DEFINITIONS OF SCALE INTENSITY AND RISK FOR UGANDA

Introduction

The Forestry Standard Development Group Uganda (SDG Uganda) was constituted after consultations with a wide range of stakeholders in the forestry sector, and endorsed in a national workshop that brought together stakeholders in the forestry sector on 31 January 2012. The SDG was subsequently approved by the FSC and officially launched on 4th September 2012. The mission of SDG Uganda is to promote economically & environmentally viable, and socially beneficial management and utilisation practices in Uganda's forests. The Goal is to institutionalise responsible forest management and exploitation standards that can be independently verified on the basis of the Forest Stewardship Council Certification Scheme. The central role of SDG Uganda is to develop a national standard for responsible forest management and utilisation in Uganda, in line with the Forest Stewardship Council (FSC) Process Requirements. Since its launch, the SDG has made progress in drafting the National Standard, through engagement and building consensus with stakeholders on different issues related to responsible forest management in Uganda.

The drafting of the National Standard is guided by, among other documents, the *FSC-STD-01-004 V1-0 EN: International Generic Indicators - Final Draft for Final Stakeholders Review* and *FSC-GUI-60-002 V1-0 EN Scale, Intensity and Risk (SIR) Guideline for Standard Developers.* These document emphasize to the need for the SDG to craft indicators that address the Scale, Intensity and Risk (SIR). Consideration of SIR aims to address the barriers faced by forest owners and managers of small scale and low intensity forest management units (FMUs) in accessing and retaining FSC certification. Taking into account SIR is meant to make certification more accessible and cost effective, while retaining the rigor of FSC certification processes.

The concept of SIR is based on the assumption that there are local & regional differences in technological capacity, economic, social and ecological realities. To this end, the indicators are determined largely at national and sub-national levels. The FSC Guide on SIR states that Standard Developers may establish unique thresholds for the scale and intensity based on regional or country specific conditions. This includes average size of Management Units in the country, rotation time, growth rate, silvicultural practices, presence of Indigenous People, presence of endangered species, and so on. These thresholds are subject to justification and approval through chamber balanced consensus by Standard Developers, or by all the Certification Bodies developing Locally Adapted Standards. It is through this defined mandate that SDG-Uganda, sitting in Mirembe Hotel in Kalangala District on 16th – 17th October 2014 that the following definitions for "Small scale" and "low intensity" were agreed upon for the purposes of developing indicators in the National Forest Stewardship Standard for Uganda.

Scale

In line with the FSC Guide on SIR, scale, Uganda defines scale as follows:

Scale category	Number of hectares in Management Unit (FSC Definition)	Number of hectares in Management Unit (Uganda Definition)
Small scale	≤ 100 ha (1,000 ha)	Up to 1000 ha

Medium scale	Between small scale and large scale	Between small scale and large scale
Large scale	> 80,000 ha (plantations) > 300,000 ha (non-plantation forest types)	> 80,000 ha (plantations) > 300,000 ha (non-plantation forest

Rationale for the Definition of Small Scale as "up to 1000ha"

Uganda Investment Authority (2008)[1] defines a "small" enterprise as an enterprise employing a maximum of 50 people; annual sales/ revenue turnover of maximum UGX 360 million (US$ 144,000) and total assets of a maximum of UGX 360 million. Most of the private forests falling within this range.

For timber plantations (including those for transmission poles), the owners of most of the forests of this size are mid-level civil servants and small scale business people who struggle to finance their operations from personal savings or personal loans from high interest commercial banks. Many tree growers cannot afford to buy land of the size that would make business sense for a plantation enterprise, and therefore they have rented the land in government forest reserves at concessionary fee rates as a result of government policy to open up open grassland areas in forest reserves for tree growing by the private sector. Most of the forest plantation owners plant 10-20ha per year (i.e. 5-10ha per planting season), even with the small startup grants being given under the Sawlog Production Grant Scheme. Therefore, the nature of investments is essentially small-scale & low technology and the ecological and social risks are relatively low.

Natural forests outside government owned protected areas are also run as micro to small scale investment & low level technology operations, relying on family incomes from micro to small scale farming and businesses. They own land within this area range (in fact most of them own less than 200 hectares) mostly because they inherited it through the family lineages, and so even a big-sized piece of land does not automatically indicate a good economic status of the family. The owners are still struggling to bring their forests under planned management. Most of the tropical moist forests on private and community lands are within a range of 1-200ha. The more open "other wooded lands" (called "woodlands" in Uganda), especially in northern Uganda can be up to 1000ha. Here opportunities for economic viability lie in non-destructive use of the forests (beekeeping, community tourism), and these will likely be dominated by small scale investments with the aid of local NGOs.

Beyond 1000ha, the forests (both plantations & natural forests) begin to involve relatively large landscapes and the forest management enterprises use machinery for ground clearing and chemicals for pre-plant weed control. The forests are owned or managed by large scale public & private organisations (mostly of international stature) which can access established long-term financing agencies for their investment finance.

[1] Uganda Investment Authority, 2008. Small and Medium Scale (SME) Business Guide

Intensity

In line with the FSC Guide on SIR, intensity is defined as shown below.

Intensity category	**Harvesting rate (FSC Guide)**	**Definition for Uganda**
Low intensity	• The Management Unit consists of a natural forest in which only Non Timber Forest Products or Ecosystem Services or protected areas; or • The rate of timber harvest is <20% mean annual increment **and** • Annual harvest or average annual harvest < 5,000 m^3 / year	*For Natural Forests:* • Only Non Timber Forest Products or Ecosystem Services are harvested • The rate of timber harvest is <20% mean annual increment **and** • Annual harvest or average annual harvest < 5,000 m^3 / year *For Plantations*: FMUs up to 100ha which are not using chemicals and heavy machinery (e.g. bush clearing tractors or heavy logging machines) in their routine management operations
Medium intensity	• > 20% mean annual increment and < annual allowable cut	For natural forests: • > 20% mean annual increment and < annual allowable cut • Plantations >100ha but less than 1000ha
High intensity	• Plantation FMUs >1000 ha • Natural forest management using short rotations and applying chemicals	• Plantation FMUs >1000 ha • Natural forest management using short rotations and/or applying chemicals

Rationale for the Uganda Definition of Intensity

Uganda's Tropical Moist Forests (TMFs) on private lands have been heavily exploited and cleared, and it is largely in a few Central Forest Reserves that timber exploitation can be expected. By 2003, the total area of TMFs in CFRs was 319,810 ha (National Biomass Study, 2003). 18% of this was degraded leaving about 260,000 ha of fairly intact forest. Of this about 135,000 ha constitute the Strict Nature Reserve (SNRs) and Buffer Zones (BZs), leaving 125,000 ha for timber production. The Production Zones (PZs) in each forest range from 2,000 – 24,000 ha, scattered in some 20 CFRs. These areas may not be economical to harvest using large fixed sawmills. The Forest Improvement

Management System for Natural Forests in Uganda (NFA, 2006[2]) adapted the reduced impact logging systems in which the largest machinery permitted in the forest are agricultural tractors or light skidders. Therefore, common harvesting systems include small mobile sawmills or pitsawying. Harvesting is controlled through an annual allowable cut (AAC) that varies from forest to forest but averaging 25-30m3 per hectare over a felling cycle of 30 years, or about 0.8-1m3/ha/year. The annual harvest of timber from a FMU can therefore be calculated based on the best available information to ensure that the maximum allowable cut is not exceeded.

The more open "other wooded lands" (called "woodlands" in Uganda), especially in northern Uganda can be up to 1000ha. Here opportunities for economic viability lie in non-destructive use of the forests (beekeeping, community tourism). However, in northern Uganda, where large tracts of "other wooded lands" are mostly found, the strategic district forest development plans provide for management of the woodlands for sustainable charcoal production, through forest management certification schemes. But even here, the FMUs with a sustained yield of 5,000m3 annually would be economic to run as small scale enterprises producing somewhere between 1,500-2500m3 of charcoal annually depending carbonization efficiency.

Endorsed by Members of the SDG:

Economic Chamber

Name	**Signature**

Social Chamber

Name	**Signature**

Environmental Chamber

Name	**Signature**

[2] National Forestry Authority (2006). A Guide to the Management of Production Zones in Uganda's Tropical Mosit Forests