

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

27 APRIL 2021

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 Senior Lenders. Senior Lenders will provide ToR for the scope of work for independent E&S monitoring consultant.	Monitoring of EHSS risks and impacts Improved EHSS management	EBRD PR1 IFC PS1	Company resources Independent EHSS consultant	Mobilised 3 months post-signing and initial desk review within a month of mobilisation. First site visit during cotton harvest in 2021 (September-October 2021) Submission of site visit report by November 2021 Semi-annually over the first 2 years thereafter. Annually starting in 2024	EHSS consultant identified and approved by Senior Lenders. Monitoring visits by EHSS consultant completed and reports shared and reviewed by Senior Lenders.	
1.2	Fully develop and implement an integrated environmental and social management system (ESMS) in line with EBRD	Systematic management of EHSS impacts	EBRD PR 1 IFC PS 1 Best practice	Company resources	Prior to first disbursement	ESMS framework which identifies all the existing and planned EHSS	

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	<p>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.</p> <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>			Assign responsibilities	July 2022	<p>policies, procedures and resources required.</p> <p>Full EHSS management system in place and implemented by July 2022</p> <p>Full list of system documents and sample procedures provided to the Senior Lenders.</p>	
1.3 IFC ESAP 1.1	<p>Develop the complete set of management plans, listed in the ESIA Vol III ESMP, to the satisfaction of all the Senior 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</p>	Management and monitoring of environmental, social, health and safety issues through implementation of appropriate management and monitoring plans.	EBRD PR 1 IFC PS 1 Best practice	Company resources External consultants, if required Assign responsibilities	May 2021 (C-ESMPs) August 2021 (O-ESMPs)	Fully developed C-ESMPs and O-ESMPs received, reviewed and approved by Senior Lenders.	

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	<p>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>						
1.4 IFC ESAP 1.2	<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</p> <p>IFC PS1</p>	<p>Company resources</p>	<p>September 2021</p>	<p>Commitment register and tracking system received and approved by EBRD and IFC</p>	
1.5 IFC ESAP 1.3	<p>Establish a dedicated E&S department with adequate resources to oversee development and implementation of the ESMS and ESMPs. The department should include an experienced Stakeholder relation and communications manager to ensure proactive engagement with impacted and interested stakeholders, Provide clear roles and responsibilities and job descriptions for each of the E&S positions.</p>	<p>Implementation of the environmental, social, health and safety management systems.</p>	<p>EBRD PR 1</p> <p>IFC PS 1</p>	<p>Company resources</p>	<p>July 2021</p>	<p>EHS manager and direct reports appointed to the Project.</p> <p>Stakeholder relations and communications manager appointed to the Project.</p>	
1.7	<p>Undertake in-depth gender-based violence and harassment assessment to identify risks to workers in the workplace and</p>	<p>Prevention and mitigation of gender-based violence</p>	<p>EBRD PR1, PR2 and PR4</p> <p>IFC PS1, PS2 and PS4</p>	<p>Indorama Agro Expert consultant</p>	<p>August 2021</p> <p>September 2021</p>	<p>Assessment report shared and agreed with EBRD and IFC.</p>	

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	<p>communities interacting with project workers in relation with the project and develop prevention and mitigation measures.</p> <p>As required, develop policies and procedures on gender-based violence, sexual harassment, and discrimination for the workforce in the workplace and communities interacting with project workers in relation with the project as per action items 2.1 and 4.1.</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>				<p>January 2022</p> <p>Ongoing monitoring</p>	<p>Policies and procedures shared and agreed with EBRD and IFC.</p> <p>Report on training shared with EBRD and IFC.</p> <p>Reports of GBVH incidents and allegations provided to EBRD and IFC in safe and confidential manner.</p>	
PR2/PS2	Labour and Working Conditions						
2.1 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</p>	<p>Minimise risks related to GBVH for the Company, its workers and contractors</p>	<p>EBRD PR 2 IFC PS 2</p>	<p>Company resources</p>	<p>September 2021</p> <p>December 2021</p> <p>January 2022</p>	<p>Policy received, reviewed and approved by the Senior Lenders</p> <p>Enhanced grievance mechanism to safely receive workplace reports of GBVH</p>	

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	<p>own requirements in line with Indorama's standards.</p> <p>Ensure the worker grievance mechanism is accessible to all direct workers, as well as 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>					Implementation of capacity building; record keeping of training carried out.	
2.2 IFC ESAP 2.2	<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 on best effort basis 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, on best effort basis, 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;</p>	Increase participation of female employees in the workforce	EBRD PR 2 IFC PS 2	Company resources	April 2022 September 2024	<p>Action plan and roadmap received, reviewed and approved by the Senior Lenders.</p> <p>Reach 25% of female employment share on best effort basis.</p>	

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	and collecting gender-disaggregated data on key recruitment, retention and job progression outcomes to improve monitoring and guide decision-making.						
2.3	Develop Harassment-Free and Respectful Workplace policy and procedure and provide training to all employees.	Prompt handling of improper behaviour	EBRD PR1, PR2	Company Resources	July 2021 December 2021	Policy received, reviewed and approved by the Senior Lenders. Implementation responsibilities assigned and training provided across all operations. Training records provided to EBRD and IFC.	
2.4	The updated HR policy will be communicated widely to workers, including the right to join multiple workers' organisations of their choosing, and steps will be taken to train all relevant managers on FACB rights with a view of developing a climate of mutual understanding and constructive engagement.	Ensure FACB rights are respected	EBRD PR2 IFC PS2 Uzbek Law on Trade Unions (2019)	Company Resources	September 2021	Training provided across all operations. Training records provided to EBRD and IFC.	
2.5	Conduct a labour assessment covering Indorama's workforce at directly operated cotton farms and cotton gins. Senior Lenders to approve on the ToR and consultants.	Appropriate management of labour standards for direct employees	EBRD PR2/PR4 IFC PS2 Uzbek Labour Laws	Company resources	September 2021 November 2021	Labour assessment provided to Senior Lenders for approval.	

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	Based on the labour assessment findings if needed develop a corrective action plan with deadlines and dedicated resources to address all findings.		ISO 45001			Corrective action plan approved by Senior Lenders,	
2.6	Develop and implement a monitoring system to assess the labour conditions of contract workers in contract farms during harvesting, including but not limited to, forced and child labour, and hours worked by contract farm workers. 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.	Appropriate management of labour standards on contract farms	EBRD PR2 IFC PS2	Company resources	June 2021 2021 cotton harvest	Monitoring system reviewed and approved by Senior Lenders Verified by independent monitoring (e.g. through independent NGOs, the ILO TPM/Decent Work programme, etc.) Reports shared with the Senior Lenders.	
PR3/PS3	Resource Efficiency and Pollution Prevention						
3.1 IFC ESAP 3.1.a, 3.1.b, 3.2 and 3.3	1. a) Promote efficient and sustainable use of agricultural water in the project's four districts through follow-up on the results of the water supply and use during previous irrigation seasons, and the baseline findings of the Water Balance	Efficient use of irrigation water and implementation of sustainable water resources management plan	EBRD PR 3 IFC PS 3	Company resources (Indorama Irrigation team) Independent Irrigation and Water	1.a) By end September 2021	1.a) Water Resources Management Action Plan (with a timeline for action items) developed based on results and available data from irrigation seasons (2020-2021) taking into consideration baseline findings of Water Balance	

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	<p>Study notably in areas of water shortage;</p> <p>b) Ensure ongoing monitoring and metering of its water requirements for directly managed farms.</p>			Resources Management consultant as required.		Model and its recommendations.	
					1.b) Starting September 2021 and ongoing.	1.b) Implementation of Water Resources Management Action Plan across Indorama's agricultural lands currently under production including adaptation measures in areas of water shortages	
					1.c) September 2021 and ongoing	1.c) Monitoring records of water supply (by government) and use (by Indorama) in four districts are submitted on a periodical basis starting with operational sub-districts/completed redevelopment	
	2. Continue to engage with different stakeholders through the existing Water Consumer Associations (WCA) including government and water users. In coordination with the Ministry of Water Resources and the existing WCA, Indorama Agro				2.a) By end September 2021	2.a) Water Stewardship Program is developed in consultation with relevant stakeholders including Ministry of Water Resources, WCA and other users in project area.	

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	<p>shall establish and implement 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>				2.b) Starting September 2021 and ongoing.	2.b) Water Stewardship Program is implemented, across Indorama's agricultural lands currently under production, including relevant stakeholders (Ministry of Water Resources and other water users in project areas).	
					2.c) Starting September 2021 and ongoing.	2.c) 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.	
	3. Check quality of water consumed for drinking and domestic uses in the Project premises, and if necessary treat in line with WHO drinking water standards.				3. Starting December 2021 and ongoing (to be completed before facilities become operational)	3. Results of drinking water quality tests in line with WHO standards. Treatment facility established if needed.	

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3.2 IFC ESAP 3.4	Drainage: Introduce strict instructions on preparation of fertilizers, pesticides and other agrochemicals solutions, Undertake accurate identification of crops needs.	Prevent negative impacts from water drainage	EBRD PR 3 IFC PS 3	Company resources	December 2021	Training provided to Indorama Agro staff handling agrochemicals material including application and drainage limits, including monitoring records.	
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 discharges are 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: Amend existing Agro-pesticide Management Policy and Integrated Pest Management to: 1. develop a screening procedure, as part of the management plan for agrochemicals/pesticides, to regularly review active ingredients in use against WHO and EU databases to identify plant protection products which are classified as extremely or	Prevent negative impacts from pesticide use	EBRD PR 3 IFC PS 3	Company resources	December 2021 December 2021	Plan for the management of agrochemicals/pesticides storage and use, including screening procedure Storage and Emergency Action Plan for accidental discharge of agrochemicals	

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	<p>highly hazardous, or subject to phase-out or ban. In such cases, Indorama Agro will seek legally approved alternatives and utilise in accordance with the management plan for agrochemicals/pesticides.</p> <p>2. avoid soil contamination, Indorama Agro shall (i) store hazardous materials in a manner that prevent leaks and spills with adequate bunding 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</p> <p>3. develop an Emergency Action Plan to respond to accidental discharge of petroleum products, pesticides and other agrochemicals into soil, drainage collectors and irrigation canals</p>						
PR4/PS4	Community Health, Safety, and Security						
4.1	Undertake detailed assessment of potential community health and safety risks and impacts and develop a Community Health and Safety Management Plan covering, as necessary, issues including (but not limited to):	Prevent or address any adverse impacts on the health and wellbeing of local communities	EBRD PR4 IFC PS4	Company resources Independent EHSS consultant as required	August 2021	Community health and safety management plan reviewed by and agreed with EBRD and IFC	

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	<ul style="list-style-type: none"> - Expatriate worker accommodation - Transportation, storage and use of agrochemicals and other hazardous substances - Use of security guards - Road safety measures pertaining to movement of Project Vehicles <p>Senior Lenders will review and approve the ToR for the assessment</p>						
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 are 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	Livelihood restoration	EBRD PR5 IFC PS5	Indorama Agro Senior international resettlement expert,	July 2021 September 2021	International resettlement expert selected by IFC and EBRD and hired by Indorama Agro Livelihood restoration plan developed, reviewed and approval by Senior Lenders	

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	Restoration Plan (LRP) to mitigate and address impacts identified to meet IFC's PS5 and EBRD's PR5 requirements on livelihood restoration with timeline, budget, and detailed monitoring plan. Indorama Agro will allocate adequate resources (including financial resources) to implement the livelihood restoration plan developed.						
5.2 IFC ESAP 5.2	Update the Community Asset Programme (CAP) with income generation programmes with concrete steps for implementation. Include a clear definition of beneficiaries to best possible extent and a monitoring program to assess impacts.	Provide additional benefits for affected communities	EBRD PR1 & PR5 IFC PS1 & PS5	Indorama Agro IFC Advisory Services	September 2021	Updated CAP received, reviewed and approved by IFC and EBRD	
5.3	Monitor implementation of LRP	Livelihood restoration	EBRD PR5 IFC PS5	Indorama Agro	Ongoing on a semi-annual basis; first report to be delivered by March 2022 (6 months after approval of LRP)	Monitoring reports submitted for review and approval by Senior 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 Senior Lenders Completion audit submitted for review and approval by Senior Lenders	

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5.5	Update the land acquisition and livelihood restoration framework for future land acquisition.	Ensure future land acquisition is managed in line with Senior Lenders' requirements	EBRD PR5 IFC PS5	Independent resettlement expert	January 2022	Land acquisition and livelihood restoration framework approved by Senior Lenders.	

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PR6/PS6	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>1.</p> <p>3) BCI approved verification organisation will be hired. Terms of reference for its 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	July 2021 for items i to iii Item iv: August 2021 work plan for verification activities Ongoing external verification	<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						

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10.1 IFC ESAP 10.1	Recruitment of two female Community Liaison Officers (CLOs) reporting directly to the Company Director Training of CLOs to have the competences to safely address any reports of gender-based violence and harassment	Management/monitoring of social risks	EBRD PR1 and PR10 IFC PS1	Company resources	June 2021 September 2021	Evidence of hiring of two female CLOs Training records shared	
10.2	Undertake regular community consultations for the identification of environmental and social issues of concern to the communities and undertake targeted monitoring studies specifically designed to respond to these concerns as necessary and revert back to respective communities.	Management/monitoring of environmental and social risks Meaningful engagement of project affected communities	EBRD PR1 and PR10 IFC PS1	Company resources Expert consultants as necessary	Consultation meetings starting in June 2021 and semi-annual thereafter	Development of time-bound plan for the community consultation activities for review by the Senior Lenders Consultation reports shared with Senior Lenders	
10.3	Review performance of existing community grievance mechanism and make the necessary improvements to ensure all grievances are received, recorded and addressed promptly and effectively, without any reprisals to the complaining parties.	Timely and effective management of grievances	EBRD PR10 IFC PS1	Company resources Expert consultant	a) Prior to first disbursement b) July 2021 c) August 2021	a) ToR for third party review agreed with the Senior Lenders b) Internal review of existing community grievance mechanism and necessary improvement measures implemented c) Third party review initiated, and plan/proposal shared and agreed with the Senior Lenders	
10.4	Disclose annual E&S performance reports with a summary of key E&S impacts	Meaningful engagement of	EBRD PR10	Company resources	a) January 2022	a) Scope of annual E&S disclosures agreed with the Senior Lenders	

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	and risks, how they were mitigated and key indicators of E&S performance (including incidents, grievance resolution etc.) in a format accessible to stakeholders.	project affected communities	IFC PS1		b) April 2022	b) First annual E&S report made public on Company website and locally.	