



Uzbekistan: Cotton Farming Project ESIA

Volume IV – ESMMP

16 December 2020

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Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	07.10.19	S Goncharov E Mokrinskaya	A Strokina	M. Melinte	Volume IV – Draft ESMMP
B	28.01.20	S Goncharov E Strokina	H. Mills	M. Melinte	Volume IV – Draft ESMMP. Second Revision
C	21.02.20	S Goncharov E Strokina	H. Mills	M. Melinte	Volume IV – Draft ESMMP. Third Revision
D	28.02.20	S Goncharov E Strokina	H. Mills	M. Melinte	Volume IV – Draft ESMMP. Fourth Revision
E	28.02.20	E Strokina	H. Mills	M. Melinte	Volume IV – Final ESMMP
F	16.12.20	E Strokina	H. Mills	M. Melinte	Volume IV – Final ESMMP for disclosure

Document reference: 42484 | 06 | F

Information class: Standard

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Acronyms

Acronym	Term
ACs	Affected communities
CAP	Community Asset Programme
CEAP	Construction Environmental Action Plan
CEMP	Construction Environmental Management Plan
CLO	Community Liaison Officer
CMP	Contractor Management Plan
CSR	Corporate social responsibility
CTMP	Construction Traffic Management Plan
DD	design documents
EBRD	European Bank for Reconstruction and Development
E&S	Environmental and Social
EIA	Environmental Impact Assessment
EHS	Environmental, health and safety
EMS	Environmental Management System
EPRP	Emergency Prevention and Response Plan
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
GAP	Gender Action Plan
GIIP	Good International Industry Practice
GoU	Government of Uzbekistan
H&S	Health and safety
HR	Human resources
IFC	International Finance Corporation
KPI	Key performance indicator
LRP	Livelihood Restoration Plan
MS	Method Statement
PCRs	Physical Cultural Resources
PDR	Personal development reviews
PPE	Personal protective equipment
PR	Performance Requirements
PS	Performance Standards
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
TMP	Traffic Management Plan

1 Introduction

1.1 Overview

The primary objective of an Environmental and Social Management Plan (**ESMP**) is to provide a summary list of environmental and social measures intended to mitigate or prevent potential adverse impacts of the proposed cotton farming project in Uzbekistan.

ESMP includes the following:

- Measures to ensure compliance with the law of Uzbekistan, including design, construction and operation requirements, environmental and sanitary regulations, health and safety (**H&S**) requirements, etc.;
- Measures aiming to fulfill financiers' requirements (hereinafter “**the applicable international requirements**”) to management of impacts, records and reporting (Volume II, Chapter 5). For avoidance of duplication of activities, records and reporting, the financiers' requirements which overlap requirements of Uzbekistan Law are not considered separately. Respective notes are included as appropriate;
- Recommended best practice in the sphere of impacts management, monitoring and reporting.

ESMP provides a guideline for:

- Indorama Agro with respect to ensuring compliance with environmental, health and safety and social requirements of the law and lending agencies and contractors involved for engineering design and construction with respect to the Project environmental and social (**E&S**) aspects to be taken into account at design and construction
- Community, lenders and insurers with respect to monitoring of the Project implementation against requirements of Uzbekistan law and applicable international requirements.

Responsibility for ESMP implementation is distributed between Indorama Agro (all phases of the Project), and contractors (design development and construction).

Where responsibilities fall to the construction contractors, these should be implemented via Construction Master Plan (CMP), Method Statement (MS) or Construction Environmental Management Plan¹ (**CEMP**) being integral part of the construction contract.

Indorama Agro will actively seek to monitor, audit and assess the compliance of all parties involved in the Project implementation, and ensure that corrective actions are taken when necessary to maintain performance in line with the law and applicable international requirements specified in ESMP.

1.2 Background Information

The environmental and social management recommendations for the Project in ESMP are developed on the following background:

- ESIA Consultant's visits to the Project site in July, August and December 2019
- Information collected by Mott MacDonald (MM), the ESIA Consultant, as part of ESIA studies
- ESIA materials (Volume II of the ESIA Report)
- Environmental and Social Baseline Studies (Volume III)

¹ Construction Environmental Management Plan is required by the International Finance Corporation. Requirements to its content are fully addressed in the respective sections of design documentation, CMP, MS under Uzbekistan Law. Development of a separate Construction Environmental Management Plan (CEMP) is not required if all measures of ESMP are covered by CMP and/or MS.

1.3 Structure of ESMP

Chapter 2 herein presents the various mitigation measures as identified through the ESIA process. For each mitigation measure, relevant standards are identified together with monitoring measures and key performance indicators (**KPI**'s). For each mitigation activity, an implementation route or specific sub-plan has been identified

Chapter 3 provides a more detailed discussion of various action plans to be developed with the framework of ESMP.

Chapter 4 outlines the various institutional arrangements to be put in place by the project to enable the implementation of the ESMP and its various sub-plans. Where relevant, various capacity building measures have been identified to ensure that the various institutional arrangements are appropriate and qualified for the allocated tasks.

Chapter 5 provides an overview of monitoring and reporting requirements associated with the activities and commitments contained within the ESMP. The monitoring and reporting requirements include a “management of change” capacity to the ESMP reflecting that it is intended to be a live document subject to regular review and update as the project evolves.

Budget for ESMP implementation at the construction and operation phases has not been estimated, as the cost of specific environmental measures and equipment, as well as cost of safety measures can be defined only at the design stage. Health and safety costs including provision of individual and collective protection equipment, training, etc. cannot be assessed as long as the list of professions and personnel numbers for construction and operation are not known.

2 Summary of Mitigation Measures

2.1 Overview

The mitigation measures as identified through the ESIA process are summarized in the following sub-sections split between the construction phase and the operations phase of the Project. Furthermore, relevant monitoring recommendations or KPIs are identified for each aspect of mitigation and an implementation route or plan is identified. The implementation plans are detailed in Chapter 3.

2.2 Indorama Agro's Role

Indorama Agro will monitor contractors' (sub)contractors' performance on a regular basis throughout the duration of the construction period, including:

- Review contractor documents against the requirements of ESMP
- Undertake regular monitoring activities at the construction sites
- Monitoring of records and reporting within the national requirements
- Conduct regular environmental, health and safety (**EHS**) meetings with contractors.

Indorama Agro will ensure compliance with the environmental requirements established by Uzbekistan law through control and monitoring of contractors and has a Global Environmental Management System (**EMS**) accredited to ISO 14001 to be implemented in full scale in the cluster at the later stage of the Project implementation. The ISO 14001 requires that environmental aspects and risks of any activity or development are identified, assessed and reported, and mitigation of any non-compliances is scheduled and monitored. In order to meet these requirements, Indorama Agro should appoint a dedicated person (internal auditor) and train him/her on the methods of identifying potential environmental aspects and risks, environmental management and reporting.

Responsibilities of the internal auditor will also include preparation of acts to record any identified gaps in contractors works during the construction stage of the Project and instructions to contractors on the required corrective actions. It is expected that the same person(s) will be in charge of environmental management at both regions at the construction phase and during operation.

Indorama Agro being the owner of the Project will control contractors' performance through appropriate provisions of contract agreements that will ensure implementation of the ESMP including:

- Compliance with the Project Human Resources (**HR**) Policy and Procedures
- Compliance with the Project Recruitment Policy and Procedures
- Signing individual contracts with the Project personnel
- Compliance with the Uzbek labour law, EBRD Performance Requirement 2 (**PR2**), IFC Performance Standard 2 (**PS2**) and protection of workers
- Compliance with the Workers' Accommodation Plan
- Engagement with the Project Grievance Mechanism
- Conformance with Indorama Agro's Worker Code of Conduct (labour regulations)
- Implementation of all H&S measures required by law and the ESMP
- Implementation of the Emergency Prevention and Response Plan (**EPRP**).

At the design phase Indorama Agro will check the design documents and Construction Master Plan for compliance with the ESMP. If needed, Indorama Agro may require preparation of a separate Environmental

Management Plan by contractors. During the construction phase Indorama Agro will closely monitor all reports received from the contractors to monitor compliance.

Mitigation measures described for the operational phase will be implemented and managed using the EMS system and instructions and procedures for environmental management.

2.3 Contractors' Role

It will be the responsibility of the contractors to implement the construction phase mitigation measures outlined within this document. Compliance of the contractors will be managed via contract clauses if needed. Contractors will be required to undertake regular monitoring and inspections and will be required to keep up to date records as prescribed in this section, provide access for Indorama Agro personnel for inspection of the construction site and all temporary facilities, and report regularly to Indorama Agro.

2.4 Lenders' Environmental and Social Consultant

An Environmental and Social Consultant will be employed by the International Lenders to undertake periodically checks during the construction and operation phases of the Project to ensure compliance with this ESMP. Indorama Agro and contractors will be required to make available all records of monitoring and inspection activities.

2.5 Construction Mitigation Measures Summary

2.5.1 Introduction

The following sub-sections address individual planning, preparation, construction and other activities of the Project identifying specific E&S mitigation, management and monitoring measures to be addressed both by the Company and contractors where relevant and as required.

The major adverse social impact of the land development, preparation and construction phase of the Project is linked to the completed land acquisition process and would require immediate action by the Project in mitigating economic displacement of cotton farmers and planning livelihood restoration actions. Without proper mitigation a major risk of the construction phase may potentially impact construction workers in respect of their labour and working condition, health and safety, exposure to the construction phase hazards as well as security and wellbeing in the workers' accommodation. Moderate health and safety risk may impact local communities and the Project will need to establish good management practises for the construction to prevent or minimise such risks.

Majority of environmental impacts during planning and construction are assessed to be negligible to minor and proposed mitigation will make it possible to reduce environmental impacts further to being no residual impacts. Good housekeeping and good international practices will be applied during construction by the Company and contractors.

Appropriate mitigation measures for the land development, preparation and construction phase will be included in the design documentation or Construction Master Plan or Method Statement, or otherwise (when incorporation into the above documents is not possible) they will be covered in a separate document – Contractor's Environmental Management Plan.

2.5.2 Social Management

Table 2.1: Social Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
1	Avoid or minimise displacement	Land acquisition by the Project	<ul style="list-style-type: none"> Finalise and disclose the Project Resettlement Policy Framework to guide any future land acquisition process and plan measures on livelihood restoration Complete a full asset survey of remaining structures and assets remaining on the land allocated to Indorama Agro under Phase I land acquisition process for all Project districts to identify, agree and pay compensation to the affected farmers Draft, and disclose, get lenders' approval and implement, a Livelihood Restoration Plan in line with the applicable requirements, including a compensation protocol. The LRP includes eligibility criteria, an entitlement matrix, livelihood restoration options and a displacement-oriented grievance mechanism. Undertake consultations with the affected owners Phase 2 economic displacement will need to be managed in alignment with the LRP. Should any physical displacement be required as the Project evolves, a Resettlement Action Plan will be developed and implemented based on the Resettlement Policy Framework 	EBRD PR5. IFC PS5. National requirement.	<ul style="list-style-type: none"> RPF disclosed Assets survey completed and compensations paid LRP agreed with the Lenders and disclosed Detailed records kept of all land transactions Signed land titles Recording of grievances in a grievance log showing close-out dates and measures taken to resolve and prevent future grievances Signed acceptance sheet for each grievance showing complainant's satisfaction with close-out measures Minutes and other records kept of all consultations with affected people Records of livelihood restoration measures (training records, number of people taking part, income tracking) and their effectiveness LRP close out audit showing livelihoods have been restored or improved 	<ul style="list-style-type: none"> Project Resettlement Policy Framework Livelihood Restoration Plan Grievance mechanism
2	Avoid temporary land take or loss of properties	Land acquisition during construction	<ul style="list-style-type: none"> The Company will introduce and implement the public grievance mechanism. Contractors are to avoid as far as possible temporary land take or loss of properties from sensitive land/property users. Incorporate a contract clause with the requirement to contractors to avoid temporary land take Contractors to reinstate/restore the land to its pre-construction conditions (including erosion control measures, re-contouring the land, replacing the topsoil, restoration of vegetation and habitats, regaining its previous use). Property owners be reasonably compensated in case of any damages during construction in alignment with the RPF. 	EBRD PR5. IFC PS5.	<ul style="list-style-type: none"> The public grievance mechanism introduced and implemented Documentation of temporary land take Land is reinstated/restored by contractors to its pre-construction conditions Contractor's records/documents/budgets on compensation for the loss of land/property as a result of construction Confirmation of compensation payments to property owners/land users. 	Contract clauses in the contracts with the main contractor and sub-contractors.
3	Equal opportunities at employment and benefits for local people	Recruitment	<ul style="list-style-type: none"> Develop and disclose the Project Recruitment Policy in the ACs and local employment centres 	Uzbek Labour Code. EBRD PR2. IFC PS2.	<ul style="list-style-type: none"> Project Recruitment Policy developed by Indorama Agro and disclosed to contractors. 	Project Recruitment Policy
4	Safeguarding human rights in labour for all workers	Human rights management	<ul style="list-style-type: none"> Develop a Project Human Rights Policy Disclose Human Rights Policy to all contractors and their sub-contractors and construction workers Bind contractors and sub-contractors to adhere to the Project Human Rights Policy 	Uzbek Labour Code EBRD PR 2 IFC PS2	<ul style="list-style-type: none"> Human Rights Policy developed Sign-up sheets indicating agreement to comply with the Project Human Rights Policy of contractors, sub-contractors and their workers. Contract clauses 	<ul style="list-style-type: none"> Human Rights Policy Contract clauses

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
5	Preventing conflict and maintaining wellbeing	Management of labour force influx and population changes; Security provision	<ul style="list-style-type: none"> ● Include in the contractors' contracts clauses that prohibit discrimination of any kind, child and forced labour and promote equal opportunities for the workers ● Supply chain reviews for child labour, forced labour and OHS issues in the contractors' organisations ● Introduce clauses in the contractors' contracts to ensure compliance with the applicable international requirements and Company's policies, plans and procedures. ● Contractors to develop a Workers' Code of Conduct and include it in the employment contract with the contractor's workers (including sub-contractors). ● Contractors to arrange voluntary medical checks for the construction workers (at the expense of the contractors). ● Contractors to prepare a Security Management Plan for each site. ● Contractors to provide training to security staff to be employed in human rights and use of force. ● Contractors to conduct investigations of unlawful behaviour by security guards and report to the Company. ● The Project Community Liaison Officers (CLOs) to deal with the community grievances related <i>inter alia</i> to community health, safety, security and wellbeing. 	EBRD PR1 and PR2. IFC PS1, PS2 and PS4	<ul style="list-style-type: none"> ● Clauses in the contractors' contracts ● The Workers' Code of Conduct developed by the contractors ● Sign-up sheets indicating workers' agreement to comply with Workers' Code of Conduct ● Records of training. ● Contracts with local health care organisations to arrange medical checks. ● Security Management Plan developed and implemented. ● Investigation records. ● Community Grievance Log and records of investigations. 	<ul style="list-style-type: none"> ● Contractor's employment contracts with construction workers. ● Workers' Code of Conduct ● Training programmes for foreign workforce and security staff. ● Opportunities for voluntary medical checks of the foreign workforce. ● Security Management Plan.
6	Safeguarding fair treatment, non-discrimination and labour rights for all workers	Labour and working conditions management during construction	<ul style="list-style-type: none"> ● Develop Project Human Resources (HR) Policy ● Introduce a clause in all contracts with the Project contractors with the requirement to achieve compliance with the Project HR Policy, Uzbek statutory labour requirements and applicable international requirements. ● Incorporate expectations on prohibition of child labour and forced labour into contractors' contracts. ● Contractors to share their policies on child and forced labour. The Company to verify that it includes the risk of child and forced labour and describes mitigating steps to address child and forced labour issues. ● Develop template worker contract to share with contractors for use with all workers ● Contractors to issue individual contracts of employment for all staff detailing their rights and conditions. ● Contractors to develop, formalise and disclose a workers' grievance mechanism. ● Contractors to hold toolbox talks on labour law issues and the labour grievance mechanism. ● Supply chain reviews for child labour, forced labour and OHS issues in the contractors' organisations. 	Uzbek Labour Code EBRD PR2 IFC PS2 IFC EHS General Guidelines/ ILO labour requirements.	<ul style="list-style-type: none"> ● Project HR Policy ● Contracts with the main contractor and sub-contractors. ● Copies of contractors' policies on child and forced labour. ● External labour monitoring visits quarterly during construction to verify availability of individual contracts, correct payment of wages and overtime, non-exceedance of maximum hours and other key labour rights issues ● Personnel files in line with Uzbek labour law to contain certificates and qualifications, internal and external training, leave records, record of past abuse/criminal record for security workers. ● Timesheet records. ● Subcontractors' payroll system monitored by contractors. ● Records of toolbox talks. ● Documented reviews of contractors, issues identified, and actions taken. 	<ul style="list-style-type: none"> ● Contracts issued by contractors' HR services for construction workers. ● Contracts with the main contractor and sub-contractors. ● Inclusion of toolbox talks on labour relations in contractors' H&S plans. ● Contractors' supply chain review. ● Monitoring via the HR Department of Indorama Agro.
7	Monitoring contractors' compliance with the national law and applicable international requirements	Management of contractors	<ul style="list-style-type: none"> ● Advise (sub)contractors on the requirement to comply with the applicable national and international requirements for labour, health, safety and security of workers 	EBRD PR1 and PR2. IFC PS2.	<ul style="list-style-type: none"> ● Contract clauses ● The Company to employ or assign EHS Manager responsible for EHS monitoring of contractors. ● EHS Manager appointed by contractors. 	<ul style="list-style-type: none"> ● Contractor Management Plan. ● Contractors' contracts. ● EHS monitoring of contractors

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> The Company to employ or assign EHS Manager and EHS Officers responsible for EHS monitoring of contractors Contractors to appoint EHS Manager Clauses to be inserted in contractors' contracts to ensure compliance with the following documentation and procedures: <ul style="list-style-type: none"> Human Resources Policy and Procedures Human Rights Policy Recruitment Policy and Procedures Grievance Mechanism Worker Code of Conduct Occupational Health and Safety Plan Emergency Preparedness and Response Plan. 		<ul style="list-style-type: none"> Clauses in contractors' contracts to ensure compliance with the following documentation and procedures: <ul style="list-style-type: none"> Human Resources Policy and Procedures Human Rights Policy Recruitment Policy and Procedures Grievance Mechanism Worker Code of Conduct Occupational Health and Safety Plan Emergency Preparedness and Response Plan. 	
8	Workers' grievance mechanism during the construction phase	Grievance management	<ul style="list-style-type: none"> Indorama to develop, formalise and disclose its Workers' Grievance Mechanism within the Company Contractors to develop, formalise and disclose their own Workers' Grievance Mechanisms. In the event that contractors fail to provide Workers' Grievance Mechanism, Indorama to allow access to its own grievance mechanism for any project worker Toolbox talks on the Workers' Grievance Mechanism. Contractors to document how workers are informed about the mechanism. Contractors to maintain the grievance log, including resolutions and timeframes. 	EBRD PR2. IFC PS2.	<ul style="list-style-type: none"> Documented Workers' Grievance Mechanisms established. Documents confirming that construction workers are informed about the mechanism, including sub-contractors' workers. Monthly monitoring of grievance logs by the HR Department of Indorama Agro to identify patterns or area where actions can be taken to prevent recurrent problems. Annual summary of use of grievance mechanism and resolution of labour grievances. 	Indorama's Worker Grievance Mechanism The contractors' Workers' Grievance Mechanism. Inclusion of the Workers' Grievance Mechanism toolbox talks in the OHS training plans. Monthly grievance reporting. Annual reporting on the use of grievance mechanism and resolution of labour grievances.
9	Safeguarding health and safety of construction workers	OHS management	<ul style="list-style-type: none"> Contractors to develop an Occupational Health and Safety Plan (OHS Plan)² Provisions in the contracts with contractor and sub-contractors with the requirement to implement and monitor implementation of the OHS Plans and penalties for non-compliance or compliance incentives. Indorama Agro to assign the Project EHS Manager and if needed support staff to manage occupational health and safety (OHS) including: <ul style="list-style-type: none"> Assess OHS risks at the construction sites and camps and implement preventive and protective measures Carry out weekly site walkovers to identify hazards and act on findings Hold meetings with contractors to discuss OHS improvements Monitor contractors' training provision and records Keep record of all accidents and occupational diseases or ill health. Follow up to resolve issues and prevent recurrence Maintenance of personal protective equipment (PPE) and PPE Use Register. 	EBRD PR2 and PR4. IFC PS1 and PS2. IFC General EHS Guidelines. National requirements.	<ul style="list-style-type: none"> Occupational Health and Safety Plan Project organogram. Records of risk assessments, site walkovers, identification of OHS and PPE compliance issues and actions to remedy. Minutes of meetings. Results of medical examinations, information on occupational injuries and diseases. Logs showing accidents and occupational diseases or ill health with supporting investigation and response details. External monitoring visits quarterly during construction to verify implementation of plans. Contracts with sub-contractors. Records in the PPE and PPE Use Register. Training records to be maintained for: 	OHS Plans of the contractors, sub-contractors and Indorama Agro. Contract clauses Key personnel job descriptions (, EHS Manager OHS Manager) Emergency Preparedness and Response Plan developed for the Project and adapted for contractors' workers on the Project sites. Contractors to provide safety training. Indorama Agro to monitor content and provision Contractors' OHS Plans.

² Covering the hazards identified for the Project site, type of work and other Project activities such as driving on public roads; provision of preventive and protective measures for all hazards; H&S training including how to recognise hazards, unsafe areas and occupational disease or injury; information about safe working methods including the production of individual worksheets for discreet hazardous tasks; use of PPE; management of hazardous chemicals; and road safety measures such as speed limits on public roads and on site, etc.

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> • Training programmes for all construction workers (including sub-contractors) in OHS training, use of PPE, specific task H&S, first aid training. • Keeping of individual training certificates for each employee which they can retain for obtaining future work. • Personnel files to include next of kin details. • Registration and recording of all incidents, accidents and occupational diseases. • Adequate medical facilities to be provided – first aid kits, means of fracture immobilization and transportation of affected persons, training of team managers and supervising personnel on first aid methods. 		<ul style="list-style-type: none"> – OHS and hazardous work training – Emergency drills – Security guards. • Individual workers files to keep individual training certificates for each employee. • Records of incidents, accidents and occupational diseases. • Supply chain records on any issues of child or forced labour and OHS risks. • First aid kits, means of fracture immobilization and transportation of affected persons, training of team managers and supervising personnel on first aid methods. 	
10	Safeguarding H&S and wellbeing of local communities	Management of risks for communities H&S, security and wellbeing due to construction site security, construction workforce and accommodation	<ul style="list-style-type: none"> • Construction Environmental and Social Action Plan to include: <ul style="list-style-type: none"> – Security arrangements including fencing, locks, security guards, CCTV, signage. – Logging system to monitor entries to site. – All security guards to be vetted, their records checked for past abuse (as required by law). All security guards to hold adequate licenses. Regular refresher training (if required), recorded in logs. – Uniforms and ID provided to security guards. – Investigation of unlawful behaviour by security guards, action taken, and reports made to authorities if necessary. – Vehicles to carry spill kits, first aid kits and fire extinguishers, drivers to have communication devices for emergency use and be first aid trained. – Local communities' representatives (mahallas) to be aware (trained) of construction hazards and provided with an action plan if needed. – Availability of the community grievance mechanism in the contractor organisation and their sub-contractors. • Construction Traffic Management Plan (CTMP) 	National requirements EBRD PR2 IFC PS4	<ul style="list-style-type: none"> • Security guards' records for past abuses and licenses kept in personnel files. • Training records. • Site entry and exit logs. • Logs of security incidents and actions to remedy. • Monitoring of grievance logs to identify if complaints are made about security guards. Action taken and recorded. • Vehicle checks. • Quarterly external monitoring. • CTMP 	<ul style="list-style-type: none"> • Contractor Security Plans • Community grievance mechanism to be implemented by contractors with oversight by Indorama Agro
11	Promoting engagement with local communities	Stakeholder engagement and grievance management during the construction phase	<ul style="list-style-type: none"> • Updates to and implementation of the Project SEP and performance of the community grievance mechanism. • CLOs to carry out analysis of grievance log to identify common or recurrent problems. • CLOs to follow-up grievance issues with the Indorama Agro management and contractors to deal with the causes and identify actions to prevent further recurrence. 	IFC PS1	<ul style="list-style-type: none"> • Updated SEP for the construction phase. • Grievance log for the construction phase. • Meetings minutes. • Disclosed information dated and kept on file. • Communications log • Records as per SEP. 	<ul style="list-style-type: none"> • Stakeholder Engagement Plan. • Project CLOs

2.5.3 Air Quality Management

Table 2.2: Air Quality Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
12	Minimise dust emissions to prevent nuisance and protect human health	Sites / fields preparation and construction. Traffic and vehicle movements	<p>Minimising dust from material handling sources by using covers, water suppression.</p> <p>Minimising dust from open sources, including storage piles, by using control measures such as installing enclosures and covers, and increasing the moisture content.</p> <p>Employ dust suppression techniques such as applying water or non-toxic chemicals to minimise dust from vehicle movements.</p> <p>Prohibit levelling and other dusty works in windy days at fields adjacent to the residential houses.</p> <p>Planning of dust management measures in CMP (MS).</p> <p>No open burning of solid waste and vegetation remains including cotton branches.</p>	EBRD PR3, PR4, PR6. IFC EHS General Guidelines. IFC PS3. National requirements.	<p>Contractor(s) Environmental Manager to undertake visual checks of construction areas ever two weeks.</p> <p>Contractor to undertake daily visual inspections</p> <p>Maintenance of record of violations where observed and disciplinary action imposed on contractor.</p>	<p>Contractor to implement environmental measures in accordance with the design documents and Construction Master Plan.</p> <p>Contractor(s) Environmental Management Plans. Dust management measures.</p>
13	Minimise construction and agricultural machinery / vehicle emissions to protect human health	Construction traffic and machinery associated with construction / field works	<p>Manage emissions from mobile sources as per IFC EHS guidelines for Air Emissions and Ambient Air Quality.</p> <p>Locate mobile generators and pumps away from receptors (workers' camps and residents).</p>	EBRD PR3, PR4, PR6. IFC EHS General Guidelines. IFC PS3. National requirements.	<p>Contractor(s) Environmental Manager to undertake visual checks of construction vehicles every week (violation to be reported only).</p> <p>Contractors to maintain servicing records for all machinery.</p> <p>Indorama Agro Machinery services to undertake visual checks of agricultural vehicles every day.</p>	<p>Contractor to implement environmental measures in accordance with the design documents and Construction Master Plan.</p> <p>Indorama Agro to ensure applicable level of pollutants in exhaust gases in accordance with the national requirements (Indorama Agro Environmental Monitoring Plan).</p>

2.5.4 Management of Ground Conditions and Ground Water

Table 2.3: Ground Conditions and Ground Water Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
14	Mitigate health impacts by reduction of dust emissions. Minimize disturbance of any existing historic soil contamination	Earthworks	Use best practice construction methodology in line with legal regulations and best practice guidelines. Undertake earthworks during periods of low wind strength to minimise the level of potentially contaminated windblown dust. Risk assessment to identify the level of PPE required. Workers to wear PPE to protect against inhalation of dust depending on outcome of risk assessment. Use 'damping down' measures during excavation and movement of contaminated soils to prevent dust migration.	EBRD PR4 IFC EHS General Guidelines IFC PS3 National requirements	Weekly monitoring to be carried out by Indorama Agro EHS Manager. Records of risk assessments, site walkovers, identification of OHS and PPE compliance issues and actions to remedy.	Contractor to implement environmental and safety measures in accordance with the design documents and Construction Master Plan. OHS Plan. Indorama Agro to implement environmental and safety measures in accordance with the national law/
15	Management of contaminated soils to minimise risk to human health	Earthworks	In all cases where contamination is identified in soils, risk assessment will be undertaken if required to determine the method of subsequent remediation. Development of Remediation Plan, including soil washing. Guidance regarding the correct procedure for storage, handling and disposal of contaminated soils (historical contamination by oil and pesticides) will be detailed in CMP (MS), if required.	EBRD PR3, PR6 IFC EHS General Guidelines IFC PS3 National requirements Best practice	Risk assessments and incident reports	CMP (MS). Remediation Plan
16	Protection of soil quality, groundwater quality and human health.	Accidental leaks and spills of hazardous materials	Use best practice construction methodology in line with national regulations and best practice guidelines. Hazardous materials suitably stored to prevent leaks and spills. Drip trays to intercept leaks and spills from equipment and during refuelling. Bunding for all fuel and chemical storage. Development of the Oil Spill Liquidation Plan. Preparation of extract from Oil Spill Liquidation Plan for the construction needs and making construction personnel aware of the Plan. Spill response kits to be maintained on sites and vehicles for their use. Clean-up contaminated material in case of fuel leaks.	EBRD PR3, PR6 IFC EHS General Guidelines IFC PS3 National requirements	Undertake check-up of soil and water quality if required, in case of large spills. Site inspections by Environmental Manager and inspection reports to be made available to Lenders Environmental and Social Consultant.	CMP (MS). Extract from Oil Spill Liquidation Plan for the construction sites and awareness of construction personnel
17	Protection of soil quality, groundwater quality and human health.	Wastewater from construction, integrity testing and cleaning	Use best practice construction methodology in line with legal requirements and best practice guidelines. The quality of construction drainage waters not to exceed maximum allowable concentrations for discharge of wastewater to surface water.	EBRD PR3 IFC EHS General Guidelines IFC PS3 National requirements	Monitoring of construction drainage waters quality, results to be made available to external monitors (on request). Regular site inspections.	CMP (MS)

2.5.5 Water Resources and Water Quality Management

Table 2.4: Water Quality Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
18	Prevention of surface water and groundwater contamination	Temporary storage of chemicals, oil and excavated material	<p>Use of hard covered, bunded areas for storage of hazardous chemicals and refuelling.</p> <p>Oil interceptors or settlers in areas where fuel is used or stored,</p> <p>Provision of spill kits and records for their use and appropriate disposal to minimise the impacts of any spillages.</p> <p>Surface drainage and site runoff, particularly during rains sent to temporary settlement ponds prior to discharge to water bodies.</p> <p>Store excavated material away from water channels.</p> <p>Cover soil stockpiles.</p> <p>The quality of drainage waters not to exceed maximum allowable concentrations for discharge of wastewater.</p>	<p>ERD PR3? PR6</p> <p>IFC EHS General Guidelines and relevant sector guidelines</p> <p>National legislation</p>	<p>No spills affecting surface water quality.</p> <p>Indorama Agro to audit Contractor storage areas for construction materials, petroleum products and soil against mitigation requirements, for example, check availability of spill kits, adequate bunded storage for chemicals and fuels.</p> <p>Contractors to monitor surface drainage water in case of spills, results to be reported in construction progress reports and made available to Indorama Agro and Lenders Environmental and Social Consultant.</p>	CMP (MS)

2.5.6 Ecology and Biodiversity Management

Table 2.5: Ecology and Biodiversity Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
19	Minimise habitat loss and disturbance	Construction lay down, layout of associated infrastructure and temporary working areas, including workers accommodation. Field levelling, channels rehabilitation works	Design layout of workers accommodation and location of laydown to use existing cleared areas to minimise habitat loss. Minimise temporary working area size. Access routes for construction and operational activities outside the existing fields, roads and other disturbed areas (if required) to be kept to a minimum. Artificial lighting used on construction sites and workers accommodation will be minimised, shaded and directed downwards to avoid light spillage and disturbance to birds, bats and other wildlife.	EBRD PR6 IFC PS 6 EBRD PR 6	Monthly audit of construction areas. All laydown and working areas to be within pre-determined areas.	CMP (MS)
20	Minimise disturbance to mammals, birds and bats	Noise and light from construction and field preparation activities	Minimise noise disturbance by using modern, lower noise, equipment and compliance with national noise standards. Minimise noisy working at night and use down lighting to prevent light pollution when lighting is required.	EBRD PR6 IFC PS 6 EBRD PR 6 National legislation	Daily monitoring and monthly audit of construction activities. Report on number of incidents where noise levels exceed national requirements.	CMP (MS)
21	Control of invasive plant and animal species	Vegetation clearance, earthworks, and spoil disposal during construction and fields preparation.	Minimise traffic and the distance it has travelled. Source materials locally where possible. Contain any Alien Invasive Species and report their presence through monitoring. If infested areas are identified a wash-down area is essential before entering non-infested areas Train and raise awareness regarding Alien Invasive Species. Record and report the presence of any Alien Invasive Species. Minimize disturbance to, or movement of, soil and vegetation. Retain as much natural vegetation as possible. Use native plants for reinstatement and landscaping. If invasive species is identified as an issue further details including additional mitigation to be included within the CMP (MS). Annual summer visual inspection by experienced biologist (botanist) to identify presence of invasive species, species to be removed by appropriate means if found	IFC PS 6 IPIECA Guidelines on prevention and management of alien species National legislation	Report detailing the extent of existing alien species across the site. Production of the report including monitoring plan. Annual / Extent of invasive species distribution at project site.	CMP (MS)

2.5.7 Materials and Waste Management

Table 2.6: Materials and Waste Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
22	Protection of environment from leakage or spillage of liquid wastes Reduction of fugitive emissions Prevention of negative visual amenity impacts	Waste generation, handling and storage	List of waste management measures to be included in CMP (MS). Identify suitable temporary storage locations for each waste stream. Both the onsite and offsite waste storage facilities will include the following: <ul style="list-style-type: none"> – Separate storage areas for hazardous and non-hazardous wastes. – Separate sites, tanks or containers for the waste streams intended to re-use. – All tanks and waste containers to have covers. – Liquid wastes/oil/chemicals to be stored in bunded areas which can hold 110% of the total storage volume. – Spill kits containing suitable equipment to be available at all times in waste storage areas. 	EBRD PR3, PR4, PR6 IFC EHS General Guidelines IFC PS3 National legislation	Regular site inspections. Monitoring reports to be made available to external monitors.	List of waste management measures included in CMP (MS). Hazardous materials and waste handling rules included in workplace safety instructions.
23	Minimise generation of wastes to be disposed at landfills Minimise waste miles	Waste disposal	Minimise waste generation. Where waste streams are unavoidable, highlight potential re-use and recycling opportunities according to the Best Available Technologies. Identify waste handling (recycling) facilities in close proximity to the Project. Review on an on-going basis, the locally available re-use/recycling facilities to ensure they can accept the waste streams.	EBRD PR3 IFC EHS General Guidelines IFC PS3	Monitoring reports to be made available to external monitors. Documentation of efforts to reduce waste and identify nearby handling and reuse (recycling) facilities.	Indorama Agro Waste Generation and Handling Plan
24	Minimise adverse health impacts	Hazardous materials handling	Occupational Health and Safety Plan(s) aimed at preventing accidents, injuries and work-related diseases through the identification of the causes of physical, chemical and biological hazards and by prioritising hazard elimination, hazard control and hazard minimisation to be implemented	EBRD PR4 IFC PS 2 National legislation	Records of accidents	Contractors' Occupational Health and Safety Plan(s)

2.5.8 Transport Management

Table 2.7: Transport Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
25	Minimise delays to road other road users	Delays to road users as a result of number of construction / agricultural vehicles and trucks	Delivery of construction materials and vehicles and agricultural machinery to the sites should be conducted out of peak hours. Prohibition of vehicles parking along roads.	International Best Practice	Traffic Management Plan of contractors and Indorama Agro	Construction Traffic Management Plan for contractors and Indorama Agro Traffic Management Plan
26	Minimise safety issues	Reduced safety of vulnerable road users on the local roads and of residents affected by construction	Delivery of construction materials and vehicles and agricultural machinery to the sites should be conducted out of peak hours. Prohibition of vehicles parking within boarders of settlements. Sharp parts of vehicles moving outside fields and construction sites should be removed or switched in safe position	International Best Practice	Standard monitoring on road incidents in line with national requirements. Special monitoring is not required.	Safety instructions for drivers
27	Safeguard the safety of road users on the local roads and of residents in settlements located along the roads	Delivery of materials, abnormal loads and transport of workers	Contractor to develop a Construction Traffic Management Plan and where possible design all delivery routes away from settlements. Mandatory adherence to speed limits at all times.	International Best Practice	Indorama Agro to review the Construction Traffic Management Plan	Construction Traffic Management Plan

2.5.9 Noise and Vibration Management

Table 2.8: Noise and Vibration Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
28	Reduce noise nuisance generated by on-site plant and activities	Activities associated with site excavation, levelling and other works	<ul style="list-style-type: none"> All noisy works at sites adjacent to the sensitive receptors will be conducted during the daytime; Unnecessary revving of engines will be avoided, and equipment will be shut down when not in use; Internal haul routes will be well maintained; Plant and vehicles will be started up sequentially rather than all together; Effective exhaust silencing systems or acoustic engine covers will be used as appropriate; Machines will always be operated in accordance with manufacturers' instructions; Care will be taken to keep site equipment away from noise-sensitive areas; <p>Where possible, loading and unloading will also be carried out away from such areas.</p>	EBRD PR4 IFC EHS Guidelines National legislation	All regular monitoring of vehicles noise levels should be carried out at the regular basis	CMP (MS). Contractors' Community Grievance Mechanism

2.5.10 Greenhouse Gases Management

Table 2.9: Greenhouse Gases Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
29	Reduce GHG emissions	Use of vehicles, construction plant and generators with emissions.	Use of new and efficient vehicles and construction plant and generators. All equipment should be maintained and switched off when not in use. Use of plant with EURO-5 engines (where possible)	EBRD PR3 IFC EHS Guidelines	Contractors to provide evidence of new plant being employed, record of plant maintenance. Contractors to provide fuel consumption figures in monthly reports to Indorama Agro.	CMP (MS).
30	Reduce GHG emissions	Staff vehicle movements	Space restrictions for parking of personal cars of personnel whose job duties do not require visiting various sites. Organized transportation of workers to/from work.	EBRD PR3 IFC EHS Guidelines	Options for joint pick up made available to workers.	CMP (MS).

2.5.11 Cultural Heritage Management

Table 2.10: Cultural Heritage Management

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
31	Avoid damage to cultural heritage features. Record archaeological finds	Excavation works during construction phase	In the event of unknown archaeological finds or features being identified during the course of Project construction groundworks, an emergency procedure will be required in order to stop work and allow for the assessment of the archaeological potential of the remains. A 'chance finds procedure' will be included within the CEMP. If buried archaeological remains are of significance, then a system will be put in place to mitigate harm. This may involve protecting the remains or a system to excavate and record the remains.	World Bank's Cultural Resources Policy IFC PS 8	Monitoring is not required	

2.6 Operation Mitigation Measures Summary

2.6.1 Introduction

The following sub-sections address individual Project operation activities identifying specific mitigation and monitoring measures associated with environmental and social aspects where relevant and as required.

Taking into account that the operation of the Project has already unfolded the Company will need to assign priority to operation phase policies, plans and procedures.

2.6.2 Social Management

Table 2.11: Operational Social Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
1	Promote permanent jobs and employment among women and directly affected communities	Information disclosure at recruitment	<ul style="list-style-type: none"> Update the Project Recruitment Policy for the operation phase Bind operational contractors to comply with the Project Recruitment Policy via contract clauses Inclusion in the Project Recruitment Policy a requirement to prioritise local employment for positions that become available Include in the Project Recruitment Policy specific targets to recruit and engage women in other aspects of farming and promote local employment from the directly affected ACs Disclose the Project Recruitment Policy widely in local communities via mahallas, through District Hokimiyats and local employment centres Publish new permanent and seasonal job adverts including information about required skill levels, indicative timeframes for the recruitment process and likely duration of contracts via mahallas, local employment centres and district hokimiyats. Prioritise employment of women and jobless from the ACs 	EBRD PR1 and PR22 IFC PS1 and PS2	<ul style="list-style-type: none"> Project Recruitment Policy updated Targets to employ women and promote local employment are set. Copies of adverts, letters of notification. 	<ul style="list-style-type: none"> Project Recruitment Policy Contract clauses with operational contractors
2	Improve livelihoods and incomes for people in the ACs	Operation recruitment and livelihood restoration	<ul style="list-style-type: none"> Develop a Gender Action Plan (GAP) Identify actions to meet targets of the recruitment policy to recruit and engage women Assess training needs and identify training programmes for existing employees on harassment and gender-based violence Assess training needs of local women to enable their participation in project employment opportunities and training Assess aspects that may form barriers for women accessing training and jobs (e.g. provision of transport, etc.) and incorporate the results in the GAP Develop, plan and implement an upskilling programme for women and seasonal workers in the ACs Identify actions to improve existing skills of women and seasonal workers to fill positions available in the Project. Link the Upskilling Programme to the Project mechanisation schedule Incorporate the Upskilling Programme in the LRP and cross refer to it in the GAP Report on implementation of the upskilling programme as part of LRP reporting Develop, plan and implement a Promotion Programme for women already employed in the Project to enhance career opportunities for the female staff in the Company. 	EBRD PR2 IFC PS2	<ul style="list-style-type: none"> GAP developed Targets to recruit and engage women are set Personal files of the recruited staff Records of training needs assessment Training programmes for existing employees Upskilling programme for women and seasonal workers developed Records of trainings and participants Training certificates Upskilling programme developed and included in the LRP LRP implementation reports Promotion Programme for Women (employed in the Company) Reporting on Promotion Programme actions 	<ul style="list-style-type: none"> Gender Action Plan Livelihood Restoration Plan Compulsory LRP reporting to the International Lenders Promotion Programme for Women in the Company
3	Engage with communities	Community development	<ul style="list-style-type: none"> Prepare and formalise a Community Development Plan 	EBRD PR2 and PR10	<ul style="list-style-type: none"> Community Development Plan developed CSR measures are identified 	<ul style="list-style-type: none"> Community Development Plan

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> Identify and plan corporate social responsibility (CSR) measures for addressing community issues raised during ESIA consultations and FGDs. Report annually on the corporate social responsibility measures. 	IFC PS1	<ul style="list-style-type: none"> Annual CSR reports 	<ul style="list-style-type: none"> CSR reporting
4	Provide qualified human resources for the Project operation	Skills development training	<ul style="list-style-type: none"> Develop a Training and Mentoring Policy to supply the Project with qualified human resources and enable continuous development of the operational staff Adopt a corporate system for personal development reviews to assess staff achievements and allow career goals to be planned and supported by the management Establish a training centre for operators to secure a pool of skilled workers to operate Project facilities for the lifetime of the Project 	Uzbek Labour Code EBRD PR 2 IFC PS2	<ul style="list-style-type: none"> Training and Mentoring Programme developed Personal development reviews (PDR) records Training Centre established 	<ul style="list-style-type: none"> Training and mentoring programme PDR assessment records Training Centre operation
5	Support local development	Procurement of goods, works and services	<ul style="list-style-type: none"> Update the Project Procurement Policy developed for the construction phase and modify established practices to promote local contracting Disclose Project Procurement Policy to suppliers and contractors Develop a Procurement Procedure that establishes: <ul style="list-style-type: none"> Timeframes to communicate future demand More simple tender procedures for local companies to participate Issue of tender documents in local languages Lower price of tender documentation Prequalification requirements Price preferences for local firms Unbonded contracts so that local entrepreneurial services can be tapped Proportion of a contract value or a whole contract for local businesses Wavering or lowering the need for performance bonds Incorporate contract clauses in contracts with international suppliers and contractors to engage local firms in their supply chain Conduct tender workshops locally to help in understanding Project procurement processes Set Project targets for contracting female-headed business and local female staff. Publication of procurement adverts at the Indorama website and via "Telegram" to promote opportunities for local suppliers. 	Uzbek Labour Code EBRD PR1 and PR2 IFC PS1 and PS2	<ul style="list-style-type: none"> Updated Project Procurement Policy Communications with suppliers and contractors Project Procurement Procedures Clauses in suppliers and contractors' contracts Records of tender workshops Copies of procurement adverts Track records of contracts with local female-headed suppliers and businesses 	<ul style="list-style-type: none"> Project Procurement Policy Project Procurement Procedures Training programmes Contract clauses
6	Preventing localised community disturbance	Operation activities, machinery movements and deliveries by road	<ul style="list-style-type: none"> Prepare the Traffic Management Plan (TMP) to enhance safety of vulnerable road users on the local roads and residents affected by construction. 	International Best Practice	<ul style="list-style-type: none"> Traffic Management Plan developed and implemented. 	<ul style="list-style-type: none"> Traffic Management Plan.
7	Prevent child and forced labour in the Project primary supply chain	Primary supply chain management (contracted farms)	<ul style="list-style-type: none"> Update the Project HR Policy Bind the contracted farmers and suppliers to adhere to the Project HR Policy through contract clauses in their respective contracts Disclose the Workers' Code of Conduct to contracted farms, their workers and suppliers Include specific provisions on child and forced labour and define penalties for breaches in contracts with the contracted farms and suppliers 	Uzbek Labour Code EBRD PR 2 IFC PS2	<ul style="list-style-type: none"> Contract clauses specifically referencing HR Policy on unacceptability of child and forced labour Sign-up sheets indicating workers' agreement to comply with Workers' Code of Conduct Provisions on child and forced labour and define penalties for breaches in contracts with the contracted farms and suppliers Card system records 	<ul style="list-style-type: none"> Project HR Policy Contracts with contracted farms and suppliers Workers Code of Conduct Project Grievance Mechanism Project monitoring programme

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
			<ul style="list-style-type: none"> ● Disclose Project Workers' Grievance Mechanism to contracted farms' workers and suppliers ● Establish an identity card system for all project workers including contracted farms' workers and keep up to date (daily) records of who is working on Project sites at any one time. ● Appoint at least two Labour Officers and two Social Officers (including female officers) who will be responsible for monitoring the contractors and their sub-contractors (during the construction phase), contracted farms, including their farms' workers and seasonal workers (during operation phase) and who will link with the existing monitoring teams for contracted farms in achieving compliance with the HR Policy ● Develop a Project monitoring programme to assess and monitor risks of child and forced labour at all times with special scrutiny during cotton harvesting ● Extend the BCI training programmes to cover all newly contracted farms ● Provide training and capacity building to contracted farmers and their workers ● Immediately report to the Lenders on any cases of suspected child or forced labour ● Report to local government and relevant authorities on cases of child and forced labour or any suspicions of these ● Report annually to the International Lenders on monitoring findings during the harvesting period and annually on supply chain due diligence on child and forced labour as part of compulsory reporting under the Loan Agreements. ● Open invitation to and close cooperation with NGOs and human rights groups regarding labour monitoring missions ● Actively collaborate with and participate in third-party monitoring missions during cotton harvesting 		<ul style="list-style-type: none"> ● Labour and Social Officers appointed (at least two) ● Training records, job descriptions and CVs of Labour and Social Officers ● Formalised project monitoring programme ● BCI training records ● Capacity building training records and copies of certificates of contracted farmers and their workers ● Child and forced labour reports to district hokimiyats ● Annual child and forced labour monitoring reports to International Lenders ● Third-party labour monitoring arranged by Indorama Agro as part of monitoring and reporting to the International Lenders ● Communication records with NGOs and human rights groups regarding labour monitoring missions 	<ul style="list-style-type: none"> ● Project training programme for contracted farms and their workers
8	Safeguarding human rights in labour for all workers	Human rights management	<ul style="list-style-type: none"> ● Update a Project Human Rights Policy for the operation ● Disclose Human Rights Policy to all employees, contracted farms, their workers and other suppliers ● Bind contracted farms and other Project suppliers to adhere to the Project Human Rights Policy ● Provide labour contracts for all permanent and seasonal workers including at contracted farms ● Establish workers' grievance mechanism (to be managed by the Company) which is accessible to all Project workers, including contracted and subcontracted workers and the supply chain workforce. ● Appoint at least two Labour Officers and two Social Officers (including female officers) who will be responsible for monitoring the contracted farms, including their farms/ workers and seasonal workers and who will link with the existing monitoring teams for contracted farms in achieving compliance with the Human Rights Policy ● Document the contracted farms human rights and labour monitoring and reporting procedure including description of assigned responsibilities, timelines and remediation process when issues are identified ● Disclose the procedure to the contracted farms and their farm workers. 	Uzbek Labour Code EBRD PR 2 IFC PS2	<ul style="list-style-type: none"> ● Human Rights Policy developed ● Sign-up sheets indicating agreement to comply with the Project Human Rights Policy of contracted farms, their workers and suppliers ● Contract clauses ● Labour contracts at contracted farms ● Contracted farms human rights and labour monitoring and reporting procedure 	<ul style="list-style-type: none"> ● Human Rights Policy ● Contract clauses ● Labour contracts ● Contracted farms human rights and labour monitoring and reporting procedure

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
9	Effective OHS risk management	OHS management	<ul style="list-style-type: none"> Introduce and implement OHSAS 18001 management system. Develop and implement on the corporate level OHS Policy and Procedures (as part of OHSAS management system). Allocate respective OHS staff to implement OHS management system and manage OHS risks during operation. Updated the Company's organisation structure (including branch offices) to include staff to manage OHS issues during operation. Employ or assign a suitably qualified EHS Managers (at least two) for each project region. Develop the OHS training programme and provide necessary OHS briefings Maintain PPE Register and monitor PPE use by the Company's staff. Encourage staff to report incidents and accidents and include toolbox talks on how to report them. EPRP to be developed by the Company for each Project operations site³. 	EBRD PR2 and PR4. IFC PS2 and PS4. National requirements.	<ul style="list-style-type: none"> OHS Policy and plans of Indorama Agro OHS risk assessment procedure of Indorama Agro Allocated OHS responsibilities Updated organisational structure of Indorama Agro OHS training programme. For the Project staff OHS training records. OHS briefings records Records of risk assessments, site walkovers, identification of OHS and PPE compliance issues and actions to remedy. PPE logs. Logs showing incidents, accidents and occupational diseases or ill health. EPRP developed and other OHS plans policies and procedure are updated for the operation phase to reflect different safety condition/s in operational phase. Records of toolbox talks 	<ul style="list-style-type: none"> OHSAS 18001 certification OHS training Incidents and accidents reporting by the Project staff Continuous monitoring by OHS staff.
10	Safeguarding safe environment for work and rest	Workers accommodation management	<ul style="list-style-type: none"> Develop two Workers' Accommodation Plans (one for each residential complex) Approve the Workers' Accommodation Plans with the International Lenders Appoint Accommodation Managers at each site. 	EBRD PR 2 IFC PS2	<ul style="list-style-type: none"> Workers' Accommodation Plans develop for each residential complex No-objection from the International Landers received Accommodation Managers appointed. 	Workers' Accommodation Plan
11	Human resources development and labour grievances	Labour relations and working conditions	<ul style="list-style-type: none"> Develop and adopt HR procedures (e.g., for recruitment, motivation, assessment, training, etc) and reference them in the Project HR Policy (refer to item 7 above). Disclose HR Policy to all staff, suppliers and contractors Update the workers' grievance procedure for operations and disclose it to all staff Appoint a Workers Grievance Manager in each branch office of the Company Register all workers' grievances in the grievance log 	EBRD PR2 IFC PS2	<ul style="list-style-type: none"> HR procedures developed and referenced in the Project HR Policy. Sign-up sheets indicating agreement to comply with the Project HR Policy by contracted farms and suppliers Documented Project Workers' Grievance Procedure Appointed Workers Grievance Manager in each branch office of the Company Grievance log records 	<ul style="list-style-type: none"> HR Policy HR Procedures Workers' Grievance Mechanism
12	Managing risks to health, safety, security and wellbeing of communities during operation	Community health and safety	<ul style="list-style-type: none"> Disclose Workers Code of Conduct to all operational staff Finalise all site security arrangements prior commissioning Updated the Security Management Plan and risk assessment. Employ vetted and trained security guards Provide training to security staff to be employed in human rights and use of forces. Report unlawful behaviour of security guards Spill kits and fire extinguishers in all vehicles Provide each driver with a mobile phone to contact emergency services Develop a Traffic Management Plan (TMP) for the operation phase 	EBRD PR2 IFC PS2	<ul style="list-style-type: none"> Workers Code of Conduct disclosed to all operational staff Finalise all site security arrangements Vetted and trained security guards Training records and certificates of the Project security staff Reported unlawful behaviour of security guards Spill kits and fire extinguishers provided in all vehicles Mobile phones with each driver to contact emergency services Traffic Management Plan Emergency Preparedness and Response Plan 	<ul style="list-style-type: none"> Workers Code of Conduct Security Guards Training Traffic Management Plan Emergency Preparedness and Response Plan Workplace Safety Instructions

³ Emergency Preparedness and Response Plan (as required by IFC and EBRD)

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
13	Promote community engagement	Stakeholder engagement and grievance management	<ul style="list-style-type: none"> Develop an Emergency Preparedness and Response Plan Develop Workplace Safety Instructions Update Project SEP prior to operations Formalise Community Grievance Mechanism for the operation phase. The CLOs to be responsible for grievances registration and carries out analysis of grievance log to identify common or recurrent problems. The CLO to categorise the grievances and follow-up issues with the Indorama Agro's management to deal with the causes and identify actions to prevent further recurrence. Annual environmental and social performance and sustainability reporting. 	EBRD PR1 IFC PS1	<ul style="list-style-type: none"> Workplace Safety Instructions Grievance log. Meetings minutes. Disclosed information dated and kept on file. Records as per SEP. Semi-annual grievance reporting to Indorama's management. Indorama's annual non-financial reports to include environment and social indicators. 	<ul style="list-style-type: none"> SEP. Community grievance mechanism. Annual non-financial reporting.
14	Mitigate social tensions at retrenchment	Labour management	Retrenchment Plan to be developed in the event of significant workforce reduction 18 months prior to the anticipated redundancies.	Uzbek Labour Code EBRD PR2 IFC PS2	<ul style="list-style-type: none"> Retrenchment Plan. Numbers of people affected by retrenchment will be recorded. Outcomes of Retrenchment Plan to be recorded. Minutes of meetings with affected employees. Letters of notification to the local employment centres. 	Retrenchment Plan.

2.6.3 Air Quality Management

Table 2.12: Air Quality Operational Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
15	To ensure health and safety of workers and community	Operation of gin plants	<ul style="list-style-type: none"> Air aspiration and filtration systems shall ensure complete removal of cotton dust; Aspiration system shall ensure condensation and trapping of maximum quantity of sulphuric acid fumes from seed treatment process; Design and operation mode of gas boilers shall meet the national regulations in terms of nitrogen oxides and sulphur oxides emissions, and shall ensure minimum feasible levels of such substances in all modes of operation; Height of the gas boilers stacks shall be selected to ensure maximum dispersion of emitted pollutants; To reduce potential impact of fugitive emission sources, continuous monitoring and timely repair of fuel tanks, pipelines and locking accessories shall be provided. 	EBRD PR2, PR3, PR4 IFC EHS Guidelines National legislation	Quantitative monitoring of pollution emissions from stationary sources should be conducted, and records kept of fuel consumption (natural gas, diesel, gasoline).	Strict compliance with limits approved by environmental authority. Environmental monitoring plan
16	To ensure the health and safety of workers and the community	Field works	<ul style="list-style-type: none"> Works in the fields shall be conducted with due consideration to weather conditions, including prohibition of dust-generating activities in the vicinity of settlements in windy days to minimize dust transfer to residential areas. The above requirement also applies for spraying of fertilizer and pesticide solutions. Wind occurrence and speed should be taken into account when conducting such works near settlements. Prohibition of idle running vehicles to ensure lower emission of pollutants. 	EBRD PR2, PR3, PR4 IFC EHS Guidelines National legislation	Non applicable	Monitoring of windy days and planning of dusty works and fertilizers / pesticides application.

2.6.4 Soil Impacts Management

Table 2.13: Soil Impacts Operational Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
17	Avoid impacts to quality of soil, groundwater and human health	General operational activities Avoid leaks and spills of hazardous materials and wastes	<ul style="list-style-type: none"> Use best practice in line with local regulations and good practice for operation of the Project. Drip trays will be used to intercept leaks and spills from equipment and during refuelling. Develop Emergency Response Plan and a separate Spill Contingency Plan in accordance with local regulations. Clean-up contaminated material in case of fuel leaks. Hazardous materials will be suitably stored to prevent leaks and spills. Adequate bunding will be provided for all fuel and chemicals storage. Prohibition of pesticides, defoliant and fertilizers remains discharge to the land, irrigation and drainage system. 	EBRD PR3 IFC PS3 IFC EHS Guidelines National legislation	Continued soil monitoring. Regular site inspections. Monitoring reports to be made available to external monitors.	Environmental monitoring plan Hazardous Materials Handling and Storage Manual
18	Minimise impacts to soil and groundwater quality	Site drainage and effluents	<ul style="list-style-type: none"> No discharge to land – contaminated wastewater will be collected and treated. Monitoring and maintenance of the drainage system, and drainage outfall, in accordance with Site Maintenance Plan. 	EBRD PR3 IFC PS3 IFC EHS Guidelines National legislation	Monitoring of groundwater quality Monitoring of wastewater quality Monitoring of surface water quality (drainage)	Environmental monitoring plan
19	Minimise impacts to soil and groundwater quality	Earthworks / field levelling	<ul style="list-style-type: none"> Undertake earthworks during suitable weather conditions i.e. low wind strength to minimise the level of windblown dust, which may be potentially contaminated. Workers to wear suitable PPE to protect against inhalation of dust. 	EBRD PR3 IFC PS3 IFC EHS Guidelines National legislation	Non required	A risk assessment will be carried out to identify the level of PPE required in line with site specific risk factors.
20	Minimise impacts to soil and groundwater quality	Plant care. Impacts of pesticides, defoliant and fertilizers on soil quality	<ul style="list-style-type: none"> Prohibition of excessive application of pesticides, defoliant and fertilizers. Introduction of strict instructions on preparation of solutions of fertilizers, pesticides and other agrochemicals, and accurate identification of crops needs. 	EBRD PR3 IFC PS3	Control on preparation of solutions of fertilizers, pesticides and other agrochemicals, and accurate identification of crops needs.	Plan of pesticides, defoliant and fertilizers application.

2.6.5 Water Resources and Water Quality Management

Table 2.14: Water Resources and Water Quality Management

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
21	Protect surface water from contamination	Storage of chemicals and oil	<ul style="list-style-type: none"> Management of surface drainage and site runoff, particularly during showers, to minimise erosion and the potential for high sediment loads entering the channels Storage of excavated material away from drains, and covering stockpiles Prevention of pollution by use of hard covered, bunded areas for storage of liquids, chemicals and refuelling, oil interceptors in areas where fuel is used or stored, provision of spill kits and protocols for their use and appropriate disposal to minimise the impacts of any spillages. 	EBRD PR3 IFC EHS General Guidelines National legislation	Detailed records of fertilisers and pesticides application should be kept, in order to avoid contamination of drainage water with pesticides and petroleum products. Irrigation and drainage water shall be regularly monitored to identify potential impact of the Project on composition of drainage water.	Environmental monitoring plan
22	Protect surface water from contamination	Storm water	<ul style="list-style-type: none"> Storm water collection and treatment will be provided, such facilities should include grit removal and oil trapping. Sanitary wastewater will be collected in septic tank and subsequently removed for treatment by specialized contractor. 	EBRD PR3 IFC EHS General Guidelines National legislation	Regular monitoring of wastewater. Quality of wastewater should be strictly in line with environmental approval	Environmental monitoring plan
23	Protect surface water from contamination	Machinery washing	<ul style="list-style-type: none"> Washing of agricultural machinery and other vehicles will be arranged on dedicated sites with water recycling systems. 	EBRD PR3 IFC EHS General Guidelines National legislation	Not required	Environmental Action Plan

2.6.6 Ecology and Biodiversity Management

Table 2.15: Ecology and Biodiversity Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
24	Minimise disturbance to mammals, birds and bats	Noise and light from the Project operation	<ul style="list-style-type: none"> Minimise noise disturbance by using modern equipment which complies with the noise standards. Prohibit idle running of vehicles Use down lighting to prevent light pollution when artificial lighting is required. 	EBRD PR6 IFC PS 6	Regular site inspections. Monitoring reports to be made available to external monitors	Environmental Action Plan
25	Enhancement of biodiversity	Providing suitable habitats for animals	<ul style="list-style-type: none"> Planting at the site and beyond. Maximum use of the territory for arrangement of lawns. 	EBRD PR6 IFC PS 6	Annual monitoring of state of plantations.	Housekeeping plan
26	Non-native (alien) invasive species	Usage of seeds	<ul style="list-style-type: none"> No intentional introduction of alien species unless this is in accordance with existing national regulatory framework No deliberate introduction of AIS irrespective of national regulatory framework Introduction of alien species (e.g. in planting) must be subject to a risk assessment Implement measures to avoid accidental introduction or spreading of alien species (see below) Minimize disturbance to, or movement of soil and vegetation Prevent soil damage and erosion Ensure imported soil, seeds and other materials are safe and free of AIS (source from a reputable supplier, request information on the soil's origin and certification of AIS-free status if possible) Prevent AIS establishment on exposed stored soil (do not store bare soil near known sources of AIS, consider matting to cover exposed soil) Ensure infested material is disposed of safely Retain as much natural vegetation as possible Use native plants for reinstatement and landscaping Assess any non-native species for AIS. 	EBRD PR6 IFC PS 6 National legislation	Monitoring of imported soil, seeds and other materials	Alien invasive species plan in case of introduction of new species

2.6.7 Materials and Waste Management

Table 2.16: Materials and Waste Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
27	Minimize waste generation.	Waste generated from operation of the Project	<p>Include the Project wastes into the waste generation and disposal limits.</p> <p>Reuse waste whenever possible (cotton and wheat remain, wooden wastes, bricks, oil, etc).</p>	<p>EBRD PR3</p> <p>IFC EHS General Guidelines</p> <p>IFC PS3</p> <p>National legislation</p>	<p>Waste management in compliance with the justification document for waste generation and disposal limits.</p> <p>Accounting of all waste streams at the site.</p> <p>Records of hazardous wastes disposed off-site.</p>	Within the scope of Environmental Action Plan
28	<p>Prevention of leakage or spillage of wastes.</p> <p>Prevention of fugitive emissions.</p> <p>Prevention of negative visual amenity impacts</p>	Waste generation, handling and storage of materials	<p>Include the Project wastes into the waste generation and disposal limits.</p> <p>Both the onsite and offsite waste storage facilities will include the following:</p> <ul style="list-style-type: none"> – Separate areas for hazardous and non-hazardous wastes. – Separate vessels or containers for each waste stream in order to maximise re-use and recycling opportunities. – All containers and waste storage vessels to have a suitable cover. – Liquid wastes/oil/chemicals to be stored(collected) in tanks or drums located in bunded areas. – Spill kits to be available in the waste storage areas. 	<p>EBRD PR3</p> <p>IFC EHS General Guidelines</p> <p>IFC PS3</p> <p>National legislation</p>	<p>Indorama Agro to carry out regular inspections of waste collection sites and hazardous liquids storage areas.</p> <p>Monitoring reports to be made available to external monitors.</p> <p>Waste records.</p>	Waste Management instructions.
29	Final waste destination monitoring	Final waste destination	<p>Verify final destination of all wastes.</p> <p>Maintain waste accounting.</p> <p>Inspect waste facilities used for disposal (including treatment, decontamination and reuse/recycling) of project wastes.</p>	<p>EBRD PR3</p> <p>IFC EHS General Guidelines</p> <p>National legislation</p>	<p>Waste records.</p> <p>Waste accounting data.</p> <p>Inspection reports.</p>	Environmental Action Plan

2.6.8 Transport Management

Table 2.17: Operational Transport Management Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
30	Minimise delays to road other road users	Delays to road users as a result of number of agricultural vehicles and trucks	Delivery of construction materials and vehicles and agricultural machinery to the sites should be conducted out of peak hours. Prohibition of vehicles parking along roads.	International Best Practice.	TMP developed by Indorama Agro.	Indorama Agro Traffic Management Plan
31	Minimise safety issues	Reduced safety of vulnerable road users on the local roads and of residents affected by the Project	Delivery of chemicals and agricultural machinery to the fields should be conducted out of peak hours. Prohibition of vehicles parking within boarders of settlements. Sharp parts of vehicles moving outside fields should be removed or switched in safe position.	International Best Practice.	Standard monitoring on road incidents in line with national requirements. Special monitoring is not required.	Safety instructions for drivers.
32	Safeguard the safety of road users on the local roads and of residents in settlements located along the roads	Delivery of materials, abnormal loads (cotton) and transport of workers	To develop a Traffic Management Plan and where possible design all delivery routes away from settlements. Mandatory adherence to speed limits at all times.	International Best Practice.	TMP develop by Indorama Agro.	Traffic Management Plan.

2.6.9 Noise and Vibration

Table 2.18: Operational Noise and Vibration Matrics

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
33	Avoid noise nuisance from site operation	Project operation	<ul style="list-style-type: none"> All equipment will be regularly serviced and maintained. Prohibition of noisy works at sites adjacent to settlements out of working hours. Prohibition of idle running vehicles. 	EBRD PR4 IFC EHS General Guidelines National legislation	Monitoring of noise impact in accordance with the monitoring plan (gin sites), also near of the Denov settlement. Record and investigate complaints via the community grievance mechanism.	Community Grievance Mechanism. Noise monitoring plan for gin sites.

2.6.10 Greenhouse Gas Emissions

Table 2.19: Greenhouse Gas Emissions Matrix

No	Objective	Activity	Mitigation/Enhancement	Applicable standards	Monitoring (KPI)	Implementation method (plan)
34	Reduce GHG emissions	Use of vehicles with GHG emissions.	<ul style="list-style-type: none"> Use of new and efficient vehicles. All equipment should be maintained and switched off when not in use. Prohibition of idle running of vehicles. 	N/A	Records of plant maintenance	Environmental Action Plan
		Staff vehicle movements	Minimize parking area for personal transport. Provision of transportation scheme for operation staff	N/A	N/A	Environmental Action Plan
		Use of electricity	Efficient use of electricity.	N/A	Amount of energy purchased	Environmental Action Plan
		Fugitive emissions	Regular inspections of pipelines and oil storages for leaks.	EBRD PR3 IFC EHS General Guidelines	Number of leaks	Environmental Action Plan. Plant inspection plan

3 Plans, Policies and Procedures

3.1 Introduction

Mitigation activities identified through the ESIA process will be implemented via specific plans and policies of Indorama Agro and contractors.

The ESIA identified the following plans and policies which are needed for implementation of mitigation measures as required by EBRD PRs and IFC PSs (Table 3.1).

Table 3.1: Policies, plans and procedures to be developed by the Project

Project phases	
Land development, preparation and construction phase	
Project Resettlement Policy Framework	Construction Environmental Action Plan – to be developed as a part of the Construction Master Plan or the Method Statement
Project Livelihood Restoration Plan	Construction Waste Management Plan – as part of the Construction Master Plan or the Method Statement
Project Resettlement Action Plan (for any future physical displacement, if applicable)	Chance Finds Procedure
Security Management Plan(s)	Contractor Occupational Health and Safety Plan – as part of the Construction Master Plan or the Method Statement
Contractor Management Plan	Hazardous Materials Handling and Storage Rules – as part of the Construction Master Plan or the Method Statement
	Construction Traffic Management Plan
	Construction Oil Spill Liquidation Plan – summary of Indorama Agro Oil Spill Liquidation Plan (as part of the Construction Master Plan or the Method Statement)
Land development, preparation and construction phase and operation phase	
Project Human Resources Policy (construction and operation)	
Project Recruitment Policy (construction and operation)	
Workers' Code of Conduct (construction and operation)	
Workers' Grievance Mechanism (construction and operation)	
Workers' Accommodation Plan(s) (construction and operation)	
Stakeholder Engagement Plan (construction and operation)	
Community Grievance Mechanism (construction and operation)	
Housekeeping Plan (construction and operation)	
Indorama Agro Environmental Monitoring Plan (construction and operation)	
Traffic Management Plan (construction and operation)	
Oil Spill Liquidation Plan (construction and operation)	
Operational phase only	
Project Recruitment Policy update	Indorama Agro Annual Environmental Action Plan
Project Human Resources Policy update	Alien Invasive Species Plan
Gender Action Plan	Annual Occupational Health and Safety Plan
Community Development Plan	Indorama Agro Emergency Preparedness and Response Plan for each gin site
Training and Methodology Policy	Hazardous Materials Handling and Storage Manual

Project phases

Project Procurement Policy	Noise Monitoring Plan for Gin Sites – as part of Indorama Agro Environmental Monitoring Plan
Retrenchment Plan (end of operation phase)	Waste Generation and Handling Plan
Pesticides, Defoliant and Fertilizers Application Annual Plan	Emergency Preparedness and Response Plan. Summary for Contractors

Source: Mott MacDonald, Volume II – ESIA Report

The majority of the above documents (or their content) are to a certain extent required by Uzbekistan law and are maintained by the relevant services of Indorama Agro and/or included in the mandatory scope of design package. Thus, development of duplicate plans and policies for the Project would not bring any benefits and rather increase documents flow and complicate the work of all Project parties.

Therefore plans, policies or activities which are provided for by the Uzbekistan law are included into the existing procedures with appropriate comment.

Indorama Agro will also implement the Stakeholder Engagement Plan (**SEP**) and update it when there are significant changes to the Project, such as change in phase or identification of new stakeholders. The project performance grievance mechanism will also be implemented throughout the lifecycle of the Project and is described in detail in ESIA Volume II and in the SEP.

3.2 Plans, Policies and Procedures Overview

Table 3.2: Plans, Policies and Procedures Matrix

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Future land acquisition	Project Resettlement Policy Framework	Guide any future land acquisition processes	Planning and operation	Indorama Agro management, lawyers and the ESIA Consultant	Approval by the International Lenders
Economic Displacement and Livelihood Restoration	Project Livelihood Restoration Plan	A Livelihood Restoration Plan is to be developed by Indorama Agro with the support from the ESIA Consultant to provide guidance on the Project economic displacement mitigation in compliance with the applicable international requirements. An LRP is to be based on compensation for losses at full replacement cost.	During land acquisition	Indorama Agro management, lawyers and the ESIA Consultant	Approval by the International Lenders
Involuntary Resettlement	Project Resettlement Action Plan	A Resettlement Action Plan will be prepared for any future land needs involving involuntary physical displacement.	During land acquisition and prior to any displacement	Indorama Agro management, lawyers, external consultant	Approval by the International Lenders
Recruitment	Recruitment Policy	<p>The Project Recruitment Policy will be applied for the construction and operation phases.</p> <p>The Policy will prioritise benefits for local people aim to minimise social conflict. It will state the Project's position on prohibition of the use of child and forced labour; promotion of non-discrimination and equal opportunities.</p> <p>It will specifically include a requirement to prioritise local employment and in particular a requirement to prioritise vulnerable groups, such as women, unemployed, unskilled, seasonal workers, affected farmers.</p> <p>Indorama Agro will monitor compliance of the Project contractors with the Project Recruitment Policy.</p>	To be developed and disclosed prior to construction recruitment activities.	Indorama Agro is responsible for monitoring contractors' compliance with the Project Recruitment policy.	<p>Mahallas</p> <p>Local employment centres.</p> <p>Local Labour Inspections.</p>
Labour Management	Project Human Resources Policy	<p>The requirement to comply with the HR Policy will be included via clauses in contractors' contracts.</p> <p>Toolbox talks on the content of the HR Policy will help workers to understand their rights and will maintain good project performance on safeguarding the workforce.</p>	Prior to construction.	<p>Contractors' HR Departments responsible for compliance with the Policy.</p> <p>Indorama Agro HR Department responsible for monitoring contractors' compliance with the Project HR Policy.</p>	<p>Indorama Agro HR Department.</p> <p>Contractors' HR Departments</p> <p>Local Labour Inspections</p>

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Labour Management	Workers' Code of Conduct	Regulates behaviour of workers on site or at work, in the construction camp or offices, and communities. Provides information on specific aspects of local culture and acceptable conduct, use of psychotropic substances and alcohol (including possible testing), need to handle property of Indorama Agro and contractors with care, show respect to colleagues and community, information on sexually transmitted diseases, contraceptives, and potential penalties for violations.	Prior to construction	Indorama Agro HR Department to monitor contractors for provision of appropriate training on recruitment. Contractors are responsible for workers' compliance with the Code.	Indorama Agro Group. Local Labour Authorities.
Security Management Plan	Construction Security Management Plan	Construction Security Management Plan will be developed for each Project site. It will define security measures to protect construction site against unauthorised access by employers and strangers, and to protect local communities against injury in result of unauthorised access.	Prior to construction	Security Contractor. Indorama Agro will monitor contractors' compliance with security arrangements.	Indorama Agro, Security Contractor Police force
	Security management documentation (operational)	Security management documentation delegate security responsibilities and authority to security personnel, establishes security rules and guidelines regarding access, use of force, etc. Security Management Plan is to identify linkages with local police force, when they will be called to assist etc.	Prior to commissioning	HR, Safety Manager	
Labour Accommodation	Workers' Accommodation Plans during construction and operation)	Workers' Accommodation Plan is required for the construction and operation phases of the Project. At the construction phase two Workers' Accommodation Plans will be developed to provide safe, clean and comfortable living conditions for construction workers in two construction camps in Karshi and Gulistan. At the construction phase these plans will be implemented as part of CMP. The Project will use the Workers' Grievance Mechanism to collect and address grievances regarding workers' accommodations. Indorama Agro and the contractors will appoint an Accommodation Manager for each site who will be responsible for the Workers Accommodation Plan and accommodation maintenance.	Prior to construction	Overall responsibility for implementation of the Workers Accommodation Plan is with contractors. Indorama Agro will monitor contractors' compliance in regard to workers accommodation.	Local Labour Inspections EHS Managers of contractors. EHS Manager of Indorama Agro
Contractors Management	Contractor Management Plan	The Contractor Management Plan (CMP) will be used as a tool to assist in managing risk of poor E&S performance of contractors, especially labour and workforce issues. The CMP will detail the contractor selection process, contractor environmental, social, health and safety assessment and need to outline how contract clauses will be used to bind contractors and their sub-contractors to meeting national and international standards.	Prior to contractor selection	Indorama Agro's procurement Department, lawyers.	-

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Labour Complaints	Workers' Grievance Mechanism	To provide a formalised process by which grievances can be raised by the workforce during construction and operation. The mechanism allows structured investigation by Indorama Agro to review the validity, responsibility and response / action of labour grievances.	Prior to construction	The grievance mechanism needs to be formalised and be disclosed to all workers upon recruitment and advertised widely on site. Indorama Agro is responsible for monitoring contactors' labour grievance mechanism. Contractor Project Manager responsible for implementation of their own workers' grievance mechanisms	Local Labour Inspections Labour and Social Offices of the contractors. Labour and Social Offices of Indorama Agro.
Supply Chain Management	Project Procurement Policy	The Project Procurement Policy will specifically include aspects covering health, safety and labour rights in the supply chain in compliance with the applicable international requirements. The Project Procurement Policy will include references to procurement procedures to be established in the Company to maximise local benefits, especially for women-headed businesses.	Prior to project operation	Indorama Agro's management and procurement department.	-
Capacity Building	Training and Mentoring Policy	The Project Training and Mentoring Policy will establish strategic priorities for capacity building in the Company through enhancing training, skills and knowledge transfer and securing a pool of skilled human resources to operate facilities for the lifetime of the Project. The Policy will make reference to personal development reviews	Prior to gin plants commissioning and procurement of machinery	Indorama Agro's management, HR Department, EHS Manager	-
Equal Opportunities	Gender Action Plan	The Gender Action Plan will provide a framework to improve Project opportunities and benefits for women who have been differentially affected by job losses arising from mechanisation. The Plan will address employment targets for women, especially those who are out of work because of the project; training for employees on gender-based violence and harassment; and including strategies for enabling women to participate in the project's benefits. The Plan will develop and establish measurable indicators and targets, timelines and assign resources and responsibilities for implementing proposed measures and monitoring. The plan will be developed in consultation with women from the ACs.	During operation	Indorama Agro' management and HR Department are responsible for development and monitoring implementation of the Gender Action Plan Support from an external consultant may be needed.	Indorama Agro's Management and HR Department.
Community engagement	Stakeholder Engagement Plan	To keep communities and stakeholders informed while listening and responding to concerns about the Project to allow it to run smoothly. Annual reporting on E&S issues of concern to ACs.	Updated when project changes significantly, e.g. change of phase. Reviewed at least annually	Indorama Agro's Community Liaison Officers and management.	Mahalla Local government representatives Authorities

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
Community Complaints	Community grievance mechanism (See Volume III, SEP)	To provide a formalised process by which grievances can be raised by the local community during construction and operation which allows structured investigation by the Company to review the validity, responsibility and response / action.	During construction and operation.	Overall responsibility of community grievance mechanism is with Indorama Agros' Community Liaison Officers.	Project CLOs Mahallas Local government representatives Authorities
Labour management at end of operations phase	Retrenchment Plan	To mitigate the adverse impacts associated with job losses. The Plan to include analysis of alternatives, legislative framework, consultation with employees and their representatives, disclosure, grievance mechanism, identification of number of employees affected, severance payments calculation methodology and framework record of payments made, assistance provided to employees.	Developed prior to issuing the Retrenchment Order	Indorama Agro' HR Department is responsible for development and monitoring implementation of the Retrenchment Plan	Local Labour Inspections Indorama Agros' HR Department.
Environmental Management	Environmental Action Plan	Defines specific mitigation as identified through Environmental Impact Assessment (EIA) and Environmental and Social Impact Assessment (ESIA) processes at the operation and construction phases. Activities within the separate Construction Environmental Action Plan will be covered by the design documents (DD), CMP and/or MS, and are mandatory in accordance with Uzbek regulations.	Operation: permanently Construction: DD, CMP and MS prior to construction	Operation: Director, Environmental Manager. Construction: Contractors fully responsible for meeting the requirements of DD and CMP (MS). Contractor's and Indorama Agro Project (Environmental) Managers monitor compliance with DD and CMP (MS)	-
Environmental Monitoring	Environmental Monitoring Plan	Monitoring measures for air emission, water consumption and wastewater discharge, waste generation, soil quality etc.	Operation: after Project commissioning Construction: DD, CMP and MS prior to construction	Operation: Environmental Manager. Contractors fully responsible for meeting the requirements of DD and CMP (MS). Contractor's and Indorama Agro Project (Environmental) Managers monitor compliance with DD and CMP (MS)	Approval by the local environmental authority
Pollution prevention and control	Waste Generation and Handling Plan	Plan establishes limits (volumes) on generation of different types of wastes including hazardous wastes, processes generating different types of wastes, ways of safety collection and keeping, disposal options (reuse, recycling, deactivation, disposal at the landfill), and monitoring measures	Operation: after Project commissioning Construction: DD, CMP and MS prior to construction	Operation: Environmental Manager. Contractors fully responsible for meeting the requirements of DD and CMP (MS). Contractor's and Indorama Agro Project (Environmental) Managers monitor compliance with DD and CMP (MS)	Approval by the local environmental authority
	Pesticides, Defoliant and Fertilizers Application Annual Plan Oil Spill Liquidation Plan	Defines control measures against impact of hazardous chemicals on environment, staff and local communities	Operation: after Project commissioning	Operation: Environmental Manager, Safety Manager, Agronomists Contractors fully responsible for meeting the requirements of DD and CMP (MS). Contractor's and Indorama Agro Project (Environmental) Managers monitor compliance with DD and CMP (MS)	-

Aspect	Plan or Policy	Content	Timescale	Responsibility	Institutional responsibility
	Hazardous Materials Handling and Storage Plan				
Biodiversity	Alien Invasive Species Plan	Plan establishes rules on introduction of a new varies of plants and control measures against alien invasive species	Operation: after Project commissioning	Operation: Agronomists	Local agricultural authority, if required
Health and Safety	Occupational Health and Safety Plan	Provide list of mitigation measures to ensure safe and comfortable workplace and environment. Activities within the separate Construction Safety Action Plan will be covered by the DD, CMP and/or MS, and are mandatory in accordance with Uzbek regulations.	Operation: after Project start Construction: DD, CMP and MS prior to construction	Operation: Safety Manager Contractors fully responsible for meeting the requirements of DD and CMP (MS). Contractor's and Indorama Agro Project (Safety) Managers monitor compliance with DD and CMP (MS)	-
Community Health and Safety	Traffic Management Plan	Content mitigation measures to minimise impacts on traffic and pedestrians	Operation: after Project start Construction: DD, CMP and MS prior to construction	Operation: Safety Manager Contractors fully responsible for meeting the requirements of DD and CMP (MS). Contractor's and Indorama Agro Project Managers monitor compliance with DD and CMP (MS)	Road Police
Emergency situations	Emergency Preparedness and Response Plan	Emergency plans for gin sites provides safety and emergency measures in case of fire or explosion	Prior to operation	Operation: Safety Manager	Fire Authorities Police Ambulance
Archaeology	Chance finds procedure	To be developed as part of MS. In particular, the procedure shall include the following: <ul style="list-style-type: none"> - Procedure upon any discovery - Conditions / requirements for work stoppage - Fencing and protection of the find - Internal reporting. 	Prior to construction	Indorama Agro is responsible for monitoring contractors' activities. Project Manager (construction) responsible for implementation at the Project level.	The Ministry of Culture of the Republic of Uzbekistan

3.3 Project Resettlement Policy Framework (RPF)

The RPF establishes the policy principles and guidelines for managing land acquisition and resettlement impacts in alignment with the reference framework.

The objective of the RPF is to guide the development of livelihood restoration and/or resettlement plans that enable land acquisition and resettlement activities for all economically and physically displaced people in a socially sustainable and consistent manner.

The RPF guiding principles will be used by the Project to:

- Minimised or avoided where possible any involuntary resettlement so that land acquisition minimises adverse impacts on cotton farmers, local communities and other land users and businesses. If acquisition of land use rights is unavoidable, effective management measures will be identified to minimise adverse impacts
- Avoid forced evictions
- Carefully deal with affected people without clear land titles so that the Project will not hinder their eligibility for resettlement and livelihood restoration support. Resettlement affected people without clear land titles can have access to entitlements for resettlement assistance and compensation for the loss of non-land assets and land
- Consult displaced persons, including untitled land users
- Negotiate settlements with the displaced persons (willing buyer/willing seller or willing leaser/willing lessee)
- Sustainably manage resettlement mitigation measures. Access to social services (schooling, health, employment, training, etc), social networks, transportation routes, and basic sanitation services (water, electricity, plumbing) will be taken into account when defining relocation sites, with the goal of minimizing changes and impacts on these aspects as much as possible. Particular attention will be given to the most vulnerable displaced persons
- Arrange compensation measures such as assistance required for relocation or livelihood restoration before displacement or restriction to access are in place
- Identify compensation levels that are sufficient to replace the assets at full replacement cost in local markets (using current market prices)
- Design livelihood restoration activities with the involvement of local communities to restore the livelihoods of economically displaced people in a long-term and sustainable way
- Monitor adherence to land agreements and undertake resettlement plans
- Prepare evaluation close out reports.

3.4 Livelihood Restoration Plan (LRP)

A Livelihood Restoration Plan being developed by Indorama Agro with the support from the ESIA Consultant to provide guidance on the economic displacement mitigation in compliance with the applicable international requirements. The LRP is based on compensation for losses at full replacement cost and mitigating seasonal jobs cut resulted from mechanisation of the cotton farming operations.

The LRP includes:

- Description of the socio-economic baseline
- An introduction to the Project and regulatory framework
- A description of the Project activities that create economic displacement impacts and actions to minimise displacement
- Asset inventory and valuation

- A detailed description of compensation and other resettlement assistance including entitlement to participation in alternative livelihoods development activities
- Results of consultations with displaced people (land owners and land users) about acceptable alternatives
- A description of institutional responsibility for implementation and procedures for grievance redress
- Arrangements for implementation and monitoring
- A timetable and budget detailing all costs, including compensation, administrative costs and monitoring fees.

Livelihood restoration measures will focus on sustaining solutions that provide meaningful compensation for loss of access to the livelihood provisions, including capacity-building, alternative income generation, trainings or knowledge sharing. The study areas are:

- Commitment and implementation of appropriate strategies to maximize opportunities for local communities
- Provision of upskilling training and other support programmes for local people and businesses
- Ensuring that local communities benefit from activities like the upgrading of roads, public services and community facilities
- Training for community women in different agricultural production techniques and scouting.
- Financial management capacity building to support small business activities and manage cash compensation.

Based on IFC PS5 and EBRD PR5, those affected by involuntary resettlement are entitled to compensation at replacement cost⁴ for lost assets. Replacement cost means that the affected person can replace the affected asset to the same condition. Full replacement cost typically reflects market value (when a property market exists) without deduction of transaction costs, transfer or retitling fees, or depreciation and salvageable materials. The Project Company will use full replacement cost as a basis for identifying fair and transparent negotiated settlements for permanent and temporary land acquisition.

3.5 Resettlement Action Plan

A resettlement plan will be prepared in the case that the Project causes physical displacement in the future, although this is not expected. Prior to any displacement, the resettlement plan must be prepared, compensation must be paid, and any additional required livelihood restoration measures must be in place.

To produce a resettlement plans, a household census and detailed measurement survey will be carried out. These surveys will be undertaken with 100% of the displaced persons (individuals or households, land owners and land users).

3.6 Project Recruitment Policy

The Project Recruitment Policy will be developed by the Company for the construction phase and it will be updated for the operation phase. The Project Recruitment Policy will include but not be limited to the following:

- Policy statement of Indorama's commitment to meeting Uzbek Laws and international best practice with regards to recruitment and labour management including:
 - Non-discrimination and equal opportunities
 - Prohibition of child labour and forced labour
 - Prohibition of child labour and forced labour
- A requirement to prioritise local employment for positions that become available:
 - First priority will be defined to people originating from the directly affected ACs

⁴ The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any.

- Second priority will be defined to people from the wider area of influence (Syrdarya and Kahskadarya regions)
- Third priority will be defined to people from elsewhere in Uzbekistan
- A requirement to prioritise employment of vulnerable groups, such as women, unemployed, unskilled, seasonal workers, affected farmers.
- Specific operation phase targets for employment and engagement of women
- Mechanism to identify people of the first, second and third priority for employment and employment procedure
- Policy statement on the types and likely numbers of employment opportunities to be provided to the directly affected local people from the construction phase and from the operation phase of the Project including skills levels, indicative timeframes of recruitment, remuneration and benefits packages and likely duration of contracts
- Description of the local recruitment processes including timely (at least one month prior to recruitment) disclosure of information bulletins about vacancies including notification of the local employment centres, and Heads of the ACs.
- The job application procedures for candidates.
- Information about how job opportunities will be advertised in the directly affected communities, local employment centres and district hokimiyats. to ensure equal opportunities for all local people

Indorama Agro will monitor compliance of the contractors with the Project Recruitment Policy during the construction phase.

3.7 Project Human Resources Policy

Indorama Agro will develop a concise, consolidated Project HR Policy that is compliant with Uzbek Labour Law, EBRD PR2 and IFC PS2. The Project HR Policy will be developed prior to the construction phase and will include but not be limited to:

- Protecting the workforce, including commitments in relation to child and forced labour and migrant workers
- Working Relationship
- Working Conditions & Terms of Employment
- Workers' Organisations
- Non-Discrimination and Equal Opportunity
- Retrenchment
- Grievance Mechanism.
- Occupational health and safety
- Workers engaged by third parties
- Supply chain.

This requirement to comply with the Project HR Policy will be included in contractors' contracts to ensure that contractors and subcontractors manage the workforce in accordance with national and international standards. This will especially help any foreign contractor(s) to understand what is required of them.

Toolbox talks on the content of the Project HR Policy and its visibility on noticeboards at site and in accommodation will help workers to understand their rights and will maintain good Project performance on safeguarding the construction workforce.

3.8 Workers' Code of Conduct

A Worker Code of Conduct will be developed for project workers by the contractors and checked by Indorama Agro. The Workers' Code of Conduct will be used to govern the behaviour of construction workers on site, in their accommodation and in the local communities.

The Workers' Code of Conduct will include but not be limited to:

- Use of drugs, alcohol and smoking with information about testing and penalties for contravention
- Rules regarding safe use of PPE and Project equipment including disciplinary procedures for inappropriate use
- Maintaining a safe and tidy working area
- Reporting of incidents and accidents
- Respect for colleagues and behaviour expectations with regards to harassment and bullying
- Respect for communities and lines of communication
- Rules governing use of resources and utilities including power, water and the Internet
- Cultural awareness issues for workers coming from outside of the wider area of influence
- Guidance about how to behave to prevent the spread of HIV/AIDS and other sexually transmitted diseases
- Driving rules
- Confidentiality of information
- Security Workers' Code of Conduct
- Ethics rules
- Reporting of chance finds
- Prohibition of weapons on site or in accommodation
- Prohibition of hunting wild birds or animals
- Responsibilities of management.

Workers will be issued with the Workers' Code of Conduct upon their recruitment and asked to sign to say that they have received and understand the document.

3.9 Security Management Plan

3.9.1 Construction Phase of the Project

A Security Management Plan, and supplementary documentation such as a security workers' code of conduct and use of force policy, will be prepared for each construction site of the Project in compliance with the applicable international requirements. In the same time, by national requirements, construction site security measures should be envisaged by design documentation package (see 3.26.2) and implemented by contractors or by the project owner.

3.9.2 Operational Phase of the Project

Indorama Agro will develop a package of security management documentation in line with national regulations and international standards including:

- Operational security management plans
- Job description of security personnel which establishes their rights and responsibilities
- Safety data sheets for security personnel defines personal safety and security measures
- Entrance and exit rules will be envisaged in Access Control Procedure

- Guidelines for different types of security incidents
- Use of force policy
- Security workers' code of conduct

Roles and responsibilities of security personnel during emergency situations will be ensured by the Emergency Preparedness and Response Plan.

3.10 Workers' Accommodation Plan Framework

3.10.1 Background

The Project construction phase will engage in peak periods 130 people in construction of two residential complexes in Karshi and Gulistan, and approximately 150 people in construction of two gin plants in Kasbi and Oqoltyn districts. Two construction camps in Karshi and Gulistan will provide accommodation for 100 people. During operation the Company will provide accommodation for its expatriate staff and their families in two new residential complexes in Gulistan and Karshi with the capacity to accommodate 40 people. These accommodation facilities will require preparation and implementation of the four Workers' Accommodation Plans.

The Workers' Accommodation Plans will be developed on the basis of Uzbek regulations and taking into account the requirements of the guidance note "Worker's Accommodation: Processes and Standards" developed jointly by IFC and EBRD, referencing to the best practice in managing workers accommodation. The Plans will be included into the management system and implemented by the contractors at each site during the construction phase and by Indorama Agro for each residential complex during the operation phase.

3.10.2 Objectives

The overarching goal of the four Plans will be to ensure that workers' accommodation complies with the best practice.

Specific objectives of the plan include ensuring that workers' accommodation is:

- Provided free of charge to workers
- Provides adequate living space for each worker
- Provides sanitary, laundry and cooking facilities
- Provides potable water
- Has adequate health, fire safety measures including ambulance and medical facilities
- Has adequate heating and ventilation
- Non-restrictive to workers' freedom of movement to and from the accommodation.

3.10.3 Approach and Activities

A Workers' Accommodation Plan will be developed and followed for all new construction and operation accommodation facilities prior to them being inhabited. These Plans will address the following:

- Assessment of the need for workers' accommodation (how many workers will come from outside the area and the capacity needs of the accommodation; and availability of existing housing)
- Assessment of impacts of workers' accommodation on communities including:
 - Specific impacts during the construction and operation phases
 - Community infrastructure
 - Community services and facilities
 - Local businesses and local employment

- Community health and safety
- Community cohesion
- Land acquisition and resettlement
- Dismantling and reinstatement
- Demonstrating how national and international best practice standards for workers' accommodation will be met in relation to:
 - General living facilities
 - Room/dormitory facilities
 - Sanitary and toilet facilities
 - Canteen, cooking and laundry facilities
 - Standards for nutrition and food safety
 - Medical facilities
 - Leisure, social and telecommunication facilities
- Description of the management and monitoring approach, structure, roles and responsibilities of the accommodation area in relation to:
 - Management and staff structure
 - Charging fees for accommodation and services
 - Health and safety on site
 - Workers' rights, rules and regulations
 - Consultation and grievance mechanisms
 - Management of community relations.

3.10.4 Staff and Resources

The contractors and the Company will be required to appoint or assign duties to an Accommodation Manager at each site to implement the Workers' Accommodation Plan and make sure that the accommodation is well maintained.

Indorama Agro' (Project OHS Manager or support staff) will audit the accommodation facilities and workers' grievance log in relation to these areas on a monthly basis and will implement corrective actions where non-compliance with the Plan is identified. Monitoring reports will feed into the overall reporting schedule for the Project as explained in Chapter 5. Workers will be able to submit complaints directly to Indorama Agro at any time through the workers' grievance mechanism although a first step of addressing the complaint to their own employer will be promoted.

3.11 Human Rights Policy

The Project will develop a Human Rights Policy for the construction phase and will later updated the document for the operation phase. The Project Human Rights Policy will be disclosed to all employees, contractors and sub-contractors and their staff during construction, and to contract farms, operation contractors and suppliers during operations

Special clauses in the contracts of contractors, sub-contractors, contracted farms and suppliers will bind the contractors, sub-contractors, contracted farms and suppliers to adhere to the Project Human Rights Policy.

A policy statement may include, for example, that the Company:

- Provide respectful working conditions and seek to promote educational activities enabling professional and personal development, in order to maintain a healthy and safe place to work

- Will not tolerate any type of discrimination and/or harassment of any sort whatsoever, including moral or sexual
- Respects freedom of association, collective bargaining and diversity
- Rigorously selects and monitors security personnel, taking into account prior experience, technical skills and emotional stability
- Educates and trains these professionals to perform activities in accordance with human rights principles, rejecting abuse of power, discrimination, interfering with community privacy or permitting degrading and inhumane treatment.
- Refrains from using force, seeking appeasing solutions which ensure the physical integrity of persons, property and information preservation and the maintenance of the production process.

With respect to suppliers and contractors the policy statement may declare, for example, that the Company:

- Seeks to establish relationships with entities that share the same principles and values
- Endeavours to maintain a lasting engagement with communities and implement social, cultural, economic and environmental impacts management, as well as contribute to local sustainable development
- Promotes human rights awareness raising actions, with special focus on the eradication of forced and child labour, in addition to promoting the rights of children and adolescents

The Policy will reference where to send queries and information as well as the Project grievance mechanism to address grievances on possible violations of human rights.

3.12 Workers' Grievance Mechanism

The workers' grievance mechanism will include but not be limited to the following:

- A policy statement that grievances can be raised by any member of staff without fear of reprisals
- Contact details for staff to whom grievances should be raised
- Response times for grievances categorised according to the severity of the grievance or the issue in question
- A process for logging grievances and when and how they are closed out
- A process for monitoring grievances to identify repeat or unresolved grievances and reporting these issues to senior management in order to expedite remedial action.

The grievance mechanism will be explained to all contractor staff on appointment and a notice (summarising the approach and providing contact details for staff to which grievances should be raised) will be posted at appropriate places at the work site and accommodation areas. Grievance boxes will be placed such that anonymous grievances can be raised via discreet submission of grievance forms, for example in toilet blocks.

The grievance mechanism will be explained to all Project operational staff at recruitment.

3.13 Gender Action Plan

The Gender Action Plan (**GAP**) will contain specific gender elements to be considered during the implementation of the Project and in operations. It will help to monitor implementation of gender-related actions and mitigation measures proposed for improvement. Hence, the GAP will ensure an effective gender integration of a consistent gender-perspective in the Project to maximize benefits for women.

The GAP shall target enhancing employment opportunities for women, improvement of livelihoods through training and mitigation of any potential adverse impacts of the Project on women due to land allocation, loss of seasonal jobs and environmental impacts.

The GAP objective is to enhance women's active and equitable participation in the Project and to reduce risks of harassment of or violence against women employed on the project.

The GAP will enhance Project is compliance with EBRD Gender Strategy, Economic Inclusion Strategy and Environmental and Social Policy and will take cognizance of the emerging guidance on gender-based violence⁵.

The GAP complements the Environmental and Social Management Plan (ESMP) that already contains gender-related aspects, e.g. regarding integrating gender-aspects into recruitment and human resources policies and monitoring. In addition to the specific activities and measures of the GAP, the Project will document the positive and negative effects that Project operation have on gender relations by setting up an adequate, gender-sensitive results-based monitoring and by collection sex-disaggregated data. Part of the GAP may be presented in a tabular format as depicted in the table below.

Table 3.3: GAP Sample Template

No	Measures and actions	GAP indicators and targets	Desired outcome	Timeline	Responsibilities
1					
2					
3					
4					
5					
6					

In the Project team, competencies on gender and gender-sensitive management will be considered during operation by means of training. A gender-sensitive language should be used in reports, training materials and publications.

The GAP will be executed by all the entities involved in the Project management.

3.14 Training and Mentoring Policy

The Project will adopt at a corporate level a Training and Mentoring Policy to sustain skills and knowledge transfer for the Project and secure skilled human resources for the lifetime of the Project.

The Training and Mentoring Policy will identify types of training and programmes that will be accessible to all employees in the Company. Such programmes may include:

- On-the-job training and apprenticeship - when a seasoned employee teaches a relatively inexperienced worker how to perform job functions. This is usually skill-based training that involves learning processes or procedures for technical positions or jobs that require knowledge and expertise.
- Job shadowing – involves two similarly experienced workers with an interest in each other’s function area of expertise.
- Mentoring – sometimes the best learning opportunities happen in human interactions. Mentoring program improves employee retention and job performance, etc.

The Training and Mentoring Policy will also reference the Company’s Training Centre to be establish by the Project for operators to secure a pool of skilled workers to operate Project facilities for the lifetime of the Project.

3.15 Community Development Plan

The Community Development Plan will provide a tool to mitigate local community impacts and mitigation and propose broader sustainable development commitments which will be integral components of the Project.

The community development plan will clearly specify:

⁵ Addressing Gender-Based Violence and Harassment Good Practice Note for the Private Sector (Draft for consultation, 2019)

- Project affected people the Plan will target to support
- Resources
- Budgets
- Mitigation measures
- Sustainable community development actions
- Implementation responsibilities.

The Community Development Plan will include such measures as the Community Asset Programme (**CAP**) being currently implemented by the Company and supported by the IFC Advisory team. Under the CAP the Project has developed mulberry tree plantations across all ACs within the Project footprint to share Project benefits, engage more communities in the silk cocoon farming thus enabling local people to earn extra and increase their aggregate annual incomes.

3.16 Stakeholder Engagement Plan

The purpose of the SEP is to manage stakeholder engagement activities for the lifetime of the Project.

SEP needs to be reviewed periodically during Project implementation and updated as necessary prior to the Project major phases, any new or changed operations, modifications in the Project design or if new stakeholders are identified.

The Project SEP will identify and provide details on applicable national and international requirements with regard to Project consultations, information disclosure and Project grievance resolution (refer to Section 3.17).

The Project SEP will undertake identification and analysis of stakeholders and assign communication and enjoyment methods for each group of key Project stakeholders. The Project stakeholder engagement programme will be drafted and included in the SEP to:

- Disclose appropriate information about the Project
- Providing relevant stakeholders with the opportunity to voice their opinions, preferences and grievances

The stakeholder engagement programme will describe engagement activities, propose timing and assign responsibilities for their implementation. The overall responsibility for the SEP implementation, updates and SEP reporting will be with the appointed Community Liaison Officers (CLOs),

The SEP will be reviewed by the CLOs throughout the Project planning phase as deemed necessary or at least once, before and after the Project construction phase and annually once the Project is operational. Additional updates influenced by the Project development may be required, for instance due to Phase II land acquisitions process.

3.17 Community Grievance Mechanism

Having a grievance mechanism is a national and international requirement the Project needs to comply with. A grievance can be defined as an actual or perceived problem that might give grounds for complaint. As a general policy, the Project will work proactively towards preventing grievances through the implementation of impact mitigation measures (as identified by this ESMP) and community engagement.

Anyone will be able to submit a grievance to the Project if they believe a practice is having a detrimental impact on the community, the environment, or on the quality of life. The grievance mechanism allows also submitting comments and suggestions. A good grievance mechanism permits anonymous complaints, respects the confidentiality of the complainant(s) involved, and protects both the complainant and the Project from retaliation.

The Project grievance mechanism will be based on the following principles:

- Being legitimate,

- Easily accessible
- Predictable
- Equitable and transparent
- Rights compatible
- Dialogue based.

The grievance mechanism can help identify critical issues, encourages learning and identifying ways for continuous improvement.

The Project needs to allocate dedicated human resources (CLOs) to deal and address any communities' grievances associated with the Project.

The Project SEP (refer to Section 3.16) will outline and advertise the community grievance procedure and contact details of the Project CLOs.

The Project SEP will describe the grievance resolution procedure, and the main steps in handling grievances (receive and record, categories, acknowledge, investigate, respond, allow for recourse/appeal and follow-up, and close out).

All grievances will be acknowledged within 7 days and response will be issued within 15 days. If more time is needed to complete the investigation this will be communicated to complainant within 15 days of receiving complaint. All grievances will be logged, monitored and the Project CLOs will report to the Company and International Lenders on all grievances associated with the Project:

- Monthly grievance reporting to the Company at the Project planning phase
- Weekly grievance reporting to the Company during the Project development phase
- Biannual grievance reporting to the Company during the operation phase, and
- Annually to inform Annual E&S Report to the International Lenders (for the duration of the Loan Agreement).

3.18 Retrenchment Plan

Retrenchment of staff may be an issue on the Project, especially at the end of the operational phase where roles may become redundant. Prior to implementing any collective dismissals, Indorama Agro will carry out an analysis of alternatives to retrenchment and consider the possibility of internal transfer or other options first. If the analysis does not identify viable alternatives to retrenchment, a retrenchment plan will be developed and implemented to reduce the adverse impacts of retrenchment on workers. The Retrenchment Plan will be developed at least 18 months prior to the Project decommissioning to mitigate adverse impact of the Project workers.

The Plan will be based on the principle of non-discrimination and will reflect consultation with workers, their organisations (e.g. worker's unions), and, where appropriate, the employment authorities, social welfare authorities, and where relevant, local government, and comply with the Indorama Agro collective bargaining agreement.

The retrenchment plan will consist of several components, namely:

- Consideration of alternatives to retrenchment
- Legislative framework and collective bargaining agreement
- Information disclosure and consultation undertaken with employees and their organisations
- Grievance mechanism
- Retrenchment methods and procedures
- Selection criteria

- Number and schedule of dismissals, if unavoidable
- Notice periods
- Severance payments methodology and record of payments made
- Offers of alternative employment or assistance in retraining efforts
- Job placements.

Indorama Agro's retrenchment procedure for the Project workers will also be included in the Project HR Policy (refer to Section 3.7).

3.19 Environmental Action Plan

3.19.1 Indorama Agro Annual Environmental Action Plan

Annual Environmental Action Plan required by the law and is focussed on planning and budgeting of routine environmental actions including the following aspects:

- Environmental management;
- Environmental monitoring;
- Waste handling;
- Air and water pollution control;
- Land use, etc.

Annual Environmental Action Plan establishes list and volume of mitigation measures required by law, estimated timeframe, responsibilities and expected budget.

It is recommended to implement in this plan all environmental actions which are not directly required by national law but focused on environmental mitigation. This will ensure adequate and timely budgeting and funding of all required environmental measures including mitigation of gaps and risks identified within the future Environmental Management System.

3.19.2 Construction Environmental Action Plan (CEAP)

3.19.2.1 Background

Development of the list of environmental mitigation measures for construction phase (CEAP) of any project is required by national law as a part of design documentation package and it is focussed to avoid, mitigate and minimise environmental impacts associated with construction activities.

Content of the Construction Environmental Management Plan required by the IFC EHS Guidelines is largely covered by national requirements on development of CEAP. As IFC EHS Guidelines establish the priority of legal compliance, there is no need for issuing Construction Environmental Management Plan as a separate document.

Designer should incorporate mitigation measures developed in line with EBRD and IFC requirements and provided in the ESMP into CEAP as part of the design documentation ("Environmental Measures" section of design documentation, Construction Master Plan, Method Statement, etc.).

3.19.2.2 CEAP Implementation Monitoring by Contractors

Contractor will be responsible for the implementation of the CEAP plans and associated activities, and also for monitoring and assessing how environmental and social management is undertaken. This monitoring will include the activities undertaken by their sub-contractors. Routine monitoring will be undertaken in order to ensure that

the requirements and measures specified in the CEAP are properly implemented and that the impacts are minimised or mitigated.

The monitoring will be conducted by contractors' EHS personnel who will prepare and maintain reports of their inspections and ensure that corrective actions are taken when necessary and to track performance.

3.19.2.3 Indorama Agro Monitoring and Auditing of the Implementation of CEAP

Contractors are obliged to implement all reasonable measures with regards to noise and vibration, soil erosion, air quality, waste, hazardous materials, wastewater discharges, and contaminated land.

Indorama Agro will monitor CEAP compliance assessment at each construction site, and a system of non-conformance assessment will be put in place to prioritise action according to importance and severity.

The non-conformance procedure includes three levels:

- Work must be stopped in the event of a serious non-compliance situation;
- Work can be continued provided that non-compliance is removed under supervision of Indorama Agro;
- Investigation is required to identify the cause and prevent reoccurrence.

Periodic auditing will also take place, two months after construction has commenced and at least six-monthly audit after that, to verify conformance and that the proper procedures are in place.

Together, the above activities will allow evaluation of implemented measures, analysis of causes of problems, assessment of compliance with contractual and legal requirements, and enable identification of required corrective actions.

3.19.2.4 Staff and Resources

As indicated above, the preparation, approval, implementation, and monitoring of the various activities will require specialist environmental staff both from Indorama Agro and contractors.

Dedicated equipment or engagement of laboratory services may be required to undertake the monitoring of the various parameters.

Construction contract agreements should include the following provisions:

- implementation of CEAP and all EHS measures specified in the design documents, CMP and MS and required by law;
- hiring qualified EHS personnel to work at the Project site;
- supervision by Indorama Agro.

Indorama Agro will appoint a dedicated EHS Managers (one Environmentalist and one Safety Specialist for each cluster) for the Project who will be a permanent member of Indorama Agro staff for routine works and monitoring contractors' activities.

3.19.2.5 Budget

The cost of implementation of environmental, occupational health and safety measures by the contractor is part of the overall Project cost and should be clarified at the design stage.

3.20 Indorama Agro Environmental Monitoring Plan

Environmental Monitoring Plan will be required in line with national rules and will be developed for construction and operational stages of the Project:

- Construction Environmental Monitoring Plan will be developed during the design stage as a part of the Construction Master Plan or the Method Statement. This Plan will include monitoring measures on waste generation, disposal and reuse, air emissions, generation and discharge of surface waste water, air emissions, soil handling, and noise generation.
- Annual Environmental Monitoring Plan will be developed based on the final Project options after Project commissioning and will include monitoring measures for air emission, water consumption and wastewater discharge, waste generation, soil quality etc. Limits of impacts are to be approved by the local environmental authority (Air Emission Permit, Sanitary Protection Zone Permit, Waste Generation and Disposal Limits, Wastewater Discharge Permit, etc.).

3.21 Indorama Agro Waste Generation and Handling Plan

Waste Generation and Handling Plan and Limits on Waste Disposal for construction and operational phases of the Project will be developed at the design stage and approved by the local environmental authorities. Waste Generation and Handling Plan for construction phase of the Project will be developed as part of the Construction Master Plan or Method of Statement.

This plan establishes limits (volumes) on generation of different types of wastes including hazardous wastes, processes generating different types of wastes, ways of safety collection and keeping, disposal options (reuse, recycling, deactivation, disposal at the landfill), and monitoring measures.

Waste Generation and Handling Plan and Limits on Waste Disposal should be revised and reapproved by the local environmental authority during the Project operation in case of increase of waste volume, change of production processes, and generation of wastes not included in the latest revision of the document.

3.21.1 Highlights to Development of Waste Generation and Handling Plan

- Identify who is responsible for overall waste management for the Project and inform individuals of their responsibilities. They will be required to hold sufficient authority to ensure compliance;
- Identify the types and quantities of waste - all waste streams that will be produced require to be identified;
- Duty of Care - outline waste management procedures and records required to demonstrate appropriate handling and final disposal of all wastes;
- Identify suitable waste management sites (the most local sites should be used to minimise transportation costs). Use waste disposal contractor(s) that comply with the environmental legislative requirements of the local and national area;
- Training - all staff must be trained to ensure they understand the requirements;
- Plan - using the steps above, establish indicative percentages of the waste quantities to be produced over the life span of the Project;
- Measure - the quantities of wastes produced should be recorded on a monthly basis, and where possible measures taken to re-use, reduce or recycle waste as appropriate; and
- Monitor - throughout the Project life cycle, waste management on site should be monitored, to ensure compliance;
- Hazardous Classes – hazardous wastes should be classified according to national requirements;
- Identify waste management options - a waste hierarchy of reduce, reuse, and recycle and needs to be considered and prepared. Where hazardous wastes are being generated, particular attention to the arrangements for identifying and managing such waste will need to be addressed and procedures put in place.

3.22 Indorama Agro Pesticides, Defoliants and Fertilizers Application Annual Plan

Regarding the high biological activity and hazardous nature of pesticides, defoliants and fertilizers, planning, procurement, storage, handing, application, and disposal of these chemicals should be formalized in form of plan or manual and disclosed to the responsible staff to prevent pollution of the environment and poisoning of staff, population and habitats in result of spills or inappropriate use.

This Plan should include:

- List of chemicals
- Methodology on calculation of minimal required volumes of each chemical for the season and maximum procurement (storage) volumes
- Methodology of preparation of working solutions
- Methodology of chemical application and disposal of remains
- Safety data sheets for each chemical including methods of safe storage, handling, and application, safety measures for different professions, list of personal protection equipment, emergency response measures, first aid arrangements
- Control measures.

3.23 Indorama Agro Oil Spill Liquidation Plan

Oil Spill Liquidation Plan will be required as Indorama Agro will deal with a big volume of fuel. As soon as Oil Spill Liquidation Plan required by Uzbekistan law and content of this document is strictly limited by state instructions, Oil Spill Liquidation Plan should be developed in line with national rules.

This plan should include at least the following information:

- Number of vessels, their volume and location, vessels content and labelling
- Bunding and leaks protection measures
- Leaks liquidation measures (step by step)
- List of leaks liquidation equipment
- Safety rules
- Disposal of wastes
- First aid measures.

Oil Spill Liquidation Plan including handling of contaminated soils and waters for construction phase will be prepared separately as part of the Construction Master Plan or Method of Statement at the design stage.

3.24 Indorama Housekeeping Plan

Housekeeping Plan to be developed for each production site of the company and establishes routine works on housekeeping, cleaning, maintenance of buildings and facilities etc.

3.25 Indorama Agro Alien Invasive Species Plan

Alien Invasive Species Plan will be required in case of Indorama Agro decide to introduce new variety of plants or use of organic fertilizers like compost or manure delivered from another territories of Uzbekistan or from abroad.

In case of introduction of a new variety of plants Indorama Agro should develop Alien Invasive Species Plan on the basis on national law regulating this activity. In any case, Indorama Agro should implement strict control measures to protect local habitats from invasive species of plants and animals.

3.26 Occupational Health and Safety

3.26.1 Indorama Agro Annual Occupational Health and Safety Plan

Planning of occupational health and safety works is envisaged by national legislation and consist of a number of measures focused on prevention and minimisation of health and safety risks at work. National requirements on development of annual (quarterly) Occupational Health and Safety Plan establishes form of this plan and development guidelines.

Indicative content of the Annual (Quarterly) Occupational Health and Safety Plan:

- Occupational health and safety trainings and attestation
- Emergency aid trainings
- Provision of safe working environment
- Check-ups of equipment and buildings
- Improvement of working environment and equipment
- Automatization of processes
- Renovation of equipment and buildings
- Cleaning
- Provision of personal protection equipment
- Provision of rest and dining rooms
- Provision of showers, toilets
- Provision of clock-rooms with separate lockers for working and private cloth
- Medical check-ups
- Provision of special medical treatment
- Provision of meals and drinks
- Provision of soap, detergents and cream for some professions
- Provision of first-aid kits, etc.

Considering well developed national health and safety requirements which are quite similar to the EBRD and IFC requirements, to exclude excessive work and duplication of documentation it is recommended to use form and content of Occupational Health and Safety Plan provisioned by national regulation.

3.26.2 Construction Occupational Health and Safety Plan

Contractors are obliged to implement all reasonable precautions to protect the health and safety of workers. Various aspects which should as a minimum be take into consideration include: the integrity of workplace structures, severe weather and facility shutdown, workspace and exit, fire precautions, lavatories and showers, potable water supply, clean eating area, lighting, safe access, first aid, disease prevention, communication and training, over exertion, slips and falls, work at heights, struck by objects, moving machinery, dust, confined spaces and excavations, protective equipment, etc. All these aspects should be well developed and envisaged by the Construction Master Plan or Method of Statement.

Contractors are obliged to manage the risks and protect the community from physical, chemical, or other hazards associated with construction sites, hazards associated with the increased traffic, communicable and vector-borne diseases associated with the population of workers. Mitigation measures should be envisaged by the Construction Master Plan or Method of Statement as well.

3.27 Emergency Preparedness and Response Plan

In accordance with industrial safety regulations of the Republic of Uzbekistan, as well as other safety requirements for explosive and inflammable production sites, Indorama Agro have to develop and implement the Emergency Preparedness and Response Plan for gins, as well as special workplace safety instructions relating to specific occupational hazards.

The Emergency Preparedness and Response Plan includes the following information:

- Overview of operational processes and risk assessment for the operational site;
- List of process and area specific hazards;
- Actions in case of threat or actual occurrence of accidents, and emergency situations including:
 - procedures in case of threat of major operational accidents, emergency situations and natural disasters;
 - procedures to support functioning of the forces and means engaged for emergency response and rescue operations, and to protect production process and facilities, workforce and personnel, and property;
 - emergency rescue operations to prevent immediate risks to human life and health, and to restore production process; means and forces engaged for the task;
 - liaison with local authorities, emergency panels, civil society organizations for engagement of emergency response forces and means;
 - management of the operations.

3.28 Hazardous Materials Handling and Storage Plan (Manual)

The overall objective of Hazardous Materials Handling and Storage Plan is to ensure that all hazardous materials stored during the construction and operational phase of the Project are managed appropriately in order to prevent potential impacts associated with spills, leaks, fugitive emissions and health impacts to workers.

Development of a Hazardous Materials Handling and Storage Plan for the construction and operation phase will improve management efficiency by providing a structured summary of the available information on the hazardous materials and their handling requirements.

The following key steps will need to be considered for the Hazardous Materials Handling and Storage Plan:

- Identify who is responsible for overall hazardous materials for the Project and inform individuals of their responsibilities;
- Identify the types and quantities of hazardous materials to be stored during the construction and operational phases;
- Identify suitable hazardous waste storage sites;
- Ensure that the storage sites have the appropriate mitigations such as bunds;
- Training - all staff must be trained to ensure they understand the requirements of the Plan;
- Hazardous materials should be stored according to national requirements
- Provide safety data sheets, emergency actions and emergency aid arrangements.

The cost of implementation of the Hazardous Materials Management and Use Plan at the construction phase is part of the Project cost and subject to updating at the stage of design development.

Hazardous Materials Handling and Storage Plan can be combined with Pesticides, Defoliant and Fertilizers Application Annual Plan.

3.29 Traffic Management Plan Framework

Adverse impact of vehicles on road traffic and local communities is not expected for this Project but if applicable, it is recommended to develop Traffic Management Plan or Manual for heads of transportation units. In addition, this plan will help to safety engineers in development of occupational safety instructions for drivers. This plan should content at least the following mitigation measures to minimise impacts on traffic and pedestrians:

- Delivery of materials, chemicals, vehicles and agricultural machinery to / from sites (fields) should be conducted out of peak hours
- Parking of vehicles along roads, within borders of settlements and on unpaved soils (roadsides) is prohibited
- Sharp parts of vehicles moving outside fields should be removed or switched in a safe position
- Delivery routes should be planned away from settlements
- Mandatory adherence to speed limits at all times.

3.30 Chance Finds Procedure

3.30.1 Overview

Effective protection of cultural heritage is based on an understanding of the key issues, appropriate assessment and the correct action to minimise damage or loss. As unknown features / objects could be encountered during works, in particular earthworks, a 'chance finds procedure' will be in place to stop works and require investigation by an archaeologist in case of such findings.

This section contains a 'chance finds procedure' for use by the contractors. Updates or amendments will be made by the contractors where appropriate.

3.30.2 Framework Chance Finds Procedure

3.30.2.1 Definitions

"Chance finds" are defined for the purposes of this procedure as physical cultural resources encountered unexpectedly during project implementation.

"Physical Cultural Resources" (PCRs) are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, palaeontological, historical, architectural, religious, aesthetic, or other cultural significance. Their cultural interest may be at the local, provincial, national or international level.

3.30.2.2 Ownership

Any chance finds that may be discovered are property of the Republic of Uzbekistan.

3.30.2.3 Training

So that the contractors and employees such as equipment operators and supervisors on the Project can identify physical cultural resources, training will need to be given. Prior to commencement of works contractors (in collaboration with Indorama Agro) will consult with the authorities mentioned above in order to arrange training for its employees. Indorama Agro will monitor this process to ensure that effective training is given to the correct members of the workforce.

3.30.2.4 Procedure upon Discovery

Suspension of work:

- Upon discovery of physical cultural resources, the contractor shall stop work;

- In some cases, all work will need to be suspended, in others just the work in the immediate vicinity of the find will need to stop, in others still, all work within a certain radius of the find must cease. This issue will depend on the type of find and will be determined by competent authority;
- After stopping work, the contractor must immediately report the discovery to the Project Manager of Indorama Agro. The contractor may not be entitled to claim compensation for work suspension during this period.

Conditions and requirements for work stoppage:

- With the approval of Indorama Agro's Project Manager, the contractor is then required to temporarily demarcate and limit access to the site or may decide that the item can be removed, and work may continue, for example where the item is a single coin of archaeological value.

3.30.2.5 Chance Find Report

- The contractor will submit a Chance Find Report within one day of the find. This will record the following information:
 - Date and time of the discovery;
 - Location of the discovery;
 - Description of the PCR;
 - Estimated weight and dimensions of the find; and
 - Temporary protection that has been implemented.

The Chance Find Report will be submitted to Indorama Agro's Project Manager.

Indorama Agro's Project Manager is required to inform the cultural authority immediately following the submission of the Chance Find Report.

3.30.2.6 Actions of Cultural Authority

Cultural Authority will determine the action to be taken which may include the following:

- Removal of the PCR(s) deemed to be of significance;
- Execution of further excavation within a specified distance of the discovery point; and
- Extension or reduction of the area demarcated by the contractor.

3.30.2.7 Resumption of Work

Following approval from the cultural authority Indorama Agro Project Manager will issue the contractor with the instruction to recommence works.

4 Institutional Arrangements and Implementation

4.1 Construction Project Structure

Proposed management structure for the Project construction phase is shown Table 4.1 **Error! Reference source not found.** based on the existing Indorama Agro organization structure and ESIA findings.

4.1.1 Construction Environmental, Health and Safety Management

4.1.1.1 Indorama Agro Management Structure

Indorama Agro will recruit sufficient number of staff members of required qualifications who can easily deal with Project aspects and cover all environmental, health, safety, labour and social responsibilities and commitments of the Project under the loan agreement.

The Company will appoint permanent staff member(s) in its relevant departments to act as Environmental, Health and Safety Manager(s)/Officers who will deal with EHS aspects of the Project including monitoring visits to the multiple construction sites and compulsory Project reporting. If necessary, Indorama Agro will provide workplace(s) for Environmental, Health and Safety Manager(s)/Officers, Social and Labour Officers (at least two) at the construction sites.

4.1.1.2 Contractor Environmental, Health, Safety and Social Management

Contractors and sub-contractors will be encouraged to have management systems (Environmental Management System, Occupational Health and Safety Management System) equivalent to standards ISO 14001 and OHSAS 18001. These standards place strong emphasis on the need for continuous improvement of the management systems and resultant performance.

The appointed contractors will be required to perform the following actions:

- Implement environmental, health and safety measures specified in CMP, MS and design documents, the framework for which is set out in Section 3.2;
- Where necessary, elaborate their own plans, the framework for these is set out in Sections 3.3 -3.19;
- Provide all training necessary to oversee and implement the requirements of CMP, MS and design document;
- Appoint two full-time engineers per each site with dedicated EHS responsibilities to oversee works on site.

All sub-contractors will be required to have dedicated environmental, health, safety, labour and social staff to implement plans and procedures, to monitor and manage this on an on-going basis. The sub-contractors' staff will be required to liaise closely with the contractor staff including the provision of monthly reports and participation in weekly construction review meetings, etc.

Table 4.1: Proposed Staffing on Each Site

Role	Number	Responsibility
Contractor Project Manager	1	Overall responsibility for environmental, health and safety performance of Project contracted works, including sub-contractor(s).
Construction Site Manager	1	Responsible for practical implementation of environmental, health and safety requirements at site and for onsite performance
Environmental, Health and Safety Manager(s)	1	Monitoring and reporting of project environmental, health and safety performance
Contractor Environmental Officer	1*	Management and monitoring of plans implementation and environmental issues and performance

Role	Number	Responsibility
Contractor Community Liaison Officer	1	Community liaison on behalf of contractor. Close cooperation with Indorama Agro's CLOs.
Contractor Health and Safety Officer	1	Management and monitoring of plans implementation, reporting.

* Number of officers may vary depending on the level of construction activity

4.1.1.3 Environmental, Health and Safety Manager

The contractors will be required to nominate an officer(s) to take the primary responsibility for day-to-day environmental, health and safety activities. The formal job description to implement the requirements listed herein would be generally include the following:

- Take responsibility for implementation of environmental, health and safety measures (with support from the Contractor Construction Site Manager), and ensure all subcontractors are in compliance with the requirements listed herein;
- Review and report the contractor's performance to Indorama Agro;
- Review subcontractors' environmental, health and safety activities;
- Report any non-compliances to the Construction Site Manager;
- Carry out regular awareness sessions and assist personnel in applying standards on site;
- Act as the contractor's first point of contact on environmental, health and safety matters, for the government authorities, other external bodies and the general public.

There are certain criteria that the contractor Environmental, Health and Safety Manager will be required to have knowledge and experience in, including:

- An understanding of the international standard techniques of environmental management;
- Familiarity with local environmental and labour legislation;
- Practical operation of environmental monitoring techniques;
- Ability to summarise environmental data in order to produce concise and conclusive reports;
- Hold the confidence to enforce strict, but pragmatic, environmental control procedures and to motivate the construction staff to a high level of environmental awareness; and
- Minimum of five years practical experience on construction sites.

4.1.1.4 Construction Site Manager

The Construction Site Manager will need to work to co-ordinate efforts based on inputs from the Environmental, Health and Safety Manager(s) and assist in the allocation of staff.

It is envisaged that the Construction Site Manager will:

- Ensure that the Environmental, Health and Safety Manager is adequately qualified to understand and implement the requirements listed in this document;
- Nominate personnel to assist the Environmental, Health and Safety Manager as required; and
- Be responsible for communications with Indorama Agro with regard to environmental, health and safety issues and non-compliances.

5 Monitoring and Reporting Requirements

5.1 Introduction

Effective reporting is essential for rendering an ESMP of practical value, while routine independent auditing provides the necessary impetus for continual improvement. Performance monitoring, reporting and auditing should be carried out to ensure compliance with the requirements of this ESIA. The following provides an outline approach which is aligned to the requirements of the series of international management standards ISO 14001, ISO 9001 and ISO 45001. The final scope and format of all reports proposed herein will be agreed with the EBRD prior to them being required and produced.

5.2 Adaptive Management

The ESMP and plans contained herein will adopt an adaptive management approach throughout the life cycle of the Project. The creation of the plans at the Project outset is a process needed to ensure that the management objectives and performance indicators tailored to the current Project investment programme and objectives of the project. The ESMP utilises to the extent possible existing Project knowledge to fully address the actual environmental and social impacts of the Project at the time and allow flexibility in environmental and social management decisions made on the Project.

The following actions are required to ensure adaptive management of the ESMP:

- The ESMP should be reviewed and amended in accordance to the Project design and status as it evolves. Information about any changes to the Project which might influence its environmental and social performance should be regularly reviewed and appropriate changes should be made to the records and corrective measures, and site visits should be undertaken by Indorama Agro staff to identify the true impacts of the changes.
- On-going evaluation of the effectiveness of measures included in the ESMP should be undertaken on a regular basis as the project evolves through construction, operation and decommissioning of the project. The evaluation is conducted through on-going communication with contractors, stakeholders and lenders and is supplemented by site audit and monitoring data review to rectify any weaknesses in management systems and ESMP through the Project lifetime.

5.3 Monitoring and Reporting by Indorama Agro and Others

5.3.1 Contractors' Monthly Internal Reports

Contractors will be required to prepare brief monthly reports for issue to the Indorama EHS Manager. These reports should summarise the following:

- Progress in implementing CMP (MS) and parallel management plans;
- Findings of the monitoring programmes, with emphasis on any breaches of the control standard or standards of general site management;
- Outstanding Non-Compliance Reports;
- Summary of any complaints by external bodies and actions taken/to be taken;
- Relevant changes or possible changes in legislation.

Any breaches of legal requirements and/or this ESIA should be reported to Indorama Agro, using a form of Non-Compliance Report.

5.3.2 Indorama Agro Monitoring of Construction Activities

Indorama Agro will undertake, on a daily basis, compliance monitoring of the contractors environmental and social activities as per ESMP. Internal audits will be undertaken within two months of commencement of construction and thereafter every three months focussing on the progress of ESMP implementation.

Any breaches of the acceptable standards specified by law or ESMP through the Indorama Agro monitoring of contractors will be reported to the contractor, using a Non-Compliance Report Form.

A copy of each completed Non-Compliance Report (whether prepared by contractor or Indorama Agro) should be held on file by the EHS Officer, to be replaced by copy of corrective action response when it is received. A record of corrective actions should also be made and tracked to their completion.

During the construction phase, Indorama Agro will undertake quarterly reporting, based on their own monitoring results as a project requirement.

5.3.3 Monitoring of Indorama Agro Operational Activities

Environmental and social impacts that will occur during the operation phase will be managed and monitored through the commitments outlined in this ESMP. The Indorama Agro EHS Officer will prepare annual reports for issue to the Lenders Environmental and Social Consultant or EBRD summarizing progress against implementation of the ESMP obligations through the operational phase. This will include full reporting of monitoring results where relevant.

Adherence to the Occupational Health and Safety Action Plans will be taken seriously and audited frequently. A warning system for violations and non-compliance will be established and implemented for the monitoring system to be effective.

Regular performance monitoring of the project grievance mechanism and stakeholder engagement will take place.

5.3.4 Indorama Agro Third-party Monitoring Reports

Monitoring for labour issues is important for the Project in keeping to Project commitments on preventing risks of child and forced labour in the Project primary supply chain.

Indorama Agro will report on third-party monitoring missions quarterly during construction and quarterly for the first year of operations. Starting from the second year of operation the Company will report annually.

Indorama Agro will allow access for other third-party labour monitoring missions from external parties (NGOs/ILO/human rights watch, etc.).

5.3.5 Indorama Agro Corporate Social Responsibility Report

Indorama Agro will identify and plan corporate social responsibility measures for addressing community issues, including raised during ESIA consultations and focus group discussions with the people from the directly affected communities. The Company will report on this commitment and will annually prepare and disclose CSR Reports of the Project.

5.3.6 Indorama Agro Statutory Reports

Adhering to the external reporting requirements as set out in Uzbek Law is important. A register of all necessary external stakeholder reporting requirements under Uzbek Legislation and for regulatory compliance purposes should be developed and form part of the action plans. The frequency of reporting, the required reporting format and the persons (divisions) responsible for producing the report, as well as details of contractors engaged (in case of outsourced functions) is to be noted in the register.

Indorama Agro will ensure that all the necessary reports are produced and submitted in a timely fashion in order to achieve on-going regulatory compliance throughout the life of the Project. Meeting regulatory reporting requirements is to also form part of the scope for any internal audits and management reviews.

