Identification of departmental processes and activities

- 2.2.1 Activities conducted at KEFRI shall be listed in order to ensure that all of them are assessed in the same manner
- 2.2.2 The activities are classified per division and maintained in a risk register

2.3 Identify quality risks and environmental aspects

- 2.3.1 Quality risks and environmental aspects associated with each of the activities in clause 2.2 shall be identified
- 2.3.2 Environmental aspects can be either positive or negative
- 2.3.3 To identify environmental aspects, the following factors shall be considered where relevant:
- Water pollution
 - Air pollution and noise
 - Biodiversity loss
 - Waste management and disposal
 - Contamination of land,
 - Natural resources use and depletion
 - Applicable laws and regulations and
 - Environmental impacts.
- 2.3.4 To identify quality risks, the following factors shall be considered where relevant:
- Timeliness
 - Consistency in service delivery
 - Customer satisfaction
 - Business sustainability and continuity
 - Applicable product standard requirements and statutory regulations
 - Accuracy, courtesy, completeness and accessibility in service delivery

2.4 Identify impacts, likelihood and risk rating

- 2.4.1 Once all quality risks and environmental aspects have been identified, the respective Heads of Divisions shall identify their impacts and likelihood of occurrence to determine risk rating (significance).
- 2.4.2 This risk assessment shall be based on:
- Impact (I)
 - Likelihood (L)
- 2.4.3 Risk rating (Significance) shall be obtained by the multiplication of Impact (I) with Likelihood (L) as shown in the equation below:

$\text{RISK RATING (significance)} = \text{IMPACT} \times \text{LIKELIHOOD}$
--

- 2.4.4 Risks and aspects shall be assessed using the risk matrix below:

Impact	Likelihood		
	1	2	3
1	1	2	3
2	2	4	6
3	3	6	9

KEY**Likelihood**

- 1- Remote, likely to occur once in a year
- 2- Occasional, likely to occur once in a quarter
- 3- Frequent, likely to occur once in a week

Impact

- 1- Minor, unlikely to affect the environment or quality of service
- 2- Serious, very likely to affect the environment or quality of service
- 3- Critical, can have catastrophic effect to the environment or quality of service

Risk rating (significance)

- 1-2 Low risk**
- 3-5 Medium risk**
- 6-9 High risk**

2.5 Classification of risks

- 2.5.1 When the risk rating is low, the risk shall be acceptable and tolerated. This shall be classified as insignificant environmental aspects
- 2.5.2 When the risk rating is medium further controls and monitoring shall be required as per the risk register. This shall be classified as significant environmental aspects.
- 2.5.3 When the risk is high, immediate actions and more stringent controls shall be put in place to mitigate against the impact of such risks. This shall be classified as significant environmental aspects.

2.6 Review & control process

The quality risks and environmental aspects shall be reviewed every three years, or whenever there have been significant changes to KEFRI activities or services

3.0 Applicable records

- a) Risk register
- b) Aspect register

KEFRI/F/MR/14



ASPECT REGISTER

Process	Activity	Aspect	Likelihood	Significance	Effects	Controls

KEFRI/F/MR/15



RISK REGISTER

Process	Activity	Risk	Likelihood	Impact	Risk rating	Risk category	Control	Opportunity

PROCEDURE 7: EMERGENCY PREPAREDNESS AND RESPONSE PROCEDURE**1.0 Purpose**

The Purpose of this procedure is to identify potential and actual emergency situations and accidents that can have an impact on the environment and how KEFRI will respond to them.

1.1 Scope

This procedure covers actual and potential environmental emergencies and accidents emanating from KEFRI activities.

1.2 References

- a) ISO 14001:2015 Environmental Management System
- b) ISO 14004:2016 Environmental Management System - General guidelines on principles system and support techniques
- c) Occupational Safety and Health Act - 2007
- d) Environmental Management and Co-ordination (Amendment) Act, 2015

1.3 Terms, Acronyms, and Definitions

- a) Environmental emergency and accidents – any unexpected occurrence that could be harmful to the environment.
- b) OSHA - Occupational Safety and Health Act.
- c) EMCA – Environmental Management and Coordination Act.
- d) EOSHEPRAP – Environmental and Occupational Safety and Health Emergency Preparedness Response Action Plans.
- e) DD-HR- Deputy Director Human Resource
- f) KEFRI- Kenya Forestry Research Institute
- g) DDA – Deputy Director Administration
- h) RD – Regional Director

1.4 Responsibility

The DDA/RD shall have the principal responsibility to ensure that this procedure is adhered to.

2.0 STEPS

- 2.1 The Heads of administration shall update the list of foreseeable incidences and emergencies with a potential to cause negative environmental impact.
- 2.2 The section heads in consultation with Regional Directors shall assess emergency preparedness competence for persons working in areas prone to incidences and accidents as per Training and Competence Procedure
- 2.3 The section heads will forward the environmental emergency preparedness training needs through respective Regional Directors to the DD-HR as per Training and Competence Procedure
- 2.4 The section heads shall conduct various drills to test the effectiveness of the work

instructions and response plans for forest fires and chemical spills and first aid and submit report to Regional Director for necessary action(s).

- 2.5 The respective section heads shall monitor and record occurrences of environmental accidents and emergencies in various workstations, recommend corrective measures using Environmental Emergencies and Accidents Occurrences form and submit to the MR through respective Regional Directors.
- 2.6 The section heads shall maintain an inventory of available personal protective equipment and first aid kits using the respective forms and advise the Management on the same.
- 2.7 DDA/RDs shall ensure that all fire-fighting equipment are serviced as per their schedule and kept at easily accessible points.
- 2.8 DDA/RSs/section heads shall maintain a fire duty rooster during the fire season
- 2.9 KEFRI shall annually review and where necessary revise its emergency preparedness and response procedure as need arises

3.0 Applicable records

- a) Environmental emergencies and accidents occurrences form
- b) Inventory of available personal protective equipment and first aid kits form
- c) Maintenance schedule of fire-fighting equipment form
- d) Fire duty rooster

KEFRI/F/ADM/19

**ENVIRONMENTAL EMERGENCIES AND ACCIDENTS OCURENCES**

Centre:

Incidences/accidents	Facility affected	Severity	Response	Remarks
Forest fire	Seed orchard	50%	Staff used fire beaters and water to control the fire	-Fire breaks should be cleaned before the fire season. -Conduct fire drills

KEFRI/F/ADM/18

**PERSONAL PROTECTIVE EQUIPMENT (PPE) INVENTORY FORM**

Centre:.....

Section:

Item of PPE	Type	Quantity	Stored Location
Head Protection			
Hearing Protection			
Eye Protection			
Respiratory Protective Equipment (RPE)			
Overalls			
Gloves			
Footwear			
Safety Harness			
Clothing			
Other (Specify)			

KEFRI/F/ADM/20



FIRST AID KIT INVENTORY FORM

Centre:

Section:

Item	Quantity	Used	Not used	Expiry date

KEFRI/F/ADM/21



CHEMICAL/OIL SPILL DRILL REPORT

Submitted by:.....

Centre:

Drill conducted: date:.....

1. Identify any barriers that interfere with alerting people who would be affected by the spill.
2. Describe any problems that prevent Material Safety Data Sheets (MSDS) from being used effectively.
3. Specify any difficulties in selecting and using spill control materials (absorbents, etc.)
4. Identify any problems related to emergency phone numbers, eyewash stations, emergency showers, and first-aid kits.
5. Discuss any obstacles to ventilating the area of the spill.
6. List any difficulties in selecting and using appropriate personal protective equipment.
7. Describe any problems with equipment shut-off procedures.
8. List any goals for improvement.
9. List of personnel who participated in the drill:

Signature: _____

KEFRI/F/ADM/22



FIRE DRILL REPORT

- Submitted by:.....
Centre:.....
Drill conducted:..... date:.....
1. Were the Security and Fire Department notified? Yes () No ()
If no, provide detail.
 2. Was the Alarm heard in all areas? Yes () No ()
If no, which areas did not sound?
 3. Were the announcements clear and understood? Yes () No ()
If no, provide details.
 4. List any evacuation problems encountered.
 5. Did the alarm system reset properly after the drill? Yes () No ()
If no, provide details
 6. Corrective Actions required
 7. Approximate evacuation time from start of fire alarm until last person exited:
_____minutes
 8. List of personnel who participated in the drill:

Signature:_____

KEFRI/F/ADM/23



FIRST AID DRILL REPORT

Submitted by:.....

Centre:

Drill conducted:..... Date:

1. Identify any barriers that interfere with alerting people.
2. Identify any problems related to accessing and utilizing first-aid kits.
3. Discuss any obstacles to accessing the trained first aider at the Centre.
4. Approximate response time to the type of injury : _____minutes
5. List any goals for improvement.
6. List of personnel who participated in the drill:

Signature:_____

KEFRI/F/ADM/24



FIRE-FIGHTING EQUIPMENT MAINTENANCE SCHEDULE

Centre: _____

Section: _____

Year: _____

Fire-fighting equipment	Maintenance date	Next maintenance due date

PROCEDURE 8: OCCUPATIONAL HEALTH AND SAFETY PROCEDURE**1.0 Purpose**

The Purpose of this procedure is to specify KEFRI process for identifying and preventing occupational health and safety incidences in execution of its activities.

1.1 Scope

This procedure is applicable to KEFRI in execution of the Quality and Environmental Management System. All employees, contractors, sub-contractors and other interested parties have to adhere to these specifications.

1.2 Reference

- a) ISO 9001:2015 Clause 7.1.3
- b) ISO 14001:2015 Clause 8.2
- c) Occupational Health and Safety Act, 2007
- d) Employment Act, 2007
- e) Work Injury Benefits Act, 2007
- f) Other legal requirements on work place safety.

1.3 Terms, Definitions & Acronyms

- a) IMS – Integrated Management System
- b) KEFRI - Kenya Forestry Research Institute.
- c) DDA - Deputy Director Administration
- d) RD - Regional Director
- e) OIC - Officer In Charge
- f) Workplace - A KEFRI Premise
- g) Workroom - Workstation or Office Space
- h) OSH – Occupational Safety and Health

1.4 Principal Responsibility

- 1.4.1 The DDA is responsible for ensuring compliance to the OSH requirements.
- 1.4.2 The RDs and OICs are responsible for compliance to the OSH requirements in the respective regions and sub centres.

2 STEPS

- 2.1 Every workplace shall have effective provision for sufficient and suitable Lighting.
- 2.2 Effective means shall be provided and maintained for draining off the wet floors in all premises.
- 2.3 Effective and suitable provision shall be made for securing and maintaining adequate ventilation of all workrooms.
- 2.4 The workplace shall not be so overcrowded as to cause risk of injury to the health of the persons employed therein.
- 2.5 The floor of every workroom shall be cleaned at least once in every week as per the

- procedure on janitorial services.
- 2.6 Accumulations of dirt and refuse shall be removed from the floors and benches of workrooms, staircases and passages.
 - 2.7 All plant, machinery and equipment whether fixed or mobile shall only be used for work which they are designed for and be operated by a competent person.
 - 2.8 All chains, ropes and lifting tackle shall be of good construction, sound material, adequate strength and free from defect.
 - 2.9 Sufficient and suitable sanitary conveniences for the persons employed in the workplace shall be provided, maintained and kept clean.
 - 2.10 Every refrigeration plant capable of being entered by an employee shall have all control valves situated outside the cold storage room and have all doors of cold storage room capable of being opened easily and quickly from the inside and outside.
 - 2.11 In all KEFRI stores and warehouse, all goods, articles and substances shall be stored or stacked in such manner as will ensure their stability and prevent any interference with the adequate distribution of light, ventilation systems, the unobstructed use of passageways and unobstructed access to other fire extinguishing equipment.
 - 2.12 Machinery, equipment, personal protective equipment, appliances and hand tools used in all workplaces shall comply with the prescribed safety and health standards and be appropriately installed, maintained and safe guarded.
 - 2.13 All openings in floors shall be securely fenced.
 - 2.14 There shall be safe means of access to every place at which any person has to work.
 - 2.15 All highly inflammable substances shall be kept either in a fire-resisting store or in a safe place outside any occupied building.
 - 2.16 Every workplace shall be provided with adequate means of escape conspicuously marked by a notice printed in **RED LETTERS**, properly maintained and kept free from obstruction.
 - 2.17 All emergency exit doors shall be constructed to open outwards and shall not be locked or fastened.
 - 2.18 Material safety data sheets shall be provided for all chemicals and other hazardous substances in use at the premises.
 - 2.19 Adequate supply of drinking water at suitable points conveniently accessible to all persons employed.
 - 2.20 Every workplace shall provide and maintain a readily accessible first-aid box.
 - 2.21 There shall be a Safety and Health Committee whose chairperson and Secretary are duly appointed by the Director.
 - 2.22 The committee shall conduct quarterly workplace inspections on health and safety requirements and also meet at least once every three months.
 - 2.23 Inspection and testing of all firefighting appliances in every work place shall be carried out at least once every twelve months as per the emergency preparedness and response procure.
 - 2.24 Every workplace shall have a fire assembly point which must be painted in green.
 - 2.25 Every work place shall provide adequate and suitable facilities for washing

which shall be conveniently accessible and shall be kept in a clean and orderly condition.

- 2.26 Every work place shall have suitable facilities for a person employed whose work is done standing.
- 2.27 Every work place shall provide and conspicuously display means for extinguishing fire which should be free from any obstruction and readily accessible.
- 2.28 The section heads shall record incidents or accidents using incident form or accident form and forward the to the chairman of Health and Safety committee for necessary action(s).

3 APPLICABLE RECORDS

- 3.3.1 Health and Safety Committee Minutes
- 3.3.2 Inspection Reports
- 3.3.3 Incident form
- 3.3.4 Accident form

KEFRI/F/ADM/16

Part A	Victims details
Name: _____ Personal number _____	
Department: : _____ Job title: _____	
Telephone number: _____ Accident Location: _____	
When did the accident happen?	
Date: _____ Time: _____	
What happened?	
Description: (Include details of any object, machine or substance involved)	
Was the accident/ work related? _____	
Declaration: The above report provides a true, accurate and complete account of the accident	
Name: _____ Date: _____ Sign: _____	
Part B	First aiders' comments
What first aid was administered to the victim?	
Name: _____ Date: _____ Sign: _____	

**ACCIDENT FORM**

KEFRI/F/ADM/17

**INCIDENT INVESTIGATION REPORT FORM**

This form is to be filled by health and safety representatives within 12 hours of any incident.

Date of Incident:	Time of Incident :
_____	_____
Place of Incident :	
Description of Incident (What happened?):	
What injury, if any, was caused:	
What property damage, if any, was caused:	
How was the incident arrested:	
Action taken to prevent recurrence:	
Name:	Signature:

KEFRI/F/ADM/17

**INCIDENT INVESTIGATION REPORT FORM**

This form is to be filled by health and safety representatives within 12 hours of any incident.

Date of Incident:	Time of Incident :
_____	_____
Place of Incident :	
Description of Incident (What happened?):	
What injury, if any, was caused:	
What property damage, if any, was caused:	
How was the incident arrested:	
Action taken to prevent recurrence:	
Name:	Signature:

PROCEDURE 9: COMPLIANCE TO LEGAL AND OTHER REQUIREMENTS**1.0 Purpose**

The Purpose of this procedure is to ensure proper identification and evaluation of applicable legal and others requirements relating to Integrated Management System.

1.1. Scope

This procedure shall be applicable to KEFRI and to all activities covered by the Integrated Management System.

1.2 Reference

- a) ISO 9001:2015 Standard
- b) ISO 14001:2015 Standard
- c) All legal requirements as identified in the Legal Compliance Register.

1.3 Terms, Definitions & Acronyms

- a) IMS – Integrated Management System
- b) KEFRI - Kenya Forestry Research Institute.
- c) MR - Management Representative
- d) RD – Regional Director

1.4. Principal Responsibility

- 1.4.1 The MR shall be responsible for identifying and updating of IMS legal and other requirements.
- 1.4.2 Shall ensure the identified legal and other requirements are complied with as applicable.

STEPS**2.1 General**

The MR shall manage compliance to applicable IMS legal and other requirements as detailed below:

2.1.1 Identification of Requirements

- 2.1.2 KEFRI through its MR shall identify applicable IMS legal and other requirements that the Institute subscribes to.
- 2.1.3 Applicable requirements shall be listed and tracked in the Legal Compliance register,

2.2 IMS Requirements Update

- 2.2.1 The MR shall ensure updates of applicable existing and emerging IMS legal and other requirements.
- 2.2.2 The MR shall tracks these updates in the Legal Compliance register.

2.3 Compliance Review

- 2.3.1 The MR shall be in charge of the compliance review to ensure that all KEFRI activities are undertaken in accordance to applicable IMS, legal and other requirements.
- 2.3.2 The review shall be done during internal audits as per the internal audit procedure.
- 2.3.3 The MR shall communicate as provided for in the Communications Procedure to concerned people pertinent IMS requirements based on the compliance review.

3 APPLICABLE RECORDS

- 3.1.1 Legal Compliance Register

PROCEDURE 10: HANDLING AND DISPOSAL OF NON-HAZARDOUS SOLID WASTE

1.0 Purpose

To ensure that non-hazardous waste generated from KEFRIs operations is properly handled, segregated and disposed in a manner that minimizes environmental pollution.

1.1 Scope

This procedure will apply to all KEFRI activities, which generate non-hazardous solid waste with significant environment impact.

1.2 References

- a) ISO 14001: 2015 Standard
- b) ISO 9001:2015 Standard
- c) EMCA 1999: 2015 Environmental Management and Coordination Act Regulations on Solid Wastes
- d) PPAD 2015: The Public Procurement and Asset Disposal Act, 2015

1.3 Terms, acronyms and definitions

- a) Waste receptacle – Temporary central waste holding facility within KEFRI premises.
- b) Re-use - Waste used with or without cleaning and/or repairing.
- c) ISO - International Organization for Standardization.
- d) GR – Goods Return
- e) DDA -Deputy Director Administration
- f) RD -Regional Director
- g) OiC – Officer in Charge
- h) HOD – Head of Division

1.4 Responsibility

- 1.4.1 The DDA, RDs and OiCs shall have the principal responsibility of constructing receptacles and providing colour coded bins.
- 1.4.2 HODs shall ensure this procedure is adhered to in their respective sections
- 1.4.3 DDSCM shall ensure that waste is properly disposed off.

2.0 STEPS

2.1 Categories of non-hazardous solid waste generated by KEFRI include plastics from seed packaging and from tree nursery potting operations, general plastics, used paper, glass ware and metal.

2.2 Waste Segregation

2.2.1 All KEFRI staff shall segregate solid wastes according to colour coded waste bins as per the table below:

Category of Waste	Colour Code
Paper	Blue
Plastic	Yellow
Glass	White
Electronics (e-waste)	Black
- Computers/printers/scanners/UPS - Cartridges, tonners - Electric bulbs and tubes - Calculators	Dedicated rooms with compartments for each waste
Rubber and tyres	Dedicated room
Ceramics	Dedicated room
Organic	Green
Metal /cans	Grey
Used cooking oil	Black drums
Oil filters & oily used Spare parts	Black drums
Sanitary waste and condoms	Sanitary bins

2.2.2 All colour coded waste bins shall meet the following requirements:

- a) They must be in sound condition.
- b) They must be constructed of an appropriate material to prevent leakage.
- c) They must be closed except when adding or emptying waste materials from the container.
- d) They must be kept clean of any spilled material.
- e) They are handled and stored so as not to cause rupture or leakage.

2.2.3 Janitors shall collect, weigh and dispose the segregated solid wastes into the respective designated waste receptacles.

2.2.4 The janitors shall record the waste measurements in solid waste measurement form.

2.2.5 Heads of Administration shall monitor the wastes levels and establish trend analysis on quarterly basis.

2.3 Waste management

2.3.1 Ceramic waste shall be crashed and buried in designated areas.

2.3.2 Sanitary waste shall be disposed off through contracted service providers as per the procurement procedure.

2.3.3 Cooking oil produced at various catering outlets shall be decanted into securely sealed drums and collected by an approved waste contractor as per procurement procedure.

2.3.4 Organic waste shall be composted in a compost pit.

2.3.5 Plant materials such as non-viable seeds shall be disposed on recommendation and approval of the seed disposal committee. The disposal method shall be by composting.

2.3.6 The Heads of supplies shall ensure the quantities of oil, grease and fuel stored at

any one time does not over expose the environment to risks (spills, fires, e.t.c) by ensuring that the stored quantities do not exceed the following amounts: Oil-20 litres, Petrol-100 litres, Diesel-180 litres, Parafin-15 litres, Grease-5 kg.

- 2.3.7 In case of oil or fuel leak or spills, emergency preparedness procedure shall apply.
- 2.3.8 Waste from the timber workshop shall be sold to interested parties as per the Enterprise procedure.
- 2.3.9 Workshop Manager in timber workshop shall minimize the wood waste generated by laminating waste timber pieces.
- 2.3.10 DDSCM shall contract waste disposal agents.

NOTE:

KEFRI staff shall not dispose off any waste on a public highway, street, road, and recreational area or in any public place except in designated public waste receptacles.

3.0 Applicable records

- a) Solid waste measurement form
- b) Non-viable seed disposal form

KEFRI/F/ADM/15



SOLID WASTE MEASUREMENT FORM

CENTRE:

CATEGORY OF WASTE:

DATE	RECEPTACLE NO.	CURRENT WEIGHT	REMARKS/ SIGNATURE

KEFRI/F/SM/14

**NON-VIABLE SEED DISPOSAL FORM**

Category of seed: **Centre:**

Species name	Germination capacity	Quantity for disposal	Remarks

Approved By:

Ben E.N. Chikamai (PhD)

Director KEFRI

Signature

Date: 12th February 2018

RISK AND OPPORTUNITIES REGISTER**Technical Support Services - Knowledge Management Section**

S.n o	Activity	Risk	Opportunity	Likelihood	Severity	Risk rating	Risk category	Controls	Responsibility	Timeframe
1	Library, Knowledge Management , Printing of accountable documents, Publishing of KEFRI documents, Stakeholders training,	Server failure	None	2	2	4	Medium	Perform server back-ups at regular intervals	Head ICT	Weekly
2		Technology obsolescence	None	1	1	1	Low	Updating both software and hardware with current versions	Head ICT	Three Years
3		Language barrier	None	2	2	4	Medium	Use of multilingual in publication	Author(s)	When Need Arises
4			None					Interpretation	Scientists and Technical staff	When need arises
5			None					Use of common language as opposed to technical one.	Author(s)	When need arises
6		Poor Reading Culture	None	2	1	2	Low	Use of multimedia in publications	Author(s)	When Need Arises
7		Inadequate financial resources from exchequer	None	2	3	6	High	Application of resource mobilization procedure to increase sources of financial resources	Resource Mobilization Officer	Annual
8			None					Lobby for more funds from exchequer	Budget Committee	Annual
9		Inadequate incentives	None	2	2	4	Medium	HR Procedure on mentorship and coaching	DD HR	Continuous
10		Staff turnover	None	2	3	6	High	HR Procedures on staff retention and recruitment and selection	DD HR	When Need Arises
11		Inadequate competent staff	None	1	3	3	Medium	On-job training	Process Owner	When Need Arises

KENYA FORESTRY RESEARCH INSTITUTE

TITLE: TECHNICAL SUPPORT SERVICES PROCEDURES MANUAL

REF: KEFRI/SOP/TSS/13

ISSUE DATE: 12/02/2018

12	Lack of mentorship and coaching	None	3	2	6	High	HR Procedure on mentorship and coaching	DD HR	Continuous
13	poor knowledge sharing culture	None	3	1	3	Medium	Provide friendly knowledge sharing tools	Head KM	Continuous
14		None					Conduct training and awareness on KM system	Head KM	Continuous
15	Incompetent service providers	None	3	2	6	High	Procurement procedure	DD SCM	As need arises
16	Loss of information materials	None	1	3	3	Medium	Purchase electronic information materials	Head Library	Annual

RISK ASSESSMENT MATRIX

Impact	Likelihood		
	1	2	3
1	2	3	6
2	4	6	9
3	6	9	9

KEY

Likelihood

- 1- Remote, likely to occur once in a year
- 2- Occasional, likely to occur once in a quarter
- 3- Frequent, likely to occur once in a week

Impact

- 1-Minor, unlikely to affect the environment or quality of service
- 2-Serious, very likely to affect the environment or quality of service
- 3-Critical, can have catastrophic effect to the environment or quality of service

Risk rating (significance)

- 1-2 Low risk/insignificant aspect**
- 3-5 Medium risk/significant aspect**
- 6-9 High risk/significant aspect**



ENVIRONMENTAL ASPECTS REGISTER

Technical Support Services

Process name	Activities	Aspects (Interaction with the Environment)	Likelihood	Severity	Significance	Aspect Category	Environmental Impact	Controls	Responsibility	Timeframe
Knowledge management	Knowledge creation, capture, store, sharing	Consumption of fuel	3	1	3	Medium	Depletion of energy resources; Environmental pollution	Pooling of resource; Regular and timely maintenance of vehicles	DD-TSS	When Need Arises
	Stakeholders Training	Consumption of electricity	3	1	3	Medium	Depletion of energy resources	Use of energy saving tubes/bulb; movement sensing switches; configure computers to power saving modes	DD-Administration/ Head ICT	Annual/Quarterly
		Toner waste	3	1	3	Medium	Environmental pollution	Install segregation compartment; Contract a waste handler; Re-fill used toners for re-use	DD Administration/ DD-SCM	Quarterly
	Printing of accountable documents	Printing chemical waste	3	2	6	High	Environmental pollution	Procedure for hazardous waste disposal	Supervisor Printing	Quarterly
	Publishing of KEFRI publications	Paper waste	3	1	3	Medium	Environment pollution	Install segregation bins/receptacle; 3 Rs - Reduce, Re-use, Recycle	DD-Administration	Annual

REGISTER OF INTERESTED PARTIES**Technical Support Services - Knowledge Management Section**

Stakeholder	Stakeholder Category (Internal/External)	Needs/Expectations
Researchers	Internal	Easily accessible and usable knowledge
Suppliers of books	External	Orders lists
Farmers and Communities	External	Timely, useful and complete knowledge produced by KEFRI
KEFRI Top Management	Internal	Easily accessible reports
Development Partners	External	Access to research output and profiles of KEFRI staff
Standardization Bodies	External	Standardization compliance
Kenya Forest Services	External	Publications (electronic and non-electronic)
Institutions of Higher learning	External	Consumers of knowledge and knowledge products
Suppliers (Printers)	External	Publications for printing
KEFRI staff	Internal	Creation, storage, access and use of knowledge
Extension Agents	External	Consumers of technologies, training and publications
County Governments	External	Consumers of technologies, training and publications
Government Ministries and Departments	External	Consumers of technologies, training and publications
Private Sector	External	Consumers of technologies, training and publications

**INTERNAL AND EXTERNAL ISSUES REGISTER****Technical Support Services - Knowledge Management Section**

No	Internal Issues	External Issues
1	Incentives	Technological
2	Staff turnover	suppliers (Printing firms)
3	Knowledge transfer	Language barrier
4	Mentorship	Legal requirements (copyright)
5	Information material	Reading culture
6		Financial resources