

SRI LANKA STANDARD 1551: 2016

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**SPECIFICATION FOR
PRINCIPLE CRITERIA AND INDICATOR FOR
SUSTAINABLY PRODUCED FUELWOOD**

SRI LANKA STANDARDS INSTITUTION

Sri Lanka Standard
SPECIFICATION FOR PRINCIPLE
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Sri Lanka

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Sri Lanka Standard
SPECIFICATION FOR PRINCIPLE
CRITERIA AND INDICATOR FOR SUSTAINABLY PRODUCED FUELWOOD

FOREWORD

This Sri Lanka standard specification for Criteria and Indicators for Sustainably Produced Fuelwood (CISPF) used for different applications was prepared by the Technical Advisory Committee (TAC) on CISPF and approved by Sectoral Committee on Materials, Mechanical Systems and Manufacturing Engineering on 2016-11-10, and was authorized for adoption and publication as a Sri Lanka standard by the Council of Sri Lanka Standards Institution (SLSI) on 2016-12-28.

This standard is meant to be applied by a candidate operator with the objective of obtaining a sustainability certification. In that sense, implementation of this standard by the candidate operator is auditable by an independent third party.

Use of fuelwood by the growing population has been exerting pressure on the natural sources of biomass causing environmental and ecological problems.

Increase in the production and use of bioenergy has a potential role in tackling climate change and promoting energy security and fostering economic growth. This standard is designed to achieve those objectives sustainably.

Different types of biomass are used for the production of bioenergy in a significant number of districts and by a variety of economic operators of different sizes. Virtually every district in the country produces and consumes some form of bioenergy. The characteristics therefore are very heterogeneous, and the production processes depend on several aspects, such as geographic location, climatic conditions, level of development, and technological issues. The purpose of this standard is to provide a flexible, practical framework for considering the environmental, social, and economic aspects of bioenergy that could be used for production of bioenergy.

It takes into account the work of other relevant SLS standards, published and under development. As part of the development of this standard an inventory was carried out of other sustainability initiatives. This standard aims to promote the sustainable production of biomass.

It is not a standard for the industrial process of bioenergy. It is strictly looking at trees coming out of the ground, and not what happens to it afterwards. Ultimately, this standard could be adopted voluntarily by producers/users who are concerned about the sustainability of their fuelwood supply. This is field tested in biomass plantations (gliricidia) on home garden of members organized around Community Based Organizations (CBOs). Further field testing of this standard for small, medium and mass scale operation of biomass for thermal energy application was done.

1. SCOPE

This National standard describes the sustainability requirements for the production of fuelwood. It includes a basic chain of custody (traceability) for the certified wood through the supply chain, including transport and pre-preparation of fuelwood. Pre-preparation can be to meet the

requirements for conversion into appropriate forms of energy as required by the end user. However this standard does not cover sustainability of the technology used in industrial processes, and only includes terminology and aspects related to the sustainability (e.g. environmental, social and economic) of the production of fuelwood.

While fuelwood is also harvested in natural forests, those sources are not considered sustainable in Sri Lanka and are often illegal. Operators where fuelwood is harvested which may apply for certification are exclusively:

- Home gardens
- Coconut plantations with fuelwood intercrops. Includes husks and other coconut by-products that can be used as fuel.
- Trees used in agriculture systems such as intercropping, alley cropping and support trees
- Rubber plantations (includes intercropping systems)
- Timber plantations
- Agroenergy plantations like Gliricidia
- Dedicated fuelwood plantations
- Uprooted tea and shade trees or their branches
- Invasive species removed through sanitation programs
- Woody agricultural by-products such as cinnamon sticks.

2. REFERENCES

SLS 102: Presentation of Numerical Values

SLS 428: Random Sampling Method

3. DEFINITIONS

For the purpose of this document, the following terms and definitions apply. Words and expressions subject to a definition appear in **bold** the first time they are mentioned in a criteria.

3.1 Natural forest: Naturally regenerated forest. Includes:

- Areas regenerating following agricultural land use that are expected to reach a canopy cover of at least 10 percent and tree height of at least 5 meters;
- Forests with a mix of naturally regenerated trees and planted/seeded trees where the naturally regenerated trees are expected to constitute more than 50 percent of the growing stock at stand maturity.

These natural forests can be very small (a couple acres) or very big (hundreds of hectares). These natural forests may or may not be legally protected but they provide environmental services such as shelter for wildlife, water, medicinal plants, pollinators and the absorption of pollution.

3.2 Water body: Includes natural and artificial. Includes permanent and seasonal brooks or creek (small streams and rivulets), streams and rivers. Includes ponds, swamps, bogs, fens, peatlands, springs, marshes, wetlands and lakes. Excludes runoff.

3.3 Operator: Throughout this standard, the term ‘operator’ is used in reference to the entity seeking or holding the certificate. The operator is the plantation company, or the group of small scale farmers.

3.4 Reservation strip: Continuous reservation areas of **natural vegetation** around water bodies or other values for protection. The width of a reservation strip varies proportionally to the width of the **water body** and the slope of the river bank (wider water body and steeper river bank requires wider reservation strip). At this point this standard does not prescribe specific widths for reservation strips. It is expected that the operators will take decisions on widths of reservation strips based on international best practices.

3.5 Natural vegetation: A mix of indigenous species of trees, bush and/or herbaceous including bamboo, either planted or naturally occurring.

4. LEGAL AND REGULATORY COMPLIANCE

4.1 The **operator** complies with all applicable laws and regulations.

4.1.1 The operator has the legal right to harvest. This includes land tenure and ownership of where the fuelwood comes from, harvesting permits when required by laws and regulations.

4.1.2 When required by law and regulations, the operator has an approved management plan and it is followed and implemented.

4.1.3 When required by laws and regulations, charges and taxes are paid.

4.1.4 Laws and regulations related to environmental protection (slope, **reservation strips**, use of chemicals, road building, etc.) are respected.

4.1.5 The operator complies with national labour laws and regulations including but not limited to requirements for contracts, child labour, insurance for workers, minimum wage, etc.

4.1.6 When required by laws and regulations, the operator complies with transport requirements.

5. ENVIRONMENTAL VALUES AND IMPACTS

5.1 There is no conversion of natural forests to plantations.

5.1.1 The fuelwood shall not come from legally protected areas.

5.1.2 Natural forests inside the plantation shall be identified and mapped by the operator.

5.1.3 Fuelwood shall not be harvested inside a natural forest.

5.1.4 Natural forests shall be voluntarily protected. This standard considers the conversion of natural forest as unsustainable. Therefore, if a natural forest was removed to establish a plantation after the date this standard was approved, this plantation does not qualify for sustainability certification.

5.2 Environmental services (soil, water) are maintained or restored on the farm/plantation.

5.2.1 The **operator** shall map or demarcate on the ground the sensitive areas that are prone to erosion and degradation, and all **water bodies**.

5.2.2 The operator shall adopt and implement planting, harvesting, water crossing and transport guidelines to prevent land degradation, and to protect water from pollutants such as silt, oil, fuel and other chemicals.

5.2.3 The operator shall develop and have begun implementing plan for conservation or restoration of **reservation strips** along all **water bodies**. The plan shall contain timelines, measurable benchmarks and a budget for its implementation.

5.2.4 Reservation strips are left to grow wild. Road construction, machinery access, planting of exotic species, clearing, brushing and the spraying of chemicals are prohibited inside the reservation strips. A road may be built perpendicularly across it for water crossing in conformance with 5.2.2. Workers may access reservation strips for manual collection of Non Timber Forest Plantations (NTFPs). Already existing exotic trees can remain standing but if harvested, shall not be replaced inside reservation strips. Diseased exotic trees can be removed manually, as long as measures are taken to minimize disturbance and prevent soil from entering the adjacent **water body**.

5.2.5 Waste water, oils and solid waste generated by all activities including domestic, worker facilities, processing and use of chemicals shall be disposed of in accordance with regulations and best practices.

5.3 Species at risk shall be protected

5.3.1 The **operator** is aware of the National Red Listed species (fauna and flora) which are or can be present on its farm/plantation, is able to describe their habitats and identify these habitats on its plantation.

5.3.2 The operator has identified and implemented practices to protect the species at risk.

5.4 Invasive species shall be controlled

5.4.1 The **operator** shall be well conversant on the invasive plant species.

5.4.2 Invasive species can only be introduced in the farm/plantation if the operator clearly demonstrates he has the technique, staff and resources to prevent them from spreading.

5.4.3 The operator controls existing invasive species inside the farm/plantation, and in the surrounding areas if invasive species present on the farm/plantation are spreading to the surroundings.

6. BENEFITS TO THE COMMUNITY

6.1 Effective stakeholder consultation ensures concerns are addressed

6.1.1 The **operator** conducts consultation meetings with the community affected by its operators. While those meetings may include a short information session, they are true consultations where community members are invited to comment on the plantation activities and share their concerns.

6.1.2 Records of comments and concerns are kept.

6.1.3 The operator documents the mitigation actions taken to address the concerns presented by the community.

6.1.4 The operator demonstrates the mitigation actions have been implemented in the field.

6.2 The operator contributes to the social and economic development of local communities.

6.2.1 Opportunities are communicated and provided to local communities, local contractors and local suppliers for employment, training, and the sourcing of products by the operator.

6.2.2 For industrial plantations: Opportunities for social and economic development are identified jointly through engagement with local communities.

6.2.3 For industrial plantations: The operator's annual budget has provisions for social and economic development projects in the community. Those projects are implemented.

6.2.4 Community and worker requests and grievances are recorded and responded to and both parties agree they have been resolved.

7. GROUP SUPPORT

This standard does not require **operators** to be organized as groups. This Principle applies to operators which choose to be organized as groups. There is a group helper called the 'coordinator', and group 'members'. The coordinator is there to help the members achieve and maintain conformance. He is also the point of contact between the certifier and the group, to help organize audits, present evidence, etc. Indicator 4.1.5 aims at addressing one of the root causes of low prices offered to producers, for example by minimizing the dependence on 'middle men'.

7.1 The group is structured, functional and transparent

7.1.1 The division of responsibilities between the group coordinator and the group members are well defined.

7.1.2 The group coordinator has the capacity and resources to effectively help the group members achieve and maintain conformance.

7.1.3. The group has adopted procedures to cover:

- a) Internal audits (frequency, what to do when a non-conformance is identified, etc.);
- b) The conditions by which a new member is included or a member is excluded from the group;
- c) Training of members;
- d) The process by which group members select the coordinator, how she or he is paid and how she or he can be laid off;
- e) The sharing of group expenses such as training, internal and external audits, coordinator salary, etc.

7.1.4 The group coordinator fulfills her or his role and does not behave like a boss or supervisor of group members. She or he does not receive money directly from individual group members.

7.1.5 In cases where big disparity exists between the market price for fuelwood and the price paid to members, the group shall identify the causes of such disparity and demonstrate progress towards eliminating them.

7.2 Group records are kept

7.2.1 The group coordinator maintains a complete and up-to-date record of:

- a) Group members and contact details;
- b) Group size in hectares and yield of fuelwood;
- c) A map showing the location of all members;
- d) Records of training, visits, advice and support provided to each member and their workers;
- e) Results of internal audits including non-conformances identified;
- f) For members who have been issued corrective actions during internal or external audits, follow-up audits to verify corrective actions have been implemented.

8. CHAIN OF CUSTODY (TRACEABILITY) FROM STANDING TREE TO FARM GATE

The purpose of this principle is to ensure fuelwood which is sold with the claim of being SFW certified truly does come from a SFW certified farm or plantation. This chain of custody applies to fuelwood from the standing tree to the farm gate. The farm gate is when the SFW certified **operator** no longer has control over his certified wood. It will normally be when the certified fuelwood is sold to the next owner, but there can be exceptions. The farm gate is defined by the certified operator.

For example, if a contractor purchases the standing trees, in practice the certified operator loses control over the certified fuelwood. For example the contractor who purchased and cut the certified trees and then transports the fuelwood to the local purchaser may choose to stop at

other non-certified plantations and fill the remainder of its lorry with non-certified wood. This would contaminate the certified fuelwood and the certified chain would be broken. However, if the certified operator can design a traceability system together with its contractors that brings a low risk of contamination, it can include the contractors in the scope of its traceability system (inside the “plantation gate”). It is then the certified operator’s responsibility to ensure and verify conformance inside its plantation gate. The same concept (being included in the plantation gate) applies to wood depots.

This chain of custody can include processing facilities inside the plantation gate if it only processes certified material. It cannot cover processing facilities outside the plantation gate, or processing facilities inside the plantation gate if non-certified material is stored or processed.

8.1 Plantation gate defined and controlled

8.1.1 The **operator** shall clearly define the plantation gate, by identifying the contractors and any other step included in it. The plantation gate shall expand to the point where the operator no longer has sufficient control to minimize the risk of contamination with non-certified fuelwood.

8.1.2 The certified fuelwood must be clearly identifiable during transport and storage.

8.1.3 In order to avoid contamination with non-certified fuelwood, the operator must involve employees, contractors, transporters and any other person in the supply chain with appropriate training and make sure they have the needed competences, knowledge and experience to identify and handle certified fuelwood.

8.1.4 The operator shall appoint a member of the management who shall have overall responsibility and authority for the operator’s chain of custody.

8.1.5 The operator may use vehicles entirely for certified fuelwood material, or use, physical separation or documentation that allows to clearly quantify the certified fuelwood if vehicles transport a mix of certified and non-certified wood.

8.1.6 The operator’s management shall carry out a regular periodic review (internal audit) of its chain of custody and its compliance with the requirements of this standard.

8.1.7 The operator shall establish and maintain records of its chain of custody to provide evidence of conformity with the requirements of this standard and its effectiveness.

8.2 Claim and identification

8.2.1 The invoice and bill of lading used in transport must contain at a minimum the following information:

- a) Producer’s identification including list of fields the fuelwood comes from;
- b) Formal documentation confirming the sustainable certified status of the fuelwood
- c) Species identification and quantity (weighed or measured)
- d) Date of collection
- e) Identification of the customer for the delivery

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