EXECUTIVE SUMMARY

Project Name	Forest Resource Utilization and Plantation Development Project under Integrated Forest Management Agreement (IFMA) Numbered 18-2007
Project Location	The IFMA No. 18-2007 covering the Municipalities of Esperanza, Lebak, Kalamansig, Bagumbayan, and Senator Ninoy Aquino, all in the Province of Sultan Kudarat, Region XII SOCCSKSARGEN.
Nature of Project	Harvesting operations, plantation development and forest protection and maintenance activities
Size / Scale	Approved IFMA area covering a total of Twenty Nine Thousand Eighty Five (29,085) hectares
Rationale	*The IFMA 18-2007 original area of 1,555 hectares was approved in the year 2007 but pending its release, until the M&S Company secured the Free Prior Informed Consent (FPIC) from National Commission on Indigenous People (NCIP). Then, the approved Certificate of Pre-condition was issued by NCIP Main Office last April 13, 2009. Thus, DENR officially released the approved IFMA License denominated as IFMA No. 18-2007 last May 27, 2009. *Since the IFMA 18-2007 with 1,555 hectares are accessible and contiguous to Silvicultural Industries, Inc. (SII) under IFMA No. 022 with 27,530 hectares, the MSCI management decided to consolidate, merge and integrate the SII IFMA 022 to MSCI IFMA 18-2007 for its effective management, supervision and control of the entire consolidated IFMA area. *On June 17, 2015, the DENR issued the approval of the integration / consolidation of the IFMA 022 into IFMA 18-2007 for better and effective management, supervision and control of the accumulated area of 29,085 hectares The overall objective of this consolidated project is for the company to continuously develop, improve, protect and manage the whole area of 29,085.0 hectares under IFMA No. 18-2007 into a sustainable and productive combination of the natural and plantation forests that will support the requirements for timber and non-timber forest products supply for its affiliated wood processing plant and the local market; and attain ecological balance and efficiently functioning ecosystem by means of sustainable management.

<table>
<tr><td></td><td></td><td>
<table>
<tr><th>Present Land Use/Vegetative Cover</th><th>Area

(has)</th><th>Development and Management Strategies</th><th>Allocation of area (has)</th></tr>
<tr><td>Production Residual

Forest (PRF</td><td>2,116</td><td>* Manage as production natural forest where selective timber harvesting will be implemented pursuant to DAO 99-53 but subject to the lifting of E.O 23 and other forestry laws and regulations.

* Maintain as production natural forest.</td><td>2,116</td></tr>
<tr><td>Degraded Residual

Forest (DRF)</td><td>12,038</td><td>*Develop and manage into industrial forest plantation based on the exemption of E.O 23.

* develop as protection or buffer zone forest.</td><td>9,823

2,215.00</td></tr>
<tr><td>Established Plantation</td><td>10,442</td><td>* Continue protecting and managing as forest trees plantation</td><td>10,442</td></tr>
<tr><td>Cultivated/ Agroforestry Areas</td><td>1,043</td><td>* Continue protecting and managing as forest tree plantation/ fruit tree plantation and Other High Valued Crops plantation such as, rubber trees, oil palm or coffee tree plantations.</td><td>1,043</td></tr>
<tr><td>Open / Brush Land</td><td>2,713</td><td>* Maintain as productive cultivated /agro-forestry area.

* Develop into mix fruit tree plantation and palm oil or rubber trees plantation.</td><td>2,713</td></tr>
<tr><td>Resettlement Area</td><td>733</td><td>* Manage in place and resettled forest occupants.</td><td>733</td></tr>
<tr><td>TOTAL</td><td>29,085</td><td></td><td>29,085</td></tr>
</table>
</td></tr>
<tr><td>Components</td><td>• Road Network Rehabilitation / Maintenance
• Harvesting of Matured Forest Trees Plantation
• Harvesting of Degraded Residual Forest based on item 2.2 of E.O 23 guidelines</td></tr>
</table>

	• Selective Logging System and Enrichment Planting or Timber Stand Improvement for Production Residual Forest (Once E.O 23 is lifted) • Nursery development • Plantation Development • Forest Protection and Maintenance • Infrastructures development and maintenance • Community Development
Process / Technology	The general strategy for the whole project is to fully utilize the productive potential of the IFMA area to produce wood raw materials and agricultural food crops, with the least adverse effects on environmental stability and generate optimum socio-economic benefit for the LGUs, the company, the IFMA community particularly the Indigenous Peoples, and other forest occupants in a sustainable manner possible. The logs produced from the area will be processed in the company's existing wood processing plant in Barangay Recodo, Zamboanga City. The company will use a manual labor and / or mechanized logging activities using carabao logging or wrecker / skyline depending the status of operations, or as the need arises. While silviculture and thinning will be undertaken to ensure quality tree growth.
Products	Timber
Major Waste Streams, Types & Estimated Generation Rate	Logging residue (slash, stumps) – Approx . 50% of biomass
Manpower Requirement	Operations Phase – Male 482; Female 123 Abandonment/Decommissioning Phase – Male 188; Female 5
Project Investment Cost	**Php 6.5 Billion**
Project Duration and Schedule	Remaining 14 Years of 25-year IFMA: CY 2019 to CY 2032 Operations Life: 25 years and renewable for another 25 years thereafter IFMA Expiry: December 31, 2032

BRIEF SUMMARY OF EIA PROCESS

EIA Team

Name	Expertise	Module Assigned	DRRCC-Trained
Rodrigo B. Mallonga	Environmental Planning, civil engineering, water management	All	Yes
Corazon M. Baylon	Socio-Economics	People	Yes
Hannah R. Molde	Industrial engineering	People	No
Raul R. Buñao	Forestry	Terrestrial Flora	Yes
Zita M. Rosales	Environmental Management	All	Yes

EIA Study Area

The study area was focused on the perceived direct impact areas of consolidated IFMA 18-2007 covering the Municipality of Esperanza, Lebak, Kalamansig, Senator Ninoy Aquino, Bagumbayan, and Esperanza, all in the Province of Sultan Kudarat. Specific locations for the IFMA and sampling stations for each module are identified and discussed in the succeeding sections.

EIA Study Schedule and Methodology

The EIA study team conducted both primary and secondary data collection for the period August 2018 to March 2019.

Activity	Period Covered	Weather/Season
Site Inspection	August 26, 2018	Rainy
Terrestrial Flora and Fauna Assessment	August 27 – 31, 2018	Rainy
Socio-economic & Cultural research	August 27 – 31, 2018	Rainy
Public Scoping	August 30, 2018	Rainy
Public Participation / IEC	March 26-30, 2019	Sunny
Air Quality Assessment	April 26, 2019	Sunny
Water Quality Assessment	October 24, 2018 May 2019	Sunny Rainy
Draft of EIS report	September 2018 to September 2019	

SUMMARY OF PUBLIC PARTICIPATION (IEC/FGD/PUBLIC SCOPING)

Location	Stakeholder/Community	Discussed / Resolved Issues / Concern
Esperanza	Tribal Leader, Legodon	*M&S will only cut trees within IFMA area *Girdling of M&S Plantation trees made by IP's to give direct sunlight to their coffee trees underneath was properly accounted and informed to concerned agency and LGU
	Asst. Municipal IFMR	IPs will be prioritized for employment for manual skidding in harvesting operations
	Brgy. Kagawad Marquez	There will be no compensation for coffees planted inside IFMA area planted by IP's without permission
	Municipal LGU representative	There is no threat of flooding as there is no harvesting operation in natural protection forests.
	Tibal Leader – Brgy Marquez	*Thankful to M&S for the farming supplies, basket and plants, titled area for settlement and farming and housing provision *provide resettlement initially from 7 families which grows to 25 IP families (Dulangan Manobo)
Sen Ninoy Aquino	Brgy Kuden –Kagawad for Environment School In-charge Tuga Legal, IP from Tumangan Brgy Chairman	*Brgy endorsement / resolution with list of names whose under Committee on environment of Brgy Kuden to gain entry & exit permit in passing through the IFMA area . *Submit requisition with barangay endorsement for school laboratories / building. *M&S already had approved FPIC under IFMA 18-2007 *Collaboration activity on the road rehab and maintenance

Bagumbayan	Brgy Sto. Nino, IP Representative, Timboy Sandigan	*M&S will no longer allowed IP's to plant coffee trees inside the IFMA area otherwise, it will be a precedent on girdling of trees by IPs to give more way for direct sunlight to their coffee trees. *M&S will provide planting materials but IPs should plant it outside the IFMA area
Lebak	Reynaldo Ostan, from religious sector	*As agreed, they can secure first cutting permit before the M&S will buy the cut logs from their previous community reforestation project.
Kalamansig	Submitted request for IEC/FGD/Public scoping	*no action / denied request

SUMMARY OF BASELINE CHARACTERIZATION

<table>
<tr><td>The Land</td><td>The province of Sultan Kudarat's terrain is diverse with extensive coast, plains and valleys, hills and mountains.

The province has a total land area of 513,530 hectares of which 248,288 hectares or 48.4% are alienable and disposable while the rest are timberlands. (Map 2-1). The consolidated IFMA Project Area lies entirely within the timberlands area.

The existing vegetation within the IFMA area are as follows:

<table>
<tr><td>Vegetative Cover</td><td>Present Area (in hectares)</td></tr>
<tr><td>Production Residual Forest</td><td>2,116</td></tr>
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<tr><td>Total</td><td>29,085</td></tr>
</table>
</td></tr>
<tr><td>The water</td><td>The Project Area straddles portions of the Kabulnan 2 watershed and the Salaman watershed

Kabulnan-2 has a drainage area of about 498.89 sq.km. (NIA, 2007) while Salaman River has a drainage area of 8,176 hectares (Provincial LGU of Sultan Kudarat, 2010) or 81.76 sq.km..</td></tr>
</table>

	There are three major river systems running through the IFMA areas: Tran, Salaman, and Kabulnan.
The Air	Based on modified Corona's Climate Classification (1951-2003), the climatic condition in the province of Sultan Kudarat falls under Type III and Type IV climate type. Thus, the IFMA project falls under Type IV. Thus, characterized by rainfall which is more or less evenly distributed throughout the year. Based on the average of all weather stations in the Philippines, the mean annual temperatures of the areas in Sultan Kudarat Province with higher altitudes such as those in the Daguma Mountain Range is expected to be lower than those in the plains and valleys with lower altitudes.
The People	The IFMA area is under the political jurisdiction of the municipalities of Esperanza, Senator Ninoy Aquino, Bagumbayan, Lebak and Kalamansig, all in the province of Sultan Kudarat. Majority of the inhabitant source of livelihood income comes from farming and fishing. The dialects spoken are mixed such as Ilonggo, Visaya, Teduray, Manobo and Muslim.

SUMMARY OF IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN

Proj. Phase/ Envtl Aspect	Envtl Component likely to be Affected	Potential Impact	Options for prevention / mitigation	Cost	Guarante Fee
Pre-Operations					
*Survey & Mapping *Road Rehab & maintenance *Repair and maintenance of existing support facilities	Land	*Erosion *Dilapidation of roads	*No logging operations allowed on highly eroded areas *Highly eroded areas and boundary should be properly marked in the map *frequent road rehab and maintenance *avoid passing through during heavy rainfall		
	Air & noise quality	*Dust generation *Noise pollution	*frequent watering of unpaved roads during dry period		
	People	*Traffic / Transportation safety	*Controlled / scheduled movement to avoid road accidents / traffic occurrence		
Operations					
*Cutting and skidding *Nursery Management *Plantation development	Land	*Solid waste generation *soil compaction	* *Implement regular waste collection and disposal system at site.* **Implement re-use, reduce and recycle* *concentrate heavy equipment on few tracks as possible		

*Hauling and Transport		Landslide	Installation of appropriate physical barrier (terracing, contour trenching, bund construction) to give the chance the roots to anchor		
	Air & Noise	*Dust generation *Noise pollution	*frequent watering of unpaved roads during dry period **hauling trucks must have canvass or any materials of same kind to cover backloads* *use heavy equipment during day time only		
	Water	Water quality degradation	*Prohibit direct disposal of waste to water bodies *continue water conservation measures (protection of buffer zones -40 meters on both sides of rivers and streams)		
	People	Income generation to impact areas Forest Fire	*priority hiring on local inhabitants esp. the IP's *Formulate / implement programs on forest fire prevention and protection		
Post Operations					
•Information for abandonment to DENR and concerned LGU •Removal of facility / equipment at site •Revegetation of log areas	Land	*Solid waste generation *Log over areas	* *Implement regular waste collection and disposal system at site.* **Implement re-use, reduce and recycle* **should be revegetated with fast growing species*		
	Air & Noise	*Dust generation *Noise pollution	**hauling trucks must have canvass or any materials of same kind to cover backloads* *use heavy equipment during day time only		

SUMMARY OF ENVIRONMENTAL MONITORING PLAN

Key Envt'l Aspect	Potential Impact	Parameter To be Monitored	Sampling & Measurement Plan			Lead Person	Person Responsible	Annual Est'd cost	EQPMT MGT COST				
			Method	Freq	Location				Eqpt Range				
Pre-Operations													
• Water Quality	Siltation	TSP	Water sampling for lab analysis	Semi-Annual	*Tran river *Cabulanan River *Salaman River	PCO	In-house monitoring						
Operations													
• Land	Solid Waste	Total solid waste generated	On-site inspection	quarterly	Inside IFMA area	PCO	In-house monitoring						
• Water Quality	Siltation	TSP	Water sampling for lab analysis	Annual	*Tran river *Cabulanan River *Salaman River	PCO	In-house monitoring						

• Air Quality	Dust / Gas emission	PM 10 and TSP	Ambient Monitoring	Annual	*Bravo area *Plamango Area	PCO	In-house monitoring						
• People	Health Profile	Top 5 causes of morbidity / mortality	Key informants interview	Semi-Annual	*Inside IFMA area	PCO	In-house monitoring						
Post Operations/abandonment													
• Land	Solid Waste	Total solid waste generated	On-site inspection	quarterly	Inside IFMA area	PCO	In-house monitoring						
• Water Quality	Siltation	TSP	Water sampling for lab analysis	Annual	*Tran river *Cabulanan River *Salaman River	PCO	In-house monitoring						