

**ENVIRONMENTAL AND SOCIAL ACTION PLAN (ESAP)
FE INDORAMA AGRO LLC (INDORAMA AGRO)**

DRAFT (24 APRIL 2020)

| No. | Action | Environmental & Social Risks (Liability/ Benefits) | Requirements (Legislative, EBRD PR, IFC PS, Best Practice) | Resources | Timetable | Completion Indicator | Status |
|-------------------------------|--|--|--|--|--|--|--------|
| PR1/PS1 | Assessment and Management of Environmental and Social Risks and Impacts | | | | | | |
| 1.1 IFC ESAP 1.4 | Retain a qualified and experienced team of experts, to undertake independent, semi-annual external monitoring to assess the performance of mitigation measures and to identify the need for additional or modified mitigation measures that may be necessary to meet the requirements of the environmental and social management plan (ESMP – see 1.3 below) and the ESAP. The expert will be selected by the Company in concurrence with EBRD and IFC and report directly to both the borrower and the Lenders. | Monitoring of EHSS risks and impacts Improved EHSS management | EBRD PR1 IFC PS1 | Company resources Independent EHSS consultant | Starting with the cotton harvest in 2020 (September-October 2020) Submission of initial report by March 2021 Semi-annually over the first 2 years thereafter. Annually starting in 2023 | Monitoring visits by EHSS consultant completed and reports shared and reviewed by Lenders. | |
| 1.2 | Fully develop and implement an integrated environmental and social management system (ESMS) in line with EBRD PR/IFC PS requirements for the operational phase. The system shall include all relevant EHSS policies, procedures, and resources to ensure appropriate identification, mitigation, monitoring and reporting of environmental and social issues associated with the Project. | Systematic management of EHSS impacts | EBRD PR 1 IFC PS 1 Best practice | Company resources Assign responsibilities | March 2021 | EHS management system in place and ready to be implemented by March 2021 Full list of system documents and sample procedures provided to the Lenders. | |

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| | <p>Integrate consideration of occupational health and safety and labour issues into the ESMS to ensure that environmental, social, labour, and health and safety issues are considered in an integrated manner</p> <p>The ESMS should be aligned with international best practice such as ISO 14001 and ISO 45001.</p> | | | | | | |
| <p>1.3 IFC ESAP 1.1</p> | <p>Develop the complete set of management plans, listed in the ESIA Vol III ESMP, to the satisfaction of all the Lenders.</p> <p>Operational ESMPs (O-ESMPs) will include technical requirements and monitoring procedures for both direct farms and contracted farms, as well as clear designation of roles and responsibilities in the organizational structure.</p> <p>Monitor the implementation of construction ESMPs (C-ESMPs) by contractors.</p> <p>Implement and maintain such plans for the life of the Project.</p> | <p>Management and monitoring of environmental, social, health and safety issues through implementation of appropriate management and monitoring plans.</p> | <p>EBRD PR 1 IFC PS 1 Best practice</p> | <p>Company resources External consultants, if required Assign responsibilities</p> | <p>August 2020 (C-ESMPs) December 2020 (O-ESMPs)</p> | <p>Fully developed C-ESMPs and O-ESMPs received, reviewed and approved by lenders.</p> | |
| <p>1.4 IFC ESAP 1.2</p> | <p>Establish a centralized commitment register and performance tracking system to track the progress and implementation performance of all ESMPs</p> | <p>Monitoring of EHSS risks and impacts</p> <p>Improved EHSS management</p> | <p>EBRD PR1 IFC PS1</p> | <p>Company resources</p> | <p>December 2020</p> | <p>Commitment register and tracking system received and approved by EBRD and IFC</p> | |
| <p>1.5</p> | <p>Establish a dedicated E&S department to oversee development and implementation of the ESMS and ESMPs, monitor activities and</p> | <p>Implementation of the environmental,</p> | <p>EBRD PR 1 IFC PS 1</p> | <p>Company resources</p> | <p>October 2020</p> | <p>EHS manager and direct reports appointed to the Project.</p> | |

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| IFC ESAP 1.3 | report to the Lenders. Provide clear roles and responsibilities and job descriptions for each of the E&S positions. | social, health and safety management systems. | | | | | |
| 1.6 | <p>Undertake in-depth gender-based violence and harassment assessment to identify risks to workers and communities and develop prevention and mitigation measures.</p> <p>Develop policies and procedures on gender-based violence, sexual harassment, and discrimination.</p> <p>Build capacity and provide training to EHSS and human resources staff to implement these policies and procedures in a safe manner.</p> <p>Provide training to all staff, contractors and contract farmers on code of conduct and GBVH prevention.</p> | Prevention and mitigation of gender-based violence | EBRD PR1, PR2 and PR4 IFC PS1, PS2 and PS4 | Indorama Agro Expert consultant | <p>December 2020</p> <p>March 2021</p> <p>June 2021</p> <p>Ongoing monitoring</p> | <p>Assessment report shared and agreed with EBRD and IFC.</p> <p>Policies and procedures shared and agreed with EBRD and IFC.</p> <p>Report on training with EBRD and IFC.</p> <p>Reports of GBVH provided to EBRD and IFC in safe and confidential manner.</p> | |
| PR2/PS2 | Labour and Working Conditions | | | | | | |
| IFC ESAP 2.1 | <p>Formalize Indorama Agro's approach to the prevention and mitigation of Gender-Based Violence and Harassment (GBVH) in policy provisions and procedures and articulate the requirements in the Human Resources policy. Publicize the requirements to all Indorama Agro workers, and work with contract farmers to develop their own requirements in line with Indorama's standards.</p> <p>Ensure the worker grievance mechanism is accessible to all direct workers, as well as</p> | Minimise risks related to GBVH for the Company, its workers and contractors | EBRD PR 2 IFC PS 2 | Company resources | <p>December 2020</p> <p>March 2021</p> | <p>Policy received, reviewed and approved by the Lenders</p> <p>Implementation of capacity building; record keeping of training carried out.</p> | |

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| | <p>contract farm workers, and is equipped to handle reports of GBVH in a safe and confidential manner.</p> <p>Deliver capacity building and training to key human resources personnel.</p> | | | | | | |
| <p>2.2</p> <p>IFC ESAP 2.2</p> | <p>Introduce gender-responsive human resources policies and practices at the company level to improve employment outcomes for women workers. In this context, develop a clear action plan and roadmap to reach a female employment share of at least 25% within the company within five years of the start of operations (with an ultimate commitment to reach 45% over the longer term, through tangible measures including introducing gender-responsive recruitment and retention policies and practices in line with international best practices; addressing female employees' affordable childcare needs; engaging brigade leaders and agronomists to help stimulate hiring of women farm workers; and collecting gender-disaggregated data on key recruitment, retention and job progression outcomes to improve monitoring and guide decision-making.</p> | <p>Increase participation of female employees in the workforce</p> | <p>EBRD PR 2 IFC PS 2</p> | <p>Company resources</p> | <p>June 2021</p> <p>December 2023</p> | <p>Action plan and roadmap received, reviewed and approved by the Lenders.</p> <p>Reach 25% of female employment share</p> | |
| <p>2.3</p> | <p>Provide guidance and orientation to contract farmers to follow required labour standards on contract farms and carry out regular monitoring of working conditions of both permanent workers and seasonal workers.</p> | <p>Appropriate management of labour standards on contract farms</p> | <p>EBRD PR2 IFC PS2</p> | <p>Company resources</p> | <p>During the life of the project</p> | <p>Verified by independent monitoring (e.g. through the ILO TPM programme)</p> <p>Reports shared with the lenders.</p> | |

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| | <p>Minimise the risk of forced labour and child labour on contract farms and take measures to immediately address any reported occurrences.</p> <p>Continue to provide regular capacity building of contract farmers on implementation of labour standards.</p> | | | | | | |
| 2.4 | Indorama Agro will continue to monitor the hours worked by contract farm workers during cotton harvest season and provide regular reporting to the Lenders. . | Preventing excessive overtime and harm to workers' health and safety | EBRD PR2 IFC PS2 | Company resources | Ongoing | Evidence of monitoring results can be generated at any given time during the harvest season | |
| PR3/PS3 | Resource Efficiency and Pollution Prevention | | | | | | |
| 3.1 IFC ESAP 3.1.a, 3.1.b, 3.2 and 3.3 | <p>Agricultural Water Use:</p> <ol style="list-style-type: none"> 1. a) Ensure efficient and sustainable use of agricultural water in the project's four districts through follow-up on the recommendations of the Water Balance study notably in areas of water shortage; b) Ensure on going monitoring and metering of its water requirements for cotton plantations; 2. Continue to engage with different stakeholders through the existing Water Consumer Associations (WCA) including government and water users. In | Efficient use of irrigation water and implementation of sustainable water resources management plan | EBRD PR 3 IFC PS 3 | Company resources Independent EHSS consultant as required | December 2020 Starting March 2021/ongoing (to be completed by December 2023) March 2021/ongoing | <p>Water Resources Management Action Plan (with a timeline for action items) developed based on findings of Water Balance Model and its recommendations</p> <p>Water Resources Management Action Plan implemented across all Indorama's agricultural lands</p> <p>Monitoring records of water balance in four districts are submitted on a periodical basis starting with operational sub-</p> | |

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| | <p>coordination with the Ministry of Water Resources and the existing WCA, Indorama Agro shall establish a water stewardship program to ensure allocation of sufficient water resources without compromising access by other users in all districts. This program will be based on findings of the water balance model and the ongoing monitoring of water distribution for the agricultural operations.</p> <p>3. Check water quality for drinking and domestic uses in the Project premises, and if necessary treat in line with WHO drinking water standards.</p> | | | | <p>March 2021</p> <p>Starting December 2021/ ongoing (to be completed by December 2023)</p> <p>Starting December 2021/ ongoing (to be completed by December 2023)</p> <p>Starting December 2021/ ongoing (to be completed by December 2023)</p> | <p>districts/completed redevelopment</p> <p>Water Stewardship Program is developed</p> <p>Water Stewardship Program is implemented including relevant stakeholders</p> <p>Indorama Agro to submit meeting records and action items relevant to different Water Consumer Associations across four districts covering Indorama Agro project areas, addressing two priority issues; (i) Reliability and volume of releases from government delivery channels, and (ii) Transmission losses between the main canals and field.</p> <p>Results of water quality tests in line with WHO standards. Treatment facility established if needed.</p> | |
| <p>3.2 IFC ESAP 3.4</p> | <p>Drainage: Introduce strict instructions on preparation of fertilizers, pesticides and other agrochemicals solutions, and audit storage areas for these substances.</p> | <p>Prevent negative impacts from water drainage</p> | <p>EBRD PR 3 IFC PS 3</p> | <p>Company resources</p> | <p>December 2021</p> | <p>Training provided to Indorama Agro staff handling agrochemicals material including application and drainage limits, including monitoring records.</p> | |

OFFICIAL USE

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| | Undertake accurate identification of crops needs. | | | | | | |
| 3.3 IFC ESAP 3.5 | Wastewater: Follow good international industry practice (GIIP), as set out in the IFC EHS Guidelines to ensure sanitary and industrial wastewater disposal is compliant with IFC's requirements, as the minimum level of mitigation in the absence of national legislation or applicable international guidance. | Prevent negative impacts from waste water discharges | EBRD PR 3 IFC PS 3 | Company resources | December 2021 | Wastewater monitoring records in line with IFC EHS guidelines | |
| 3.4 IFC ESAP 3.6 & 3.7 | Agrochemicals Use and Management: 1. To avoid soil contamination, Indorama Agro shall (i) ensure hazardous materials are suitably stored to prevent leaks and spills with adequate bunding will be provided for all fuel and chemicals storage; (ii) fertilizers and pesticides solutions will be prepared in application machinery tanks or at a dedicated site with impermeable paving and a drainage system 2. Develop an Emergency Action Plan to respond to accidental discharge of petroleum products, pesticides and other agrochemicals into soil, drainage collectors and irrigation canals. | Prevent negative impacts from pesticide use | EBRD PR 3 IFC PS 3 | Company resources | December 2021 December 2021 | Guidelines for agrochemicals/pesticides storage and management Storage and Emergency Action Plan for accidental discharge of agrochemicals | |
| PR4/PS4 | Community Health, Safety, and Security | | | | | | |
| 4.1 | Develop a Community Health and Safety Management Plan. | Prevent or address any adverse | EBRD PR4 | Company resources | December 2020 | Community health and safety management plan reviewed by and agreed with EBRD and IFC | |

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| | | impacts on the health and wellbeing of local communities | IFC PS4 | Independent EHSS consultant as required | | | |
| PR5/PS5 | Land Acquisition and Involuntary Resettlement | | | | | | |
| 5.1 IFC ESAP 5.1 | Hire a senior international resettlement specialist to extrapolate baseline information, aiming to: 1) establish a profile of the previous cotton farm leasers, including name, age, land areas, and current livelihood status (to the extent they are traceable and data on livelihood is available); 2) establish a profile of the farm workers on the Project, include numbers, earning levels and livelihood post the land acquisition; 3) identify and map the dimension of impacts on those farm workers and former land leasers to the extent there is reliable data available on them; 4) develop a Livelihood Restoration Plan (LRP) to mitigate and address impacts identified to meet IFC's PS5 and EBRD's PR5 requirements on livelihood restoration with timeline and budget. Indorama Agro will allocate adequate resources (include financial resources) to implement the livelihood restoration plan developed. | Ensure livelihoods are restored | EBRD PR5 IFC PS5 | Indorama Agro Senior international resettlement expert, working with IFC Advisory Services | October 2020 March 2021 | International resettlement expert selected by IFC and EBRD and hired by Indorama Agro Livelihood restoration plan developed, reviewed and approval by lenders | |
| 5.2 IFC ESAP 5.2 | Update the Community Asset Programme (CAP) with income generation programmes with concrete steps for implementation. | Provide additional benefits for affected communities | EBRD PR1 & PR5 IFC PS1 & PS5 | Indorama Agro IFC Advisory Services | May 2021 | Updated CAP received, reviewed and approved by IFC and EBRD | |

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| 5.3 | Monitor implementation of LRP | Ensure livelihoods are restored | EBRD PR5 IFC PS5 | Indorama Agro | Ongoing on a semi-annual basis | Monitoring reports submitted for review and approval by lenders | |
| 5.4 | Evaluation by an independent resettlement expert of LRP implementation progress and completion | Ensure livelihoods are restored | EBRD PR5 IFC PS5 | Independent resettlement expert | June 2022 June 2026 | Evaluation reports submitted for review and approval by lenders | |

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| PR6/PS 6 | Biodiversity | | | | | | |
| 6.1 IFC ESAP 6.1-6.3 | <p>1) BCI principles and criteria training and independent verification – Indorama Agro will prepare a Plan with detail of activities to expand full suite of BCI principles training to all existing and future contract farmers.</p> <p>2) Indorama Agro will engage a third party to independently verify implementation of the full suite of BCI principles and criteria in both direct and contract farms. The third-party independent verification activities will follow the Better Cotton Standard System assurance process.</p> <p>3) The verification organization will be hired prior to Board and will be a BCI approved verifier. Terms of reference for their engagement will be drafted and agreed with IFC and EBRD. A work plan for verification that follows BCSS assurance process will also be prepared and agreed with IFC and EBRD.</p> | Apply Good International Practice (GIP) to cotton farming | IFC PS6 EBRD PR6 GIP | Indorama Agro Independent BCI auditor | <p>July 2020 for items i to iii</p> <p>August 2020 work plan for verification activities</p> <p>External verification to continue during the life of the project/until certification is possible</p> | <p>i. Plan for training roll out agreed with IFC and EBRD</p> <p>ii. Terms of reference for third party verification agreed with IFC and EBRD</p> <p>iii. Third party verification organization appointed</p> <p>iv. Work plan for verification activities agreed with IFC and EBRD</p> | |
| PR10/ PS1 | Information Disclosure and Stakeholder Engagement | | | | | | |
| 10.1 IFC ESAP 10.1 | <p>Recruitment of two female Community Liaison Officers (CLOs) reporting directly to the Company Director</p> <p>Training of CLOs to safely address any reports of gender-based violence and harassment</p> | Management/ monitoring of social risks | EBRD PR1 and PR10 IFC PS1 | Company resources | <p>October 2020</p> <p>March 2021</p> | <p>Evidence of hiring of two female CLOs</p> <p>Training records shared</p> | |