

EXTRAORDINARY



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GOVERNMENT OF FIJI

MAHOGANY INDUSTRY (LICENSING AND BRANDING) DECREE 2011
 (DECREE NO. 53 OF 2011)

IN exercise of the powers vested in me as the President of the Republic of Fiji and the Commander in Chief of the Republic of Fiji Military Forces by virtue of the Executive Authority of Fiji Decree 2009, I hereby make the following Decree—

PART 1—PRELIMINARY

Short title and commencement

1. This Decree may be cited as the Mahogany Industry (Licensing and Branding) Decree 2011, and shall come into force on the date of its publication in the *Gazette*.

Interpretation

2. In this Decree, unless the context otherwise requires—

“Certificate of Legality” means the certificate contained in Schedule 3 of this Decree;

“Code” means the Fiji Plantation Grown Mahogany Harvesting Code of Practice, contained in Schedule 4 of this Decree;

“Council” means the Mahogany Industry Council established under the Mahogany Industry Development Decree 2010;

“FHCL” means the Fiji Hardwood Corporation Limited, a Fiji incorporated limited liability company having its registered office at Garden City, Raiwai, Suva;

“Fiji mahogany brand” means the brands and marks contained in Schedule 1 of this Decree;

“licence” means a licence to purchase mahogany logs from FHCL, issued under this Decree;

“licensee” means any person or entity that has been granted a licence by the Council under this Decree to purchase plantation grown mahogany logs from FHCL;

“Minister” means the Prime Minister;

“Protocol” means the Fiji Mahogany Brand Protocols and Standards contained in Schedule 2 of this Decree;

PART 2—LICENSING

Council may issue licence

3.—(1) The Council may in its discretion, by notice in writing, grant a licence to any person or entity to purchase plantation grown mahogany logs from FHCL.

(2) The licence may contain such terms and conditions as the Council may, in its discretion, determine, and shall include, but not limited to, the following:

- (a) the duration of the licence;
- (b) the licence fees payable by the licensee;
- (c) the quantity and the grade of mahogany logs that the licensee shall be entitled to purchase from FHCL;
- (d) a reforestation fee;

- (e) a branding fee; and
- (f) such requirements to incorporate value-adding, as the Council may direct.

Licence to entitle purchase of mahogany logs and timber

4.—(1) Subject to such directions as may be provided by the Council to FHCL, FHCL shall only supply plantation grown mahogany logs to those persons and entities that have obtained a licence from the Council pursuant to the provisions of this Decree.

(2) Any person or entity who seeks to purchase mahogany logs from FHCL, must apply in writing to the Council for a licence.

Licence granted before the Decree

5. Any licence granted by the Council to any person or entity prior to the commencement of this Decree shall remain valid and shall be deemed to have been granted pursuant to the provisions of this Decree.

Council may vary or terminate licence

6.—(1) The Council may, by notice in writing, vary or amend any licence issued under this Decree.

(2) The Council may also, by notice in writing, suspend or terminate any licence issued under this Decree for any violation of the Protocol or terms of the licence. Any suspension or termination of the licence to purchase mahogany or licence to use the Fiji mahogany brand would be subject to the provisions of the Protocol, with any rights of appeal as described therein.

PART 3—BRANDING

Licensee to use Fiji mahogany brand

7. Only the timber harvested under the direction of FHCL and produced by a licensee in conformance with the Protocol shall be branded with the Fiji mahogany brand.

Application for use of Fiji mahogany brand

8.—(1) All licensees must, immediately upon the grant of a licence from the Council to purchase mahogany logs from FHCL under this Decree, apply in writing to the Council for the use of the Fiji mahogany brand.

(2) The Council shall, upon receipt and approval of the completed application under subsection (1) require the licensee to enter into a Fiji mahogany brand licence agreement with the Council.

(3) No licensee shall use the Fiji mahogany brand unless it has entered into a Fiji mahogany brand licence agreement.

Stamping of mahogany timber

9. Any licensee that has been issued a licence by the Council to purchase plantation grown mahogany logs from FHCL shall, upon the granting of its application for the use of the Fiji mahogany brand, stamp with the Fiji mahogany brand all mahogany timber produced from mahogany logs purchased from FHCL and produced in conformance with the Protocol, whether for export or for sale and use in Fiji.

Fees for use of Fiji Mahogany brand

10.—(1) All licensees shall pay a fee for the opportunity to use of the Fiji mahogany brand, regardless of whether they are able to actually meet the requirements of the Protocol.

(2) The fee shall be fixed by the Council and shall be provided in the licence issued to the licensee, or in the agreement entered into between Council and the licensee under section 8(2).

Use of Fiji mahogany brand to be in accordance with the Protocol

11. The use of the Fiji mahogany brand by any licensee must be strictly in compliance with the provisions of the Protocol.

Failure to comply

12.—(1) If any licensee fails to comply with the Protocol, the Council may take such action as is necessary to ensure compliance with the Protocol, or may either suspend or terminate the licence of the licensee as set forth in the Protocol.

- (2) Without prejudice to subsection (1), any person or entity who—
- (a) knowingly and materially fails to use the Fiji mahogany brand;
 - (b) knowingly and materially fails to comply with the Protocol, or
 - (c) knowingly and materially breaches any provision of this Part,

shall be guilty of an offence and shall be liable upon conviction to a fine of \$50,000 or to a term of imprisonment not exceeding 5 years, or to both.

PART 3—MISCELLANEOUS

Power to make regulations

13. The Minister may make regulations necessary for carrying out or giving effect to this Decree.

Schedules

14. The Minister may, by written notice published in the *Gazette*, amend the Schedules to this Decree.

No further licence for purchase of mahogany logs

15. Except for the licences described herein, no additional licences or permits shall be required for the purchase, production or export of plantation grown mahogany timber.

Given under my hand this 8th day of December 2011.

EPELI NAILATIKAU
President of the Republic of Fiji

SCHEDULE 1 (Section 2 & Part 3)

FPM

FIJI PURE MAHOGANY

FIJI PURE

(and any related designs thereof)

SCHEDULE 2 (Section 2 & Part 3)

FIJI MAHOGANY BRAND PROTOCOLS AND STANDARDS

- 1.0 THE MISSION STATEMENT
- 1.1 The Republic of Fiji has the largest mahogany plantation forests in the world and the Fijian Government wants to ensure that no illegal practices involving our local mahogany are carried out. As set forth in the Mahogany Industry Development Decree 2010 (Decree No. 16), the Fiji Government acknowledges the need for the mahogany industry to be operated on a basis that is sustainable in the long term.
- 1.2 As such, the Fijian Government has established a system wherein licences are issued and protocols established to ensure that only plantation grown mahogany timber is harvested, exported and sold from Fiji on a sustainable basis.
- 1.3 With the licensing and exclusive branding of Fijian mahogany, Fiji will be able to obtain maximum benefit and premium prices for Fijian mahogany products. In addition, apart from the revenue generated from the sale of mahogany products, the licensing and branding regime will result in additional substantial annual revenues for Fiji.
- 1.4 In keeping with these principles, the Government of Fiji hereby establishes the following certified marks or Fiji mahogany brands (hereinafter collectively and individually referred to as the "Fiji mahogany brand"):

FIJI PURE MAHOGANY

FPM

FIJI PURE

(and any designs thereof)

1.5 When used exclusively by authorized, licensed operators subject to the protocols described herein and any subsequent documents, these marks, individually and collectively, will certify plantation grown mahogany wood of Fiji origin that it is legally grown, harvested and produced under the laws of Fiji.

2.0 THE BENEFITS

- (a) Optimal use of the mahogany resource – yield
- (b) Value adding in Fiji
- (c) Job creation in Fiji
- (d) Higher revenue for exports
- (e) Up-skilling of workers in Fiji
- (f) Sustainability of the mahogany resource
- (g) Development of safety in the industry
- (h) Maximizing return to the land owners
- (i) Global brand recognition for Fiji and end users
- (j) Attraction of very substantial manufacturers from U.S.A. and E.U.
- (k) Pride for the people of Fiji
- (l) Supports Fiji
- (m) Grown and manufactured in Fiji
- (n) Made with pride in Fiji
- (o) Legality – Lacey Act-Verified Legal Origin
- (p) Complete chain of custody
- (q) Lowered carbon footprint
- (r) New investment in Fiji
- (s) Tax domicile in Fiji
- (t) New revenues for the Fiji Hardwood Corporation
- (u) Funding for reforestation and replanting of mahogany
- (v) Benefit all parties involved with the Fiji mahogany brand

3.0 FIJI MAHOGANY BRAND CERTIFICATION PRINCIPLES

3.1 The Fiji mahogany brand shall be based on the following principles:

Principle 1: Establishes licensing and fee requirements to ensure that the Fiji mahogany brand is used by only those mill operators that are legal entities, authorized to do business in Fiji and export timber from Fiji.

Principle 2: Establishes reforestation program for plantation grown mahogany through mandatory reforestation fees to ensure a sustainable and renewable resource.

Principle 3: Establishes that all applicable fees, royalties and taxes have been paid and are current by the licensees using the Fiji mahogany brand.

Principle 4: Establishes that any licensee using the Fiji mahogany brand produces and exports only legally harvested, plantation grown mahogany from Fiji.

Principle 5: Establishes and ensures compliance with applicable Fijian laws regarding timber production and harvesting, namely the Mahogany Industry Development Decree 2010 (Decree No. 16) and the Fiji Plantation Grown Mahogany Harvesting Code of Practice.

Principle 6: Establishes and ensures compliance by each licensee using the Fiji mahogany brand mark with applicable Fiji Occupational Health and Safety standards as they pertain to the health, safety and welfare of employees.

Principle 7: Establishes production standards and packaging requirements of products bearing the Fiji mahogany brand mark.

Principle 8: Establishes the existence and maintenance of the licensee's chain of custody by requiring inspections and audits by government officials at various points in the chain of custody.

4.0 ISSUANCE OF FIJI PURE MAHOGANY BRAND

- 4.1 At all times, the Fiji Government shall have sole discretion to permit a third party to use the Fiji mahogany brand based on the criteria that it has established in this document.
- 4.2 Only those companies which are legal entities, authorized to do business in Fiji and export timber from Fiji, and who have been granted a valid Licence by the Mahogany Industry Council ("Council") to purchase mahogany in Fiji may be granted the right to use the Fiji mahogany brand. A copy of the requirements of the Licence is attached hereto as Attachment A and incorporated by reference. However, if an applicant meets all criteria as established herein and holds a valid Licence, the applicant shall be granted the right to use of the Fiji mahogany brand and there shall be no discrimination in making such a determination.
- 4.3 To apply, an applicant shall submit an application to the Council for the right to use the Fiji mahogany brand. A copy of the application is attached hereto as Attachment B and incorporated by reference.
- 4.4 Prior to granting any applicant the right to use the Fiji mahogany brand, the Council shall require the applicant to sign a licence agreement under the laws of Fiji, agreeing to be bound by the Chain of Custody Protocols and other requirements set forth in this document and the licence. A sample copy of the licence agreement is attached hereto as Attachment C and incorporated by reference. Failure to strictly comply with these terms may result in termination or suspension of the underlying timber licence and/or the right to use the Fiji Mahogany brand, as well as financial and other penalties.
- 4.5 Upon being granted the right to use the Fiji mahogany brand, the applicant shall also be issued a specific and unique ink colour which it will use to mark its products with the Fiji mahogany brand.
- 4.6 It is a condition of use that the Fiji mahogany brand shall not be used without indicating that it is either a Certification Mark or a Collective Mark, as may be required in the respective country to which the product bearing the brand is being exported and sold.

5.0 CHAIN OF CUSTODY PROTOCOLS

- 5.1 All timber subject to the Fiji mahogany brand shall only be from plantation grown logs purchased under the licence to purchase mahogany issued by the Council, and which are planted, grown and harvested under the specifications and requirements of the Mahogany Industry Development Decree 2010 (Decree No. 16) and the Fiji Plantation Grown Mahogany Harvesting Code of Practice.
- 5.2 Only those mills—
- (a) which have been granted the licence to purchase mahogany issued by the Council; and
 - (b) which are current on all royalties, fees and taxes, including mandatory reforestation fees; and
 - (c) which comply with this Protocol and the Licensing Agreement.
- shall be entitled to use the Fiji mahogany brand.
- 5.3 At the Plantation
- (a) All logging will be done to the specifications and requirements of the Mahogany Industry Development Decree 2010 (Decree No. 16) and the Fiji Plantation Grown Mahogany Harvesting Code of Practice.
 - (b) Fiji Hardwood Corporation Limited ("FHCL") or an independent entity selected by FHL will monitor the logging subcontractors and perform an inventory of the logs harvested.

- (c) The inventory will specifically describe the Forestry Management Unit (FMU) from where the logs were harvested.
- (d) Every log harvested at the plantation will be issued a log tag as it is harvested and prior to being loaded onto the truck. This tag will describe the diameter, length and grade and from which plantation it came.
- (e) The logs will be transported to the mill with a properly licenced, insured and registered company.
- (f) FHCL, as directed by the Council, will perform regular spot audits at each plantation to ensure compliance with the above protocols.

5.4 At the Mill

- (a) Upon arrival at the mill, the mahogany logs will be re-inventoried by the licenced mill operator (the Licensee) and the original inventory list must be compared to the new inventory.
- (b) To ensure that all timber coming from the mill complies with the protocol, only plantation-grown logs obtained under a licence to purchase mahogany issued by the Council and which have complied with these standards shall be allowed inside the mill at any time.
- (c) All timber must be produced according to the Minimum Production Standards listed separately herein. Upon the completion of that production, the timber will be stamped with the Fiji mahogany brand.
- (d) After the timber is stamped with the Fiji mahogany brand, any timber being exported will be loaded onto a container and inventoried. FHCL shall inspect each such container and shall seal it with a specific number.
- (e) The Fiji mahogany brand stamps used at each mill will be kept in a secure location and used only by authorised individuals.
- (f) Upon inspection and approval, FHCL, acting as a delegate of the Council, shall issue a Certificate of Legality, which shall be signed and stamped. This shall denote inspection and approval of that container by the Council and that it is CITES exempt.
- (g) FHCL will perform spot audits at each mill on a random basis to ensure compliance with the above protocols.

5.5 At the Port

- (a) Upon execution of the Certificate of Legality, the container shall be transported to the Port. At that time, the Fiji Revenue and Customs Authority will inspect the paperwork for the container and will perform spot audits as it requires. Upon conclusion of any spot audit of any container, the Fiji Revenue and Customs Authority, shall re-seal the container and provide a substitute seal number.
- (b) Upon conclusion of any inspection by the Fiji Revenue and Customs Authority or if no inspection is performed, the Fiji Revenue and Customs Authority shall sign and stamp the Certificate of Legality.
- (c) Upon signing of the Certificate of Legality by the Fiji Revenue and Customs Authority, the container shall be loaded onto the vessel for shipping. No products bearing the Fiji mahogany brand shall be exported from Fiji without an accompanying Certificate of Legality.

5.6 Following the foregoing Chain of Custody Protocols will ensure that the timber harvested and certified with the Fiji mahogany brand is plantation grown mahogany that is legally harvested in accordance with Fiji law and then milled by a duly licenced mill in Fiji that is current on all royalties, taxes and fees.

5.7 Recognizing that the provisions of Sections 5.4(d), 5.4(f) and 5.5 address only situations where the products are exported directly from Fiji, in the event that a Licensee wishes to sell plantation grown mahogany products bearing the Fiji mahogany brand within Fiji, the Licensee shall only do so to sublicensees that are pre-approved by FHCL and which (1) have agreed in writing to abide by the terms of these protocols and (2) have instituted internal measures which are satisfactory to FHCL, at its sole discretion, to show clear chain of custody from the point of sale to the sublicensee to the point of export by the sublicensee, if the sublicensee exports the products itself or sells them to a third party that it knows or should reasonably know intends to export them.

6.0 MINIMUM PRODUCTION AND PACKAGING STANDARDS

- 6.1 To ensure quality and maximum yield, all timber bearing the Fiji mahogany brand must comply with the following minimum production standards:
- 6.2 Sawmilling
- (a) Primary log breakdown utilizing a Band Mill or Small Kerf circular saws
 - (b) Dimensional tolerance of plus minus 1mm on thickness
 - (c) Use of sawing process that clearly demonstrates a commitment to optimizing grade recovery and wood fiber overall yield.
- 6.3 Drying
- (a) All production must be commercially kiln dried and equalized.
 - (b) Full records of all kiln charges must be kept for inspection.
 - (c) A comprehensive Quality Control Process must be operated and documented.
- 6.4 Surfacing
- (a) All production must be surfaced to a minimum of two sides
 - (b) Dimensional tolerance of plus minus 1mm on thickness
- 6.5 End Trimming and Branding
- (a) All production must be a minimum one end trimmed with the Fiji mahogany brand applied to the trimmed end, together with the ink or paint designated by the Council.
 - (b) Each Licensee will receive a specific and unique colour, which can be used to subsequently identify the specific mill from which the timber came.
- 6.6 Packaging
- (a) All packaging must comply with International Standards For Phytosanitary Measures No. 15 requirements.
 - (b) All packaging must include the Fiji mahogany brand on at least one side of all units.

7.0 SAFETY

- 7.1 All Licensees must fully comply with the Fiji Occupational Health and Safety regulations. Further, all Licensees must demonstrate that they have a comprehensive safety plan and continuous safety training in place. If a Licensee fails to comply with these requirements, they may be subject to various sanctions as outlined elsewhere in this document.

8.0 CERTIFICATE OF LEGALITY

- 8.1 The Certificate of Legality is used to denote that the timber contained in a particular container is mahogany that is legally harvested from plantations in Fiji and produced in conformance with the Chain of Custody Protocols and Minimum Production and Packaging Standards herein. The Certificate of Legality shall only be issued to a Licensee that holds a valid and current licence to purchase mahogany issues by the Council and which is current on all royalties, taxes and fees due.
- 8.2 Upon inspection and approval of the milled timber, FHCL, acting as a delegate of the Council, will seal the container as described in the Chain of Custody Protocols and will sign, stamp and issue the Certificate of Legality. That Certificate shall accompany the container to the Fiji port, which shall be signed and stamped by the Fiji Revenue and Customs Authority upon approval of the container as outlined in the Chain of Custody Protocols. The Certificate of Legality shall be presented to the appropriate foreign officials upon import of the container to a foreign port in order to demonstrate the legality of the container's contents.

9.0 INSPECTIONS AND AUDITS

- 9.1 Any Licensee entitled to use the Fiji mahogany brand shall allow inspections and audits at any time by any entity designated by the Council including, FHCL, Department of Occupational Health and Safety,

Department of Environment and Fiji Revenue and Customs Authority in order to verify compliance with the standards set forth in this document.

- 9.2 These inspections and audits may include, at the official's discretion, interviews with employees, inspection of the facilities, inspections of any container, and review of corporate files relating to timber production and sales.
- 9.3 Failure to cooperate with official shall be grounds for suspension of the mill's timber licence and right to use the Fiji mahogany brand, in addition to any financial sanctions. The nature of the sanctions shall depend on the nature and seriousness of non-cooperation.

10.0 VIOLATIONS

Violation of Chain of Custody Protocols or Minimum Production and Packaging Standards

- 10.1 In the event that any entity designated by the Council (as per paragraph 9.1 above) determines that a Licensee entitled to use the Fiji mahogany brand has violated any of the Chain of Custody Protocols or Minimum Production Standards herein, it shall report the matter to the Council, which shall issue a written notice to the Licensee, noting the date or dates of the violation, the nature of the violation and the corrective action to be taken.
- 10.2 Upon being notified in writing by the Council of a violation of any of the Chain of Custody Protocols or Minimum Production and Packaging Standards, the licence to purchase mahogany of the Licensee shall be immediately suspended pending a finding and ruling by the Council as to sanctions, which may include financial sanctions and/or a recommendation of suspension or revocation of the Licensee's licence.
- 10.3 In determining the level and nature of sanctions, the Council shall consider factors such as the egregiousness of the violation, whether the Licensee's violation was intentional or unintentional, whether the violation has adversely impacted the integrity of the Fiji mahogany brand or reputation, and whether the Licensee has previously been found to have violated Chain of Custody Protocols or Minimum Production Standards.
- 10.4 The ruling by the Council shall be issued in writing thirty (30) days from the date of the notification of the violation to the Licensee. Both the Licensee and the entity finding the violation may submit supporting documentation to the Council for review and consideration at least ten (10) days prior to the date that the ruling will be made.

Violation of Safety Protocols

- 10.5 In the event that the Department of Occupational Health and Safety determines that a Licensee has violated any of the Safety Protocols herein, it shall issue a written notice to the Licensee, noting the date or dates of the violation, the nature of the violation and the corrective action to be taken. Upon being notified of the violation, the Licensee shall rectify the safety violation within three (3) days of the written notice or as soon as is practical based on a timetable set by the Department of Occupational Health and Safety.
- 10.6 The Department of Occupational Health and Safety may impose financial sanctions and/or make a recommendation of suspension or revocation of the Licensee's licence to purchase mahogany and/or licence to use the Fiji mahogany brand if the Licensee fails to cure the violation within the deadline or it is determined that the violation is egregious. The ruling and any recommendations by the Department of Occupational Health and Safety regarding violation of the Safety Protocols shall be issued in writing thirty (30) days of the notification of the violation to the Licensee. The Licensee may submit documentation for consideration to the Department of Occupational Health and Safety at least ten (10) days prior to the date that the ruling will be issued. In determining the level and nature of sanctions, the Department of Occupational Health and Safety shall consider factors such as the egregiousness of the violation, whether the Licensee has sought to rectify the violation and whether the Licensee has been previously cited for safety violations.
- 10.7 If the Department of Occupational Health and Safety believes a sanction of suspension or termination of the licence to purchase mahogany is warranted, it shall make this recommendation to the Council, which shall have final authority on this matter. In making its decision, the Council shall only review and consider those documents submitted and arguments made to Department of Occupational Health and Safety, including the documents submitted by the Licensee.

Non-Cooperation During Inspection or Audit

- 10.8 In the event that an entity designated by the Council finds that a Licensee has failed to cooperate during an inspection or audit, that entity shall issue a letter of non-cooperation to the Licensee, which shall specify the date of the inspection or audit, the events causing the non-cooperation and the potential sanctions imposed. A copy of this letter shall be forwarded to FHCL.
- 10.9 Upon receipt of the letter of non-cooperation, the Licensee shall have ten (10) days to respond directly to FHCL. The response shall include a brief statement as to why the finding of non-cooperation is not warranted and/or why the sanctions should not be imposed, as well as any supporting documentation by the Licensee of the Licensee's position. FHCL shall issue a written ruling on the alleged non-cooperation thirty (30) days of issuance of the letter of non-cooperation to the Licensee. In determining the level and nature of sanctions, FHCL shall consider factors such as the egregiousness of the non-cooperation, whether the Licensee has failed to cooperate previously and whether the Licensee has subsequently cooperated in other inspections or audits.
- 10.10 If FHCL believes a sanction of suspension or termination of the licence to purchase mahogany is warranted due to non-cooperation, it shall make this recommendation to the Council, which shall have final authority on this matter. In making its decision, the Council shall review and consider only those documents previously submitted and arguments previously made to FHCL.

Action While Licence is Suspended

- 10.11 While the licence to purchase mahogany of any Licensee is suspended for any reason, the Licensee shall not be entitled to use the Fiji mahogany brand and shall immediately cease production and shipment of any timber bearing the Fiji mahogany brand until the licence is reinstated. All timber that was certified as Fiji mahogany brand and still in the possession of the Licensee or at the Fiji port shall be immediately seized by FHCL, acting as a delegate of the Council and removed from commerce.
- 10.12 Written notice shall also be issued by the FHCL to all applicable foreign Customs Offices to seize any shipments of timber from that Licensee bearing the Fiji mahogany brand until further written notice.
- 10.13 Upon a final ruling by the Council suspending or terminating a licence to purchase mahogany or the licence to use the Fiji mahogany brand, all customers and stakeholders of the Licensee shall be informed by FHCL in writing that the company is no longer permitted to use the Fiji mahogany brand until further notice.
- 10.14 If a licence to use the Fiji mahogany is terminated by the Council, the Licensee may appeal that decision to the applicable trademark agency of the particular country or countries in which the licensee has historically done business under the brand. In determining whether the Licensee may continue to use the licence to use the Fiji Pure Mahogany brand, the trademark agency of the particular country shall review these protocols to determine whether the Licensee has violated said protocols and whether termination of the licence to use the Fiji mahogany brand is warranted under the terms of these protocols. Any decision by a trademark agency of a particular country to allow the Licensee to continue to use the Fiji mahogany brand in that particular country despite the decision of the Council shall be binding only upon that particular country and shall not constitute general right to use the brand outside of the country issuing the decision. In no way, shape or form, however, shall a decision of any foreign country's trademark agency to allow a Licensee to continue to use the Fiji mahogany brand in that particular country constitute a right to use the Fiji mahogany brand within Fiji or otherwise operate in Fiji.

11.0 RECORD KEEPING

Documentation Regarding Chain of Custody and Minimum Production and Packaging Standards

- 11.1 All Licensees entitled to use the Fiji mahogany brand shall keep internal documents showing full compliance with the Chain of Custody Protocols and Minimum Production and Packaging Standards described herein.
- 11.2 All Licensees shall maintain a document retention policy that retains all records for a minimum of three (3) years, except for documentation regarding alleged violations, discussed separately. This requirement includes the obligation to keep sufficient documents to verify in any audit that only plantation-grown logs

obtained under the licence to purchase mahogany from the Council and which have complied with the standards described herein have been allowed inside the mill at any time since the Licensee was granted the right to use the Fiji mahogany brand. Failure to maintain adequate records on these issues shall be considered a violation of the Chain of Custody Protocols and the appropriate sanctions shall be imposed.

Documentation Regarding Alleged Violations

- 11.3 All Licensees shall keep all documentation relating to any allegations of violations of any protocol described herein for a period of at least ten (10) years following the date of the alleged violation. The records shall be kept in a safe and secure location and shall be made available to any official of the Fiji Government upon request. This requirement shall apply to all allegations of violations, even if the Licensee is exonerated of the particular allegations.
- 12.0 EDUCATION
- 12.1 To ensure that the foregoing protocols and standards are observed, the Government of the Republic of Fiji, through the Council, will provide necessary training and education to all relevant entities on these protocols and standards.

ATTACHMENT A

LICENCE NO.



MAHOGANY INDUSTRY (LICENSING AND BRANDING) DECREE 2010

LICENCE TO PURCHASE MAHOGANY

[INSERT Name of Licensee]

is hereby granted this Licence to purchase plantation grown mahogany logs from Fiji Hardwood Corporation Limited.

This Licence is subject to the Mahogany Industry Development Decree 2010 and any other laws that may affect the conduct of the operations authorised by this Licence and upon such terms and conditions as prescribed in the attached Special Conditions or as may be directed by the Mahogany Industry Council.

Dated this ____ day of _____ 2_____

.....
CHAIRMAN, MAHOGANY INDUSTRY COUNCIL

SPECIAL CONDITIONS

1.0 Definitions**1.1** In this Licence and Special Conditions—

“FHCL” means Fiji Hardwood Corporation Limited;

“Licensee” means _____;

“Licensor” means the Mahogany Industry Council.

The “Fiji Pure Mahogany brand” means the marks “FIJI PURE MAHOGANY, “FIJI PURE” and “FPM”, collectively, and individually, and any related designs thereof.

2.0 Duration of Licence

2.1 This Licence is valid for _____ years from the date it is granted, is non-exclusive in nature, and must be renewed by the Licensee prior to its expiry, provided however that the Licence including any conditions of the Licence may be reviewed or amended annually by the parties upon such terms and conditions as the parties may mutually agree.

3.0 Fees

3.1 The Licensee must pay a licence fee of FJD\$ _____ VEP for every cubic metre of mahogany logs purchased during the term of this Licence.

3.2 The Licensee shall pay an upfront licence fee of FJD\$ _____ VEP upon the issuance of this Licence.

3.3 For the avoidance of doubt, the licence fee does not include the cost of mahogany logs, which shall be payable to FHCL, upon approval by the Licensor.

3.4 Given the need to ensure that the mahogany industry continues to operate on a sustainable basis, a separate and additional reforestation fee of FJD\$25 VEP per cubic metre shall also be payable by the Licensee to FHCL.

4.0 Quantity & Grade

4.1 Subject to paragraph 4.2, this Licence shall entitle the Licensee to purchase _____ cubic metres of grades _____ of mahogany logs per annum from FHCL.

4.2 FHCL shall use its best endeavours to ensure that _____ cubic metres of grades _____ mahogany logs are supplied to the Licensee every year, and the Licensee shall have an option to purchase grades _____ mahogany logs harvested by FHCL in excess of _____ cubic metres in any year. The Licensor or the FHCL shall not be liable to the Licensee in any manner whatsoever, in the event that FHCL, upon reasonable endeavours, is unable to supply a total of _____ cubic metres of grades _____ mahogany logs to the Licensee in any year.

5.0 Value Adding

5.1 The Licensee shall ensure that value-adding is done to the mahogany logs supplied to the Licensee under this Licence.

6.0 Branding/Certification Mark

6.1 Upon the granting of this Licence, Licensee agrees to apply for a separate license for right to use the “Fiji Pure Mahogany” brand.

6.2 Upon approval of the separate licence for the “Fiji Pure Mahogany” brand, the Licensee shall pay a branding fee per annum. Licensee agrees to pay this branding fee regardless of whether all or some of its products actually meet the requirements of the Fiji Mahogany Brand Protocols and Standards.

6.3 The Licensee shall ensure that any plantation grown mahogany timber or any products produced from the plantation grown mahogany logs supplied under this Licence and which are produced in conformity with

the Fiji Mahogany Brand Protocols and Standards shall carry or be affixed with the "Fiji Pure Mahogany" brand as approved or authorised by the Licensor, in order to safeguard and promote Fiji plantation grown mahogany as an exclusive brand.

- 6.4 The Licensee expressly agrees and acknowledges it shall not use the "Fiji Pure Mahogany" brand except in conformance with the requirements of the Fiji Mahogany Brand Protocols and Standards, and that any failure to abide by the terms of said Protocols and Standards could result in sanctions to the Licensee, including but not limited revocation or suspension of the rights granted to the Licensee under this Licence.
- 6.5 The Licensee expressly agrees that only plantation-grown logs obtained under the Licence herein and which have been harvested, inventoried and transported in compliance with the Fiji Mahogany Brand Protocols and Standards shall be allowed inside any mill used by the Licensee at any time.
- 7.0 Licence not Transferable**
- 7.1 The Licensee shall not assign, transfer, sub-licence or otherwise dispose of its rights, duties, liabilities, obligations and privileges under this Licence to any person or persons, and does not include any subsidiaries of the Licensee.
- 8.0 Variation and Determination of Licence**
- 8.1 The Licensor may, upon giving one month's notice, revoke this Licence in whole or in part, or any right hereby conferred under this Licence, without compensation of any kind in any of the following events:
- (a) if during the term of this licence, the Licensee shall be liquidated; or
- (b) if in the opinion of the Licensor, there has been a contravention, whether by act or omission, of the provisions of this Licence or of any law of Fiji by the Licensee.
- 8.2 The Licensor may otherwise vary the Licence or these special conditions at anytime to ensure that the Licence or these special conditions accord with the laws of Fiji.
- 9.0 Governing Law and Jurisdiction**
- 9.1 This Licence shall be governed by and construed exclusively under the laws of Fiji. Any dispute concerning this Licence shall be litigated and resolved in the courts of Fiji and the Licensee expressly agrees to jurisdiction therein.
- 10.0 Service of Notices**
- 10.1 All notices under this Licence shall be in writing and shall be deemed to have been given if sent by hand to the Licensee at its registered address or by any such other means that is agreed in writing between the Licensor and the Licensee.

Acknowledged and Agreed:

Date: _____

[Insert name of person signing for licensee]

[Insert Licensee's company name]

ATTACHMENT B



APPLICATION FOR
LICENCE TO USE FIJI PURE MAHOGANY BRANDING

Please complete the following information:

Applicant Name: _____

Applicant Address: _____

Please provide your License Number to Purchase Mahogany: _____

Do you agree to abide by the terms and requirements of the Fiji Mahogany Brand Protocols and Standards?

Provide the names and addresses of all mills in Fiji that you intend to use for purposes of producing mahogany products under the Fiji Pure Mahogany brands.

I HEREBY DECLARE UNDER PENALTY OF PERJURY that the foregoing is true and correct and that I have the legal authority to sign this application on behalf of the Applicant:

Signatory's Name: _____ Date: _____

Position: _____

Upon the granting of the Licence to Use Fiji Pure Mahogany Branding, the Applicant will be expected to pay all related licence fees, taxes and royalties.

For Administrative Use Only: The Applicant Should Not Write Below This Line.

The Applicant possesses a valid Licence to Purchase Mahogany:

Signature of Applicable Officer

The Applicant has been provided with a blank copy of the Licence to Use Fiji Pure Mahogany Branding

Signature of Applicable Officer

A physical inspection of the Applicant's mill has been made to ensure that it can and will comply with the Fiji Mahogany Brand Protocols and Standards

Date of Inspection: _____

Signature of Applicable Officer

ATTACHMENT C

LICENCE NO.



MAHOGANY INDUSTRY (LICENSING AND BRANDING) DECREE 2011

LICENCE TO USE FIJI PURE MAHOGANY BRANDING

[INSERT Name of Licensee]

is hereby granted this Licence to use the FIJI PURE MAHOGANY brand.

This Licence is subject to the Mahogany Industry (Licensing and Branding Decree 2011), the Fiji Mahogany Brand Protocols and Standards and any other laws that may affect the conduct of the operations authorised by this Licence and upon such terms and conditions as prescribed in the attached Special Conditions or as may be directed by the Mahogany Industry Council.

Dated this ____ day of _____ 2____

.....
CHAIRMAN, MAHOGANY INDUSTRY COUNCIL

SPECIAL CONDITIONS

1.0 **Definitions**

1.1 In this Licence and Special Conditions---

"FHCL" means Fiji Hardwood Corporation Limited;

"Licensee" means _____;

"Licensor" means the Mahogany Industry Council.

The "Fiji Pure Mahogany brand" means the marks "FIJI PURE MAHOGANY", "FIJI PURE" and "FPM", collectively, and individually, and any related designs thereof.

2.0 **Duration of Licence**

2.1 This Licence is valid for _____ years from the date it is granted, is non-exclusive in nature, and must be renewed by the Licensee prior to its expiry, provided however that the Licence including any conditions of the Licence may be reviewed or amended annually by the parties upon such terms and conditions as the parties may mutually agree.

3.0 **Fees**

3.1 The Licensee shall pay an upfront licence fee of FJD\$_____ VEP upon the issuance of this Licence.

3.2 The Licensee must pay an annual licence fee of FJD\$_____ VEP during the term of this Licence.

3.3 For the avoidance of doubt, the licence fee does not include the cost of the separate Licence to purchase plantation grown mahogany logs from Fiji Hardwood Corporation Limited or the cost of the separate reforestation fee under that separate Licence.

4.0 **Grant of Licence.**

4.1 With this Licence, the Licensee is hereby granted a non-exclusive worldwide license to use the following marks in connection with mahogany products that were produced from plantation grown mahogany logs purchased from FHCL by the Licensee and then produced according to the Fiji Mahogany Brand Protocols and Standards:

FIJI PURE MAHOGANY
FIJI PURE
FPM
(and any designs thereof)

4.2 The Licensee shall ensure that any plantation grown mahogany timber or any products produced from the plantation grown mahogany logs supplied under this Licence and which are produced in conformity with the Fiji Mahogany Brand Protocols and Standards shall carry or be affixed with the Fiji Pure Mahogany brand as approved or authorised by the Licensor, in order to safeguard and promote Fiji plantation grown mahogany as an exclusive brand. Any plantation grown mahogany products not produced in conformity with the Fiji Mahogany Brand Protocols and Standards shall not bear the Fiji Pure Mahogany brand.

4.3 The Licensee expressly agrees and acknowledges it shall not use the Fiji Pure Mahogany brand except in conformance with the requirements of the Fiji Mahogany Brand Protocols and Standards, and that any failure to abide by the terms of said Protocols and Standards could result in sanctions to the Licensee, including but not limited revocation or suspension of the rights granted to the Licensee under this Licence.

4.4 The Licensee expressly agrees that only plantation-grown logs obtained under the separate Licence to Purchase Mahogany and which have been harvested, inventoried and transported in compliance with the Fiji Mahogany Brand Protocols and Standards shall be allowed inside any mill used by the Licensee at any time.

5.0 Compliance with Fiji Mahogany Brand Protocols and Standards.

- 5.1 This Licence is hereby granted to the Licensee in conformance with the terms and conditions of the Fiji Mahogany Brand Protocols and Standards.
- 5.2 The Licensee hereby acknowledges that it has reviewed Fiji Mahogany Brand Protocols and Standards and agrees to be bound by and abide by its terms.

6.0 Licence not Transferable

- 6.1 The Licensee shall not assign, transfer, sub-licence or otherwise dispose of its rights, duties, liabilities, obligations and privileges under this Licence to any person or persons, and does not include any subsidiaries of the Licensee.

7.0 Variation and Determination of Licence

- 7.1 The Licensor may suspend or terminate this Licence as outlined in the Fiji Mahogany Brand Protocols and Standards, without compensation of any kind.
- 7.2 The Licensor may otherwise vary the Licence or these special conditions at anytime to ensure that the Licence or these special conditions accord with the laws of Fiji.

8.0 Governing Law and Jurisdiction

- 8.1 This Licence shall be governed by and construed exclusively under the laws of Fiji. Any dispute concerning this Licence or the use of the Fiji Pure Mahogany brand shall be litigated and resolved in the courts of Fiji, and the Licensee expressly agrees to jurisdiction therein.

9.0 Service of Notices

- 9.1 All notices under this Licence shall be in writing and shall be deemed to have been given if sent by hand to the Licensee at its registered address or by any such other means that is agreed in writing between the Licensor and the Licensee.

Acknowledged and Agreed:

_____ Date: _____
 [Insert name and title of person signing for Licensee]
 [Insert Licensee's company name]

REPUBLIC OF FIJI
CERTIFICATE OF LEGALITY



THIS CERTIFICATE OF LEGALITY HEREBY CERTIFIES THAT THE UNDERMENTIONED CONTAINERS HAVE BEEN INSPECTED AND APPROVED AND THAT ALL CONTENTS THEREIN, CONSISTING OF MAHOGANY TIMBER (*SWIETENIA MACROPHYLLA*), HAVE BEEN GROWN AND HARVESTED FROM PLANTATIONS LOCATED WITHIN THE REPUBLIC OF FIJI IN CONFORMANCE WITH THE LAWS OF THE REPUBLIC OF FIJI AND ARE CITES EXEMPT. THIS CERTIFICATE OF LEGALITY FURTHER CERTIFIES THAT THE UNDERMENTIONED LICENSEE IS DULY LICENSED TO OPERATE IN THE REPUBLIC OF FIJI AND HAS PAID ALL APPLICABLE ROYALTIES, FEES AND TAXES TO THE REPUBLIC OF FIJI STEMMING FROM THE HARVEST, TRANSPORT AND COMMERCE OF THE CONTENTS OF THE CONTAINERS LISTED HEREIN.

LICENSEE NAME _____

LICENCE NUMBER _____

CONTAINER NUMBERS _____

VOLUME (cubic metres) _____

DATE ISSUED _____

FIJI HARDWOOD CORPORATION LIMITED
INSPECTED AND APPROVED

FIJI REVENUE AND CUSTOMS AUTHORITY
INSPECTED AND APPROVED

FIJI PURE MAHOGANY

SCHEDULE 4
(Section 2)



Government of the Republic of Fiji

**FIJI PLANTATION GROWN MAHOGANY
HARVESTING CODE OF PRACTICE**

**MAHOGANY INDUSTRY COUNCIL
November 2011**

INTRODUCTION

With Fiji having one of the world's largest reserves of plantation grown, non-native mahogany forests, the Government of the Republic of Fiji has implemented a number of reforms in the mahogany industry to ensure that it operates in a sustainable manner, while providing maximum returns to all Fijians, including in particular, the landowners.

The introduction of the Mahogany Industry Development Decree ("the Decree") in 2010 heralded in a new and more efficient era in the administration of mahogany plantation land and production in Fiji. The Decree restructured the mahogany industry and provided specific roles and duties of all the stakeholders of the industry, including the Fiji Hardwood Corporation Limited ("FHCL") and the Fiji Mahogany Trust.

The Decree also established the Mahogany Industry Council ("Council"), with the principal function of supervising and directing the maintenance and development of the mahogany industry.

Given this role, the Council has prioritised a number of initiatives in the mahogany industry. These include:

- The licensing of all purchasers of mahogany logs from FHCL;
- The requirement for all licensees to contribute to reforestation of mahogany plantation land, to ensure that the mahogany industry continues on a sustainable basis;
- The restructuring of FHCL, so that it may be able to better perform its redefined role under the Decree;
- The introduction of a requirement for value-adding;
- The establishment of a distinct Fiji mahogany brand, in order to safeguard and promote plantation grown Fiji mahogany as an exclusive brand.

With the finalisation of the Protocols and the Standards for the Fiji mahogany brand, and in accordance with its functions prescribed in the Decree, the Council has prepared this separate and distinct Fiji Plantation Grown Mahogany Harvesting Code of Practice ("the Code").

The Code applies specifically to the harvesting of plantation grown mahogany trees in any mahogany plantation land in Fiji. Given the differences between plantation grown mahogany and native forests, this Code is designed to expressly address and deal with some of the unique issues involved with managing plantation grown mahogany. As such, it is intended that when addressing plantation grown mahogany, the terms of this Code shall govern and not any other code.

With clearly defined harvesting rules and procedures for all parties involved in the harvesting of plantation grown mahogany, the Code is an integral part of the Government's policy of having a sustainable mahogany industry, which at the same time provides vital economic benefits to all Fijians.

Commodore Josala Voreqe Bainimarama
Prime Minister of the Republic of Fiji & Chairman, Mahogany Industry Council

1. SCOPE

- 1.1 The Fiji Plantation Grown Mahogany Harvesting Code of Practice (the "Code") shall apply to all operations with respect of plantation grown mahogany in all mahogany plantation land (as defined in the Mahogany Industry Development Decree 2010) in the Republic of Fiji in conjunction with any agreement between the Mahogany Industry Council ("Council"), the Fiji Hardwood Corporation Limited ("FHCL") and the buyers of mahogany logs.
- 1.2 The Code prescribes desirable practices aimed at protecting the mahogany plantation land, its environment, its assets and its users, while allowing the execution of economically viable operations within acceptable safety standards.
- 1.3 The provisions of the Code are legally binding on all parties and individuals involved in marking, felling, extracting, loading and hauling mahogany logs and mahogany products from all mahogany plantation land in the Republic of Fiji. When addressing plantation grown mahogany, the terms of this Code shall govern.
- 1.4 The Code must be used in conjunction with any additional directive issued by the Council.
- 1.5 The Code governs the operational phase of the Harvesting Procedures for mahogany plantation land. All harvesting operations in mahogany plantation land must be carried out by FHCL in accordance with such directives as the Council may issue. In this regard, FHCL may by written agreement licence harvesting operators to undertake harvesting of mahogany in mahogany plantation land.
- 1.6 The Code aims to optimise the utilisation of mahogany in an ecologically sustainable manner. All harvesting operations must comply with the standards prescribed in this Code and the licence granted by FHCL to any harvesting operator.
- 1.7 This Code remains in force until such time that it is amended or revised by the Council.

2. LEGAL COMPLIANCE

- 2.1 All harvesting of mahogany in any mahogany plantation land shall be conducted in accordance with the requirements of the Mahogany Industry Development Decree 2010, the Mahogany Industry (Licensing and Branding) Decree 2011, and in accordance with such directives as may issued by the Council.

3. PRE-OPERATIONAL INSPECTION

Field Inspection

- 3.1 FHCL shall inspect the subject area to ensure that environmental, social and commercial factors are fully considered in determining whether harvesting is a viable option.
- 3.2 Important points to be considered during the field inspection include:
 - the identification of common boundaries;
 - the visual assessment of the mahogany trees and volume distribution over the proposed harvesting area;
 - existing and proposed forest roads, including access points to public roads; terrain conditions, including areas too steep or wet for harvesting; streams and potential crossing points; gravel deposits/quarries; and landslides.
- 3.3 Special attention must be given to areas of biological and archaeological significance. The ultimate aim is to design a mutually acceptable and practical Harvesting Plan.

Liaison with Other Organizations

- 3.4 In situations where major haulage roads serve other possible end uses, FHCL shall clearly identify the roles and responsibilities for the use, maintenance and repair of the roads, when entering into harvesting agreements with harvesting contractors. FHCL should consider the interests of landowners as well as other road users.

4. PRE-HARVEST INVENTORY

- 4.1 FHCL shall carry out a pre-harvest inventory (PHI) after the determination of harvest boundaries, buffer strips and other protected areas.

5. THE HARVESTING PLAN

Preparation and Submission of the Harvesting Plan

- 5.1 The chief executive officer of FHCL shall prepare and submit the Harvesting Plan with relevant documents for the subject area to the FHCL Board for certification.

Requirements of the Harvesting Plan





- 5.2 Coupe planning must be undertaken and the Harvesting Plan submitted to the FHCL Board for approval prior to the commencement of any harvesting operations, including road construction.
- 5.3 Coupe planning involves gaining good ground knowledge of the coupe/compartments to be logged to identify the location of the boundary, special management zones, stream crossings, roads and skid tracks and the starting point of the felling operations.
- 5.4 Coupe size should generally be in the range of 30 to 50 ha and should not exceed 100 ha unless FHCL determines good environmental and safety outcomes can be achieved.
- 5.5 The Harvesting Plan must contain details of the harvest area and the proposed operations, as shown in Table A.
- 5.6 The features identified in the Harvesting Plan must be clearly demarcated and verified by FHCL in the field before harvesting and road construction machinery enter the forest area. Standard colours should be used for maps and field marking, in accordance with Table B.
- 5.7 The Harvesting Plan must be certified by the FHCL Board before any harvesting is undertaken by any harvesting contractor engaged by FHCL.
- 5.8 Where it becomes necessary to make a variation to a Harvesting Plan due to unforeseen circumstances, such variation must be certified by the FHCL Board. The variation will only be certified where reasonable environmental outcomes can be achieved. Any certified variation must be attached to all copies of the Harvesting Plan.
- 5.9 All parties must at all times comply with the provisions of a certified Harvesting Plan and all certified variations.
- 5.10 The Harvesting Plan must be kept bound and up to date, including any certified variations. All relevant documentation must be held in a secure filing system.

Table A– Details that must be contained in a Harvesting Plan

| |
|---|
| <p>1. A contour map of scale 1:10,000 or 5,000 showing the following features-</p> <ul style="list-style-type: none"> - The area boundary - The boundary of the harvesting coupe(s)/compartment - Buffer zones along designated streams, special management zones such as protection forests, catchments areas, reserves, historic and archaeological sites, etc.; any underground and overhead lines such as water, sewerage, electricity, and telecommunications - Locations of stream crossings - Haulage roads - Major arterial skid tracks - Loading locations or landings - Location of the disposal area for material approved by FHCL - Any other features required to be shown in accordance with an agreement between the FHCL and the harvesting contractor |
| <p>2. The method of harvesting extraction, loading and haulage in coupes/units/compartments, using the method of harvesting that will maximize grade recovery and highest return to the landowner.</p> |
| <p>3. The location of communities or indigenous populations that could be affected by harvesting or the transportation system associated with the harvesting operation. The Harvesting Plan should identify the consultation that has occurred and the measures that will be taken to mitigate any adverse impacts.</p> |
| <p>4. Location and prescriptions relating to the camp (living) sites for loggers, including the specific designated areas for fires and smoking.</p> |
| <p>5. An inventory of the Plantation grown mahogany forest – volume to be removed from each compartment.</p> |
| <p>Note: Separate maps showing trees marked for removal and felling direction should be prepared at a scale of 1:2,000 or 1:5,000.</p> |

Table B – Standard colours for the marking of features in a Harvesting Plan

| Feature | Map colour | Field colour |
|---------------------------------------|-----------------|--------------|
| Licence area boundary | Red line | Red |
| Harvesting coupe/compartment boundary | Red broken line | Red X |
| Mataqali | Orange line | Orange |

| | | |
|--------------------------------------|--|---------------|
| Buffers zones | Blue line | Blue |
| Location of stream crossings | Blue  | Blue X |
| Haulage roads (metalled) | Double Brown lines | Double Yellow |
| Haulage roads (non-metalled) | Brown line | Yellow |
| Major arterial skid tracks | Brown broken line with arrows  | Yellow X |
| Loading locations or landings | Brown box  | Double yellow |
| Trees marked for removal | Numbered circle  | Blaze |

6. TRAINING AND ACCREDITATION

- 6.1 FHCL must ensure that all harvesting contractors who undertake harvesting activities under the Harvesting Plan must successfully have completed a training course approved by FHCL, which are available at the Fiji School of Forestry.
- 6.2 Powered harvesting equipment shall be operated only by personnel trained and certified for that specific equipment.
- 6.3 All untrained harvesting workers shall attend a relevant training course (listed in Annex 3) and undertake to sit a skills test conducted by the Department of Forestry to attain a Certificate of Competency.
- 6.4 All harvesting supervisors shall attend the approved training courses (listed in Annex 3) conducted by the Department of Forestry and attain a Harvesting Supervisor Certificate.
- 6.5 Qualification requirements for chainsaw, harvesting machine and log hauling truck operators are given in Table C.

Table C - Qualification requirements for chainsaw operators, harvesting machine operators and log hauling truck operators

| | |
|--------------------|---|
| Chainsaw operators | <ul style="list-style-type: none"> • A valid Competency Identity Card provided by the Forestry Training Centre. The Competency Identity Card must be produced on demand. • All chainsaw operators who have not been involved in the forest industry for a period of two (2) consecutive years will be required to undergo the required skills test offered by the Forestry Training Centre. |
|--------------------|---|

| | |
|------------------------------|--|
| Harvesting machine operators | <ul style="list-style-type: none"> • A valid Competency Identity Card provided by the Forestry Training Centre. The Competency Identity Card must be produced on demand. • All harvesting machine operators who have not been involved in the forest industry for a period of two (2) consecutive years will be required to undergo the required skills test offered by the Forestry Training Centre. • All harvesting machine operators must work in compliance with current Lands Transport Authority (LTA) regulations. • A valid LTA Operator's Licence for the relevant machine must be produced on demand. |
| Log hauling truck operators | <ul style="list-style-type: none"> • A valid LTA Operator's Licence for the relevant machine must be produced on demand. • Valid proof of insurance must be produced on demand. |

7. WEATHER RESTRICTIONS

- 7.1 It is the responsibility of all operators to cease work when adverse weather conditions are likely to cause an increased risk of personal injury or damage to the environment.
- 7.2 Guidelines for stopping and starting work according to weather are provided in Table D.
- 7.3 Additional restrictions may be placed on harvesting operations at the discretion of FHCL in consultation with the harvesting contractor.

Table D - Guidelines for stopping and starting operations according to weather

| Operation | Stop when | Start when |
|--------------------------------------|--|---|
| Felling | Wind prevents accurate directional felling | Wind drops and accurate directional felling is possible |
| | Ground conditions are too slippery to allow the chainsaw operator to move safely | The ground dries to allow the operator to move without slipping |
| Skidding or road construction | Water is seen flowing on any length of skid track or road | Water has stopped flowing and the soil is no longer saturated. This can be seen as the soil surface becomes solid enough to operate on without causing rutting. |

| | | |
|------------------------|--|--|
| | | <p>Note:</p> <ul style="list-style-type: none"> • skid tracks must not be bladed off • New skid tracks must not be opened up to by-pass an old skid track • Rutting must not exceed 30cm below the original ground surface. |
| Landings | Water starts to pond on the surface of the landing | The soil is no longer saturated. This can be seen as the soil surface becomes solid enough to operate on without causing rutting. |
| Haulage of logs | <p>Trucks cannot move unassisted along the road because of slippery conditions; or</p> <p>Muddy water is running in wheel ruts which are more than 10cm below the road surface for a distance greater than 50 m.</p> | <p>The surface dries and trucks can move without assistance along the road and water is no longer running in wheel ruts.</p> <p>Note: Other machines must not be used to move trucks.</p> |

8. BUFFER STRIPS

- 8.1 Buffer strips are required for the protection of designated streams and may also be applied to protect special management zones such as protection forests, catchment areas, reserves, historic and archaeological sites and infrastructure for water, sewage, electricity, and telecommunications.
- 8.2 Buffer strips should be marked in the field and on the Harvesting Plan.
- 8.3 Buffer strips must remain undisturbed except at approved crossing points where clearing widths should be minimised.
- 8.4 The minimum widths of buffers are given in Table E. The widths specified are horizontal distances and must be applied to both sides of the streams. FHCL may prescribe wider buffer widths in a Harvesting Plan where necessary to protect sensitive streams or catchments.
- 8.5 The following protection applies to buffers -
- Trees must not be felled in buffers (except in plantations where planted trees may be harvested providing that debris does not enter streams and disturbance to indigenous trees and understorey is minimised).

- Trees in forest adjacent to buffers must be directionally felled or retained where necessary to avoid damage to buffers.
- Machines must not enter any buffer or stream (except at approved crossing points). Skid tracks should be kept at least 40 m away from streams except at approved crossing points.
- Tree crowns are not to be felled into streams. Debris increases water turbulence resulting in erosion and increased turbidity, which adversely affects water quality and stream biodiversity. Any debris in streams is therefore to be removed immediately, whilst ensuring that machines do not enter the buffer.
- Floating of logs along rivers/large streams can be carried out only with the written consent of FHCL.

Table E - Minimum buffer widths for streams (metres)

| Width and type of stream ¹ | | Buffer strip width ² | Restrictions |
|---------------------------------------|---|---------------------------------|---|
| 20 m | | 30 m | No felling or machine entry |
| 10-20 m | | 20 m | No felling or machine entry |
| 0 to 10 m | 1. perennial streams | 10 m | No felling or machine entry |
| | 2. intermittent streams (no flow during the dry season) | 10m | Selective felling permitted No machine entry Avoid disturbance to understorey Remove any debris from stream |
| Streams in plantations | | 10 m | Felling of planted trees only is permitted No machine entry Avoid disturbance to understorey Remove any debris from stream |

1. The width of stream from bank to bank during normal flush seasonal flow
2. Horizontal distance measured from the stream bank to the edge of the buffer

9. ROAD ACCESS

Road Location, Clearing and Construction

- 9.1 Construction of haulage roads must be confined to the road alignment shown in the Harvesting Plan.
- 9.2 Any deviations/alterations to the road alignment must be covered by a certified variation to the Harvesting Plan prior to construction.

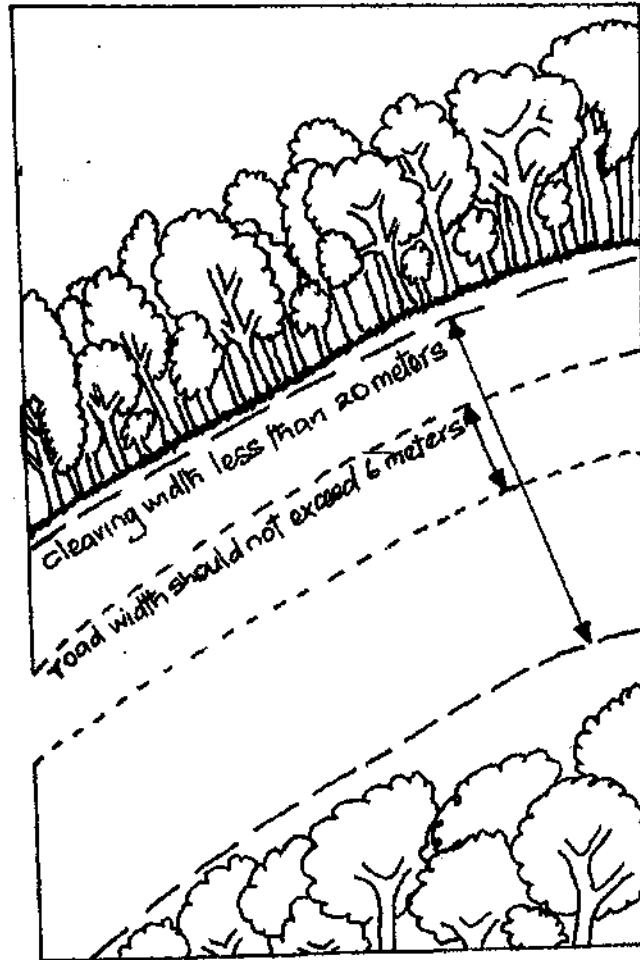
- 9.3 The width of major haulage roads should not exceed 5.5 to 6m and minor roads 3.7 to 4.5m. The road clearing width should be minimised and should not exceed 20 metres (including width of road) for major haulage roads or 15 metres for minor haulage roads unless FHCL deems it necessary for safety reasons and to enhance the drying of constructed road surfaces.
- 9.4 All road construction, maintenance and drainage works must be conducted during dry weather.
- 9.5 During construction, all trees within the road line must be directionally felled in a manner that minimizes damage to the residual stand and promotes full utilisation of the felled trees and proper disposal of the slash.
- 9.6 Roads should be located on or along ridge tops or on moderate side slopes wherever possible. The alignment should be designed to –
- minimise the earthworks
 - ensure good drainage
 - minimise the proximity of roads to streams and minimise the number of stream crossings. Roads should be at least 20 metres from the edge of the closest stream buffer zone and care must be taken to prevent any side-cast material from entering the stream buffer.
- 9.7 Roads should be constructed and compacted well in advance of proposed haulage operations to allow the road to dry out and 'bed-in' before heavy use.
- 9.8 All surface formation and maintenance for Category A roads must be undertaken with a grader.

Road Grades and Cambers

- 9.9 Road grades should generally be 8° (14%) or less, although sections steeper than 8° may be approved by FHCL in order to reduce overall construction lengths or reduce earthworks, provided that adequate drainage can be installed.
- 9.10 Camber and super-elevation of the road surface should be properly formed to allow for water runoff.

Figure 1 –

Clearing beyond the width of the road formation should be minimised and should be done by manual felling and by avoiding the blading of soil where possible.



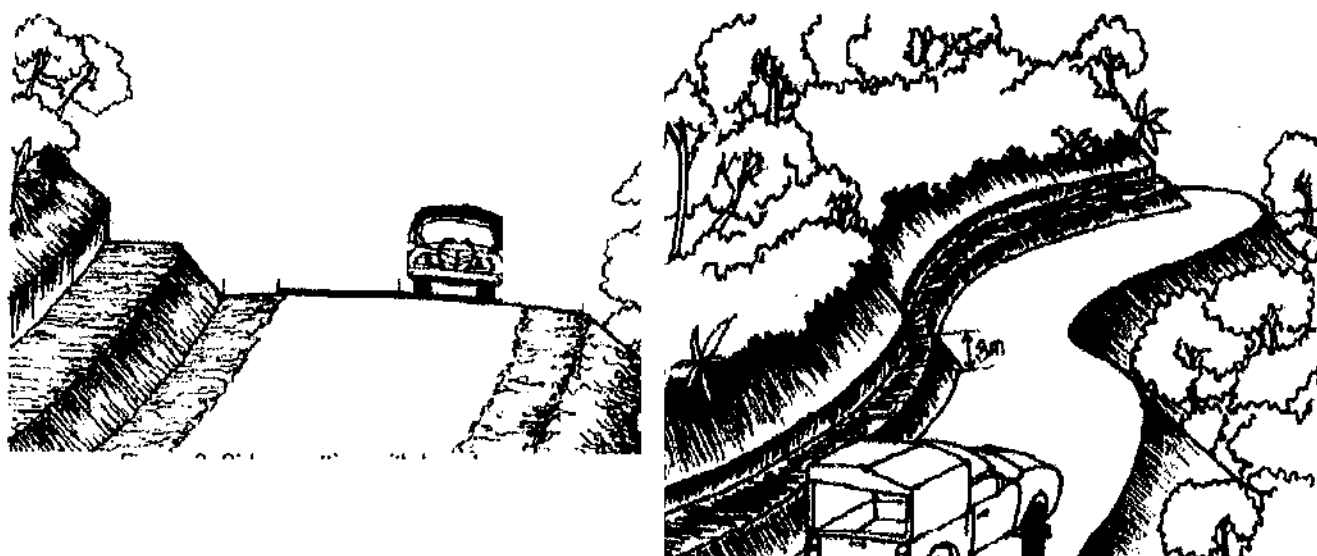
Box and Side Cuts

- 9.11 Box cuts must be avoided wherever possible and may only be constructed in short sections where adequate road drainage can be achieved. Box and side cuts deeper than 2 metres must be shown on the Harvesting Plan.
- 9.12 Side cut roads should generally not be located on slopes greater than 30° (58%) on stable soil types or 25° (46%) on unstable soils. Any side cuts on slopes above these limits should be very carefully considered and shown on the Harvesting Plan.
- 9.13 Wherever side cutting is necessary, the roadway width must be kept on solid ground (i.e. on the cut section and not on any part of the fill section).
- 9.14 Grass or reeds must be planted on cuts and fills soon after construction to minimise erosion and to stabilise the road formation.

Batters and Benches

- 9.15 Benches must be constructed to avoid erosion or batter slumping where batters (either cut or fill) are in excess of 3 metres.
- 9.16 All benches when formed should be graded back against the cut edge.
- 9.17 To minimise erosion, vegetation should be retained at the top of cut batters and at the toe of fill batters and shrubs/grass/reeds planted on benches.
- 9.18 The edges of all cut batters should be levelled back wherever possible.

Figure 2 – Construction of benches to improve sight distance and the stability of road batters.



Road Visibility

- 9.19 Visibility is the minimum distance ahead, which a driver should be able to see in his/her own traffic lane. All vehicles using the forest roads should have their headlights on.
- 9.20 At road intersections, a minimum visibility of 30 metres along all roads shall be maintained where practicable.
- 9.21 Road intersections, wherever possible, should always be at right angles or as near as feasible, even though it may be necessary to introduce a curve prior to the intersection to achieve it.

- 9.22 All curves should be kept at the maximum possible radius achievable, circular in shape and with minimum super-elevation.
- 9.23 Wherever feasible and particularly where successive tight curves are in opposite directions, intermediate stretches should be reasonably straight and for a distance of at least 20 metres.
- 9.24 On tight curves, where visibility standards cannot be adhered to, extra widening of the curves should be applied wherever possible.

Road Drainage

- 9.25 Proper drainage is essential for the maintenance of all harvesting roads and tracks.
- 9.26 All roads and tracks must be adequately drained to minimise erosion and to avoid the movement of sediment into streams.
- 9.27 Cross drains and turnout drains should be constructed at regular intervals as required to reduce surface flow, particularly in steep country where frequent diversions are necessary to reduce the volume and velocity of run-off.
- 9.28 Roads should have adequate camber and side drains (V drains) to direct water off the road surface towards dispersal points.
- 9.29 Drainage on roads approaching a watercourse should be prevented from entering the watercourse by diverting it through cross drains or turnouts into the adjacent vegetation as close as possible to the watercourse while maintaining an effective filter strip (one which ideally allows a minimum of 30 m of drainage over vegetated ground before entering the watercourse).
- 9.30 Silt traps should be used where necessary to prevent sediment entering streams.
- 9.31 Except for the initial stage of road construction and drainage, machine blades must not be used to remove road surface material. This does not include minor repair work or that which will not further excavate the road. Any fill must be deposited in locations that avoid the entry of sediment into streams.
- 9.32 The use of hydraulic excavators is encouraged on steep or erodible slopes.

Figure 3 - Use turnout drains or culverts to divert runoff into vegetation and away from streams.

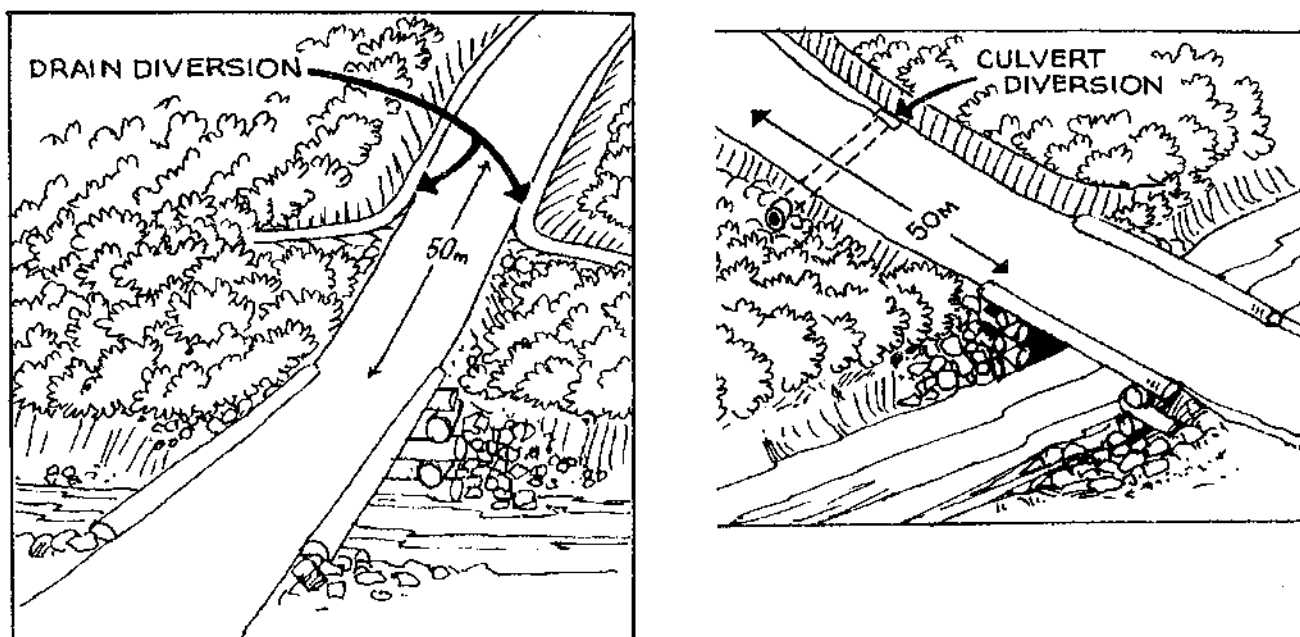
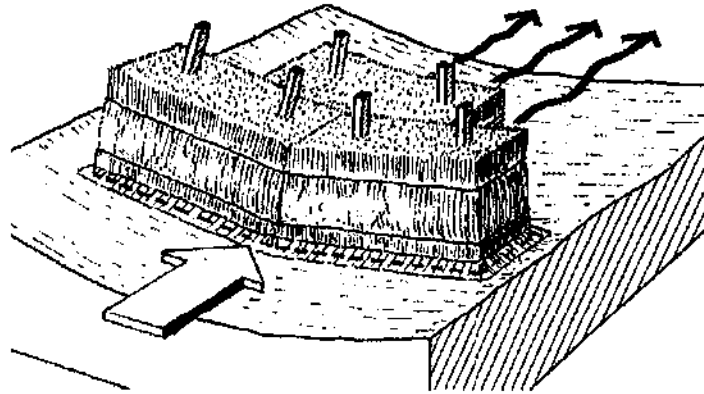
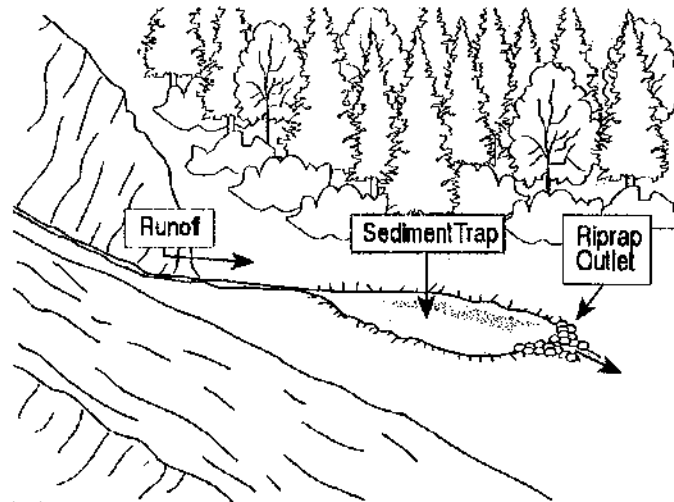


Table F - Maximum spacing between cross-drains for roads

| Gradient of road | Maximum distance between drains (metres) | |
|------------------|--|------------------------|
| | Low erodibility soils | High erodibility soils |
| 0-9° (0-16%) | 150 | 40 |
| >9° (>20%) | 50 | 30 |

Note: drains should also be installed at major changes of slope and within 50 metres of watercourse crossings.

Figure 4 – Silt traps can be constructed as sediment ditches or barriers made of straw or other vegetation to filter run-off from roads.



Stream Crossings

- 9.33 Stream crossings are potentially the most hazardous sources of stream sediment.
- 9.34 The number of crossings should be minimized.
- 9.35 Crossings should be carefully located to minimise disturbance to stream banks.
- 9.36 All crossing locations and types should be shown on the Harvesting Plan.

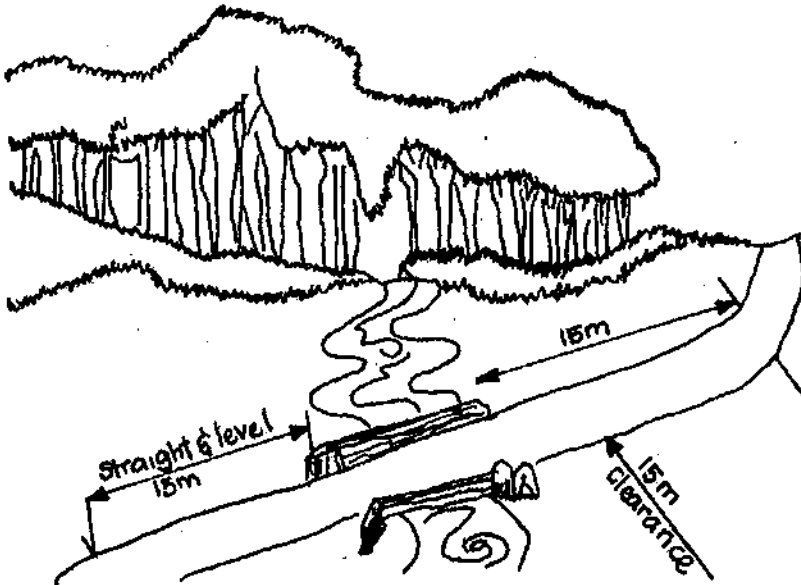


Figure 5 - Roads should be located to avoid steep side cuts and approach stream crossings at right angles where possible.

Permanent Crossings

- 9.37 Bridges must be constructed to allow for free flow of water underneath during normal (1 in 20 year) flood events.
- 9.38 Construction and maintenance activities must be planned and conducted so as to minimise the risk of sediment entering streams.
- 9.39 Where possible, crossings of designated streams should be located at right angles where stream channels are straight and have well defined stream banks
- 9.40 Approaches to a bridge should be of straight alignment with level gradient for a minimum distance of 15 metres either side wherever possible.
- 9.41 Large rocks, sandbags or logs must be placed on the upstream side of the foundation to reduce erosion. All fill must be similarly stabilised or re-vegetated to minimise slumping and erosion.
- 9.42 Where earth and gravel is used for paving bridges, kerbs should be installed to contain such material.
- 9.43 Culverts with adequate fill may be used on small streams where peak flows are not extreme. The culvert size must be designed to cope with catchment flow and should be no less than 300mm diameter.

- 9.44 Where the road is constructed using the 'cut and fill' method, culverts should not discharge over fill material unless flumes or non-erosive materials are used below the outlet to prevent erosion.
- 9.45 The use of hydraulic excavators is encouraged during the construction of bridges, permanent crossings and culverts to avoid soil erosion and the collapse of the stream banks.

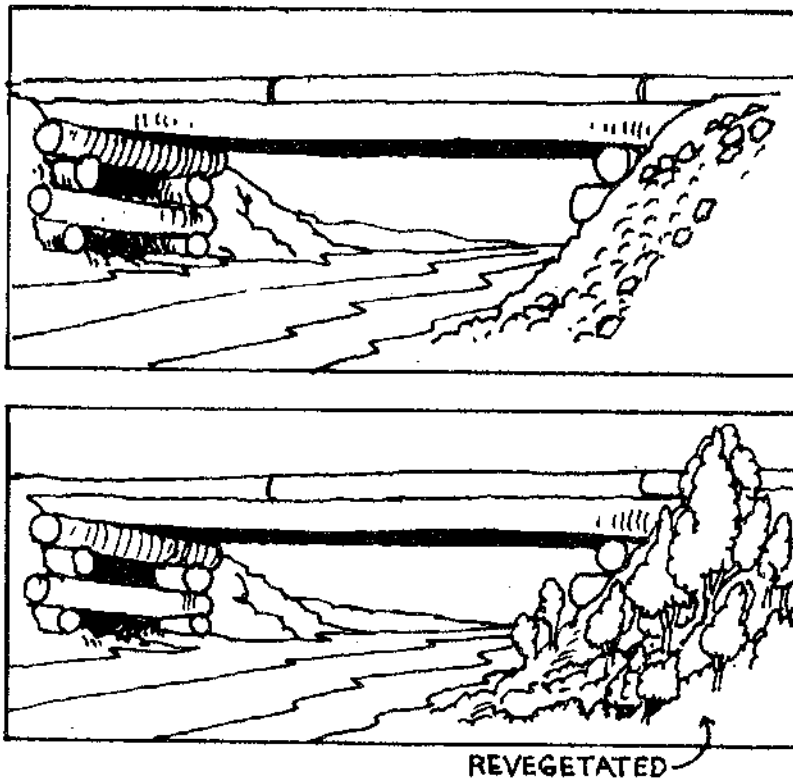


Figure 6 -
Bridge
embankments
should be
protected and
stabilised with
vegetation or
heavy duty
materials such
as rock or logs

Temporary Crossings

- 9.46 Approaches to temporary crossings should be adequately drained to prevent runoff flowing directly into the stream.
- 9.47 Crossings should be located on sites with stable streambed material and where bank restoration will be possible.
- 9.48 Construction activities should be timed to coincide with dry weather and low stream flows.
- 9.49 Ford crossings should only be constructed over stable gravel material.

- 9.50 Log crossings must be constructed as a temporary log bridge allowing free flow of water.
- 9.51 Log clusters with soil fill are not permitted as crossings.
- 9.52 Temporary crossings must be removed to allow unimpeded stream flow as soon as operations over the crossing are completed or before the wet season if operations are not completed. The streambed and banks must be restored as near as possible to its natural condition.

Road Metalling

- 9.53 The ultimate aim of metalling is to provide a durable, all weather surface which will provide an acceptable level of travelling comfort and safety and have sufficient inherent strength to withstand expected loads and weather conditions.
- 9.54 Before any metalling is carried out adequate grading of the road must be undertaken to ensure that:
- the prescribed construction widths and drainage systems are maintained;
 - a suitable and even surface is formed to accommodate the metal;
 - the camber and super-elevation (if required) are formed correctly.
- 9.55 Metalling is generally not warranted for Category B roads. However, consideration should be given to the metalling of sections where necessary because of steep gradients, erodible soils or other values.

Public Access – Government Roads

- 9.56 Any construction from or on to a public road must be approved by the relevant authority having responsibility of that public road.
- 9.57 Harvesting activities from within the Road Reserve should have prior approval of the relevant authority, and any condition set by the relevant authority must be incorporated into the Harvesting Plan and adhered to.
- 9.58 Road haulage vehicles used to transport forest produce; heavy plant, and road construction material shall comply with all regulations prescribed under the Land Transport Authority. All loads must be safely secured with approved load binders to avoid any movement in transit. Load and vehicle limits must not be exceeded unless the necessary approvals have been obtained from the Land Transport Authority.

- 9.59 The logger and/or cartage contractor shall erect approved temporary signs where log haulage vehicles enter onto public roads and provide warnings of any potential safety hazards. The logger/cartage contractor shall provide additional traffic control in high hazard situations.

Road Closure

- 9.60 Roads may be closed to haulage vehicles when in the opinion of FHCL damage to the road formation or its structures may occur.
- 9.61 The logger and cartage contractor must take reasonable precautions to avoid causing damage to the road infrastructure and must cease haulage before major damage occurs.
- 9.62 Roads shall be kept open to essential traffic during the course of harvesting operations.

Road Maintenance & Repair

- 9.63 During harvesting and haulage operations, the licensee and harvesting contractor(s) will be responsible for the maintenance and repair of roads and associated infrastructure, including bridges and signs.
- 9.64 Road edges, drains and silt traps must be cleared of harvesting debris and maintained in good working order at all times during operations.
- 9.65 Road metal should be routinely maintained during the course of heavy traffic usage and log loading to prevent road deterioration.

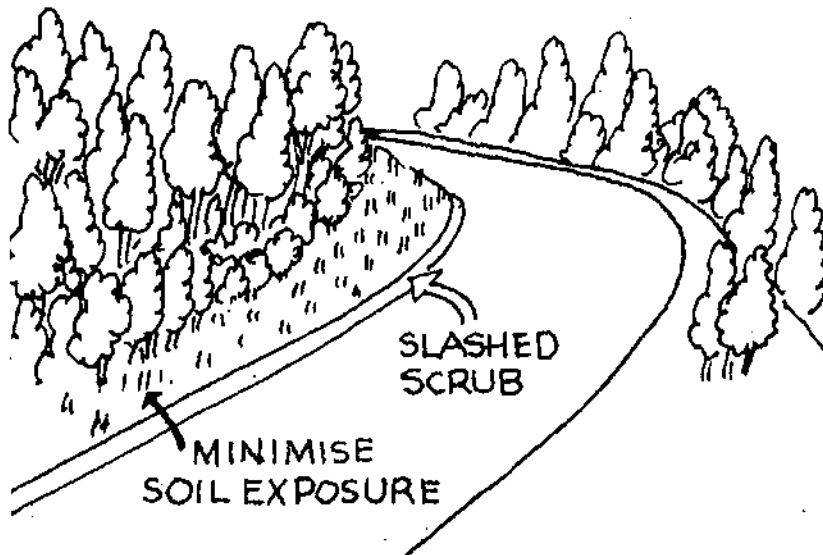


Figure 7 - Control roadside vegetation only to the extent necessary to keep the road surface dry, to permit good visibility and for weed and fire control purposes. Soil disturbance on batters should be avoided.

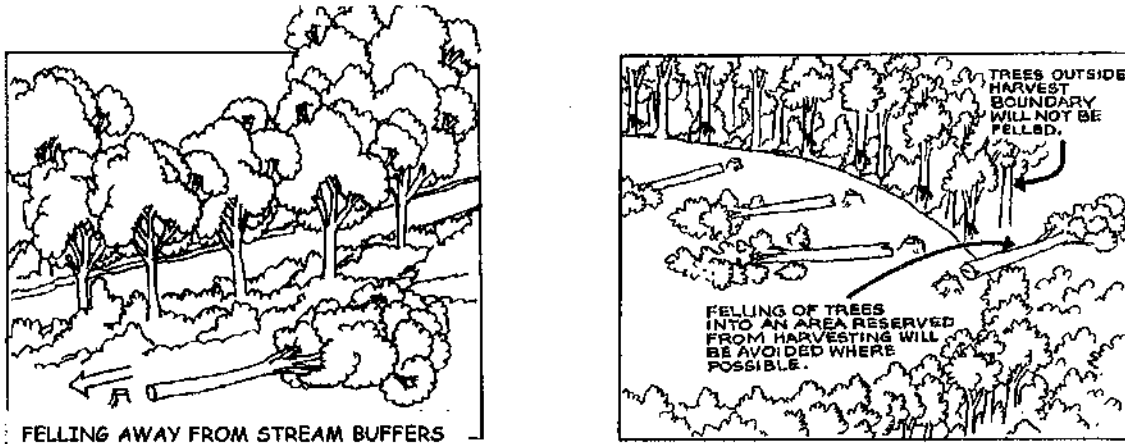
10. FELLING OPERATION

- 10.1 Felling should not occur where average slopes exceed 25° over a distance of 100 metres or more unless approved by FHCL and measures are taken to avoid erosion and environmental harm.
- 10.2 The Harvesting Contractor(s) will provide all persons in the field with Personal Protective Equipment (PPE) as listed in Annex 2. All persons must wear the relevant PPE at all times whilst undertaking harvesting activities.
- 10.3 Chainsaw operators must work in pairs not closer than 2 tree lengths apart but close enough to call for assistance or notice in case of an accident. All other persons must remain at a safe distance of at least two tree lengths. Greater distances should be allowed on slopes where felled trees may slide downhill.
- 10.4 Tree driving is not permitted under any circumstances.

Job Organisation – Preparing to Fell

- 10.5 'Morning briefings' between supervisors, machine operators and fellers must be held to review safety issues and the day's operations.
- 10.6 'Weekly briefings' should be held between supervisors, FHCL personnel and the harvesting contractor to review safety and operational issues.
- 10.7 Trees should always be directionally felled in a manner that minimises any potential safety hazards or damage to the remaining stand. Factors to be considered include:
- Suitable gaps in the canopy and intended skidding direction
 - the lean of the tree and the direction and strength of the wind
 - any obstacles in the way of the tree's fall and escapes routes.
- 10.8 Back-pulling is strictly prohibited

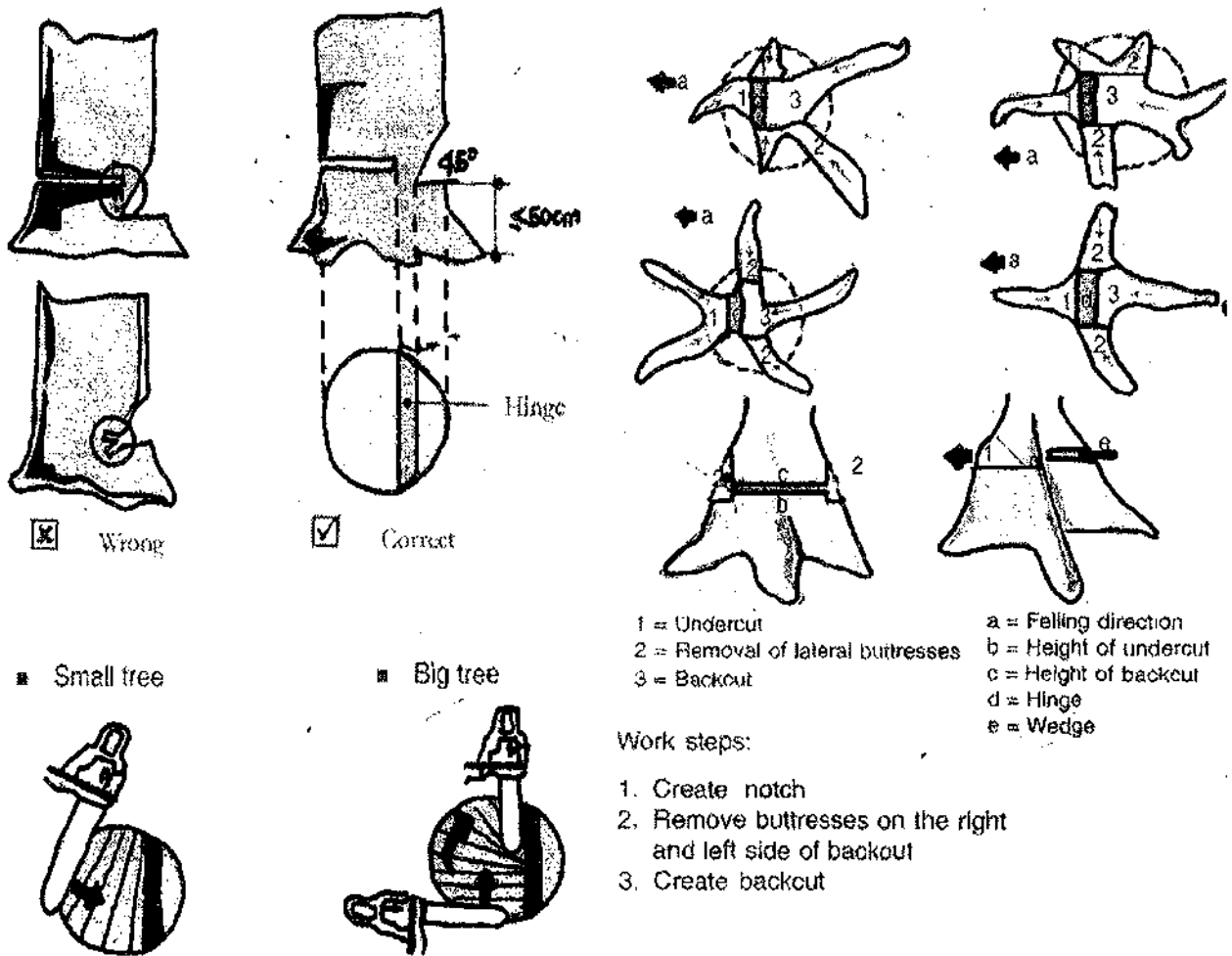
Figure 8 – Directional felling away from buffers and retained trees



Preparing to fell at Roadside

- 10.9 Suitable signboards and precautions must be taken to warn oncoming traffic when trees are being felled within 2 tree lengths from a road or greater on sloping land where felled trees may slide downhill.
- 10.10 Any underground and overhead lines such as water, sewage, electricity, and telephone must be accurately identified, the relevant authority notified and the required buffers marked on the ground before felling commences. Appropriate care must be taken to avoid any damage to the utility lines.
- 10.11 Where an overhead electricity line passes through a harvesting area, it must be suitably marked and felling must not take place within this area without prior consultation with Fiji Electricity Authority (FEA).

Figure 9 - Directional felling techniques



Stump Height

10.12 Stump height should be as low as practicable (less than 30 cm on the uphill side) to maximize merchantable volume.

10.13 Stump height greater than 30cm is acceptable where butt defect is obvious or if a buttress exists. Trees may be cut immediately above the buttress but below shoulder height.

Partially Cut Trees and Hung Up Trees

10.14 Trees must not be partially cut and left standing.

10.15 Where a tree is 'hung up' it must be brought to the ground as soon as possible.

- 10.16 Trees not marked for felling that have been damaged and become dangerous as a result of felling or skidding operations must be felled as soon as possible and FHCL must be notified.
- 10.17 Where trees cannot be safely taken down manually, a machine with winch must be used. When winching, the distance from the tree to the machine must be at least one and a half times the height of the tree.
- 10.18 The chainsaw operator and all other persons must remain as far away as possible until the tree is safely on the ground and winching has ceased.

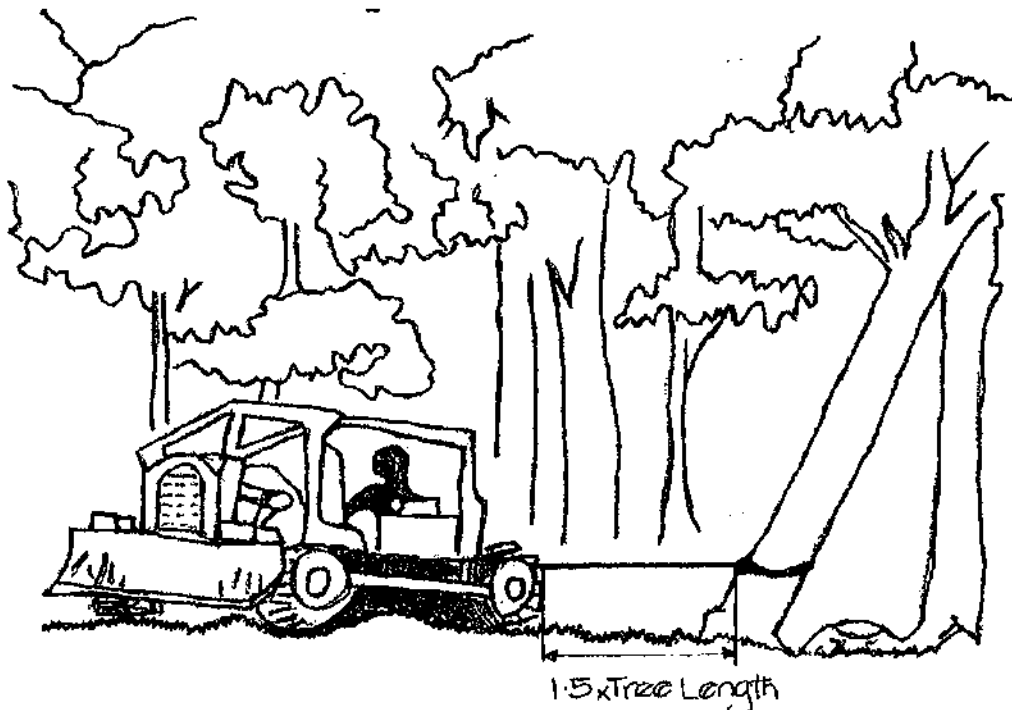


Figure 10 - Machines should maintain a distance of at least 1.5 x the total tree length when removing hung up trees

Salvaging of Windblown Trees

- 10.19 Windblown trees may be harvested where approved FHCL. Major salvage operations should be covered by a Harvesting Plan or by a certified variation to an existing Harvesting Plan.

11. SKID TRACKS

Planning of Skid Tracks

11.1 Skid tracks must be planned to:

- Minimize the area covered by skid tracks, reduce skid track grades and avoid box cuts and excessive side cuts.
- Maximise the volume of logs that can be skidded safely and efficiently.
- Eliminate unnecessary stand damage by the skidding machine.
- Provide winch-line paths to logs. This will eliminate the necessity for the machine to approach every log and thereby reduce stand damage.

11.2 Major skid tracks must be shown on the Harvesting Plan and marked in the forest prior to the commencement of harvesting.

Skid Track Location & Clearing

11.3 Skid track location will be influenced by factors such as topography, required drainage, volume available, log size and harvesting equipment available.

11.4 Locations requiring side cuts should be minimised. On steep land the tracks should be contoured and tracks must not be less than 60 metres apart.

11.5 Skid tracks should be planned to provide uphill skidding to landings wherever possible. Where downhill skidding is necessary, skid tracks and haulage roads should be carefully located and drained to ensure that run-off is diverted before it enters the landing.

11.6 Major access tracks should be located and constructed prior to the commencement of the felling operation. This will allow better directional felling and sequencing of the harvesting area.

11.7 The clearing width for tracks should be minimised and must not exceed 4 metres.

11.8 Skid tracks shall generally not exceed 25° (46%) except for short distances where effective drainage and prevention of erosion can be achieved.

Track Construction

11.9 The harvesting machine operator must follow the route marked on the ground and verified by FHCL.

- 11.10 During construction, all trees located on the skid track must be directionally felled in a manner that minimizes damage to the residual stand and promotes full utilisation of the felled trees and proper disposal of the slash.
- 11.11 Soil displacement (e.g. side cutting) should be avoided as much as possible during skid track construction and use since this tends to expose the often highly erodible subsoil.
- 11.12 Box cuts should be avoided, as they are difficult or impossible to drain.
- 11.13 Except for the initial stage of skid construction and track drainage, machine blades must not be used to remove soil. This does not include minor repair work or work which will not further excavate the track.

Skidding Operation

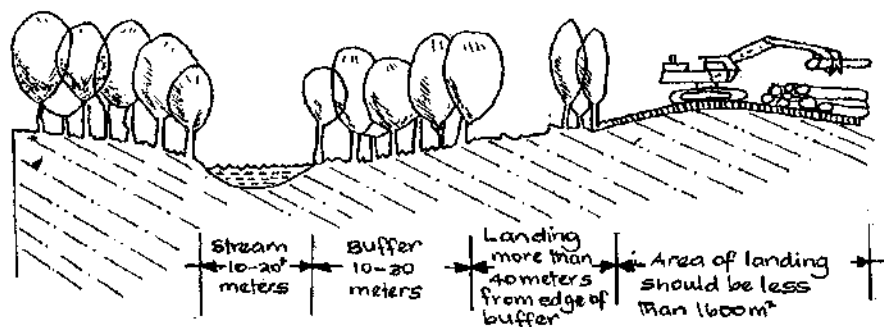
- 11.14 Log Skidders and crawler tractors (D6 size or equivalent) are the preferred skidding machines.
- 11.15 Blading after initial construction is not permitted. Machines must walk along the constructed tracks with blades lifted unless the lowering of the blade is essential for safety on steep slopes.
- 11.16 On steep slopes machines must remain on the designated skid tracks at all times and use winching techniques to extract logs.
- 11.17 Machines shall be driven at a safe speed appropriate to the conditions of the forest roads and tracks.
- 11.18 All logs must be raised at the front during skidding to minimise soil disturbance and skid track damage caused by the ploughing effect of logs during extractions.
- 11.19 Skidding of logs is not permitted along or across haulage roads and streambeds.
- 11.20 Logs must be removed to the facilities of the licensed purchaser within 15 days after felling to avoid insect and fungal infections.

12. LANDINGS

Construction of Landings

- 12.1 The following factors should be considered when determining the size and location of a proposed landing site-
- The planned operational duration of the site and the expected stockpiling requirements as determined by the loading and haulage logistics
 - Topography and drainage, including gradients to connecting skid tracks and roads
 - Average skid distances and the extraction method to be used
 - Disposal of accumulated logging residues.
- 12.2 Landings should be located as far as practical on a slight slope (up to 6° or 10.5%) on a ridge, and they should be at least 40 metres from the closest buffer, or further if on steep terrain.
- 12.3 The number and size of landings should be minimised, consistent with providing safety and efficiency for the movement of machines and workers. As a general guideline, landings should not exceed 1,600m² (e.g. 40m x 40m).
- 12.4 All landings must be shown on the Harvesting Plan and marked in the forest prior to the commencement of harvesting.
- 12.5 Landings should be constructed in a manner that minimises soil damage and allows for rapid rehabilitation after the completion of harvesting operations. Consideration should be given to techniques such as cording and the stockpiling of topsoil for use in rehabilitation.

Figure 11 – Landings should be located well away from streams and buffers



Log Piling/Stacking on Landing

- 12.6 Stacks of logs shall be built on firm level ground or other secure base.
- 12.7 Adequate measures shall be taken to prevent stacks from collapsing or logs from falling off.
- 12.8 Clearances shall be created in between stacks to allow safety of movement and work.
- 12.9 Push-loading is not permitted.

13. REHABILITATION OF HARVEST AREA

- 13.1 Rehabilitation measures should be undertaken as soon as practicable after harvesting to ensure that infrastructure such as roads, tracks, stream crossings and landings are properly drained and revegetated so as to minimise the risk of erosion or other environmental harm. Wherever possible, rehabilitation measures should be undertaken in a manner that permits the infrastructure to be re-used during the next harvesting cycle.

Skid Tracks

- 13.2 Skid tracks must be adequately drained after harvesting to minimise the risk of erosion.
- 13.3 Cross-drains with turnouts must be constructed on skid tracks at locations where the surface water can be diverted into undisturbed vegetation or silt traps.
- 13.4 Cross-drains must be constructed at an angle (50° – 70°) across the track, depending on the gradient of the slope.
- 13.5 Place cross-drains at a change in slope or at other locations so that the spacing between drains is equal to or less than the maximum allowed in Table 14.1.
- 13.6 Where skid tracks approach stream crossings, cross-drains should be placed within 10 metres of the crossing in a location that maximises the filtration of runoff before it enters the stream.
- 13.7 Cross-drains may not be necessary where the topsoil and surface vegetation are intact and the risk of erosion is low.

13.8 Tracks must not be widened by blading material from the side in order to cover the track surface.

Figure 12 – Cross drains must divert run-off into adjacent vegetation

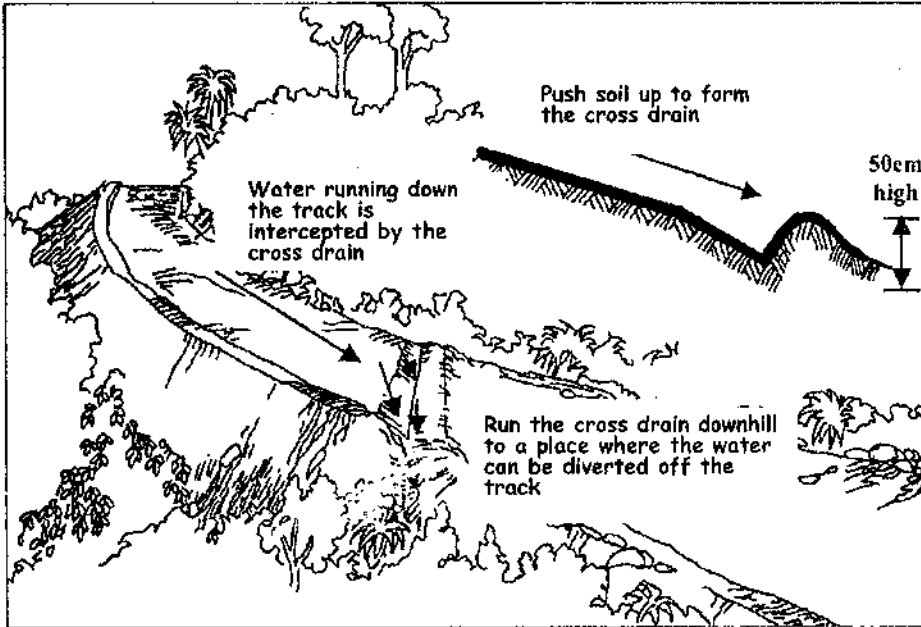


Figure 13 – Rehabilitation of skid tracks

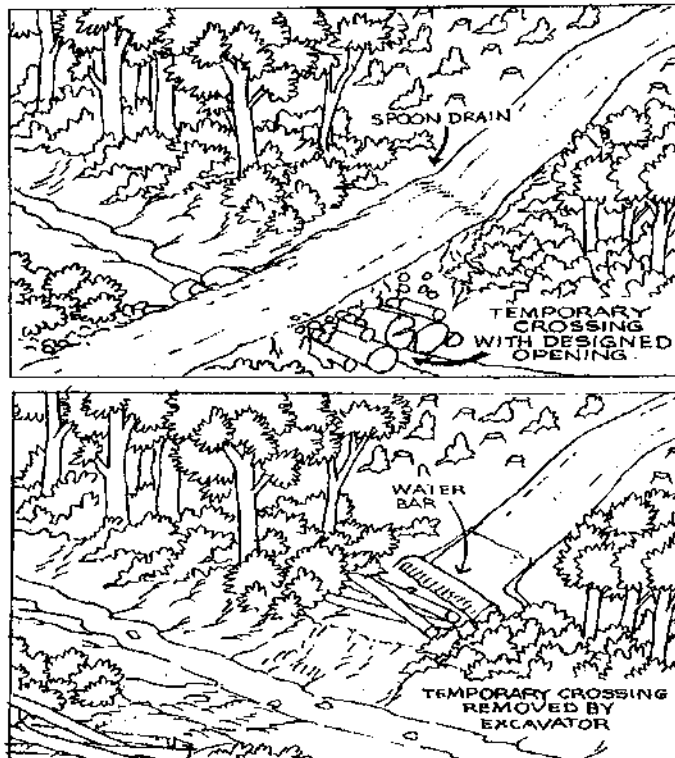


Table G – Maximum distance apart for cross-drains on skid tracks (metres)

| Gradient | | Soil erodibility | |
|-----------|-------------|------------------|-------------------|
| | | Low | High |
| 0 to 4° | (0 to 7%) | nil | 40 m |
| 5 to 9° | (8 to 16%) | 50 m | 30 m |
| 10 to 19° | (17 to 34%) | 30 m | 20 m |
| >19° | (>34%) | 20 m | Avoid skid tracks |

Temporary Crossings

- 13.9 Temporary crossings must be removed to allow unimpeded stream flow as soon as the use of the crossing is no longer required or prior to the commencement of the wet season if operations are not completed. The streambed and banks must be restored as near as possible to their natural condition.
- 13.10 Excavator type machines should be used to remove temporary crossings.
- 13.11 Avoid disturbance to the watercourse banks and buffer zones, placing materials at least 10m from the watercourse

Landings

- 13.12 Remove rubbish from the designated site. Petrochemicals and containers (including oil drums, grease cartridges, hydraulic hoses etc) must be removed to an approved disposal site. Wood residues must be removed from the landing by placement in the forest or be neatly stacked to facilitate collection.
- 13.13 Landings must be properly rehabilitated and drained to minimise erosion and encourage rapid revegetation. Deep ripping may be required where surface soils are compacted. Stockpiled topsoil should be re-spread and contoured to encourage rapid re-vegetation.
- 13.14 All batters must be stabilised and left no steeper than 45° for cuts and 25° for fills.
- 13.15 Drain all areas where water may pond. The drain should be directed to stable disposal points and not directly into watercourses. The grade of drains is to be 2% - 4%.

Haulage Roads

- 13.16 Road formations must be left in a good condition with adequate drainage. There should be no ruts in the surface. It is likely that surface grading and compaction will be required to leave the road in a stable and well-drained condition.
- 13.17 All bridges and culverts, including decking foundations and sidewalls, must be left in a secure and safe condition.
- 13.18 All harvesting debris in watercourses must be removed by excavators, winches or by hand, avoiding any entry of machinery into the stream or buffer.
- 13.19 Bridge and culvert openings must allow free water flow, including flood events (at least equivalent to the 1 in 20 year flood).
- 13.20 All drains and silt traps must be maintained in working order. Soil, vegetation or other material, which would obstruct water flow, must not be left in the road drains.

Quarries & Borrow Pits

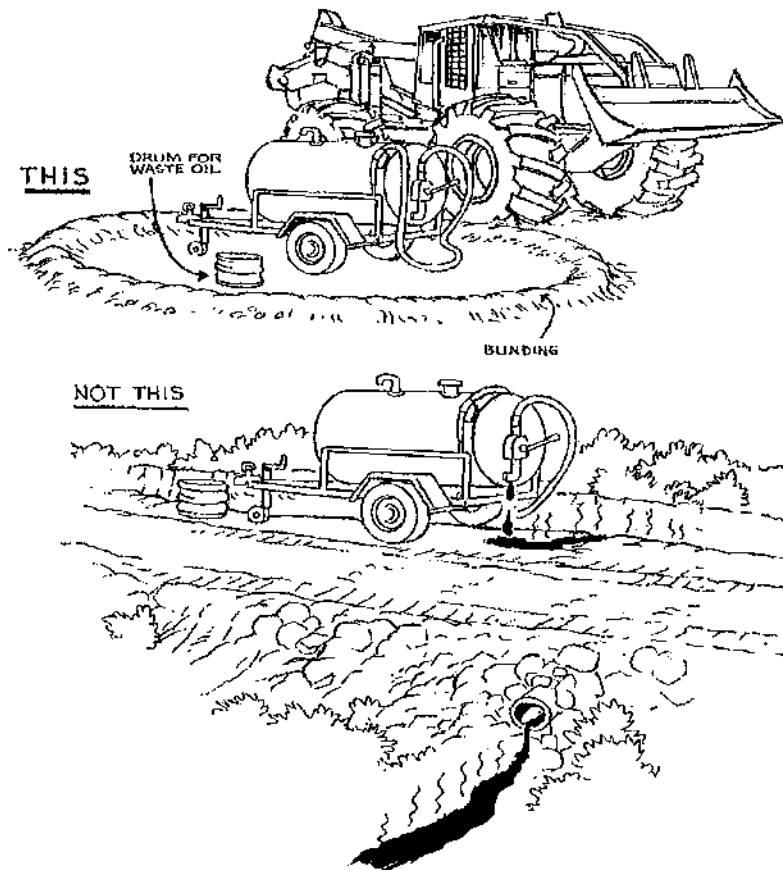
- 13.21 All rubbish must be removed. Petrochemicals and containers (including oil drums, grease cartridges, hydraulic hoses etc) must be removed to an approved disposal site.
- 13.22 Steep cuts should be stabilized where practicable by constructing batters that are less than 45° and by constructing vertical steps in cuts that are higher than 3m. Drains on the up-hill side should be clear and functioning so that runoff cannot enter the quarry or borrow area.
- 13.23 The surface of the quarry should be drained if water is likely to pond.
- 13.24 Run-off from quarries must be diverted and filtered through stable disposal areas such as gently sloping, undisturbed vegetation to minimise the risk of sediment entering streams.

14. FOREST HYGIENE

Fuels and rubbish

- 14.1 Spillage during refuelling or machine maintenance must be avoided by locating maintenance areas on level ground well away from streams and drains. All storage and use of fuels must be contained within bunded areas.
- 14.2 Spills arising from the operation of any machinery must not be allowed to enter any streams. Contaminated soil must be immediately excavated and removed to an offsite disposal area approved by FHCL.
- 14.3 Used oil filters, empty grease gun cartridges, drums, spray paint cans, etc. should be removed to an offsite disposal area approved by FHCL.
- 14.4 In the event that any machine leaks fluids excessively, the machine shall immediately be shut down and shall not operate again until the leakage has been repaired and approved by FHCL.

Figure 14 – Re-fuelling and storage sites must be located away from drains and streams and surrounded by a bund of soil



Camp Site Standards

- 14.5 Harvesting crew camps must consist of a separate sleeping shed, a kitchen, eating area, storeroom and toilet in compliance with Occupational Health & Safety (OHS) requirements.
- 14.6 The campsite must be located in a safe and a healthy surrounding.
- 14.7 Campsites must have access to clean water supplies.
- 14.8 To prevent the breeding of mosquitoes, water collection tanks at the campsite must be properly screened and the campsite must be well drained so that water does not accumulate in ponds for more than one day.
- 14.9 Domestic waste-water must be disposed at least 20 metres from the building.
- 14.10 Toilet facilities must be provided at all campsites and should be located at least 100 metres away from sources of drinking water and a safe distance from sleeping quarters.
- 14.11 A rubbish collection site for non-organic waste products must be provided at all campsites and placed at least 50 metres away from any watercourse or water source and located above the water table. A rubbish disposal site for all organic waste products must be provided.
- 14.12 All non-organic waste products such as discarded equipment and parts, waste oil and related containers, must be removed from the forest and disposed of at FHCL designated off-site collection centres.
- 14.13 It is the responsibility of the harvesting crews to clean and clear the site to its previous conditions before they shift to a new site.

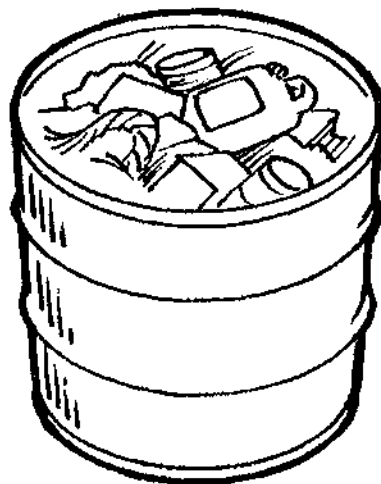


Figure 15 – All rubbish should be placed within containers and removed to approved disposal sites

Fire Precautions

- 14.14 No smoking is permitted within a plantation, except on an approved landing or expressly designated area within a campsite that is cleared of flammable material.
- 14.15 All cigarette butts and matchsticks are to be properly extinguished before being discarded.
- 14.16 Fires for preparing meals, boiling water or for any other purposes must be not be less than 5m from any log, stump or tree and the ground must be cleared of all flammable materials within 2m of the fire. Any such fire should be completely extinguished when being left, either temporarily or otherwise.
- 14.17 No fires shall be lit or maintained except in approved areas by FHCL.
- 14.18 Fires in approved buildings and camps shall be lit in properly constructed fireplaces and must be completely extinguished before leaving the site.
- 14.19 No fire should be lit in a plantation except as provided for in 14.17 and 14.18. FHCL shall provide training for all subcontractors and workers for forest fire prevention and fighting.
- 14.20 It is the responsibility of the harvesting crews to clean and clear the site to its previous conditions once they shift to a new site.

15. HARVESTING MACHINE STANDARDS

- 15.1 All harvesting operators must comply with relevant OH & S requirements, including the following –
- All chainsaws must have required safety features (e.g. chain-breaks) in working order.
 - All machines are to be fitted with seat belts, which must be worn during the operation of the machine.
 - All machines must be fitted with a fully charged fire extinguisher and a First Aid Kit.
 - All machines must be fitted with a safety cabin, which conforms to the standard of the Roll Over Protection Structure (R.O.P.S). The cabin of the machine must have a safe and securely mounted seat.

- The machine cabin must not be modified, drilled, welded or altered in any way nor should any attempt be made to straighten any part of the frame or attached brackets which have suffered damage.
- The Land Transport Authority must examine all damaged cab frames prior to further use.
- No part of the main frame or safety cabin should be secured by fittings other than the specified high tensile nuts and bolts.
- The machine must have an engine stopping device which is non-self returning. It must be securely attached with clear instructions for use (e.g. Pull/Stop) and purpose. It should be readily accessible to the driver from the normal operating position.
- If the machine is driven on public roads or forest roads it should be equipped with lights conforming to the statutory regulations.
- The machine must be fitted with an efficient spark arrestor and this must be maintained in working order.
- All pulleys, shafts, belts and fan blades must be securely guarded.
- Machine operation should not commence before workers not engaged in the operation vacate the work area.
- All machines must be registered with the Land Transport Authority.
- Machines must not have any fuel or oil leaks.
- For loaders and excavators, an appropriate grapple must be in place.
- All skidding machines shall be fitted with a winch carrying not less than 40 metres of good wire rope. The winch must be operational at all times.
- Any new machines apart from those mentioned in the code should be approved by FHCL.
- All lifting machines, including helicopter trials, must be first cleared by the appropriate authorities (such as CAAF and Department of Labour).

16. HARVESTING SUPERVISION

- 16.1 Responsibility for the supervision of the harvesting operation should be clearly stated in the Harvesting Plan. The Harvesting Supervisor should inspect operations on a regular basis, preferably at least weekly, to ensure that any problems are identified and that corrective action is taken in a timely manner. The harvesting operators shall at all times have direct access to the FHCL Harvesting Supervisor.

Work Skills and Ethics of a Harvesting Supervisor

- 16.2 A Harvesting Supervisor should have a good working knowledge and skills in –
- industrial labour issues and contractor work agreements
 - company/concession/harvesting agreements
 - harvesting operations, including machine operations, maintenance schedules and basic repairs.
 - consultation and communication with harvesting operators, licensees, FHCL staff and landowners.
 - First aid, including a current First Aid Certificate.
 - the planning and organization of all facets of harvesting operations as required by the Management Team and the Code.

Main Duties of a Harvesting Supervisor

- 16.3 Direct involvement in pre-harvesting planning whenever appropriate.
- 16.4 Direct supervision of field operations to ensure compliance with the Code.
- 16.5 Liaison between company management and field crew regarding transport, support services and any other relevant matters and ensure that all persons have access to communication systems and transport at all times.
- 16.6 Liaison between company management and the licensee on any matter of mutual concern.
- 16.7 Direct responsibility to company management for –
- All activities of plant and machine operators, loggers, drivers, trainees and any other field hands employed.
 - Coordination of all operations to ensure company production targets are satisfied in respect of quality and quantity of output.
 - Maintenance and submission of accurate records, as required by law and as required by the company.
 - Ensuring harvesting operations conform to acceptable standards of safety as detailed in this Code.
 - Rendering first aid if required to do so.
 - Arranging rapid evacuation to hospital of any injured worker if required.

- Reporting and recording all work-related accidents as soon as possible.

Safety Officer

- 16.8 FHCL shall appoint a safety officer whose duty it shall be to inspect each plantation that is being actively logged on a monthly basis to ensure that proper safety procedures are being followed. In the event the safety officer determines there are unsafe practices, he may suspend logging activities until the unsafe practices are corrected to FHCL's satisfaction. The safety officers shall report all safety violations to FHCL Board.

17. MONITORING AND EVALUATION OF OPERATIONS

- 17.1 Monitoring and evaluation programs provide forest managers with information about the standards that are being achieved in the forest and how those standards can be improved.

- 17.2 Monitoring should be carried out by FHCL, as follows -

- Regular (monthly) inspections to assess compliance with the Harvesting Plan and the Code.
- Final monitoring inspection upon the completion of harvesting areas and prior to the closure of the coupe or licence area.
- Final monitoring reports must be submitted to the FHCL Board and must include the following information –
 - (a) Results of the monitoring inspection, including any safety violations.
 - (b) Corrective actions that have been taken in relation to major non-compliances.
 - (c) Other recommended actions to improve the standards of compliance with the Harvesting Code of Practice.

- 17.3 FHCL will prepare an annual report on the results and outcomes of the monitoring and evaluation programs.

18. REFORESTATION

18.1 FHCL shall use its current reforestation plan to reforest those plantation areas that have been harvested until it develops a new, enhanced reforestation program consistent with the following principles:

- FHCL shall create two separate Reforestation Departments on Viti Levu and Vanua Levu. Having two separate Departments is necessary due to the geographic distance between the two islands, as well as the differences in seed base and growing conditions.
- FHCL shall establish a system to harvest and collect seeds from mature trees to ensure consistent crops from generation to generation.
- FHCL shall continue operate a nursery system in which to grow nursery stock from the collected seeds.
- FHCL shall use best available science in all aspects of the reforestation program to develop a plan for planting density, location and methods.
- FHCL shall study, inventory and monitor all plantations on ongoing basis to ensure that the annual cut is within sustainable levels and that the planted saplings are growing and thriving.
- FHCL shall, consistent with the Mahogany Industry Development Decree 2010, implement measures for debris removal other than burning because of the environmental impact on plantations, which affects replanting.
- FHCL shall involve the landowners in the replanting process and will endeavour to use the local population in the replanting process whenever feasible.

18.2 FHCL will create and implement the new reforestation plan as soon as is reasonably practical.

ANNEX 1

Glossary

The following definitions shall apply for the interpretation of the terms used in this Code -

Adequate tool kit (chainsaw) – an adequate tool kit for a chainsaw comprises- :

- (a) Combination spanner / screwdriver
- (b) Grease gun
- (c) Correct diameter round file and file holder
- (d) Flat file and depth gauge regulator
- (e) Combination allen key / box spanner
- (f) Small screwdriver

Allowable cut - trees specified for removal, selected using the PHI data and the DLT

Annual Cut - Volume removed per annum on a given area

Basal Area - Cross-sectional area of tree calculated from the diameter at breast height (DBH)

Batter slope – the slope of the bank of cut earth or soil fill on either side of a constructed road or track

Benches - horizontal area constructed along the side slope of batters to provide a break in the slope and reduce erosion

Borrow pit - Source of land-fill for roads or landings

Box and Side Cuts - portion of ridge or hillside cut away during road making. Side cuts occur when one side is cut and box cuts are made when both sides of the road are cut into the hill.

Buffer strip - (also known as a filter strip or streamside reserve) - within a harvesting coupe, a specified horizontal width of ground retained either a side of a designated stream and any associated saturated flat in which indigenous trees must not be felled and machinery may not enter, except at crossings, which must be kept to a minimum and only where designated in a Harvesting Plan. Minimum buffer widths are prescribed in this Code.

Buttress - a ridge of wood that develops in the angle between a lateral root and the base of a tree stem to provide lateral stability to the stem

Bund - a circular mound of soil that is constructed in the forest to surround fuel storage, re-fuelling and machine maintenance areas so that any spillage is contained and prevented from entering drains or streams

Camber - curvature of road carriageway; the amount of cross-fall on a road.

Chain breakage guard (chainsaw) – the part of the rear handle of a chainsaw designed to prevent injury to the operator's right hand in the event of a chain breaking

Chain catcher (chainsaw) – a device located on the underside of the chain saw close to the front and designed to arrest the chain if it comes off the bar

Chainsaw – a petroleum-driven portable saw for felling and cross-cutting timber

Contour map – a map showing all points at the same height above sea level at fixed interval

Cording – placement of small logs, branches or bark material on a landing or skid track to spread the weight of the harvesting or loading machine and to protect the soil from direct contact with the tyres or tracks during operations, thus reducing ground pressure and rutting.

Coupe / compartment / stand / cutting permit area – an area of forest from which logs for sawmilling or other industrial processing are harvested.

Cross-drain – a drain constructed across a road or skid track to divert water towards a disposal point. Cross-drains may be either culverts under the surface of the road or open surface drains (see also Water bars).

Designated streams – all watercourses that have a defined stream channel, including all permanent streams and any intermittent streams which for reasons of water quality, erosion risk, wildlife habitat, or recreational value should be buffered from any impacts associated with forest harvesting

Diameter Limit Table - Table used to determine if the diameter a species is qualified for harvesting

Erosion hazard (soil) - the susceptibility (erodibility) of soil to movement by water or wind (erosion) when disturbed or exposed

Exotic – introduced, not native (indigenous)

Forest – any mahogany plantation land, as defined in the Mahogany Industry Development Decree 2010

Harvesting – includes tree felling, extraction and the marking, sorting, loading and carting of mahogany logs produced within any mahogany plantation land.

Harvesting Plan – A plan of harvesting operations for a given area showing roads, skid tracks, protection areas, landings, etc

Haulage roads – the road network within areas of forest for the primary purpose of extracting or carting timber from the forest

Landing – place where sawlogs and residual roundwood are transported for sorting and loading for transport from the forest; or where roundwood is processed into sleepers, posts or miscellaneous products

Merchantable Volume - Log volume suitable for commercial timber

Perennial stream – a watercourse that flows for all or most of the year

Permanent crossing – a bridge or culvert structure that is constructed to provide access across a permanent or intermittent stream for harvesting traffic. The crossing must have an opening designed to permit natural flows, including floods to at least the 1 in 20 year frequency. Such a crossing may be subsequently used for other purposes after the completion of harvesting operations

- Permanent road – a generally high standard road constructed initially for timber extraction, but permanently required for the continuing management of the forest
- Pre-Harvest Inventory (PHI) - stock-take of trees carried out before harvesting. Data include tree species, diameter, height, log class, etc.
- Push-loading - the loading of loads by machines pushing logs up a ramp or off a bench on to the truck
- Road Alignment – The location of the road on the map/ground. It includes the road's horizontal and vertical positions across the landscape.
- Road Categories -
- Category A: Main haulage roads – the main haulage routes within a forest serving large areas, having a relatively high volume of use that warrants two-way traffic.
 - Category B: Minor haulage roads – feeder roads that provide the major common route to a landing from a major haulage road.
 - Category C: Skid tracks – tracks that run from the harvested trees to the landing.
- Road grades - gradient (incline) of road measured as a percentage or degree of angle from the horizontal and expressed as adverse (uphill) or favourable (downhill)
- Road Reserve – areas reserved for road making and development of rural zones
- Reforestation – the establishment of a stand mahogany trees by planting or seeding with mahogany species on previous logged or poorly forested land for the purposes of establishing a tree cover, usually for timber production
- Residual stand - trees still standing after a harvesting operation
- R.O.P.S. – Roll Over Protection Structure
- Turn-out (or diversion drain) – a short graded channel angled away from the edge of roads and tracks to divert run-off into undisturbed vegetation so that any sediment can be filtered and trapped before the water reaches a stream
- Safety / dead hand throttle catch (chainsaw) – a device to prevent the accidental operation of the throttle trigger
- Safety helmet – helmet manufactured from polycarbonate and complying with international safety standards, it should have eye protection and ear/hearing protection fitted as an integral part of the helmet
- Scarf, sink cut, or notch – the first 2 cuts made in a tree to remove a wedge to assist directional felling
- Seed Trees - Mahogany retained as seed source for regeneration purposes
- Side drain - (v drain or table-drain) – a drain constructed along the side of a road to carry run-off towards culverts or turn-outs where the water can be discharged into vegetation for dispersal and filtration.
- Silt Traps - Holes dug to catch sediment in run-off water flowing in drains. Other silt traps include hay bales or barriers made of hessian or other materials to trap sediment at the outlet of drains

- Skidder – all purpose built frame-steered wheeled machines used for the extraction of timber with load lifted at one end only
- Skidding – the towing or winching of a log on the ground by a tractor or dozer from the stump to the landing site
- Skid track – track along which a log is skidded
- Special management zones – designated areas of scientific, recreational or landscape significance (e.g. water supply areas, fishing areas, village teitei, old village or burial sites etc), erosion prone sites or particular steep sites which may require them to be excluded or harvested under special conditions or restrictions
- Spoon drain – A shallow semi-circular open drain, normally traversable by vehicles, designed to carry water to the side of a road, access track or fire break.
- Standard Error - a measure of the variation of the sample means
- Super Elevation - the cross-sectional gradient of a road, designed to improve road safety and drainage.
- Temporary crossing – a road or skid track crossing constructed across an intermittent stream using corded logs, a culvert or ford for use for a limited period of less than three (3) months during the dry season only
- Intermittent (temporary) stream – a watercourse that flows for part of the year and normally carries no flow during the dry season
- Timber – standing trees or felled logs before their processing into forest produce
- Tractor – harvesting machinery i.e. bulldozers. A variety of types and sizes are used depending on the type of forest being harvested.
- Tree driving – when a tree or a number of trees have been partly sawn across at the butt and left standing until the last tree is felled towards the partly sawn trees(s), so that all the trees are brought down to the ground by trees falling over one another.
- Water bar – a cross-drain that is constructed by excavating a shallow depression and forming a mound of soil to divert water from a track or road into adjoining vegetation.
- Water catchment area – an area of land that provides natural drainage for rainfall run-off and seepage into streams for water supply purposes

ANNEX 2

Personal protective equipment (PPE) appropriate for forestry operations

(Sourced from the ILO Code of Practice: Safety and Health in Forestry Work)

| Parts of the body to be protected | Feet | Legs | Trunk, arms, legs | Hands | Head | Eyes | Eyes/ face | Hearing |
|-------------------------------------|------------------------------------|------------------------------|------------------------|----------------|----------------|---------|--------------|------------------------|
| PPE normally appropriate | Safety boots or shoes ¹ | Safety trousers ² | Close-fitting clothing | Gloves | Safety helmet | Goggles | Visor (mesh) | Ear muffs ³ |
| <i>Felling</i> | | | | | | | | |
| Hand tools | ✓ | | ✓ | ✓ | ✓ | | | |
| Chainsaw | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |
| <i>Extraction</i> | | | | | | | | |
| Manual | ✓ | | | ✓ | ✓ ⁴ | | | |
| Animal | ✓ | | | ✓ | ✓ ⁴ | | | |
| <i>Mechanical extraction</i> | | | | | | | | |
| Skidder | ✓ | | ✓ | ✓ ⁵ | ✓ | | | ✓ |
| Forwarder | ✓ | | ✓ | | ✓ | | | ✓ |
| Cable crane | ✓ | | ✓ | ✓ ⁵ | ✓ | | | ✓ |
| Helicopter | ✓ | | ✓ ⁶ | ✓ ⁵ | ✓ ⁷ | ✓ | | ✓ |

Notes-

1. Safety boots or shoes with integrated steel toe for medium or heavy loads
2. In hot climates/weather chain saw leggings or chaps may be used. Safety trousers and chaps contain fibres that are inflammable and will melt and should not be worn during fire fighting
3. Ear plugs and ear valves are not generally suitable for forestry work because of the risk of infection
4. When extracting near unstable trees or branchwood
5. Only if manipulating logs. Gloves with heavy-duty palm required if handling wire chocker rope or tether line
6. Highly visible colours
7. With chin strap

ANNEX 3**List of Courses offered at the Fiji School of Forestry**

1. Bridging Courses:
 - Sustainable Management Forestry Awareness Training
 - OHS Awareness Training
 - First Aid Course
 2. Harvesting Trees Manually – Basic Level
 3. Harvesting Trees Manually – Intermediate Level
 4. Harvesting Trees Manually – Advanced Level
 5. Harvesting Planning
 6. Supervision Course for Harvesting Supervisors
 7. Supervision Course for Plantation Supervisors
 8. Harvesting Manager's Training
 9. Chainsaw Mechanics Training
 0. Forestry Business Creation Course
 11. Harvesting Machines Training
 - Skidder
 - Bulldozer
 - Loader
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