



German Credit Facility to Assist the Return of IDPs in Iraq (GCFI)

Environmental and Social Management Framework (ESMF)

January 2019

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Abbreviations

BMZ	Federal Ministry for Economic Cooperation and Development (Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung)
CLO	Community Liaison Officer
CSOs	Civil Society Organizations
DMA	Directorate of Mine Action
E&S	Environmental and Social
EHS Guidelines	World Bank Group Environmental, Health, and Safety Guidelines
EODP	Emergency Operation Development Project
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMMF	Environmental and Social Management and Monitoring Framework
ESMMP	Environmental and Social Management and Monitoring Plan
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
EWR	Explosive War Remnants
FC	Financial Cooperation
GCFI	German Credit Facility programme to assist the permanent return of IDPs in Iraq
GIIP	Good International Industry Practice
GIM	GCFI Implementation Manual
GoG	Government of the Federal Republic of Germany
GoI	Government of the Republic of Iraq
GRM	Grievance Redress Mechanism
IC	Implementation Consultant
IDPs	Internally Displaced Persons
IED	Improvised Explosive Devices
IFC	International Finance Corporation
ILO	International Labour Organization
ILS	International Labour Standards
IOM	International Organisation for Migration
ISIS	Islamic State of Iraq and Syria
KfW	KfW (Kreditanstalt für Wiederaufbau)
LACP	Land Acquisition and Compensation Plan

LGRC	project-Level Grievance Redress Committee
M&E	Monitoring and Evaluation
MMC	Management and Monitoring Consultant
MoCH	Ministry of Construction and Housing
MoE	Ministry of Electricity
MoF	Ministry of Finance
OP	Operational Procedure
OPIM	Other Potential Infectious Materials
PAPs	Project Affected Persons
PBA	Programme-Based Approaches
PEA	Programme Executing Agency
PIA	Project Implementing Agency
PMO	Prime Minister's Office
PMT	Project Management Team
PPE	Personal Protective Equipment
RAP	Resettlement Action Plan
ReFAATO	Reconstruction Fund for Areas Affected by Terroristic Operations
RPF	Resettlement Policy Framework
SC	Steering Committee
ToR	Terms of Reference
UNCBD	UN Convention for Biological Diversity
UNCCD	UN Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UXO	Unexploded Ordnance
WB	World Bank
WWTP	Wastewater Treatment Plant

لمحة عن المشروع

أدى عدم الاستقرار السياسي والعمليات الإرهابية في العراق إلى أزمة نزوح كبيرة حيث يعتبر حوالي 10 بالمائة من مجموع سكان العراق نازحين داخليًا. وكجزء من التزام المجتمع الدولي بمساعدة حكومة العراق (GoI) في إعادة إعمار المناطق المتضررة وعودة الأشخاص النازحين داخليا، أعدت حكومة جمهورية ألمانيا الاتحادية (GoG) والحكومة العراقية الألمانية برنامج تسهيلات ائتمانية لمساعدة العودة الدائمة للنازحين في العراق برنامج (GCFI).

يركز برنامج GCFI على المشاريع الاستثمارية قصيرة ومتوسطة الأجل لدعم استعادة البنية التحتية الاقتصادية والاجتماعية الأساسية، وكذلك تعزيز توفير الخدمات الأساسية لسكان المناطق الآمنة في محافظات ديالا وصلاح الدين والأنبار ونيوى. سيكون برنامج GCFI متوافقاً بشكل وثيق مع مشروع تطوير عمليات الطوارئ الجارية في العراق (EODP) المنفذة بدعم من البنك الدولي. ويتضمن البرنامج التدخلات في قطاعات الطاقة والمياه والصرف الصحي والطرق والجسور والتعليم والصحة، مع التركيز في البداية على قطاعات الطاقة والمياه والصرف الصحي والطرق ومشاريع الجسور. يتم تجميع تدخلات القطاع في حزم الاستثمارات العامة التي تتراوح بين 50 و 140 مليون يورو لكل منها لتنفيذها من قبل الوزارات المعنية.

وكالة تنفيذ البرنامج (PEA) هي صندوق إعادة إعمار المناطق المتضررة من العمليات الإرهابية (ReFAATO)، حيث تقوم هيئة صندوق "إعادة الاعمار" بتيسير التبادل والتوافق مع جميع أصحاب المصلحة المعنيين على المستويين الوطني والإقليمي بما في ذلك التنسيق مع مبادرات دعم الاستقرار والانتعاش الأخرى ذات الصلة في العراق. لهذا الغرض، تعاقدت ReFAATO و GOPA مع إدارة GCFI ومستشار الرصد (MMC)، لتوفير (1) إدارة ورصد الدعم لـ ReFAATO، و (2) دعم تنمية القدرات لفرق إدارة المشاريع (PMTs).

أهداف إطار عمل الإدارة البيئية والاجتماعية (ESMF)

على الرغم من أن التأثيرات والمخاطر البيئية والاجتماعية المرتبطة بالمشروع تعتبر بشكل عام ذات أهمية معتدلة ويمكن التعامل معها من خلال الحلول القياسية والتقنية الحديثة، إلا أن بنك التنمية الألماني صنف مشروع GCFI على أنه خطر بيئي واجتماعي عالي (الفئة أ)، وقد تم تبرير هذا التصنيف من خلال سياق المخاطر الذي يحف المشروع، فيما يتعلق بقضايا الاستقرار والنزاع والأمن.

من أجل الامتثال لمتطلب الاستدامة، ولأن مواقع المشاريع الفرعية لم يتم تحديدها عن طريق التقييم، تم تطوير إطار عمل الإدارة البيئية والاجتماعية (ESMF) وكذلك إطار سياسة التسوية في برنامج GCFI، استنادا إلى أحكام إطار عمل الإدارة البيئية والاجتماعية المعدة لمشروع تطوير عمليات الطوارئ ولتلبية متطلبات "إرشادات البيئة والصحة والسلامة" الصادرة عن البنك الدولي، والمبدأ

التوجيهي للاستدامة بنك التنمية الألماني بالإضافة إلى الأحكام القانونية الوطنية في العراق. يعمل إطار عمل الإدارة البيئية والاجتماعية الخاص ببرنامج GCFI كأداة تحد وتخفف من الأثار البيئية والاجتماعية المحتملة في أنشطة البرنامج المستقبلية ، ويهدف على وجه التحديد إلى ما يلي:

إنشاء عملية مسح بيئي واجتماعي لتصنيف مشاريع البرنامج، وتحديد أنواع أدوات الحماية البيئية والاجتماعية المتوقعة للمشروعات، وتحديد تدابير الإدارة ورصد التأثيرات البيئية والاجتماعية أثناء تنفيذ البرنامج. خلال مرحلة تنفيذ GCFI، سيتم دمج أدوات الحماية الخاصة البيئية والاجتماعية التي سيتم إعدادها للمشروعات في وثائق العطاء وستكون بمثابة أساس تعاقدى للإشراف والامتثال للمتطلبات البيئية والاجتماعية الخاصة بـ GCFI.

الإطار القانوني

تشمل القوانين واللوائح والتعليمات العراقية المطبقة بالإضافة إلى السياسات والإجراءات الدولية التي ينطلق منها هذا البرنامج والتي يلتزم بها GCFI ما يلي:

تشمل القوانين واللوائح والتعليمات الوطنية المعمول بها وكذلك المعاهدات الدولية ما يلي:

القوانين الوطنية:

قانون حماية وتحسين البيئة رقم 27 لعام 2009

قانون حماية الحيوانات البرية رقم 17 لعام 2010

قانون استغلال وحماية الأحياء المائية رقم 48 لعام 1976

قانون الموارد المائية رقم 50 لعام 2008

قانون الصحة العامة رقم 89 لعام 1981 والمعدل بالقرار رقم 54 لعام 2001

قانون رقم بشأن الأثار والتراث العراقي 55 لعام 2002

قانون الطرق العامة رقم 35 لعام 2002

قانون بشأن إنشاء الهيئة العامة للمياه والصرف الصحي رقم 27 لعام 1999

قانون منع الضوضاء رقم 41 لعام 2015

قانون بشأن الهيئة الوطنية للنظافة والسلامة المهنية رقم 6 لعام 1988

قانون الاستحواذ رقم 12 لعام 1981

اللوائح

اللائحة التنفيذية لحماية الأنهار رقم 25 لعام 1967

لائحة الحفاظ على الموارد المائية رقم 2 لعام 2001

التعليمات والتوجيهات

التعليمات رقم 2 لعام 2014 بشأن حماية البيئة من النفايات البلدية

التوجيه رقم 67 لعام 1986 بشأن تنظيم مناطق جمع الحطام

قانون الهواء النظيف رقم 1 لعام 2004

التعليمات رقم 2 لعام 1993

التوجيه رقم 4 لعام 1993 بشأن الصحة المهنية وحماية العمال من الاهتزاز

التعليمات رقم 1985/3 بشأن السلامة المهنية

الاتفاقيات والمعاهدات الدولية

اتفاقية الأمم المتحدة للتنوع البيولوجي (UNCBD)

اتفاقية الأمم المتحدة لمكافحة التصحر (UNCCD)

اتفاقية RAMSAR بشأن الأراضي الرطبة

اتفاقية اليونسكو للتراث العالمي

اتفاقية الأمم المتحدة الإطارية بشأن تغير المناخ (UNFCCC) وبروتوكول كيوتو ومع ذلك، يكون مستشار التنفيذ (IC) مسؤولاً عن تحديث الإطار القانوني للتأكد من أنه يغطي جميع الجوانب القانونية والحديثة ذات الصلة بالمشروع المحدد.

تتضمن المبادئ التوجيهية البيئية والاجتماعية الدولية المعمول بها ما يلي:

وفقاً للمبدأ التوجيهي لاستدامة بنك التنمية الألماني، تشمل الخطوات العامة لتقييم البيئة والتنمية الاجتماعية على ما يلي:

مسح وتصنيف تدابير التعاون المالي (FC).

تقييم عميق / العناية الواجبة الاجتماعية والبيئية

إشراك أصحاب المصلحة وإدارة الشكاوى فيما يتعلق بمقياس التعاون المالي.

تم إعداد دليل تنفيذ GCFI (GIM) في نوفمبر 2017 لتوجيه ReFAATO، وفرق المشروع، والاستشاريين والمقاولين على الإجراءات اللازمة لتنفيذ البرنامج. يعد الالتزام بهذا الدليل إلزامي لجميع أصحاب المصلحة الرئيسيين المحددين كجزء من إعلان النوايا المشترك بين مكتب رئيس الوزراء العراقي ومكتب الخارجية الاتحادي الألماني.

يقوم إطار عمل الإدارة البيئية والاجتماعية لمشاريع تطوير عمليات الطوارئ في العراق (EODP) على تصنيف المشروعات إلى أنواع وفقاً للمعايير والآثار البيئية والاجتماعية، وكذلك تعريف الأدوات والعمليات المحددة المطلوبة لكل تصنيف. بما أن إطار عمل الإدارة البيئية والاجتماعية الخاص بمشروع تطوير عمليات الطوارئ هو برنامج شامل ومقبول بشكل عام للمشاريع الممولة من بنك التنمية الألماني، يعمل برنامج GCFI بشكل عام على الحفاظ على هذه الضمانات الحالية وينسق نهج GCFI مع مشروع تطوير عمليات الطوارئ المستمر. وبناءً على ذلك، يجب تصميم وتشغيل إطار عمل الإدارة البيئية والاجتماعية استناداً إلى الأحكام (المعايير والإجراءات) الخاصة بإطار عمل الإدارة البيئية والاجتماعية بمشروع تطوير عمليات الطوارئ.

إجراءات الحماية للبنك الدولي والسياسات التشغيلية. وتعتبر هذه جزءاً من إطار العمل الخاص بإطار الإدارة العامة لشؤون البيئة (ESFF). على وجه التحديد، الإجراء التشغيلي رقم (4.01) بشأن التقييم البيئي، الموائم الطبيعية (4.04)، الغابات (4.36)، سلامة السود (4.37)، الموارد الثقافية المادية (4.11)، التسوية القسرية (4.12)، المجاري المائية الدولية (7.50). بالإضافة إلى ذلك، ينبغي استخدام المبادئ التوجيهية العامة والصناعية مع المبادئ التوجيهية للبيئة والصحة والسلامة (EHS) حسب الاقتضاء. وبما أنه من غير المتوقع أن يكون للأنشطة المقترحة تأثيرات بيئية واجتماعية ضارة للغاية، فقد تم تعيين مشروع تطوير عمليات الطوارئ ضمن الفئة "ب". على الرغم من أن الإطار البيئي والاجتماعي للبنك الدولي (ESF) استبدل السياسات التشغيلية للبنك الدولي في يناير 2018 بالمبادئ التوجيهية لإجراء تقييمات بيئية واجتماعية وصحية، كما يلتزم إطار عمل الإدارة البيئية والاجتماعية لـ GCFI بالإجراءات التشغيلية للبنك الدولي للحفاظ على نفس مستوى أحكام إطار عمل الإدارة البيئية والاجتماعية لمشروع تطوير عمليات الطوارئ.

كشفت تحليل الفجوات الذي تم تنفيذه على القوانين الوطنية العراقية، والمبادئ التوجيهية للاستدامة في بنك التنمية الألماني، والسياسات التشغيلية في البنك الدولي، أنه فيما يتعلق بقضايا ظروف العمل والصحة والسلامة، لا يوصى باتخاذ إجراءات أخرى لأن الإجراءات الحالية متناسقة ومتناسكة. ومع ذلك، أشار تحليل الفجوة أنه بالنسبة لإطار العمل البيئي والاجتماعي والتسوية القسرية، يجب أن يعتمد برنامج GCFI إشراك أصحاب المصلحة والمشورة ووضع خطة الإفصاح وكذلك اعتماد إطار عمل لسياسة التسوية (RPF) لبرنامج GCFI لأن القوانين العراقية الوطنية لا تتطلب التشاور / الإفصاح ولا تمكن أولئك الذين ليس لهم الحق القانوني في الممتلكات والخاضعون لخسارة سبل كسب العيش / أصولهم من أي نوع من التعويض.

شروط خط الأساس

وتشمل المحافظات التي يشملها برنامج GCFI ديالا وصلاح الدين والأنبار ونيوى، والتي تقع جميعها داخل الأجزاء الشمالية الشرقية والشمالية الغربية من العراق. يتضمن إطار عمل الإدارة البيئية والاجتماعية (ESMF) لمحة عامة عن الشروط الأساسية فيما يتعلق بالبيئة المادية والتنوع البيولوجي والظروف الاجتماعية والاقتصادية ومواقع التراث الأثري والثقافي ضمن هذه المحافظات الأربع. ومع ذلك، أثناء التنفيذ، يكون مستشار التنفيذ مسؤول عن توفير وثائق محدثة ومحددة المنطقة لشروط خط الأساس.

عملية تنفيذ إطار عمل الإدارة البيئية والاجتماعية

يوفر إطار عمل الإدارة البيئية والاجتماعية (ESMF) منهجاً توجيهياً لتحديد وتقييم التأثيرات البيئية والاجتماعية المتوقعة أثناء تنفيذ مشروعات GCFI. حيث يتم تنفيذ أنشطة هذا النهج من قبل فرق إدارة المشروع (PMTs) بالتعاون مع المراكز المتكاملة المعنية

خلال مرحلة تقييم المشروعات، وتشمل ما يلي:

المسح البيئي والاجتماعي

التعرف المبني على المستقبلات البيئية والاجتماعية

تقييم أولي للأثار البيئية والاجتماعية لـ GCFI

تطبيق أداة الحماية المتوقعة للمشروع في إطار برنامج GCFI

مسح وتصنيف المشروع الاجتماعي والبيئي

إنها الخطوة الأولى في دورة المشروع المستخدمة لتحديد مدى تأثير المشروع على البيئة. يتم إجراؤها بواسطة فريق المشروع / مستشار التنفيذ لكل مشروع. استنادًا إلى نوع المشروع وموقعه وحجمه والتأثيرات السلبية المتوقعة، يتم تصنيف المشروع إلى الفئة أ أو الفئة ب + أو الفئة ب أو الفئة ج وفقًا لمبدأ الاستدامة لبنك التنمية الألماني.

ترد أمثلة على التصنيف البيئي والاجتماعي المتوقع لمشروعات GCFI في الجدول 14 بناءً على نوع المشروع. ومع ذلك، يجب أن نتذكر أن لكل مشروع خصائصه الفريدة في المجالين البيئي والاجتماعي.

تجدر الإشارة إلى أن بعض المشاريع التي لها تأثيرات بيئية و / أو اجتماعية كبيرة لن تكون مؤهلة للحصول على التمويل بموجب إطار التعاون العالمي. فيما يلي معايير المشروعات غير المؤهلة في إطار GCFI :

تحويل أو تدهور كبير في الموائل الطبيعية الحرجة

أضرار للممتلكات الثقافية والمواقع الأثرية والتاريخية والآثار الدينية والمقابر.

محطة معالجة مياه صرف جديدة لخدمة 10,000 أسرة أو أكثر

قدرة توليد جديدة تبلغ أكثر من 10 ميغاوات

بناء السدود التي يزيد ارتفاعها عن 5 أمتار وإعادة تأهيل السدود التي يزيد ارتفاعها عن 15 مترا

استخدام خشب الوقود، بما في ذلك الأشجار والأدغال

استخدام المواد الخطرة أو نظم الري والصرف الجديدة.

علاوة على ذلك، وبسبب المخاطر المحتملة للمخلفات القابلة للانفجار في الأنقاض وتحتها، يجب أن تحصل فرق المشروع / مستشارو التنفيذ على تأكيد خطي من السلطات المختصة في المحافظات لضمان إزالة هذه المخاطر من منطقة المشاريع. يتم تضمين أداة المسح البيئي والاجتماعي كجزء من إطار عمل الإدارة البيئية والاجتماعية (الملحق 1 من تقرير إطار عمل الإدارة البيئية والاجتماعية).

التعرف المبني على المستقبلات البيئية والاجتماعية

يوفر التحديد الأولي للمستقبلات البيئية والاجتماعية لمحة عامة عن المستقبلات البيئية والاجتماعية التي من المتوقع أن تتأثر أثناء تنفيذ برنامج GCFI . وتشمل هذه البيئة المادية (نوعية الهواء والتربة والتضاريس وموارد المياه)، والبيئة البيولوجية (النباتات والحيوانات)، والبيئة الاجتماعية والاقتصادية (السكان في محيط الأنشطة، واستخدام الأراضي وملكية الأراضي والمرافق والبنية التحتية، فضلا عن الصحة والسلامة)، والآثار والتراث الثقافي.

تقييم أولي للآثار البيئية والاجتماعية لـ GCFI

بشكل عام، من المتوقع أن يكون لمشروعات GCFI تأثيرات بيئية واجتماعية إيجابية كبيرة في مجالات التدخل. ستحفز مثل هذه التأثيرات (التنمية الاقتصادية والاجتماعية، وتحسين إمكانية الوصول إلى السلع والخدمات، وخلق فرص العمل والتنمية الاقتصادية المحلية) العودة الدائمة للنازحين إلى مواقعهم الأصلية. ستتم معظم تدخلات برنامج GCFI في مناطق حضرية تتميز بيئيًا بأنها غير حساسة. ومع ذلك، قد تنطوي أنشطة المشاريع على تأثيرات بيئية واجتماعية سلبية تمت مناقشتها في وثيقة إطار عمل الإدارة البيئية والاجتماعية.

الأدوات البيئية والاجتماعية

بناءً على نتائج عملية الفرز البيئي وتصنيف كل مشروع، يجب على فرق إدارة المشروع / مستشارو التنفيذ استخدام أدوات الضمانات الإلكترونية التالية أثناء تنفيذ مشروعات GCFI:

خطة الإدارة البيئية والاجتماعية مصممة بشكل عام لأعمال إصلاح روتينية بسيطة. يتم استخدام هذه الأداة لضمان الامتثال الأساسي والتدبير المنزلي الجيد للأعمال المدنية الصغيرة الروتينية في البيئات غير الحساسة. وهو يناسب معظم أنشطة إعادة التأهيل والتعمير ومشروعات إطار التعاون العالمي، كما توفر تدابير تخفيف نموذجية لمشاريع ذات طبيعة منخفضة المخاطر وأثار محلية صغيرة. تم تضمين نموذج لهذه الأداة في الملحق 2 من هذا التقرير.

التقييم البيئي والاجتماعي السريع وخطة الإدارة البيئية والاجتماعية المحددة للمشروعات الكبيرة مع مزيد من أعمال البناء الكبيرة إلى جانب الظروف البيئية والاجتماعية الأقل حساسية. تهدف هذه الأداة إلى التعرف على شروط خط الأساس البيئية والاجتماعية والتي تكون أكثر حساسية وتتطلب إجراءات الإدارة والتخفيف إلى ما هو أبعد من النهج المعتاد للممارسات الجيدة التي تحددتها القائمة المرجعية لـ خطة الإدارة البيئية والاجتماعية. كما تحتوي على تدابير وأحكام مصممة للتعامل مع قضايا البيئة والصحة والسلامة (البيئية والاجتماعية) عالية الحساسية والتعقيدات مثل حماية المناطق / البيئات الحساسة، والأشجار القديمة، والتراث الثقافي، وما إلى ذلك. تم تضمين نموذج لهذه الأداة في الملحق 3 من هذا التقرير.

تقييم الأثر البيئي والاجتماعي / خطة الإدارة البيئية والاجتماعية الشاملة مع ظروف بيئية واجتماعية أكثر حساسية. تم تصميم هذه الأداة لمسح وتقييم التأثيرات البيئية والاجتماعية المتوقعة للأعمال ذات النطاق الأكبر والتي تقع في المناطق التي يتوقع فيها وجود حساسية بيئية واجتماعية أعلى. هذه الأداة عبارة عن مجموعة كاملة لتقييم الأثر البيئي والاجتماعي (ESIA) ومشروع خطة الإدارة البيئية والاجتماعية محدد ومشتق وفقًا لمتطلبات مشروع بيئي من الفئة ب بموجب 4.01 الخاص بالبنك الدولي. تم تضمين الحد الأدنى من محتوى تقييم الأثر البيئي والاجتماعي / في الملحق 4 من هذا التقرير.

رصد إطار عمل الإدارة البيئية والاجتماعية

بما أن برنامج GCFI ينطوي على مشاريع في أربع محافظات لها ظروف بيئية واجتماعية مختلفة، يجب على فرق المشروع / مستشارو التنفيذ أن يأخذون بعين الاعتبار سياق البيئية والاجتماعية المحلي لكل مشروع ومن ثم تكييف إجراءات التخفيف المحددة بناءً على نتائج تقييم الأثر البيئي والاجتماعي. لأغراض هذا الإطار (إطار عمل الإدارة البيئية والاجتماعية)، تم جدولة تدابير التخفيف العامة المتوقعة للأثار البيئية والاجتماعية التي تم تحديدها بشكل أولي لأنشطة مشاريع GCFI، في تقرير إطار الإدارة البيئية والاجتماعية والرصد.

تقوم فرق إدارة المشروع / مستشارو التنفيذ، خلال GCFI بإعداد وتنفيذ خطة مراقبة وإدارة بيئية واجتماعية محددة (ESMMP) لكل مشروع لمعالجة جميع الأنشطة التي لها تأثيرات كبيرة محتملة على البيئة وتدابير التخفيف المناسبة أثناء الظروف العادية وغير العادية. كحد أدنى، يجب أن تتكون ESMMP كما يلي:

أنشطة المشروع ذات الصلة

الأثار البيئية والاجتماعية السلبية المحتملة

تدابير التخفيف المقترحة

الطرف المسؤول عن تنفيذ تدابير التخفيف

مقياس الرصد المقترح

المؤسسات المسؤولة عن مراقبة تنفيذ تدابير التخفيف وتواتر التدابير المذكورة

تقديرات التكلفة لهذه الأنشطة يوجد في الملحق 5 نموذج مقترح لبرنامج ESMMP لاستخدامه من قبل فرق إدارة المشروع / مستشارو التنفيذ خلال GCFI .

الترتيبات المؤسسية والمسؤوليات الخاصة بإدارة الضمانات الخاصة ببرنامج GCFI

تم تطوير الآلية المؤسسية والتنفيذية لتحديد وتقييم وإدارة ومراقبة إجراءات الحماية البيئية على جميع المستويات خلال برنامج GCFI على أساس إعلان النوايا المشترك بين مكتب رئيس الوزراء العراقي ومكتب الخارجية الاتحادي الألماني. تتم مناقشة ترتيبات ومسؤوليات إطار عمل الإدارة البيئية والاجتماعية أدناه.

ترتيبات تنفيذ GCFI

تقع المسؤولية العامة لبرنامج GCFI على عاتق مكتب رئيس الوزراء (PMO) الذي يمثل الحكومة العراقية . تكون وزارة المالية المقترض الفردي لـ GCFI والمتلقي لمنحة تقدمها وزارة الخارجية الألمانية الاتحادية، وهي مسؤولة عن إتاحة أموال القرض والمنح من الصندوق العالمي للتنمية الزراعية للكيانات المنفذة المعنية.

تعمل اللجنة التوجيهية الألمانية - العراقية (SC)، التي تم تأسيسها من أجل GCFI، كهيئة حاكمية، وتضم ممثلين من الأمانة العامة لمجلس الوزراء، و ReFAATO، ورئيس الأمانة العامة للجنة العليا للتنسيق بين المحافظات، ووزارة الخارجية الألمانية الاتحادية،

و بنك التنمية الألماني. تتحمل اللجنة مسؤولية عن:

التوجه الاستراتيجي الشامل لـ GCFI

اعتماد وتنقيح GIM

تخصيص الأموال وفقا لأولويات إعادة الإعمار في العراق

الإشراف على تنفيذ البرنامج في جميع مراحل برنامج GCFI، سيتم تخطيط وتنفيذ ومراقبة إجراءات الحماية والتقييم على ثلاثة مستويات من (1 ReFAATO و2) فرق المشروع، و (3) المقاولون على النحو التالي:

ReFAATO (PEA): خلال مرحلة إنشاء GCFI، تكون ReFAATO مع مستشار الإدارة والرصد، مسؤولة عن تصميم وتفعيل الإطار العام للضمانات البيئية والاجتماعية. خلال مرحلة تنفيذ GCFI، يكون ReFAATO و مستشار الإدارة والرصد مسؤولان عن مراقبة وضمان تنفيذ سياسات الحماية البيئية والاجتماعية من قبل فرق إدارة المشروع.

فرق إدارة المشاريع (PMTs): تقوم فرق إدارة المشروع، بدعم من مستشارو التنفيذ، بمسؤولية التخطيط والتنفيذ والرصد اليومي لأدوات وعمليات الحماية والتقييم الخاصة بالمشاريع. يقوم كل فريق مشروع بتعيين جهة (جهات) اتصال للضمانات البيئية والاجتماعية التي تضمن التطبيق السليم والصحيح للضمانات البيئية والاجتماعية. تعمل جهات الاتصال البيئية والاجتماعية / مستشارو التنفيذ بشكل وثيق مع ReFAATO / ومستشار الإدارة والرصد لضمان تنسيق الأنشطة وفقاً لمتطلبات إطار عمل الإدارة البيئية والاجتماعية.

المقاولون: أثناء تنفيذ أنشطة البناء، يكون المقاولون هم المسؤولون في نهاية المطاف عن تنفيذ خطط الإدارة البيئية والاجتماعية (ESMPs) للمشاريع. بالإضافة إلى التزاماتهم المحددة تعاقدياً، يقوم المقاولون بتخطيط وتنفيذ وتوثيق أعمال البناء وفقاً لمتطلبات البيئة والصحة الاجتماعية والسلامة المحددة من قبل فرق إدارة المشروع/ مستشارو التنفيذ خلال مرحلة تقييم المشروعات.

عملية العناية الواجبة للضمانات البيئية والاجتماعية

يتم تحديد مسؤوليات أصحاب المصلحة الرئيسيين المختلفة خلال مسح المشاريع ومراجعتها وإقرارها على شكل مصفوفة العناية الواجبة في تقرير إطار عمل الإدارة البيئية والاجتماعية.

متطلبات تنمية القدرات

لضمان الإدارة الفعالة للضمانات الحماية والتقييم في GCFI، سيتم توفير بناء القدرات لـ ReFAATO و فرق المشروع في مجالين رئيسيين:

تخصيص الموظفين والموارد حيث يتم تخصيص مهندسين اثنين من موظفي ReFAATO وجهة اتصال واحدة لكل فريق مشروع لرصد وإدارة الضمانات البيئية والاجتماعية أثناء تنفيذ برنامج GCFI. يوصى بإشراك المزيد من المهندسين خلال البرنامج لزيادة الوعي البيئي والاجتماعي بين فريق ReFAATO ، لضمان استدامة بنود البرنامج في المستقبل.

تدريب وتوعية الموظفين المستهدفين من ReFAATO و فرق المشروع لإضفاء الطابع المؤسسي على ضمانات البيئية والاجتماعية. يهدف هذا البرنامج بشكل رئيسي إلى ضمان أن الموظفين المستهدفين يملكون القدرة الكافية لتحليل التأثيرات البيئية الضارة، و يضع تدابير التخفيف والإعداد والإشراف على تنفيذ خطط الإدارة البيئية والاجتماعية بشكل مناسب. يتضمن البرنامج ثلاث وحدات تدريبية

يتم تقديمها على ثلاثة مستويات:

- المستوى 1: مقدمة لنموذج ورشة العمل إلى أكثر الموظفين أهمية في ReFAATO وفرق المشروع لتقديم المتطلبات البيئية والاجتماعية ووضع الأسس البيئية والاجتماعية
- المستوى 2: نموذج ورشة العمل المتقدم لتوفير ورشة عمل متقدمة للمهندسين المتخصصين أو الذي سيكونون متخصصين محتملين في الضمانات البيئية والاجتماعية أثناء تنفيذ GCFI.
- المستوى 3: نموذج الفريق التوأم يقدم للمهندسين من ReFAATO وهذه الفرق التي سيتم تخصيصها للتعامل مع الضمانات البيئية والاجتماعية الكافية أثناء تنفيذ GCFI. يعزز هذا النموذج الدعم والتدريب والتوجيه المستمر للمهندسين المشاركين من خلال التطبيقات العملية لأدوات وضمانات GCFI البيئية والاجتماعية.

تقارير سير العمل

سيتم الإبلاغ عن سير العمل في ضمانات السلامة والصحة الإلكترونية على ثلاثة مستويات رئيسية:

- تقديم التقارير من قبل ReFAATO إلى GCFI SC:** يدمج التقرير المعلومات حول المخاطر والضمانات البيئية والاجتماعية استناداً إلى المعلومات التي تقدمها فرق إدارة المشاريع على أساس ربع سنوي.
- تقديم تقارير فرق إدارة المشروع إلى بنك التنمية الألماني / ReFAATO:** تقوم فرق إدارة المشروع على أساس ربع سنوي، وكجزء من تقرير التقدم المحرز في GCFI، بتقديم معلومات عن المخاطر والضمانات البيئية والاجتماعية.
- تقديم التقارير من قبل المقاولين إلى فرق إدارة المشروع:** أثناء تنفيذ المشاريع، يقوم جميع المقاولين بتقديم تقارير مرحلية شهرية وتفصيلية إلى فرق المشروع حول الأداء البيئي والاجتماعي ومتعلقات الصحة والسلامة. يتضمن التقرير الشهري مخصصات إدارة أداء الصحة والسلامة والبيئة في المواقع بما في ذلك التدريب، والتحقق في الحوادث، والتفتيش، ونتائج التدقيق.

مراجعة إطار عمل الإدارة البيئية والاجتماعية

يعد إطار عمل الإدارة البيئية والاجتماعية وثيقة "حية" يتم تنفيذها ومراجعتها واستكمالها بنشاط وبصورة نصف سنوي. ومع سير عمل البرنامج، قد تنشأ حاجة إلى تغييرات تعكس معلومات جديدة عن المشروعات والقطاعات المعنية والظروف البيئية والاجتماعية. وبالمثل، من المتوقع إدخال تحسينات على القوالب والنماذج المحددة مع اكتساب الخبرة أثناء مرحلة التنفيذ.

إطار سياسة التسوية

تم تصميم إطار سياسة التسوية (RPF) بحيث: أ) لتجنب التسوية والإخلاء القسري، وب) للتخفيف من الآثار الاجتماعية والاقتصادية السلبية التي لا مفر منها من حيازة الأراضي والاضطراب الاقتصادي والمادي، و ج) لضمان تخطيط وتنفيذ أنشطة التسوية مع الإفصاح المناسب عن المعلومات والمشاوره والمشاركة المستنيرة من المتضررين.

تتمثل القواعد المنظمة لإطار سياسة التسوية في القوانين الوطنية ذات الصلة، مثل القوانين المدنية وقوانين الاستحواذ، والإجراء التشغيلي رقم 4.12 من البنك الدولي، ومبادئ الاستدامة في بنك التنمية الألماني. وتتمثل المخاطر التي تتعرض لها إطار سياسة التسوية في إدارة حالات إعادة توطين واضعي اليد والمجموعات الضعيفة والتعامل مع السكن غير الرسمي في المناطق الحضرية.

يهدف رصد وتقييم إطار سياسة التسوية ضمان تنفيذ المبادئ والأهداف التي تحكم إعداد وتنفيذ التسوية وفقاً للأسس التي تحكم نظام تخطيط موارد المؤسسة، وكذلك طرق رصد وتقييم الأصول المتأثرة وخطة التعويض الخاصة بها.

كذلك وصف للمشاوراة والتظلم المتاح للأشخاص المتضررين وترتيبات تمويل التسوية بما في ذلك إعداد ومراجعة تقديرات التكاليف وتدفق الأموال وترتيبات الطوارئ.

0 يوفر إطار سياسة التسوية التوجيهات والاختصاصات لتطوير خطة عمل التسوية (RAP) للأشخاص المتأثرين لأكثر من 200 شخص. يتناول فريق العمل الإقليمي وصف المشروع، والإطار القانوني، وتحديد بيانات خط الأساس المطلوبة لتأثيرات المشروع، ونهج برنامج سبل المعيشة في إطار التعويض والشكاوى والإجراءات وميزانية التسوية وجدول التنفيذ. في حال كان عدد السكان المتأثرين أقل من 200، عندئذ يتم اقتراح RAP / LACP مختصرة، ويتم توفير إرشادات ونماذج لـ RAP / LACP المختصرة والتبرع الطوعي للأراضي. تحدد المبادئ التوجيهية شروط نقل ملكية الأراضي وتسجيلها، ومقدار الأرض المتبرع بها، وإبلاغ الأشخاص المتأثرين بالشكل المناسب واستشارتهم بشأن المشروع والخيارات المتاحة لهم.

نهج مشاركة أصحاب المصلحة

من أجل الإدارة الناجحة للمخاطر البيئية والاجتماعية للمشروع، ينبغي أن يكون لدى إعادة التثقيف وإعادة تسيير الاتصالات وفريق إدارة المشروع عمليات إشراك بناءة للكشف عن المعلومات ومعاملات للإفصاح تتوافق مع أحكام البنك الدولي. يتطلب إشراك أصحاب المصلحة في GCFI ما يلي:

تحديد هوية أصحاب المصلحة: خلال مرحلة تنفيذ GCFI، تستمر فرق المشروع ومستشارو التنفيذ في التعامل مع الأطراف المتضررة من المشروع والأطراف المعنية الأخرى وتقديم المعلومات إلى الأطراف المعنية طوال دورة حياة كل مشروع. بالنسبة لبرنامج GCFI، وقد تم تصنيف أصحاب المصلحة إلى مجموعتين:

أصحاب المصلحة الداخليين: أولئك الذين يعملون مع ReFAATO و فرق المشروع أو المتعاقدين الرئيسيين والمقاولين من الباطن، ويشارك هؤلاء أصحاب المصلحة مباشرة في البرنامج، مثل مدير المشروع والمهندسين المقيمين والمنسقين وعمل البناء والموردين،... الخ.

أصحاب المصلحة الخارجيين: هم أفراد أو مجموعات قد يؤثر على المشروع وأنشطته بشكل غير مباشر خلال مرحلة البناء. من الأمثلة عن أصحاب المصلحة الخارجيين الوزارات ذات الصلة، والبلديات، وقادة المجتمع، والرجال والنساء العاملون، والمزارعون، وأرباب الأسر، والعاملين والعاطلين عن العمل، والشباب والطلبة، ووكالات التمويل الدولية،... الخ.

طرق التشاور مع أصحاب المصلحة: يجب أن تتشاور فرق إدارة المشروع / مستشارو التنفيذ مع المجتمعات المحلية بطريقة مناسبة ثقافياً تمكن فرق إدارة المشروع من فهم متطلبات أصحاب المصلحة بعمق والقضاء على / التقليل من النزاعات المحتملة. يجب أن تتضمن العملية ممثلين من السلطات المحلية، وتكون وثائق التقييم البيئي والاجتماعي (أي القائمة المرجعية لخطة الإدارة البيئية والاجتماعية أو خطة الإدارة البيئية والاجتماعية المحددة أو تقييم الأثر البيئي والاجتماعي) متاحة لهذه المجتمعات قبل مرحلة طرح عطاء المشاريع. من أكثر الطرق التي يتم تبنيها بشكل عام لمشاورات أصحاب المصلحة التي يمكن إجراؤها خلال إطار GCFI، حلقات العمل التشاركية (عندما يشارك عدد كبير من أصحاب المصلحة ذوي الاهتمامات والتخصصات المختلفة)، واجتماعات مجموعات التركيز (عندما يكون لدى أصحاب المصلحة اهتمام مماثل ويركزون على هدف مشترك واحد)، والمقابلات وجهاً لوجه (الطريقة الفعالة للغاية للمناقشات المتعمقة لفهم القضايا ذات التكلفة المنخفضة عندما يكون عدد أصحاب المصلحة محدود)، و بالنظر إلى أن المشاريع صغيرة نسبياً في حجمها، يوصى بإجراء المقابلات الفردية.

عناصر التواصل الفعال مع أصحاب المصلحة: يبرز إطار عمل الإدارة البيئية والاجتماعية العناصر الرئيسية للمشاورات الفعالة كونه

في يوضح وجهات نظر أصحاب المصلحة مسبقاً، بوسائل شفافة وبسيطة ومفهومة، وتنتظر في المساواة بين الجنسين، والنتائج الموثقة، وهي عملية "ثنائية الاتجاه" تركز على الآثار الناجمة وتخفف من التدابير المطلوبة.

أنشطة مشاركة أصحاب المصلحة المخطط لها: يقترح إطار عمل الإدارة البيئية والاجتماعية أنشطة لإشراك الجهات المعنية ولضمان مشاركة أصحاب المصلحة. وتشمل هذه المشاورات مع المؤسسات الحكومية ذات الصلة، والكشف عن الوثائق والتقارير البيئية والاجتماعية، والتواصل مع أفراد المجتمع المحلي. ولكل من هذه الأنشطة، يشير إطار عمل الإدارة البيئية والاجتماعية إلى طريقة التشاور الموصى بها، ونوع المعلومات التي يتم الإفصاح عنها، وأصحاب المصلحة الذين تمت استشارتهم، ويحدد أي مرحلة من البرنامج يتم تنفيذ النشاط.

تم عقد ورشة تشاور لمناقشة مشروع إطار عمل الإدارة البيئية والاجتماعية خلال شهر سبتمبر 2018 مع أصحاب المصلحة من وزارة الكهرباء (MoE) ووزارة البناء والإسكان (MoCH)، بالإضافة إلى ممثلين عن المنظمات غير الحكومية في محافظة صلاح الدين ومهندسو REFAATO. فيما يلي القضايا الرئيسية التي تمت مناقشتها:

التأثير الإيجابي للبرنامج على المجتمعات المحلية وكيف سيحفز العودة الدائمة للأشخاص النازحين داخليا

إزالة الحطام أثناء تنفيذ البرنامج

التزام المقاولين بضمانات التعاون البيئي والصحة والسلامة (الضمانات البيئية والاجتماعية لـ GCFI) أثناء التنفيذ

المشاركة / التنسيق مع وزارة البيئة خلال تنفيذ البرنامج

آلية الشكاوى

تم تقديم آلية تعويض الشكاوى (GRM) كأداة إدارية تهدف إلى منع ونزع وتخفيف حدة التوتر والنزاع المجتمعي على مستوى المشروع. وقد تم تصميم آلية تعويض التظلمات كآلية تظلم مجتمعية غير قانونية ومتوافقة مع الحقوق تدعم تنفيذ حزم الاستثمار. من منافع تصميم آلية التظلمات وتنفيذها بشكل صحيح في البرنامج لأصحاب الشكاوى إمكانية الوصول إلى المعلومات ذات الصلة، بطريقة سهلة وسرية وفعالة من حيث التكلفة للإبلاغ عن شكاواهم. كما ستقوم آلية تعويض الشكاوى بمنح الشاكين إمكانية التفاوض والتأثير في قرارات وسياسات المشروع التي قد تؤثر سلبيًا عليهم. من المقرر أن تكون آلية تعويض التظلمات متاحة للعام كجزء من استراتيجية المعلومات العامة الخاصة بالبرنامج، وترافق حملات التوعية الخاصة للعام بتنفيذ الآلية. يغطي النموذج العام لتسجيل التظلم المعلومات الرئيسية المطلوبة كما هو الحال في نموذج استلام طلب الشكاوى، ونوع الشكاوى، والإجراءات المتخذة للوصول إلى حل وترضية المشتكى. تتضمن المعلومات الواردة في هذا النموذج نوع الشكاوى لكل قطاع ومحافظة. تنص خطة إدارة المخاطر لآلية تعويض الشكاوى على معالجة المخاطر الخارجية وإدارتها مثل تسرب المعلومات غير الصحيحة إلى وسائل الإعلام، وعدم التبليغ من قبل المجموعات الضعيفة، والخوف من العواقب بعد التبليغ. تم توفير مجموعة من مؤشرات التأثير كجزء من نظام الرصد والتقييم الخاص بنظام آلية تعويض الشكاوى. بما في ذلك، رصد وتقييم الالتزام التنظيمي، والشرعية، وسهولة الوصول، والقدرة على التنبؤ، والشفافية، وقدرة الموظفين. يعد الإبلاغ عن آلية تعويض التظلمات متعدد المستويات، تبدأ من المقاول / فريق المشروع / مستشار التنفيذ، وتوجه إلى كل من السلطات المختصة في المحافظة على المستوى المركزي بما في ذلك ReFAATO / MMC. يمكن تناول التقرير على مستوى المشروع والقطاع والمحافظة على فترات، وتواتر يتناسب مع متطلبات العمل لأغراض الإدارة والرصد.

Executive Summary

Project Background

The political instability and terroristic operations in Iraq have resulted in a massive displacement crisis where around 10 percent of Iraq's total population is considered to be internally displaced. As part of the international community commitment to assisting the Government of Iraq (GoI) in the reconstruction of affected areas and the return of Internally Displaced Persons (IDPs), the Government of the Federal Republic of Germany (GoG) and the GoI prepared a German Credit Facility programme to assist the permanent return of IDPs in Iraq (GCFI).

The GCFI Programme focuses on short to medium term investment projects to support the restoration of basic economic and social infrastructure as well as to enhance the provision of basic services to the population of safe areas in the governorates of Diyala, Salah al-Din, Al-Anbar and Niniveh. The GCFI programme will be closely aligned to the ongoing Iraq Emergency Operation Development Projects (EODP) implemented with support from the World Bank. The Programme includes interventions in the energy, water and sanitation, roads and bridges, education and health sectors, with an initial focus on energy, water, sanitation, roads, and bridges projects. The sector interventions will be bundled into Public Investment Packages of roughly EUR 50 million to EUR 140 million each for implementation by relevant Line Ministries.

The Programme Executing Agency (PEA) is the Reconstruction Fund for Areas Affected by Terroristic Operations (ReFAATO). ReFAATO will facilitate exchange and consensus building with all stakeholders concerned at national and sub-national levels including the coordination with other relevant stabilization and recovery support initiatives in Iraq. For this purpose, ReFAATO has contracted GOPA Infra GmbH, as GCFI Management and Monitoring Consultant (MMC), to provide 1) management and monitoring support to ReFAATO, and 2) capacity development support to the Project Management Teams (PMTs).

Objectives of the Environmental and Social Management Framework (ESMF)

Although the environmental and social impacts and risks associated with the project are generally regarded as of moderate significance and as manageable with standard solutions and state of the art technology, KfW has categorized the GCFI project as of high environmental and social risk (Category A). This categorization is justified by the risk context in which the project is embedded in, relating to stability, conflict and security issues.

To comply KfW's Sustainability Guideline and as subprojects locations were not identified by appraisal, an Environmental and Social Management Framework (ESMF) as well as an corresponding Resettlement Policy Framework (RPF) was developed for the GCFI programme, based on the provisions of the ESMF prepared for the EODP and meeting the requirements of the World Bank's "Environmental, Health and Safety Guidelines", the KfW Sustainability Guideline as well as the national legal provisions in Iraq. The GCFI's ESMF serves as the tool for identifying and mitigating the potential environmental and social (E&S) impacts of future programme activities. It specifically aims at:

- Establishing an environmental and social screening process to classify the programme's projects;
- Defining the types of E&S safeguard instruments anticipated for the projects; and

- Specifying measures for managing and monitoring environmental and social impacts during the programme implementation.

During the GCFI implementation phase, the specific E&S safeguard instruments that will be prepared for the projects will be incorporated in the tender documents and will serve as a contractual basis for supervision and compliance with GCFI environmental and social requirements.

Legal Framework

The applicable Iraqi laws, regulations, and instructions as well as international policies and procedures that are triggered by this programme which the GCFI shall comply with include:

The applicable national laws, regulations, instructions as well as international treaties include the following:

- **National Laws:**
 - The Law for the Protection and Improvement of Environment No. 27 of 2009
 - Protection of Wild Animals Law No 17 of 2010
 - Exploitation and Protection of Aquatic Life Law No. 48 of 1976
 - Ministry of Water Resources Law No. 50 of 2008
 - Public Health Law No. 89 of 1981, amended by Resolution No.54 of 2001
 - Law No. 55 of 2002 for The Antiquities & Heritage of Iraq
 - Public Roads Law No. 35 of 2002
 - Law No. 27 of 1999 concerning the establishment of the General Authority for Water and Sewage
 - Noise Prevention Law No. 41 of 2015
 - Law No. 6 of 1988 concerning the National Commission for Occupational Hygiene and Safety
 - Acquisition Law No.12 of 1981
- **Regulations**
 - The Regulation for the Protection of Rivers No. 25 of 1967
 - Preservation of Water Resources Regulation No.2 of 2001
- **Instructions and Directives**
 - Instruction No. 2 of 2014 on Environmental Protection from Municipal Waste
 - Directive No. 67 of 1986 on Regulating the Debris Collection Areas
 - Clean Air Act No. 1 of 2004
 - Instruction No. 2 of 1993
 - Directive No. 4 of 1993 concerning occupational health, protection of workers against vibration
 - Instructions No. 3/1985 Concerning Occupational Safety
- **International Conventions and Treaties**
 - UN Convention for Biological Diversity (UNCBD)
 - UN Convention to Combat Desertification (UNCCD)
 - RAMSAR Convention on Wetlands

- UNESCO World Heritage Convention
- United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol

However, the Implementation Consultant (IC) shall be responsible for updating the legal framework to ensure that it covers all the legal and intuitional aspects relevant the specific project.

The applicable international environmental and social guidelines include the following:

- **KfW Sustainability Guideline.** According to the Guideline, the general steps of the KfW environmental and social assessment involve:
 - Screening and categorization of the financial cooperation (FC) measures.
 - In-depth Environmental and Social Due Diligence/assessment.
 - Stakeholder engagement and complaints management in relation to the FC measure.
- **GCFI Implementation Manual (GIM)** prepared in November 2017 to guide ReFAATO, PMTs, Consultants and Contractors on the procedures necessary to implement the programme. Adherence to this manual is mandatory for all key stakeholders identified as part of the Joint Declaration of Intent between Iraqi Prime Minister’s Office and the German Federal Foreign Office.
- **ESMF for Iraq Emergency Operation Development Projects (EODP).** The EODP ESMF classifies projects into typologies along environmental and social criteria and impacts. For each typology, the required specific instruments and processes were defined. Since the EODP’s ESMF is comprehensive and generally acceptable for projects financed by KfW, the GCFI will generally maintain these existing safeguards and harmonise the GCFI approach with the on-going EODP. As such, the GCFI ESMF shall be designed and operationalized based on the provisions (standards and procedures) of the EODP ESMF.
- **World Bank Safeguard Procedures and Operational Policies.** These are considered part of the governing framework for the GCFI ESMF. Specifically, Operational Procedure (OP/BP 4.01) on Environmental Assessment, Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Safety on Dams (OP/BP 4.37), Physical Cultural Resources (OP4.11), Involuntary Resettlement (OP/BP 4.12), and International Waterways (OP7.50) are considered to be triggered. In addition, the General and Industry guidelines on Environmental, Health and Safety Guidelines (EHSGs) should be used as appropriate. Since the proposed activities are not anticipated to have highly significant adverse environmental and social impacts, the EODP has been assigned a Category “B”. Though as of January 2018 the World Bank’s Environmental and Social Framework (ESF) replaced the World Bank’s operational policies as the guidelines on conducting environmental, social and health assessments, the GCFI ESMF will adhere to the World Bank OPs to stay in line with the provisions of the EODP ESMF.

The gap analysis carried among the Iraqi national laws, KfW sustainability guideline and the World Bank’s operational policies revealed that on issues of labour conditions and health and safety, no further actions are recommended as they are in harmony. However, the gap analysis indicated that for EIA framework and involuntary resettlement, it is recommended that the GCFI adopt a stakeholder engagement, consultation, and disclosure plan as well as a Resettlement Policy Framework (RPF) for the GCFI programme since the national Iraqi laws do not require consultation/disclosure nor do they entitle those who do not have the legal right on a property and are subject to involuntary loss of livelihoods/assets for any kind of compensation.

Baseline Conditions

The governorates covered under the GCFI programme include Diyala, Salah al-Din, Al-Anbar and Niniveh, which are all located within the northeastern and northwestern parts of Iraq. The ESMF includes a general overview of the baseline conditions with respect to physical environment, biodiversity, socio-economic conditions, and archaeological and cultural heritage sites within these four governorates. However, during implementation, the IC is responsible for providing an updated and area-specific documentation of the baseline conditions.

ESMF Implementation Process

The ESMF provides a directive approach for identification and assessment of anticipated environmental and social impacts during the implementation of GCFI projects. The activities of this approach are carried by the PMTs in cooperation with respective ICs during the assessment stage of projects. They involve the following:

- Environmental and Social Screening
- Preliminary Identification of E&S Receptors
- Preliminary Assessment of Environmental and Social Impacts of the GCFI
- Applying the safeguards instrument anticipated for project under the GCFI programme

E&S Screening and Project Categorization

It is the first step in a project cycle used to determine the extent to which the project is likely to affect the environment. It shall be conducted by the PMT/IC for each project. Based on project type, location, size and anticipated negative impacts, the project shall be classified into either Category A, Category B+, Category B, or Category C according to KfW Sustainability Guideline.

Examples of the expected E&S categorization for the GCFI projects are provided in Table 14 depending on the project type. However, it should be remembered that each project has its own unique E&S characteristics.

It should be noted that some of the projects that have significant environmental and/or social impacts will not be eligible for funding under the GCFI. Criteria for ineligible projects under GCFI include:

- Significant conversion or degradation of critical natural habitats;
- Damages cultural property, archaeological and historical sites, religious monuments and cemeteries;
- New wastewater treatment plant to serve 10,000 or more households;
- New power generating capacity of more than 10 MW;
- Construction of dams more than 5 meters high and Rehabilitation of dams more than 15 meters high;
- Use of fuel wood, including trees and bush;
- Use of hazardous substances; or
- New irrigation and drainage schemes.

Moreover, and due to the potential risk of explosive remnants in and under the rubble, the PMTs/ICs shall obtain a written confirmation from relevant authorities in the governorates to ensure clearance of from such risks at projects area. The environmental and social screening tool is included as part of the ESMF (Annex 1 of the ESMF report).

Preliminary Identification of E&S Receptors

The preliminary identification of environmental and social receptors provides an overview of environmental and social receptors that are expected to be affected during the implementation of GCFI programme. These include physical environment (air quality, soil, topography, and water resources), biological environment (flora and fauna), socio-economic environment (population in the vicinity of activities, land use & land ownership, utilities and infrastructure, as well as health and safety), and archaeology and cultural heritage.

Preliminary Assessment of Environmental and Social Impacts of the GCFI

In general, the GCFI projects are anticipated to have major positive environmental and social impacts in their areas of intervention. These impacts (such as economic and social development, improved accessibility to goods and services, and Job creation and local economic development) will incentivize the permanent return of IDPs to their home locations. Most of the GCFI programme interventions will take place in urbanized areas characterized environmentally as non-sensitive. However, activities of projects may entail adverse environmental and social impacts as discussed within the ESMF document.

Environmental and Social Instruments

Based on outcomes of the environmental screening process and the categorization of each project, the PMTs/ICs shall use the following E&S safeguard instruments during the implementation of GCFI projects:

- **Tailored Generic ESMPs** for simple routine repair works. This tool is used to ensure basic compliance and good housekeeping for minor, routine civil works in non-sensitive environmental settings. It fits most planned rehabilitation and reconstruction activities of the GCFI projects and provides typical mitigation measures for projects of low-risk nature and small localized impacts. A template of this tool is included in Annex 3 of this report.
- **Rapid E&S Assessment and Specific ESMPs** for larger projects with more substantial construction works combined with less sensitive environmental and social conditions. This tool aims to capture E&S baseline conditions that are more sensitive and require management and mitigation measures beyond the standard good practice approach prescribed by the checklist ESMP. It contains tailored measures and provisions to deal with E&S issues of higher sensitivity and complexity such as the protection of sensitive areas/habitats, old trees, cultural heritage, etc. A template of this tool is included in Annex 4 of this report.
- **Comprehensive ESIA/ESMPs** with more sensitive environmental and social conditions. This tool is designed to screen and assess anticipated E&S impacts of larger scale works that are situated in areas where higher environmental and social sensitivities are expected. This tool would be a full set of ESIA and specific, derivative ESMP according to the requirements for an environmental Category B project under the World Bank's OP4.01. The minimum content of an ESIA/ESMP is included in Annex 5 of this report.

Monitoring of the ESMF

As the GCFI involves projects in four governorates that have different environmental and social conditions, the PMTs/ICs shall consider the local E&S context of each project and tailor specific mitigation measures based on the environmental and social impact assessment findings. For purposes of this ESMF, general mitigation measures foreseen for environmental and social impacts that are preliminarily identified for GCFI's project activities have been tabulated in the ESMMF report.

During the GCFI, the PMTs/ICs shall prepare and implement a specific environmental and social monitoring and management plan (ESMMP) for each project to address all activities that have potentially significant impacts on the environment and appropriate mitigation measures during normal and abnormal conditions. At a minimum, the ESMMP shall consist of the following:

- The relevant project activities;
- The potential negative environmental and social impacts;
- The proposed mitigating measures;
- The party responsible for implementing the mitigation measures;
- The proposed monitoring measure;
- The institutions responsible for monitoring the implementation of the mitigation measures and the frequency of the afore-mentioned measures; and
- The cost estimates for these activities.

A proposed template of an ESMMP to be used by the PMTs/ICs during the GCFI is presented in **Error! Reference source not found.**

Institutional Arrangements and Responsibilities for GCFI Safeguards Management

The institutional and implementation mechanism for identifying, appraising, managing and monitoring E&S safeguards at all levels during the GCFI programme have been developed based on the Joint Declaration of Intent between the Iraqi Prime Minister's Office and the German Federal Foreign Office. These ESMF arrangements and responsibilities are discussed below.

GCFI Implementation Arrangements

The overall responsibility of the GCFI programme lies with the Prime Minister's Office (PMO) representing the GoI. The Ministry of Finance (MoF) will be the borrower of individual loans for the GCFI and the recipient of a grant provided by the German Federal Foreign Office. MoF will be responsible to make the GCFI loan and grant funds available to the respective implementing entities.

The Iraqi-German Steering Committee (SC), which has been established for the GCFI, acts as governing body. It includes representatives from the General Secretariat of the Council of Ministers, Re-FAATO, the Secretariat Chair of High Commission for Coordination among Provinces, the German Federal Foreign Office, and KfW. The SC is responsible for:

- the overall strategic orientation of the GCFI;
- the adoption of and revision of the GIM;

- the allocation of funds according to Iraq's reconstruction priorities; and
- the supervision of Programme implementation.

Throughout the GCFI programme, planning, implementation, and monitoring of the E&S safeguards will take place at three levels of 1) ReFAATO, 2) PMTs, and 3) Contractors as follows:

- **ReFAATO (PEA):** During the GCFI inception phase, ReFAATO together with the MCC, will be responsible to design and operationalize the overall E&S safeguards framework. During GCFI implementation phase, ReFAATO and the MCC will be responsible for monitoring and ensuring the implementation of E&S safeguard policies by the PMTs.
- **PMTs:** The PMTs, with support of the ICs, will be responsible for day-to-day planning, implementation, and monitoring of E&S safeguard instruments and processes specific to projects. Each PMT will assign focal point(s) for E&S safeguards who will ensure timely and sound application of E&S safeguards. The environmental and social focal points/ICs shall work closely with ReFAATO/MCC to ensure harmonization and coordination of activities according to the ESMF requirements.
- **Contractors:** During the implementation of construction activities, Contractors are ultimately responsible for the implementation of Environmental and Social Management Plans (ESMPs) of projects. In conjunction with their obligations defined contractually, Contractors will plan, execute and document construction works pursuant to the Environment, Social, Health and Safety requirements defined by PMTs/ ICs during projects assessment stage.

E&S Safeguards Due-Diligence Process

The different project key stakeholders responsibilities during projects screening, review and approval are established as a due-diligence matrix within the ESMF report.

Capacity Development Requirements

To ensure effective E&S safeguards management during the GCFI, capacity building will be provided to ReFAATO and PMTs in two main areas:

- **Allocated staff and resources** where two engineers from ReFAATO staff and one focal point from each PMT shall be allocated to monitor and manage E&S safeguards during the implementation of GCFI programme. It is recommended to involve more engineers during the programme to maximize the environmental and social awareness among ReFAATO team and ensure sustainability of the programme provisions in the future.
- **Training and awareness** targeting staff allocated from ReFAATO and PMTs to institutionalize E&S safeguards. This programme mainly aims to ensure that staff targeted has adequate capacity to analyse adverse environmental impacts, to prescribe mitigation measures, and to prepare and supervise the implementation of environmental and social management plans appropriately. The programme includes three training modules that will be provided at three levels:
 - **Level 1: Introductory Workshop Model** to the most relevant staff at ReFAATO and PMTs to introduce the environmental and social requirements and set a basis for E&S
 - **Level 2: Advanced Workshop Model** to provide an advanced workshop for engineers who are or will be potential specialists in the E&S safeguards during the implementation of the GCFI.

- o **Level 3: Twinning Team Model** to be provided to engineers from ReFAATO and PMTs who will be allocated to handle E&S safeguards during the implementation of the GCFI. This model promotes continuous mentoring and coaching support for engineers involved through practical applications of the GCFI E&S safeguards and instruments.

Progress Reporting

The progress reporting input on E&S safeguards will take place at three main levels:

1. **Reporting by ReFAATO to the GCFI SC:** The reporting will integrate information on environmental and social risks and safeguards based on the information provided by PMTs on a quarterly basis.
2. **Reporting by PMTs to KfW / ReFAATO:** As implementation agencies, PMTs will provide on a quarterly basis, and as part of the GCFI progress report, information on environmental and social risks and safeguards.
3. **Reporting by Contractors to PMTs:** During the implementation of the projects, all contractors shall submit monthly progress reports to respective PMTs detailing E&S, health and safety performance. The monthly report shall include provisions for HSE performance management on sites including training, incident investigation, inspection and audit findings.

ESMF Reviewing

The ESMF is a “living” document that will be actively implemented as well as reviewed and updated semi-annually. As the programme proceeds, changes may be needed to reflect new information on the projects, sectors involved, and environmental and social conditions. Similarly, improvements to the specific templates and forms are anticipated as experience is gained during the implementation phase.

Resettlement Policy Framework

The Resettlement Policy Framework RPF is designed to a) avoid involuntary resettlement and forced eviction b) to mitigate unavoidable adverse social and economic impacts from land acquisition and economic and physical displacement c) to ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

The governing bases of the RPF are the relevant national laws such as the civil and acquisition laws, the World Bank OP 4.12 and the KfW Sustainability Guidelines. The risks to the RPF are in managing resettlement cases of squatters, vulnerable groups and dealing with informal housing in urban and urban areas. The monitoring and evaluation of the RPF is proposed to ensure that principles and objectives governing resettlement preparation and implementation are carried out as per the governing bases of the ERP. The monitoring and evaluation will also assess the methods for valuing affected assets and its compensation plan.

A description of consultation and grievance available to the affected people and the arrangements for funding resettlement including the preparation and review of cost estimates, the flow of funds and contingency arrangements.

The RPF provides guidance and terms of reference for the development of Resettlement Action Plan

(RAP) for affected people of more than 200. The RAP addresses project description, legal framework, required baseline data identification of project impacts and compensation framework livelihood program approach, grievance procedures and resettlement budget and implementation schedule. If the affected population is less than 200, then an abbreviated RAP/LACP is proposed, and guideline and templates are provided for the abbreviated RAP/LACP and voluntary land donation. The guidelines set the terms for land transfer and registration, amount of land being donated and that the affected persons are being appropriately informed and consulted about the project and the choices available to them.

Stakeholders Engagement Approach

For successful management of a project's environmental and social risks, ReFAATO and PMTs should have constructive stakeholder's engagement and disclosure processes that comply with the World Bank's provisions. The GCFI stakeholder engagement requires the following:

- **Stakeholders Identification:** During the GCFI implementation stage, the PMTs/ICs shall continue to engage with, and provide information to, project-affected parties and other interested parties throughout the life cycle of each project. For the GCFI, stakeholders are classified into two groups:
 - Internal Stakeholders: are those who work with ReFAATO, PIAs/PMTs or its key contractors and subcontractors, these stakeholders are directly involved in and benefitting from the programme, such as project manager, resident engineers, coordinators, construction workers, suppliers, etc.
 - External Stakeholders: are individuals or groups who may influence the project and its activities indirectly during the construction stage. Examples of external stakeholders are related ministries, municipalities, community leaders, employed men and women, farmers, households males and females, employed and unemployed labour force, youth and students, international funding agencies, etc.
- **Stakeholders Consultation Methods:** The PMTs/ICs shall consult with local communities in a culturally appropriate manner that enables the PMTs to have an in depth understanding of the stakeholder's requirements and eliminates/minimizes potential conflicts. The process should include representatives from local authorities and should make the documentation of environmental and social assessments (i.e. Checklist-ESMP, Specific ESMPs or ESIA) available to these communities prior to projects tendering stage. Participatory workshops (when a large number of stakeholders with different interests and specializations are involved), focus group meetings (when the stakeholders have similar interest and focused towards one common objective), and face-to-face interviews (very effective method for in-depth discussions to understand the issues with low cost when stakeholders are not large in number) are the most commonly adopted methods of stakeholder consultations that could be carried out during the GCFI. Given that the projects are relatively small in size, the face-to-face interviews are recommended.
- **Elements of effective Stakeholder Communication:** The ESMF highlighted the main elements of effective consultations such as being early enough capture stakeholder views, transparent, simple and understandable, considers gender equity, documented outcomes, and a "Two way Process" that focuses on impacts and mitigation measures.
- **Planned Stakeholder Engagement Activities:** the ESMF has proposed activities for stakeholder engagement and activities to be performed to ensure stakeholders engagement. These include consultation with relevant governmental institutions, disclosure of the environmental and social

documentations and reports, and communication with local community members. For each of these activities, the ESMF indicates the recommended consultation method, type of information disclosed, stakeholders consulted, and at which stage of the GCFI to carry the activity.

A consultation workshop to discuss the draft ESMF has already been conducted during September 2018 with stakeholders from the Ministry of Electricity (MoE) and Ministry of Construction and Housing (MoCH), in addition to representatives from NGOs at Salah al-Din governorate and REFAATO engineers. The main issues of concern raised included:

- The positive impact of the programme on local communities and how it will incentivize the permanent return of IDPs;
- Debris removal during programme implementation;
- Contractors commitment to adhere with the GCFI E&S safeguards during the implementation; and
- Involvement/Coordination with the Ministry of Environment during the programme implementation.

Grievance Redress Mechanism

The Grievance Redress Mechanism (GRM) is introduced as a management tool aims to prevent, defuse and resolve community tension and conflict at project level. The GRM is designed as a rights-compatible, non-judicial community grievance mechanism supporting the implementation of investment packages. The benefits of properly designed and implemented GRM in the program will provide the complainants with accessibility to relevant information, to easy, confidential and cost-effective method to report their complaints. The GRM shall also provide complainants with access to negotiate and influence decisions and policies of the project that might adversely affect them. The GRM is to be open to public as part of the program public information strategy and special awareness campaigns to the public shall accompany the GRM implementation. The generic template for grievance registration and management covers the main required information as in the mode of receiving the grievance, type of a grievance, actions taken to reach resolution and satisfaction of complainants. Information entailed in this template include type of complaint per sector and governorate. A risk management plan for the GRM is stipulated addressing external risks and their management such as leaks to media, reporting by vulnerable groups, and fear of retribution. A set of process and impact indicators are provided to be utilized as part of the GRM-monitoring and evaluation system. Including, monitoring and evaluating the organizational commitment, legitimacy, accessibility, predictability, transparency and staff capacity. The reporting of the GRM is proposed as multi-tiers starting from contractor/PMT/IC and addressed to both relevant authorities at governorate at central level including ReFAATO/MMC. The reporting can be carried at project, sector, governorate level at periods and frequency as per work requirements for management and monitoring purposes.

1 Introduction

1.1 Background

Iraq suffers from substantial political instability resulting, most notably, from the insurgency of the so-called Islamic State of Iraq and Syria (ISIS) and recurrent protests, riots and violent clashes related to socio-political distress and ethno-sectarian strife. Instability has resulted in a massive displacement crisis. In particular, since early 2014, territorial gains by ISIS in northern and central Iraq have led to substantial population movements. According to estimates by the International Organisation for Migration (IOM), internal displacement increased from less than 450,000 people in 2014 to more than 3 million in early 2017 (around 10 percent of Iraq's total population).

As part of the international community commitment to assisting the Government of Iraq (GoI) in the reconstruction of areas affected by terroristic operations and the return of Internally Displaced Persons (IDPs), the Government of the Federal Republic of Germany (GoG) and the GoI prepared a German Credit Facility programme to assist the permanent return of IDPs in Iraq (GCFI). A Joint Declaration foresees a Credit Facility by KfW Development Bank, aimed at supporting the GoI in preparing the socio-economic conditions for the return of IDPs. The GCFI Programme focuses on short to medium term investment projects to support the restoration of basic economic and social infrastructure as well as enhancing the provision of basic services to the population of safe areas that have been liberated from terrorist activities in the governorates of Diyala, Salah al-Din, Al-Anbar and Niniveh.

The Reconstruction Fund for Areas Affected by Terroristic Operations (ReFAATO), which acts as Programme Executing Agency (PEA) and as the first entry point of the GCFI programme, is the entity responsible for the coordination of reconstruction operations in liberated territories. ReFAATO will facilitate exchange and consensus building with all stakeholders concerned at national and sub-national levels including the coordination with other relevant stabilization and recovery support initiatives in Iraq. For this purpose, ReFAATO has contracted GOPA Infra GmbH, as GCFI Management and Monitoring Consultant (MMC), to provide 1) management and monitoring support to ReFAATO in its role as PEA at central-level, and 2) capacity development support to the Project Management Teams (PMTs) at Governorates and Line Ministries level in their role as Programme Implementation Agencies.

This document presents the Environmental and Social Management Framework (ESMF) for the GCFI programme. The ESMF has been developed to manage and minimize anticipated negative environmental and social impacts during the implementation of this programme in addition to consolidate the anticipated positive impacts.

The general approach for preparation this ESMF followed the World Bank's "Environmental, Health and Safety Guidelines" and taking into consideration KfW Sustainability Guidelines, World Bank Operational Safeguards, and the national legal provisions in Iraq. It is worth noting that this ESMF was developed based on the provisions of the ESMF prepared for the Emergency Operation Development Project (EODP) in May 2017 and updated in September 2017.

1.2 GCFI Programme

The GCFI programme aims to incentivize the permanent return of IDPs to their home locations in Iraq by supporting investments into the restoration of local economic and social infrastructure and rehabilitation, reconstruction and supply of equipment in safe municipalities in liberated territories of the governorates of Diyala, Salah al-Din, Al-Anbar, and Niniveh.

The GCFI programme has been designed to represent an additional pillar of the overall Iraqi approach to the reconstruction of areas affected by terroristic operations, complementing ongoing recovery activities of the Gol and support provided by the international community. In the interest of swift and efficient implementation, the programme shall rely as much as possible, in accordance with the main stakeholders' rules and regulations, on functional institutions and procedures. In particular, the programme will be closely aligned to the ongoing Iraq Emergency Operation Development Projects (EODP) implemented with support from the World Bank.

The Programme includes interventions in the energy, water and sanitation, roads and bridges, education and health sectors, with an initial focus on energy, water, sanitation, roads, and bridges projects. The sector interventions will be bundled into Public Investment Packages of roughly EUR 50 million to EUR 140 million each for implementation by relevant Line Ministries.

1.3 Objectives of the GCFI ESMF

The GCFI's ESMF serves as a practical tool during programme formulation, design, implementation and monitoring. It describes the steps involved in identifying and mitigating the potential environmental and social impacts of future programme activities. The ESMF specifically aims to:

- Establish an environmental and social screening process which allows projects of the GCFI programme to be classified according to their potential impacts and appropriate mitigation measures required;
- Define the types of safeguards instruments anticipated for the projects based on the provisions of the EODP's environmental and social (E&S) safeguards; and
- Specify measures for managing and monitoring environmental and social impacts during the programme implementation.
- Outline provisions for stakeholder engagement, consultation and grievances management.
- Specify appropriate roles and responsibilities for project implementation, and outline the necessary reporting procedures, for planning, managing and monitoring E&S risks.

During the GCFI implementation phase, the specific E&S safeguard instruments that will be prepared during the technical and financial viability assessment stage of projects will be incorporated in the tender documents and subsequent work contracts. Furthermore, these safeguards will serve as a contractual basis for supervision and compliance with GCFI environmental and social requirements during projects implementation.

2 Project Description

Rebuilding territories liberated from terrorist activities constitutes a priority to the Iraqi Government as part of its overall objective of long-term recovery and stabilization. Going beyond the facilitation of IDP returns, effective restoration of public basic service delivery is essential in order to prevent distributional conflicts in areas of high return, to re-establish meaningful state presence in liberated territories and to contribute to constructive state society relations in areas previously under terrorist control.

The overarching objective of the GCFI is to contribute to the permanent return of IDPs to their home locations in Iraq. To this end the GCFI will support investments into the restoration of local economic and social infrastructure, through rehabilitation, construction or supply of equipment in safe municipalities in liberated territories of four governorates (Niniveh, Anbar, Salah Al-Din, Diyala). The programme will cover interventions in the energy, water/sanitation, roads/bridges, education and health sectors, with an initial focus on energy, water/sanitation and roads/bridges (Phase 1). The overall budget of EUR 450 million for sector interventions will be bundled into Public Investment Packages of roughly EUR 50 million to 100 million each for implementation by relevant Government Ministries.

2.1 GCFI Interventions

As mentioned previously, the GCFI will cover interventions in four sectors that are Energy Sector, Water/sanitation sector, Roads/bridges sector, and Health sector. An initial list of GCFI intervention projects is provided in Table 1.

Table 1. Initial List of GCFI intervention projects

Sector	GCFI Phase	Project Name	Province
Energy	Phase 1 Quick Win	Lot 1 (EPC Substations Nineveh)	Niniveh
		Lot 2 (supply towers + equipment)	Niniveh
		Lot 3 (Supply Distribution + mobile Substations)	Niniveh
		Lot 4 (Supply transformers etc)	Niniveh
	Phase 2 Investment Project	Lot 1 (EPC Mosul Super grid Substation)	Niniveh
		Lot 2 (EPC 2x High-Voltage Substations, Tikrit & Ramadi)	Anbar & Salah ad Din
		Lot 3 (EPC 2x Distribution Substations, Tikrit & Ramadi)	Anbar & Salah ad Din
		Lot 4 (EPC Transmission line Haditha-Qa'em)	Anbar

Sector	GCFI Phase	Project Name	Province
Water & Sanitation	Phase 1 Quick Win	Contract 1 (Lots 1, 2, 4.1 & 4.2): Supply+ installation	Niniveh
		Contract 2 (Lots 3, 4, excl. 4.1 & 4.2): supply + installation	Niniveh
		Contract 3 (Lot 5): supply + installation. WTP & Bartella pipeline	Niniveh
		Contract 4 (items from Lots 6&7): supply vehicles + equipment	Niniveh
		Contract 5 (items from Lots 6&7): Supply vehicles + equipment	Niniveh
Roads & Bridges	Phase 1 Quick Win	Package 1 (Qayara Bridge)	Niniveh
		Package 2 (Bridges Mara'ay, Al-Hawd, Al-Muth 2nd)	Niniveh
		Package 3 (Al Gwer Bridge)	Niniveh
		Package 4 (Road Mosul)	Niniveh
Health	Investment Project	Bagdad Nursing House	Baghdad
		Haditha Hospital	Anbar
		Al-Dour Hospital	Salah Ad Din

3 Legal Framework for the GCFI

The selection, planning, design, and implementation of projects under the GCFI shall be consistent with the relevant national environmental requirements as well as KfW Sustainability Guidelines and World Bank's applicable policies and procedures. This chapter provides an outline of the applicable Iraqi laws, regulations, and instructions as well as international policies and procedures that are triggered by this programme. However, the Implementation Consultant (IC) shall be responsible for updating the legal framework to ensure that it covers all the legal and intuitional aspects relevant the specific project.

3.1 National Environmental Laws and Regulations

This section gives a brief synopsis of selected environmental laws, regulations and instructions that are particularly important to the implementation of the GCFI. These include the following:

3.1.1 Laws

- **The Law for the Protection and Improvement of Environment No. 27 of 2009:** The Law necessitates the provision of the Environmental Impact Assessment (Article 18) for any new developmental project in the country. The Law addresses the issues of regulation of air pollution and noise reduction, protection of soils, biodiversity conservation, management of hazardous waste, protection of the environment from pollution resulting from exploration and extraction of oil and natural gas, establishment of an environmental protection fund. In additional, the law specifies the necessity of protection of water resources from pollution and regulates the discharge of effluents independently of their origin.
- **The Labour Law No. 37 of 2015:** The law aims to regulate the work relationship between the workers and employers and their associations, in order to protect their rights and achieve sustainable development based on social justice and equity, secure decent work for all, without any discrimination for the development of the national economy and the achievement of human rights and fundamental freedoms, regulate the work of foreigners working or wishing to work in Iraq and implement the provisions of Arab and international labour agreements duly ratified.
- **Protection of Wild Animals Law No 17 of 2010:** The Law states that Ministry of Agriculture issues the list of protected species of animals and birds, prohibited zones, hunting seasons, hunting gears and methods (Article 5).
- **Exploitation and Protection of Aquatic Life Law No. 48 of 1976:** It regulates breeding and protection of aquatic life, fishing seasons, fishing methods and gear, prohibits the use of chemicals and explosives for fishing.

- **Ministry of Water Resources Law No. 50 of 2008:** The Law includes the provisions for establishing the Ministry of Water Resources and creating the legal and technical framework for institutionalization of water resources management in the country. Article 2 states the need to “preserve ground and surface water from pollution, giving priority to the environmental aspect, and revive and maintain marshlands and other water surfaces”.
- **Public Health Law No. 89 of 1981, amended by Resolution No.54 of 2001:** In addition to addressing various issues related to the population health, the Law stipulates the provision of the safety of drinking water and drinking water quality standards.
- **Law No. 55 of 2002 for The Antiquities & Heritage of Iraq:** It defines all movable and immovable antiquities, archaeological properties, and artefacts. The Law provides regulations on communication channels upon discovery of the unregistered antiquities and the measures to be undertaken for the preservation of the historical and archaeological sites.
- **Public Roads Law No. 35 of 2002:** the law defines the responsibilities of the General Authority for Roads and Bridges under the supervision of the implementation of public roads outside the borders of the Municipality of Baghdad and Municipalities.
- **Law No. 27 of 1999 concerning the establishment of the General Authority for Water and Sewage:** This Law provides instructions to the local authorities on provision of drinking and processing of raw water and the discharge of sewage and rainwater in all parts of Iraq beyond the boundaries of the Municipality of Baghdad. It defines the permissible discharge limits to both natural waters and sewers. Table 2 presents the permissible discharge limits to both natural waters and sewers.

Table 2. Permissible discharge limits to both natural waters and sewers

Pollutant	Limits for Discharge into Water Bodies	Limits to discharge into Sewer
Color	N/A	N/A
Temperature	<35°C	45°C
Suspended Solids	60 mg/L	750 mg/L
pH	6 -9.5	6 -9.5
BOD	<40	1000
COD	<100	N/A
Nitrate	50 mg/L	N/A
Phosphate	3 mg/L	N/A
Free Chlorine	Trace	100 mg/L
Lead	0.1 mg/L	0.1 mg/L
Copper	0.2 mg/L	N/A
Mercury	0.005 mg/L	0.001 mg/L
Sulphate	if the ratio of the discharge is to the amount of source water is 1:1000 or less, the sulphate concentration should not exceed 400 mg/L	300 mg/L
Total hydrocarbons and derivatives	For the river with continuous flow, 5mg/L provided the ratio of discharge to source water is 1:500	N/A

- **Noise Prevention Law No. 41 of 2015:** This Law aims to prevent the excessive noise in public places. It also prevents broadcasting in public places that may disturb peace between 10 p.m. and 8 a.m.
- **Law No. 6 of 1988 concerning the National Commission for Occupational Hygiene and Safety:**
 - Governs the enforcement of occupational health and safety regulations.
 - Provides for inspections of places of employment and inspections reports.
 - Establishes the duties and responsibilities of employers vis-a-vis occupational health and safety.
 - Establishes the functions of safety commissions at places of work.
 - Regulates the responsibilities and duties of workers with respect to occupational health and safety.
- **Acquisition Law No.12 of 1981:** It governs the expropriation of property through acquisition and entitlement for compensation and replacement costs, cancellation of legal rights and other issues of acquisition for the public benefit.

3.1.2 Regulations

- **The Regulation for the Protection of Rivers No. 25 of 1967:** It regulates wastewater discharges and provides physical, biological, and chemical guidelines for water quality. Also, the regulation includes provisions for protection of public water bodies from pollution.
- **Preservation of Water Resources Regulation No.2 of 2001:** Chapter 2 of this Regulation provides instructions on disposal of or recycling of wastewater. It also prohibits the discharge of effluent by private or public entities into public water.

3.1.3 Instructions and Directives

- **Instruction No. 2 of 2014 on Environmental Protection from Municipal Waste:** This Instruction consists of 5 articles and aims at protecting the urban environment with a proper management of wastes. The Ministry of Municipalities and Public Works and the Municipality of Baghdad are responsible for collecting and transporting waste materials for treatment and disposal; for creating the necessary supplies and equipment; for identifying appropriate locations and the development of containers to throw municipal waste; for distributing of special bags for waste producers; and for identifying waste collection dates.
- **Directive No. 67 of 1986 on Regulating the Debris Collection Areas:** It provides that debris disposable should be done in areas with stable geology and that siting near particularly vulnerable or sensitive ecosystems and groundwater and surface water resources should be avoided.
- **Clean Air Act No. 1 of 2004:** It provides the guidelines for prevention and control of air pollution, as well as the applicable national standards of the most common air pollutants.

- **Directive No. 4 of 1993 concerning Occupational health, Protection of Workers against Vibration:** Pursuant to Sections 3 and 105 of the Public Health Act (No. 89 of 1981), it establishes work place procedures designed to minimize vibration and any harmful effects that workers might be exposed to. It also stipulates the maximum total daily limits for occupational exposure to vibration.
- **Instruction No. 12 of 2016 on Occupational Health and Safety Requirements:**
 - Provides for the enforcement of occupational safety provisions at places of work.
 - Regulates that all work places are to appoint a person in charge of occupational safety and an occupational safety committee.
 - Provides for the appointment and duties of the person responsible for occupational safety and for the occupational safety committee at each workplace.
 - Establishes the functions and duties of employers and employees with regard to occupational safety.

3.2 International Conventions and Treaties

International conventions and treaties signed by Gol include:

- UN Convention for Biological Diversity (UNCBD)
- UN Convention to Combat Desertification (UNCCD)
- RAMSAR Convention on Wetlands
- UNESCO World Heritage Convention
- United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol
- All ratified ILO convention, including the latest one on Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)

3.3 International Environmental and Social Guidelines

3.3.1 KfW Sustainability Guideline

The KfW finances investments and related advisory services in developing and emerging countries on behalf of the German Federal Government with the objective of achieving their overarching development goals (i.e. to reduce poverty, secure peace, support democracy, shape globalization in an equitable manner and engage in environmental and climate protection). The **KfW Sustainability Guideline** reflects the KfW commitment to the concept of sustainable development and consequently describes the principles and procedures to assess the environmental, social and climate performance during the preparation and implementation of financial cooperation (FC) measures financed by KfW Development Bank. These aspects are clearly stated in the principles for its FC measures.

With the aim of sustainability and avoiding adverse environmental, social and climate impacts and risks, KfW Development Bank pursues in particular the following principles for its FC measures that are financed:

- to avoid, reduce or limit environmental pollution and environmental damage including climate-damaging emissions and pollution;
- to preserve and protect biodiversity and tropical rainforests and to sustainably manage natural resources;
- to consider probable and foreseeable impacts of climate change including utilizing the potential to adapt to climate change. In this context climate change is understood as climate variability and long-term climate change;
- to avoid adverse impacts upon the living conditions of communities, in particular indigenous people and other vulnerable groups, as well as to ensure the rights, living conditions and values of indigenous people;
- to avoid and minimize involuntary resettlement and forced eviction of people and their living space as well as to mitigate adverse social and economic impacts through changes in land use by reinstating the previous living conditions of the affected population;
- to ensure and support health protection at work and the occupational health and safety of people working within the framework of a FC measure;
- to condemn forced labour and child labour, ban discrimination in respect of employment as well as occupation and support the freedom of association and the right to collective bargaining;
- to protect and preserve cultural heritage; and
- to support the executing agency in the management and monitoring of possible adverse environmental, social and climate impacts as well as risks within the framework of the implement FC measure.

According to the Guideline, the general steps of the KfW environmental and social assessment involve:

- Screening and categorization of the financial cooperation (FC) measures to classify a project into one of the following three categories:
 - Category A: have diverse significant adverse impacts and risks on the environment and the social conditions of the affected population.
 - Category B: adverse risks and impacts upon the environment and on the social conditions.
 - Category C: expected to have no or only minor adverse environmental and social impacts or risks.
- In-depth Environmental and Social Due Diligence/assessment.
- Stakeholder engagement and complaints management in relation to the FC measure.

Based on KfW Sustainability Guideline, the programme is classified as an “A” project due to the programmatic character of the GCFI as well as the risk context in which the project is embedded in, relating to stability, conflict and security aspects.

3.3.2 World Bank Safeguard Procedures and Operational Policies

In line with the KfW Sustainability Guideline and the provisions of the EODP ESMF, the World Bank safeguard procedures are considered part of the governing framework for the GCFI ESMF. Accordingly, the World Bank safeguards policies and procedures triggered for the GCFI projects are summarized in Table 3.

Table 3. Triggered World Bank operational policies and procedures

WB OP	Triggered? (Yes/No)	Comments on Applicability
OP/BP 4.01 on Environmental Assessment	Yes	OP 4.01 aims at ensuring that financed projects are environmentally sound and sustainable. OP 4.01 is triggered as the GCFI could have impacts on the environment due to the rehabilitation of damaged infrastructures and associated civil works. According to OP 4.01, the GCFI consists of projects and hence requires an ESMF. All projects will be screened for categorization and selection of appropriate safeguard instrument as per the GCFI ESMF.
OP/BP 4.04 on Natural Habitats	Yes	OP 4.04 aims at conservation of natural habitats. It is triggered if a GCFI project is likely to cause issues to a natural habitat. Accordingly, all projects are required to identify early on any natural habitat issues likely to arise and in such case ensure that appropriate conservation and mitigation measures will be implemented.
OP 4.07 on Water Resources Management	No	The GCFI interventions will involve rehabilitation of existing facilities. As such, OP 4.07 is considered to be not triggered.
OP 4.09 on Pest Management	No	The GCFI interventions will not require the use of pesticides.
OP 4.10 on Indigenous People	No	There are no social groups with distinct identities from dominant groups in their national societies. Therefore, OP 4.10 is not triggered.
OP/BP 4.11 on Physical Cultural Resources	Yes	This policy addresses physical cultural resources that are of cultural interest at the local, provincial or national level and aims to avoid or mitigate adverse impacts on such resources. As Iraq is indicated to have more than 30,000 documented archaeological and historic sites and monuments, and as some of the rehabilitation projects might involve excavations, OP/BP 4.11 is considered to be triggered.
OP/BP 4.12 on Involuntary Resettlement	Yes	OP/BP 4.12 aims at avoiding, or minimizing involuntary resettlement. Where unavoidable, the Policy aims at assisting displaced persons in their efforts to improve their livelihoods and standards of living. Unavoidable resettlement impacts may arise during the implementation of some of the GCFI projects. Thus, OP/BP 4.12 is considered to be triggered.
OP/BP 4.36 on Forests	Yes	OP/BP 4.36 applies to projects that may impact forests, affect people's interaction or dependence on forests, or that may alter a forest's management/utilization/protection. Forests in Iraq are reported to cover less than 2% of the country's land area (Trading economics, 2015). However, OP/BP 4.36 will be considered as triggered only for the GCFI projects that involve activities screened to be close to a forest (as defined under OP/BP 4.36). The environmental assessment of such projects shall address the potential impact on forests and/or the rights of local communities depending upon that forest.

WB OP	Trig-gered? (Yes/No)	Comments on Applicability
OP/BP 4.37 on Safety of Dams	Yes	This policy requires evaluating the safety of an existing dam as well as its operation and maintenance procedures by an independent dam specialist(s) in order to determine any remedial work or safety-related measures necessary to upgrade the existing to acceptable standard of safety. It is applicable to GCFI interventions that will involve rehabilitation of dams that are less than 15 meters in height.
OP/BP 7.50 Inter-national Water-ways (OP7.50)-	No	The GCFI will support activities involving the rehabilitation of water supply and sanitation infrastructure that falling under the applicability of the OP/BP 7.50, which requires notifying other riparians of the proposed project and its details. However, and according to paragraph 7 of OP/BP 7.5, the GCFI has an exception of the riparian notification requirements due to the following: <ul style="list-style-type: none"> • The GCFI interventions in the water and sanitation sector will not respond to growing demand for water and therefore will not attempt to increase water off-take from international waterways, but rather focus on repairing what has been damaged by the conflict; and • The rehabilitation of wastewater treatment plant(s) are of small scale addressing local demands, and it is not expected to expand or increase their capacity.

The World Bank Group Environmental, Health, and Safety Guidelines (known as the "EHS Guidelines") are also required to be adopted by the projects as relevant to each sector. The EHS Guidelines technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). These General EHS Guidelines are designed to be used together with the relevant Industry Sector EHS Guidelines, which provide guidance to users on EHS issues in specific industry sectors. For the GCFI projects, the General and Industry guidelines on Environmental, Health and Safety Guidelines (EHSGs) are applicable including the General Guidelines and Sector Guidelines for Construction and Decommissioning and the relevant sector-specific EHSGs. The relevant EHS Guidelines for each GCFI sector are summarized in Table 4.

Table 4. Relevant EHS Guidelines for each GCFI sector

Project Sector	Relevant EHS Guidelines
Water and Sanitation	<ul style="list-style-type: none"> • Environmental, Health, and Safety General Guidelines • Environmental, Health, and Safety Guidelines for Water and Sanitation
Roads and Bridges	<ul style="list-style-type: none"> • Environmental, Health, and Safety General Guidelines • Environmental, Health, and Safety Guidelines for Toll Roads
Electricity	<ul style="list-style-type: none"> • Environmental, Health, and Safety General Guidelines • Environmental, Health, and Safety Guidelines for Electric Power Transmission and Distribution
Health	<ul style="list-style-type: none"> • Environmental, Health, and Safety General Guidelines • Environmental, Health, and Safety Guidelines for Health Care Facilities

3.3.3 ESMF for Iraq Emergency Operation Development Projects (EODP)

The EODPs programme was designed by the World Bank to complement the Iraqi government's stabilization efforts and implementation of reconstruction and rehabilitation of priority infrastructure projects to restore the delivery of public services in the liberated areas. The EODP Programme promotes inclusive recovery and reconstruction processes through a three-layered approach consisting of creation of an enabling environment for the recovery and reconstruction of the liberated areas, effective and timely implementation of the recovery and reconstruction activities, and the formulation and financing of an integrated and coherent regional development framework for the liberated areas. The projects of EODP include the following components:

- Component 1: Restoring Electricity Infrastructure and Connectivity;
- Component 2: Restoring Municipal Waste, Water and Sanitation Services;
- Component 3: Restoring Transport Infrastructure;
- Component 4: Restoring Health Services;
- Component 5: Technical Assistance;
- Component 6: Project Management, Sensitization and Communications and Monitoring and Evaluation;
- Component 7: Restoring Agriculture Productivity;
- Component 8: Emergency repair of water control infrastructure and irrigation schemes;
- Component 9: Restoring Education Services; and
- Component 10: Restoring Municipal Infrastructure and Services and Preserving Cultural Heritage Assets

The World Bank commenced on behalf of the GoI the preparation of an Environmental and Social Framework (ESMF) as the primary safeguards instrument of the EODP. The ESMF covered the entire scope of potential investment projects (e.g. housing, road repairs, transmission lines, bridges, energy production facilities, etc.). It classified projects into typologies along environmental and social criteria and impacts. For each typology, the required specific instruments and processes were defined.

Since the EODP's ESMF is comprehensive and generally acceptable for projects financed by KfW, the GCFI will generally maintain these existing safeguards and harmonize the GCFI approach with the ongoing EODP. As such, the GCFI ESMF shall be designed and operationalized based on the provisions (standards and procedures) of the EODP ESMF.

3.3.4 GCFI Implementation Manual (GIM)

In addition to the KfW Sustainability Guideline, the KfW in cooperation with ReFAATO prepared in November 2017, the GCFI Implementation Manual (GIM) that mainly aims to spell out procedures and detailed arrangements for the implementation of the GCFI programme in Iraq. The GIM provides a comprehensive documentation of how the programme will be made operational and implemented. It guides ReFAATO, PMTs, Consultants and Contractors on the procedures necessary to implement the programme. Adherence to this manual is mandatory for all key stakeholders identified as part of the Joint Declaration of Intent between Iraqi Prime Minister's Office and the German Federal Foreign Office.

3.3.5 BMZ Guidelines on Human Rights Standards

Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung (BMZ) Guidelines on Incorporating Human Rights Standards and Principles including gender in programme proposals for Bilateral German Technical and Financial Cooperation is among the standards that the GCFI is required to adhere to.

The BMZ "Human Rights in German Development Policy" strategy paper was published its in May 2011 in order to further ensure the systematic mainstreaming of human rights in German development policy. The Strategy Paper is binding for all institutions involved in bilateral German development cooperation. It provides for the mainstreaming of the human rights-based approach throughout all priority areas and sectors of development cooperation. The human rights-based approach requires that civil and political, economic, social and cultural rights as well as human rights standards and principles are systematically referred to. As prescribed by international human rights law, the human rights-based approach comprises special protection and targeted support for disadvantaged or marginalized groups.

3.3.6 IFC Performance Standard 2 on Labor and Working Conditions as well as the International Labor Standards of the International Labour Organization (ILO)

As the World Bank Safeguards do not provide provisions on occupational health and safety, the International Finance Corporation (IFC) Performance Standard 2 - Labor and Working Conditions IFC Performance Standard 2as well as the ILO Core Labor Standards are of relevance for the project. International labour standards are legal instruments drawn up by the ILO's constituents (governments, employers and workers) setting out basic principles and rights at work. They are either Conventions, which are legally binding international treaties that may be ratified by member States, or Recommendations, which serve as non-binding guidelines. Ratifying countries commit themselves to applying the Convention in national law and practice and to reporting on its application at regular intervals. The ILO's Governing Body has identified eight Conventions as "fundamental", covering subjects that are considered as fundamental principles and rights at work: freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.

According to KFW sustainability Guideline, the GCFI projects shall comply with the core labour standards of the ILO. These include:

- the freedom of association and the right to bargain collectively;
- the abolition of forced labour;
- equality of opportunity and treatment in employment and occupation;
- equal pay for men and women for work of equal value; and
- minimum age for employment and the elimination of child labour.

3.4 GAP Analysis

The programme is financed by KfW, which entails fulfilling the requirements of KfW Sustainability Guideline and the World Bank E&S safeguards. At the same time, the programme projects are confined to reconstruction and rehabilitation of existing projects and facilities.

Though the programme projects are all about rehabilitation and reconstruction, requirement for additional land is not anticipated. Nevertheless, the OP/BP 4.12 on involuntary resettlement is considered to be triggered as a precautionary measure and hence, prepared a Resettlement Policy Framework (RPF). The WB's "Involuntary Resettlement OP/BP 4.12" addresses resettlement in terms of applicability and means for compensation. However, the Iraqi "Acquisition Law No. 12 of 1981" does not entitle such vulnerable group (those who do not have the legal right on a property, and are subject to involuntary loss of livelihoods/assets) for any kind of compensation in return. This promotes a potential shortcoming in the area of involuntary resettlement, which will be covered through the Resettlement Policy Framework (RPF) to be developed for the GCFI programme.

On another aspect, the KfW sustainability guideline, focuses on projects in terms of poverty reduction and MDG attainment, and contributes to the removal of gender discrimination and gender inequality. KfW made a commitment, both internally and externally, to take equality seriously and to empower women in management positions. Similarly, under the World Bank operational policies, social development and inclusion are critical for all of the World Bank's development interventions and for achieving sustainable development. The review of Iraqi national legal framework noted gender issues addressed under Labour Law No. 37 with respect to working women and their protection within working environment. As such, the GCFI programme is recommended to emphasize equal opportunity with respect to women employment.

A high-level analysis matrix is outlined in Table 5 for the purpose of informing the staff and stakeholders of the Programme of the identified gaps between the existing E&S safeguards adopted by the GCFI and the National Iraqi requirements.

Table 5. Gap identification among Iraqi regulatory framework, KfW Guideline, and World Bank ESF

	Iraqi	KfW	World Bank	Recommended Action
EIA Framework	<p><u><i>The Law for the Protection and Improvement of Environment No. 27 of 2009</i></u></p> <p>It fairly classifies projects according to severity of impacts. However, public participation and disclosure are not presented.</p>	<p><u><i>Sustainability Guideline</i></u></p> <p>Provides a classification of projects according to severity of impacts and magnitude and indicates the level of EIA study.</p> <p>Public Participation and EIA disclosure are well presented.</p>	<p><u><i>OP/BP4.01: Environmental Assessment</i></u></p> <p>It classifies projects according to severity of impacts and magnitude and indicates the level of EIA study.</p> <p>Public Participation and EIA disclosure are well presented.</p>	<p>Require a stakeholder engagement and consultations as well as disclosure for the GCFI programme.</p>
Involuntary Resettlement	<p><u><i>Acquisition Law No. 12</i></u></p> <p>It does not entitle those who do not have the legal right on a property, and are subject to involuntary loss of livelihoods/assets for any kind of compensation.</p>	<p><u><i>Sustainability Guideline</i></u></p> <p>Avoid and minimize involuntary resettlement and forced eviction of people and their living space as well as to mitigate adverse social and economic impacts through changes in land use by reinstating the previous living conditions of the affected population.</p>	<p><u><i>OP 4.12: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</i></u></p> <p>Recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives. Avoid forced eviction and mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by providing timely compensation for loss of assets at replacement cost and assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards. It also aims at improving living conditions of poor or vulnerable persons who are physically displaced</p>	<p>Prepare Resettlement Policy Framework (RPF) for the GCFI programme according to OP/BP 4.12.</p>
Labour	<p><u><i>Labour Law No. 37</i></u></p> <p>The Iraqi Labour law is a recent one with extensive chapters addressing various issues</p>	<p><u><i>Sustainability Guideline</i></u></p> <p>Condemns forced labour and child labour, bans discrimination with respect to employment as well as occupation and supports the</p>	<p><u><i>IFC Performance Standard 2 on Labor and Working Conditions</i></u></p> <p>Recognizes the importance of employment creation and income generation in</p>	<p>None.</p>

	<p>on employment, training, forced labour, child employment, protection of women at work, working hours and others.</p> <p>On child labour, the law specifies the minimum age for employment as 15 years.</p>	<p>freedom of association and the right to collective bargaining, and is in compliance with the Core Labour Standards of the International Labour Organization (ILO).</p>	<p>the pursuit of poverty reduction and inclusive economic growth. Bans discrimination in employment, provides equal opportunities for workers including women, persons with disabilities migrant workers, contracted workers, community workers and others, and ensures safe and healthy working conditions. This shall be consistent with national law.</p>	
<p>Health and Safety</p>	<p>Health and safety is addressed by couple of local laws and instructions as well as ratified ILO Conventions such as:</p> <ul style="list-style-type: none"> • Public Health Law No. 89 of 1981 • Noise Prevention Law No. 41 of 2015 • Instructions No. 12 of 2016 on Occupational Health and Safety Requirements • ILO Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187), in force in Iraq since 2015. 	<p><u>Sustainability Guideline</u></p> <p>To ensure and support health protection at work and the occupational health and safety of people working within the framework of a FC measure.</p> <p><u>World Bank Environmental Health and Safety Guidelines</u></p> <p>Details mentioned under the WB.</p>	<p><u>World Bank Environmental Health and Safety Guidelines</u></p> <p>The General Environmental, Health and Safety (EHS) Guidelines which are explicitly mentioned by and part of the KfW/GCF safeguards contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors.</p>	<p>None.</p>

<p>Gender</p>	<p>None is available. Gender issues are addressed under Labour Law No. 37 with respect to working women.</p>	<p><u>Gender Strategy:</u> Strengthen the planning and operational work undertaken by KfW in the area of gender equality. It focuses on projects in terms of poverty reduction and MDG attainment, and contributes to the removal of gender discrimination and gender inequality.</p> <p>The new Equal Opportunities Plan is adopted in 2015. KfW signed the United Nations' Women Empowerment Principles (WEP) and committed itself to adhere to the principles contained therein. KfW made a commitment, both internally and externally, to take equality seriously and to empower women in management positions. The WEPs grant KfW a credible certificate which underscores its commitment to the issue of the advancement of women.</p>	<p>Equally, social development and inclusion are critical for all of the World Bank's development interventions and for achieving sustainable development. For the Bank, inclusion means empowering all people to participate in, and benefit from, the development process.</p> <p>The World Bank uses its convening ability, financial instruments, and intellectual resources to embed this commitment to environmental and social sustainability across all its activities, which range from the Bank's global engagement in issues such as climate change, disaster risk management, and gender equality, to ensuring that environmental and social considerations are reflected in all sector strategies, operational policies, and country dialogues.</p>	<p>Recommended that the GCFI programme encourage equal opportunity for women employment.</p>
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N/A = Not applicable.

KfW (German Development Bank) can also use comparable standards of other development banks.

4 Baseline Conditions

This chapter provides an overview of the baseline conditions with respect to physical environment, biodiversity, socio-economic conditions, and archaeological and cultural heritage sites within the four governorates of Diyala, Salah al-Din, Al-Anbar and Niniveh. The information provided is general and refers to the target governorate as a whole. During implementation, the IC is responsible for providing an updated and area-specific documentation of the baseline conditions.

4.1 Physical Environment

Iraq is centrally located in the Middle East. Its neighbours are Syria and Turkey to the north, Iran to the east, Saudi Arabia and Kuwait to the south, and Jordan to the west. The territory of 440,000km² is marked by mountains in the northeast, desert in the south-west, and arid plains in the central and southern regions. The Euphrates and Tigris Rivers meet south of Baghdad and flow into the Persian Gulf near Basra - Iraq's only sea access point. Iraq has a climate of long, hot, dry summers from April to October, and mild to cool winters, especially in higher northern altitudes, from November to March. Approximately 37 million Iraqis live across 18 administrative governorates (Figure 1). Baghdad, Iraq's capital, is in the centre of the country and home to an estimated 7 million people.

This section provides a general description of prevailing baseline conditions for the governorates targeted by the Project, which are Diyala, Salah al-Din, Al-Anbar, and Niniveh, whose locations are illustrated in Figure 1.

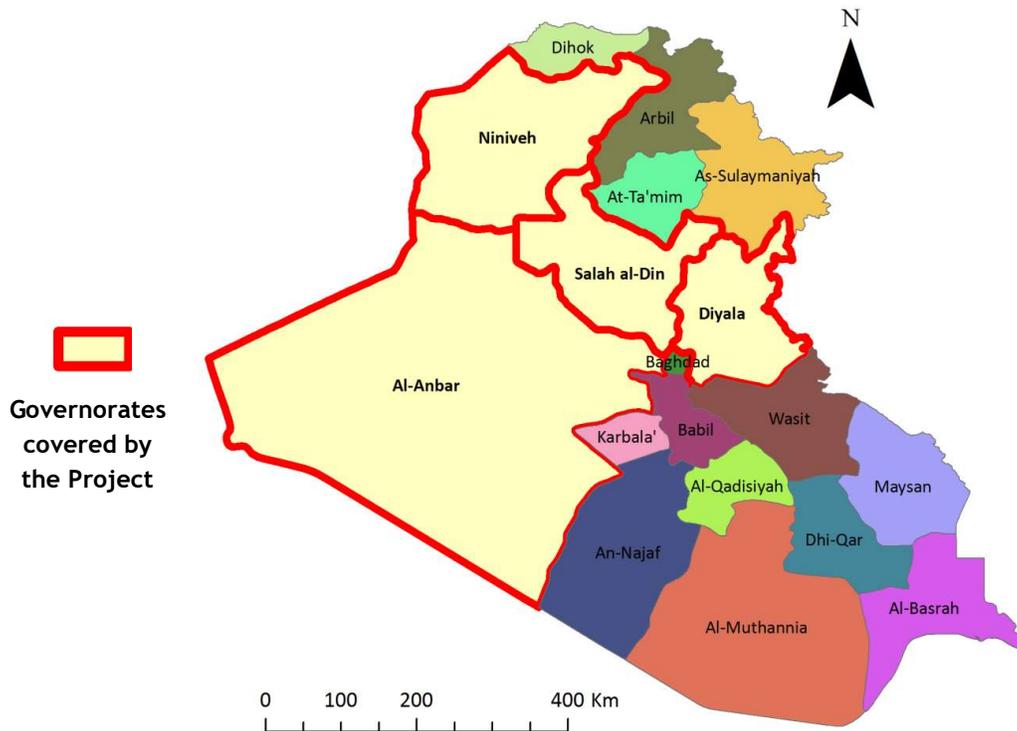


Figure 1. Governorates of Iraq and those included within the Project

Table 6. Overview of the four governorates

Governorate	Location Overview
Diyala	Diyala Governorate extends to the northeast of Baghdad to Iraq's eastern border with Iran. It covers an area of 17,685 km ² (IAU, 2010a). The landscape varies dramatically from the Hamrin mountains, which cross the governorate in the north, to the desert in the south. A large portion of the province is drained by the Diyala River, a major tributary of the Tigris.
Salah al-Din	It is north of Baghdad. The governorate has an area of 24,075 km ² (IAU, 2009).
Al-Anbar	Covering almost all of western Iraq, Anbar is Iraq's largest governorate (area of 138,228 km ² which form almost one third of Iraq). Desert dominates the landscape, particularly in al-Rutba district. The governorate borders Saudi Arabia, Syria and Jordan (IAU, 2010b; NCCI, na).
Niniveh	It is located in the northwestern part of Iraq, about 400 km from Baghdad and shares borders with Syria and several Iraqi governorates. Niniveh is the third largest governorate in terms of size. Its total land area is estimated at

37,323 km ² (8.6% the total size of Iraq) (IRFAD, 2014; NCCI, 2010).

4.1.1 Climate

Climate in Iraq is classified as continental and sub-tropical semi-arid, with the northern and northeast mountainous area under Mediterranean influence (JICA and NTC, 2016). Rainfall is seasonal and 90 percent of the annual rainfall occurs between November and April, most of which occur in the winter months from December through March. The remaining six months, particularly the hottest ones of June, July, and August, are dry.

Except in the north and northeast, mean annual rainfall ranges between ten and seventeen centimeters. Data available from stations in the foothills and steppes south and southwest of the mountains suggest mean annual rainfall between thirty-two and fifty-seven centimeters for that area. Rainfall in the mountains is more abundant and may reach 100 centimeters a year in some places.

Mean minimum temperatures in the winter range from near freezing (just before dawn) in the northern and northeastern foothills and the western desert to 2-3°C and 4-5°C in the alluvial plains of southern Iraq. They rise to a mean maximum of about 15.5°C in the western desert and the northeast, and 16.6°C in the south. In the summer mean minimum temperatures range from about 22.2°C to about 29°C and rise to maximums between roughly 37.7o and 43.3°C. Temperatures sometimes fall below freezing and have fallen as low as -14.4°C at Ar-Rutbah in the western desert. They are more likely, however, to go over 46°C in the summer months, and several stations have records of over 48°C.

The summer months are marked by two kinds of wind phenomena. The southern and south-easterly sharqi, a dry, dusty wind with occasional gusts of 80 km/hour, occurs from April to early June and again from late September through November. It may last for a day at the beginning and end of the season but for several days at other times. This wind is often accompanied by violent dust-storms that may rise to heights of several thousand meters and close airports for brief periods. From mid-June to mid-September the prevailing wind, called the shamal, is from the north and northwest. It is a steady wind, absent only occasionally during this period. The very dry air brought by this shamal permits intensive sun heating of the land surface, but the breeze has some cooling effect.

Evaporation varies from 1300 mm in the northern region to 2450 mm in the central region of which 400-500 mm occurs in both July and August only (Iraq EODP, 2017).

Table 7 provides an overview of the target governorates climate.

Table 7. Climate overview for the target governorates

Governorate	Climate Overview
Diyala	Though it has three different climates (hot desert, hot semi-arid, and hot-summer Mediterranean climates), Diyala is dominated by typical dry hot desert climate (Iraq EODP, 2017). In summer temperatures easily exceed 40°C,

Governorate	Climate Overview
	while rainfall is very limited and restricted to the winter and early spring (NCCI, 2016)
Salah al-Din	Its climate is classified as semi-arid, subtropical, Mediterranean climate, which is characterized by a hot dry summer and cold winter. It is however dominated by hot desert climate. Most of rain falls in winter and spring (October through May). There is no rainfall during summer (i.e., from June to September) (Ahmad and Al-Hedny, 2013). Total annual precipitation is around 153 mm. Minimum temperature is around 4°C in January and 27.9°C in July. The maximum temperature is 14.6°C in January and 43.9°C in July (Ahmad and Al-Hedny, 2013).
Al-Anbar	It is considered as one of the driest governorates in Iraq's western desert climate (NCCI, na). The average rainfall in Anbar is 115 mm per year. Summer temperatures may reach as high as 45°C, and may fall as low as 9°C in the winter (NCCI, na).
Niniveh	There are arid, semi-desert plains south of Mosul city (NCCI, 2010). The average temperature in Mosul is 19.8 °C and the average annual rainfall is 456 mm. Summer temperature may reach around 42 °C and may fall as low as around 2 °C in winter.

4.1.2 Topography, Geology, and Soil Conditions

Iraq has four main topographical regions (FRD, 2006):

- The desert zone of Iraq's west and southwest is part of the Syrian Desert, dominated by wide, flat, sandy expanses.
- The uplands region occupies most of Iraq's northern part, beginning about 120 km north of Baghdad and including the watersheds of the Tigris and Euphrates rivers to the Syrian border. Although primarily desert, the region is characterized by deep river valleys.
- The third region is the northern highlands, which includes all of Iraq's north-eastern most territory and extends into neighbouring Turkey and Iran. A series of elevation rises, interspersed with steppes, gives way to mountains as high as 4,000 m near the Iranian and Turkish borders.
- The fourth region is the alluvial plain that extends from north of Baghdad southward to the Persian Gulf, following the lower Tigris and Euphrates rivers. The area, which is a large delta, includes lakes and marshlands. The extent of marshland in the alluvial plain varies according to the volume of water carried by the rivers in flood season. In their lower reaches, the two rivers break into several channels.

The major orders of soil in Iraq include (Muhaimed, na):

- Aridisols: include the gypsum soil which covers around 35% of Iraq especially areas spread over the Tigris and Euphrates flats and island area, along the harmin mountains, and near the Iranian borders in the south.
- Entisols: has high percentage of sand.
- Vertisols: are located in basins and depressions and contain more than 35% clay.
- Inceptisols: are located in plains adjacent to mountains and their soil are dark in color.
- Mollisols: occur at foothills.

A brief overview of related geology, topography and soil information of Salah Al-Din and Al-Anbar governorates are presented in Table 8.

Table 8. Overview of geology, topography and soil of the target governorates

Governorate	Overview of geology, topography and soil
Salah al-Din	The dominant soil orders are Aridisols and Entisols which represent soils with beginning degree of soil development or event very recent soils without any status of development. This is due, mainly to the effect of arid or semi-arid climatic conditions (Ahmad and Al-Hedny, 2013).
Al-Anbar	Some of Anbar is part of the Syrian Desert, characterized by steppe and desert terrain. Most of Anbar is considered as a topographical continuation of the Arabian Peninsula plateau region. It has some small hills and a number of valleys (wadis), including Wadi Rordan. Given a decline in land preservation and a lack of natural vegetation, the land is often exposed to the elements and prone to severe erosion (NCCI, na).

4.1.3 Tectonic Setting

Iraq has a well-documented history of seismic activity. The historical seismicity shows a well-defined pattern and follows the boundaries of the major tectonic faults. Tectonically, Iraq is located in a relatively active seismic zone at the tectonically active northern and eastern boundaries of the Arabian Plate. In 1976, Iraq established a seismic network consisting of five short period stations located in Bagdad, Sulaimaniya, Mosul, Basra, and Rutba. As such, the baseline documentation for each project shall account if the location is in an area of seismic faults.

4.1.4 Hydrology

4.1.4.1 Surface Water Resources

As rainfall is limited in Iraq, the country depends on its two major rivers, the Tigris and Euphrates. Iraq is traversed by the two major rivers, both of which rise in the eastern mountains of Turkey and enter Iraq along its northwestern borders. Before their confluence, the Euphrates flows for about 1,000 km and the Tigris for some 1,300 km within Iraqi territory. Downstream from this point, the combined rivers form the tidal Shatt al-Arab waterway, which flows 190 km into the Gulf (Iraq EODP, 2017). Several major tributaries of the Tigris flow through Iraq. The Khabur, the Great Zab, the Little Zab, the Uzaym, and the Diyala all flow into the Tigris from the northeastern highlands. The Euphrates has no tributaries in Iraq (FRD, 2006). The Euphrates River does not receive water from permanent tributaries within Iraqi territory and is fed only by seasonal runoff from wadis (Iraq EODP, 2017).

The great alluvial plains of the Tigris and Euphrates Rivers comprise more than a quarter of Iraq's surface area. Under natural conditions, the region was rich in wetlands and subject to annual flooding of up to 3 m. However, flooding danger in the alluvial plain has decreased since construction of dams upstream on the Euphrates River (FRD, 2006).

The major river flow annual cycle can be divided into three periods (Iraq EODP, 2017):

- spring flood period, February to June
- summer low flow period, July to October
- autumn - winter rainfall period, November to February

Transboundary pollution and a lack of river basin management by the government have led to the degradation of Iraq's major waterways (FRD, 2006). Water quality in the Euphrates is affected by return flows from irrigation projects in Turkey and Syria, and is expected worsen as irrigated land is added. Within Iraq, much of the return flow is now drained into the Persian Gulf through the Main Outfall Drain, but considerable saline return flow enters the river system. On the Tigris River, the quality is further degraded with flood flows diverted into off-stream storage in the highly saline Tharthar Lake, and later returned to the river system carrying salts washed from the lake (Iraq EODP, 2017).

4.1.4.2 Groundwater Resources

Iraq has good quality subterranean water (salinity levels below 1.0 mg/l) in the foothills of the mountains in the northeast of the country and in the area along the right bank of the Euphrates (JICA, 2011). The aquifer in the foothills of the northeastern mountains has an estimated sustainable discharge of between 10 and 40 m³/s, at depths of 5 to 50 m, while those on the right bank of the Euphrates River are found at depths up to 300 m, and have an estimated discharge of 13 m³/s (Iraq EODP, 2017). However, the quality of this groundwater is rapidly deteriorating in Iraq due to over-extraction (JICA, 2011). Elsewhere, groundwater salinity always exceeds the 1.0 mg/l threshold. There is concern that groundwater may be vulnerable to spillages of oil and oil-contaminated water, and possibly to contamination by hazardous substances released into the environment as a consequence of military conflict (Iraq

EODP, 2017).

4.1.4.3 Water Resources of the Target Governorates

Some of the most prominent water resources for Diyala, Salah al-Din, Al-Anbar and Niniveh governorates are presented in Table 9.

Table 9. Major water resources of Diyala, Salah al-Din, Al-Anbar and Niniveh governorates

Governorate	Overview of major water resources
Diyala	The man made Hamrin Lake, formed by a dam on the Diyala River, is located approximately 50 km northeast of the governorate’s capital of Baqubah. The construction of dams on the tributary rivers of the lake in Iraqi Kurdistan and neighbouring Iran has been significantly lowering water levels over the past years, thereby threatening the governorate’s water supply, which for an important part depends on the lake. The Diyala River and a number of other smaller rivers intersect Diyala, while the Tigris River crosses the southwestern borders of the governorate (NCCI, 2016).
Salah al-Din	Relies on groundwater where the water table in the area exists at depths ranging from 25-60 m.
Al-Anbar	The Euphrates river is a main water source for residents of Al-Anbar. The river flows southeasterly through seven of Al-Anbar’s districts: Al-Qa’im, Ana, Haditha, Heet, Rawa, Ramadi and Falluja (NCCI, na).
Niniveh	The Tigris river extends from the governorate’s northwest to the south. The Tigris and Greater Zab rivers irrigate much of Mosul (NCCI, 2010).

4.2 Biodiversity

This section is based on biodiversity baseline provided by Iraq EODP report (Iraq EODP, 2017). The combination of rain shortage and extreme heat makes much of Iraq a desert. Because of very high rates of evaporation, soil and plants rapidly lose the little moisture obtained from the rain, and vegetation cannot survive without extensive irrigation. Some areas, however, although arid do have natural vegetation in contrast to the desert. For example, in the Zagros Mountains in northeastern Iraq there is permanent vegetation, such as oak trees, and date palms are found in the south.

4.2.1 Biodiversity of Iraq

The UNEP-WCMC Species Database lists 73 terrestrial mammal species (plus a further three species known to be extinct). 46 of these, including three bat species, Eurasian otter (*Lutra lutra*) and smooth-coated otter are listed as ‘vulnerable’ in the 2002 IUCN Red List.

A large number of reptiles occur in Iraq, but information on their distribution and conservation status is limited. The 2002 IUCN Red List ranks the Euphrates soft-shelled turtle (*Rafetus euphraticus*) as ‘endangered’, and common tortoise (*Testudo graeca*) as ‘vulnerable’.

Over 400 species of birds have been recorded in the northern Gulf Region (comprising Kuwait, Iraq, eastern Saudi Arabia and western Iran). Among the species occurring in Iraq, white-headed duck (*Oxyura leucocephala*) which is listed as endangered in the 2002 IUCN Red List, while Socotra cormorant (*Phalacrocorax nigrogularis*), marbled teal (*Marmaronetta angustirostris*), greater spotted eagle (*Aquila clanga*), imperial eagle (*Aquila heliaca*), lesser kestrel (*Falco naumanni*), corncrake (*Crex crex*), and sociable lapwing (*Vanellus gregarius*) are listed as vulnerable.

Nine more species are listed as ‘conservation dependent’ or ‘near threatened’. The region is especially important as part of the intercontinental flyways used by huge numbers of birds moving between Africa and Eurasia. It has been estimated that some two to three billion migrant birds move south across Arabia each autumn.

The majority of sites important for biodiversity conservation have no protected area status, although many have been recommended for designation. For example, Bird-Life International has recognized a total of 42 sites as ‘Important Bird Areas’ (IBAs). These cover a combined area of 35,000 km², or about 8% of the country’s surface area (Iraq EODP, 2017).

Protected areas that are located within Al-Anbar, Diyala, and Niniveh governorates in are presented in Table 10 and Figures 2-7. **Error! Reference source not found..** (Source: <https://protectedplanet.net/search?q=iraq>)

Table 10. Protected areas located within Al-Anbar, Diyala, and Niniveh governorates

Governorate	Name of protected area	Area
Al-Anbar	Haditha Wetland and Baghdadi	4820.74 Km ²
Al-Anbar	Razzaza Lake	1562.34 Km ²
Al-Anbar	Tharthar Lake and Dhebaeji Field	3405.73 Km ²
Diyala-Niniveh	Badra and Zurbatiyah	669.97 Km ²
Niniveh	Mosul Lake	481.28 Km ²
Niniveh	Qara Dagh	253.45 Km ²



Figure 5. Tharthar Lake and Dhebaeji Field

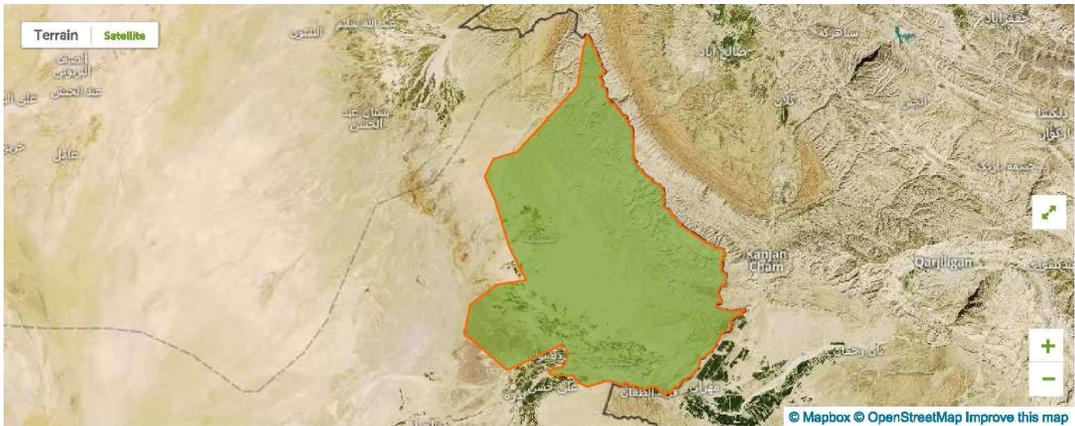


Figure 6. Badra and Zurbatiyah

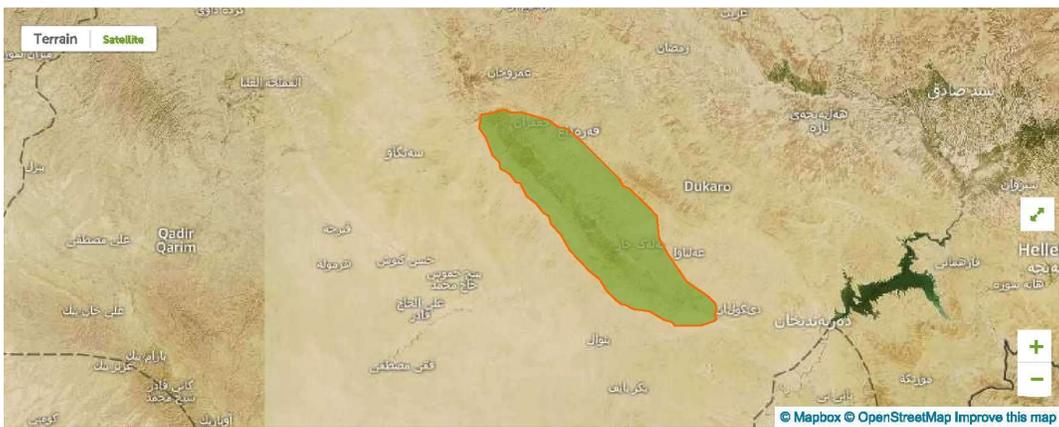


Figure 7. Qara Dagh

4.2.2 Mesopotamian Marshlands

The Mesopotamian marshlands are unique ecological features at the confluence of the Tigris and Euphrates. They fall into three distinct areas: Hawizeh Marsh in the north, fed by the Tigris and Karkheh rivers, the Central (Qurnah) Marsh, which lies between the Tigris and the Euphrates, and the Hammar Marsh to the south, traditionally fed by the Euphrates. These three marshes were once contiguous and covered 20,000 km². At their full extent, they were able to absorb inflows of over 16 BCM annually. The marshes were formed by flood flows from the Tigris and Euphrates, and were also fed by the Karkheh river from Iran; water spilled out from these rivers forming inter-connected lakes, mud flats and wetlands. Further downstream, the Euphrates, Tigris and Karun rivers merge to form the Shatt al Arab River which drains into the Persian Gulf. As tides averaging 3m can run up the Shatt al Arab into the Euphrates and Tigris, and then into the marsh and wetland systems, the water quality of the marshes varies in brackishness (Iraq EODP, 2017).

The marshes are important economically and ecologically to all peoples of this area and are of global environmental significance. For over 5000 years the *madan*, the Marsh Arabs, made these wetlands their home, building an economy and lifestyle centered around the ecology of the area. The wetlands ecosystem is rich in bio-diversity, supporting giant reeds, wetland rice cultivation and many species of plants, fish and animals.

Most of the original riverine forest which once lined the banks of the Euphrates and Tigris rivers has been replaced by orchards and other cultivated land, although some significant stands of forest still exist, especially on small islands. The surviving patches of forest provide important breeding habitat for a wide variety of birds, notably regional specialties such as the grey hypocolius (*Hypocolius ampelinus*), Iraq babbler (*Turdoides altirostris*) and Dead Sea sparrow (*Passer moabiticus*), and are used as staging areas by large numbers of migratory passerines. Other important natural wetlands in central Iraq include two large brackish to saline lakes, Shari Lake to the east of the Tigris north of Samarra, and Haur Al Shubaicha on the plains to the east of the Tigris southeast of Baghdad.

4.3 Socio-Economic Conditions

Iraq's population in 2017 was around 39.2 million with an estimated growth rate of 2.55% (CIA World Factbook, 2018). It has a rate of 70% urbanization. Around 94% of urban population and 70% of rural population have access to improved water sources. With respect to sanitation, around 86% of urban population and around 84% of rural population have improved access to improved sanitation facilities (CIA World Factbook, 2018).

Due to war conditions, there were a large number of internally displaced persons (IDPs) across Iraq. So far, there have been 3,511,602 returnees across 8 governorates and there are still 2,317,698 internally displaced persons (IDPs) across Iraq (OCHA, 2018).

Table 11 provides a social overview of the demographic characteristics of the target governorates in terms of population number, percentage of males and females, rural and urban population, percentage of IDPs, and available information on ethnic and religious groups within these governorates as well as additional comments on socio-economic conditions.

Table 11. Summary of target governorates demographics

Governorate	Population	Gender Distribution	Level of Urbanization	Number of IDPs (OCHA, 2018)	Other Comments	Reference
Diyala	1,133,627 (5% of total population)	Male: 50% Female: 50%	Has the most rural population in Iraq. Urban: 41% Rural: 59%	80,118	<ul style="list-style-type: none"> • Because of its proximity to two major sources of water, Diyala is traditionally dependent upon agriculture as a major source of income and employment. • Irrigated farmland stretches along the rivers. • Famous for its citrus fruits and dates. Grows dates in large groves. It also contains olive groves. • Agriculture provides a fifth (19%) of all jobs in Diyala and accounts for an estimated one fifth of the governorate's GDP. • Has one of Iraq's highest numbers of unemployment. • Public sector currently provides 36% of all jobs in the governorate. • Lack of capital and skilled staff. • Lack of improvement in services and economic opportunities. • Lack of regular electricity and water supplies, poor infrastructure. • ISIS left numerous booby-traps in Diyala before being driven from the governorate. 	NCCI, 2016 IAU, 2010a
Salah al-Din	1,191,403 (4% of total population)	Male: 50% Female: 50%	Has one of the most rural population in Iraq Urban: 46% Rural: 54%	215,400	<ul style="list-style-type: none"> • It is one of the Iraqi historical Governorates. Its center is Tikrit (NA, na). • It has a vital geographical location being the knot of transportation between the northern and southern Governorates (NA, na). • Its main activities include cattle breeding, agriculture, oil refinery, animal feed, drug industry (NA, na). • Agriculture provides 36% of the jobs in the governorate. • Many buildings and infrastructure (roads, supply networks, etc.) in Salah Al Din governorate were reportedly damaged 	Ahmad and Al-Hedny, 2013 IAU, 2009

Governorate	Population	Gender Distribution	Level of Urbanization	Number of IDPs (OCHA, 2018)	Other Comments	Reference
					as a result of the conflict, more so than in other governorates.	
Al-Anbar	1,230,140 (5% of total population)	Male: 50% Female: 50%	Urban: 52% Rural: 48%	90,312	<ul style="list-style-type: none"> • The most sparsely populated governorate. • Agriculture provides a quarter of jobs in the governorate. • Falluja city in Al-Anbar has the highest concentration of poverty in Iraq. • Unemployment in the governorate is at 14%. • Exposure to toxic weapons and war zone conditions, malnutrition, and pollution have led to alarming trends of cancer, leukemia, increased rate of stillborn and paralyzed newborns, often with other congenital birth defects. 	IAU, 2010b NCCI, na.
Niniveh	2,811,091 (9% of total)	Male: 50% Female: 50%	Urban: 61% Rural: 39%	11% of IDPs in Iraq	<ul style="list-style-type: none"> • It is the third largest and second most populated governorate in Iraq. Its capital city of Mosul is also Iraq's third largest city. • Agriculture is a key component of its economy, particularly cereal production. The governorate produces sugar cane, sunflower, vegetables and herbs. • Successive years of drought have severely affected croplands. • Industrial activity consists mainly of cement, sugar, textiles, and beverage factories. 	IAU, 2010c

4.4 Archaeology and Cultural Heritage Sites

Iraq is indicated to have more than 30,000 documented archaeological and historic sites and monuments of which 119 sites and monuments were listed by Legacy Resource Management Program - Department of Defense (LRMP-DoD) as among the most significant due to the substantial quantity of artifacts and historical information that have been found at these locations (LRMP-DOD, na).

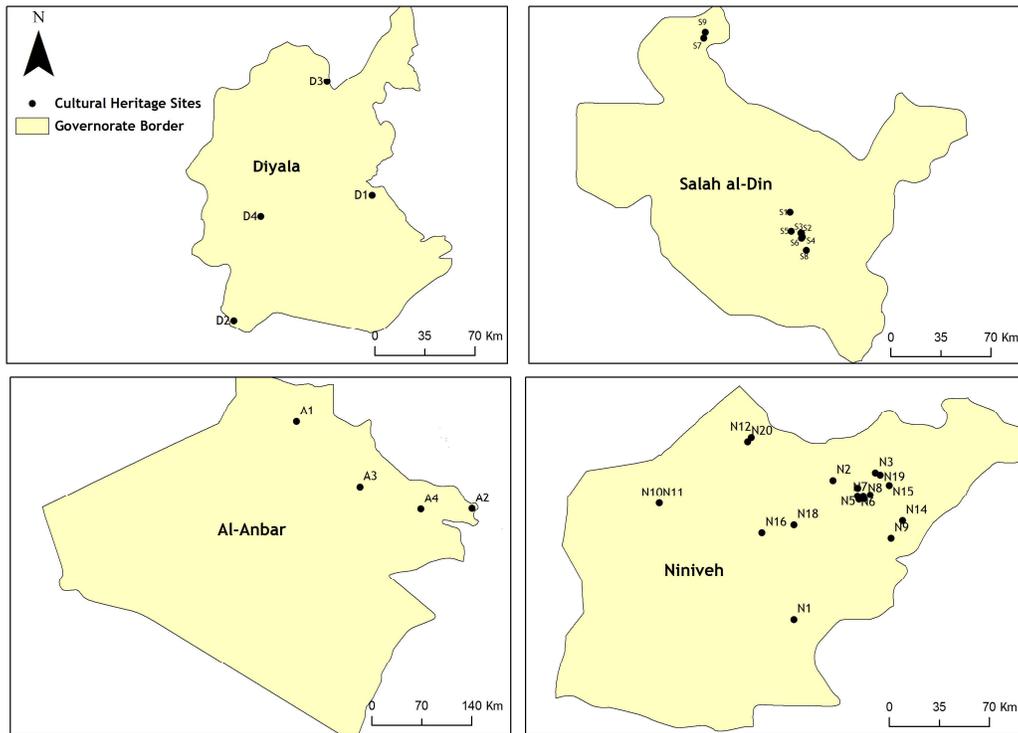
After centuries of environmental degradation, armed conflict, intentional destruction and site looting, some of these places may appear to be ruined. Yet trained archaeologists can often retrieve artifacts and information from even the most ruined site.

The sites listed as significant by LRMP-DOD database within the target governorates are included in Table 12.

Table 12. Listing of significant archaeology and cultural heritage sites for the target governorates (source: LRMP-DOD, na)

Governorate	Significant archaeological and cultural heritage sites
Diyala	<ol style="list-style-type: none"> 1. “Choga Mami” is a settlement site of the Samarra culture in eastern Iraq on the foothills of the Zagros Mountains, close to the border with Iran. Dates to the late Neolithic, Samarran period. 2. “Salman Pak, Tak Kisra” was one of the great cities of ancient Mesopotamia. It dates to the Parthian and Sassanian periods. 3. “Tell Abedeh”. 4. “Tell al-Asmar” situated between the Tigris and the Zagros Mountains, 16 km to the east of the Diyala River. It dates from the 4th millennium through the 2nd millennium BC. 5. “Tell Sleimeh” is part of the Hamrin dam salvage project. It dates back to early Dynastic-Old Babylonian.
Salah al-Din	<p>Saladin Governorate contains– a number of important religious and cultural sites. Samarra, the governorate’s largest city, is home to both the Imam al-Askari and Imam al-Hadi Shrines (an important religious site in Shia Islam where the 10th and 11th Shia Imams are buried), the Sardab where the 12th Imam al-Mahdi went into occultation, and the Great Mosque of Samarra with its distinctive Malwiya minaret. Samarra was also the capital of the Abbasid Caliphate in the 9th century CE, and today Abbasid Samarra is a UNESCO World Heritage Site (Wikipedia, 2018). Other significant sites of Samarra include: Abu Dulaf Mosque and Minaret, Balkuwara Palace, Imam Dur Mausoleum, Jawsaq Al-Khaqani Caliph Palace, Bab al-Amma, Al-Mutawakil Mosque, Qasr al-Ashiq. There are also Qala’at Sherqat, Tell es-Sawwan, and</p>

	<p>Telul al-Aqr (LRMP-DOD, na) where the ancient Neo-Assyrian Empire Assyrian city of Assur is located in Al-Shirqat District on the banks of the Tigris River (Wikipedia, 2018).</p>
Al-Anbar	<ol style="list-style-type: none"> 1. The minaret at “Anah” from the Uqaylid period was reportedly destroyed on June 22, 2006. The Minaret was located in the town of Anah, in western Iraq, near the banks of the middle Euphrates River a short distance from the main road connecting Iraq and Syria, about 80 km east of the Syrian border and 310 km west of Baghdad. 2. “Aqar Quf” located approximately 30 km west of Baghdad, mid-way between Baghdad and Falluja. 3. “Hit” city approximately one km southwest of the outskirts of the modern city of Hit and on the right bank of the Euphrates. 4. “Tell Anbar” about 19 km west of Fallujah on the left bank of the Euphrates, downstream from modern Ramadi in central Iraq. It is an ancient town on the Euphrates, known from classical sources, and Abbasid residence. 5. “Tell Al Jabiriejh” which is near Al Qaim. On the Middle Euphrates, near Der. It dates to old Babylonian-Neo-Assyrian (circa 1800-600 BC) and possibly later. It is a city in the middle Euphrates area primarily important in Assyrian times.
Niniveh	<p>Nineveh (the ancient Assyrian city) includes many valuable ruins from various historical periods. Many of these ruin sites have not been properly excavated, or remain to be discovered, due to the difficult security, political and economic conditions that have faced this region in the past decades. Some of the most acclaimed archaeological sites in Niniveh include: Hadhr (also known as Hatra), Hassuna, Khorsabad, Nabi Yunis, Al-Habda Minaret (Minaret of the Great Mosque of Nur al-Din and Mosque al-Nuri), the ancient Martuma church, Imam Awn al-Din Mashad, Imam Yahya ibn al-Qasim Mashhad, Nabi Yunis Complex, Nimrud, Sinjar - Minaret of the Qutb al-Din Muhammad Madrasa, Sittna Zaynab Mausoleum, Tell al-Hawa, Tell Arpachiyeh, Tell Balawat, Tell Billa, Tell Rimah, Tell Sherif Khan, Tell Taya, Tepe Gawra, and Yarim Tepe (LRMP-DOD, na; NCCI, 2010).</p>



Site No.	Name	Site No.	Name
D1	Choga Mami	N1	Hadhr (Hatra)
D2	Salman Pak, Tak Kisra	N2	Hassuna
D3	Tell Abedeh	N3	Khorsabad
D4	Tell al-Asmar	N4	Kouyounjik - Nebi Yunis
S1	Samarra- Abu Dulaf Mosque and Minaret	N5	Al-Habda Minaret
S2	Samarra- Jawsaq Al-Khaqani Caliphal Palace	N6	Imam Awn al-Din Mashad
S3	Samarra- Bab al-Amma	N7	Imam Yahya ibn al-Qasim Mashhad
S4	Samarra- Al-Mutawakil Mosque and Minaret al-Malwiya	N8	Nabi Yunis Complex
S5	Samarra- Qasr al-Ashiq	N9	Nimrud
S6	Samarra- Shrine of Imam al-Hadi and Imam al-Askari	N10	Sinjar - Minaret of the Qutb al-Din Muhammad Madrasa
S7	Qala'at Sherqat	N11	Sittna Zaynab Mausoleum
S8	Tell es-Sawwan	N12	Tell al-Hawa
S9	Tell al-Aqr	N13	Tell Arpachiyeh
A1	Minaret at 'Anah	N14	Tell Balawat
A2	Aqar Quf	N15	Tell Billa
A3	Hit City	N16	Tell Rimah
A4	Tell Anbar	N17	Tell Sherif Khan
		N18	Tell Taya
		N19	Tepe Gawra
		N20	Yerim Tepe

* Sites not included on the map due to absence of known coordinates:

- Diyala Governorate: Tell Sleimeh
- Salah al-Din Governorate: Balkuwara Palace and Imam Dur Mausoleum
- Al-Anbar Governorate: Tell Al Jabiriejh
- Niniveh Governorate: Ancient Martuma Church

Figure 8. Identified cultural heritage sites within each of the target governorates

5 ESMF Implementation Process

In general, E&S safeguard provisions of the GCFI focus on the project assessment and implementation stages. During the assessment stage of projects, and in parallel with the technical and financial viability assessment, the PMTs in cooperation with respective ICs will assess activities anticipated of each project for potential environmental and social risks and determine the level of assessment required based on safeguard provisions specified in this ESMF.

This chapter provides a directive approach for the implementation of the ESMF especially in terms of the screening process and safeguard instrument for each GCFI project. It is worth to emphasize here that PMTs should carefully examine and specify in details associated environmental and social impacts of each project by using instruments included in this document and propose accordingly appropriate mitigation measures. Moreover, in the interest of harmonizing the GCFI approach with the ongoing WB EODPs in Iraq, the GCFI will maintain same E&S safeguard instruments used by PMTs during the implementation of WB EODPs. This chapter provides a clear guidance on those instruments that will be used by the PMTs/ICs during the implementation of the GCFI. The overall ESMF process is illustrated in Figure 9.

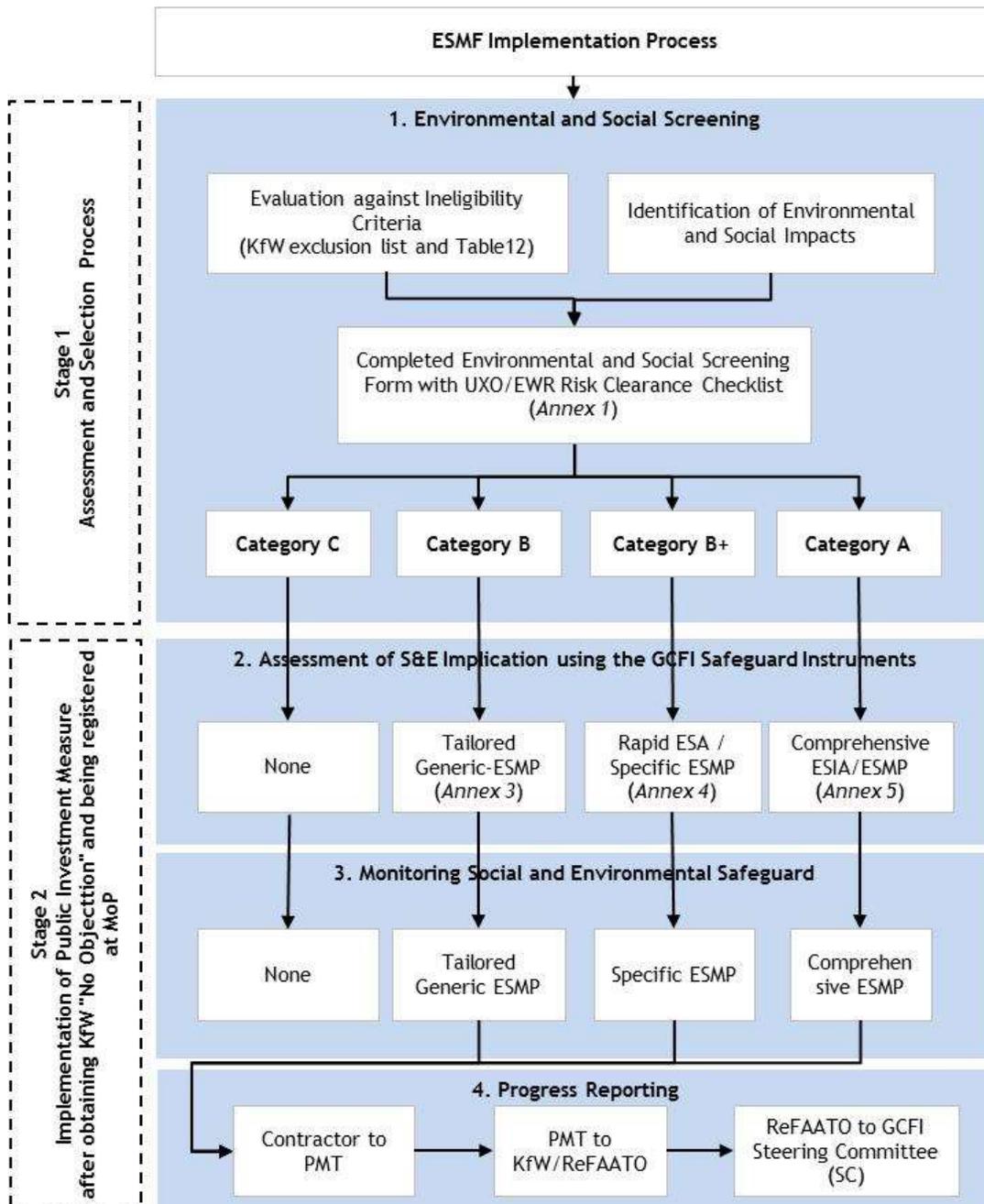


Figure 9. Illustration of the ESMF implementation process including screening process

5.1 E&S Screening and Project Categorization

The environmental and social screening process is the first step in any project cycle. The objective of this process is to determine the extent to which projects are likely to affect the en-

vironment. The process provides a mechanism for ensuring that potential adverse environmental and social impacts of GCFI projects will be identified, assessed and mitigated as appropriate, in a systematic way. The following criteria shall be considered during this process:

- Type of the project;
- Location and size of the project; and
- Anticipated negative impacts.

The screening process is illustrated as part of the ESMF process in Figure 9. At Stage 1 of the project assessment and selection process, ReFAATO should check that the project does not include criteria that would place it on the KfW Exclusion List. Hence, PMT/IC shall conduct an E&S screening of potential adverse impacts for each project and categorize the project to determine the type of safeguards instrument required. As part of the application process, all prospective projects have to undergo an initial E&S screening process to determine the project category. Annex 1 provides a categorization checklist for the high-level identification of relevant E&S risks and gives guidance on the project categorization. The checklist should be completed by the PMT/IC during Stage 2 and will be reviewed by ReFAATO/MMC. The outcomes of risk categorization process shall be documented for all project categories (i.e. whether Category A, B+, B or C).

According to KfW Sustainability Guideline, the initial screening process will classify the projects according to their potential environmental and social adverse impacts into either Category A, Category B+, Category B, or Category C, per the following definitions:

- Category C projects: No or insignificant adverse impacts or risks. No particular management plans required.
- Category B projects: Moderate adverse impacts and risks are usually limited to the Project site and manageable with standard solutions and state of the art technology. Category B projects must implement mitigation measures as foreseen in the generic Environmental & Social Management Plans (ESMP).
- Category B+ projects: Projects with substantial impacts and risks are those where impacts occur in single areas that show a higher risk than category B projects but not as diverse and unprecedented as for A Projects. Category B+ projects should as a minimum undergo an “Rapid Environmental and Social Assessment” (Rapid ESA) for the identified risks and areas/topics of concern and address those through a fit-for-purpose site-specific ESMP tailored to the identified impacts and receptors. For some category B+ projects full-fledged ESIA and ESMP can be required, especially if demanded by national law.
- Category A projects: Projects with high adverse impacts and risks, that are diverse, irreversible and unprecedented. Generally, triggers of Category A can be of complex nature, a large to very large scale, the sensitivity of the location of the Project or the irreversibility of the impacts. Category A projects need to undergo a full ESIA process per the KfW Sustainability Guideline.

Details on categorization criteria are illustrated in Table 13

Table 13. Categorization Criteria

	"A" High E&S Risk	"B+" Substantial E&S Risk	"B" Moderate E&S Risk	"C" low E&S Risk
	Projects with high adverse impacts and risks, that are diverse, irreversible and unprecedented . The impacts may extend beyond the project site, the areas of construction and/or the direct project area.	Projects with substantial impacts and risks are those where impacts occur in single areas that show a higher risk than category B projects but not as diverse and unprecedented as for A Projects. An example would be a small number of people affected by resettlement (see further indications below).	Moderate adverse impacts and risks are usually limited to the Project site and manageable with standard solutions and state of the art technology .	No or insignificant adverse impacts or risks. No particular management plans required.
Indications for the different E&S Risk Categories				
<i>A single indication for one risk category does not directly lead to this category. Rather the accumulation of indication is relevant. Therefore a comprehensive justification of the category and the consideration of the particular chosen category are important. The tool seeks to detecting risk at a rather early stage and being able to manage them along the project cycle.</i>				
	Indication for High E&S Risks	Indication for Substantial E&S Risks	Indication for Moderate E&S Risks	Indication for low E&S Risks
Environment	Location in a protected area or protected habitat	Spatial site expansion; Greenfield in a non-sensitive habitat /rural area	Minimal to no spatial site expansion	Modernization on existing sites
	Project size very large (>15ha)	Site in unused natural environment	Unknown: div. small scale site (E.g. Programs)	No fixed site encounterable (e.g. consulting)
	High Risks e.g. through explosion of fire risks	Unknown: div. larger Sites (e.g. programs)	Site in industrial area	No to low spatial requirements
	Diverse higher risk for residents (noise, air, water pollution, etc.)	Agricultural land/ urban areas / multiple sites	Project size medium (ca.2-5 ha)	No risks for residents
		Project size large (5-15ha)	No impacts on protected area/habitats	
		Project adjacent to protected area/habitats or potential impacts on protected areas/habitats	Diverse smaller risks for residents	
		Diverse moderate risks for residents / Increased heavy load traffic	Transport of hazardous material	
Increased risk for epidemic diseases				
High worker influx				

	"A" High E&S Risk	"B+" Substantial E&S Risk	"B" Moderate E&S Risk	"C" low E&S Risk
	Projects with high adverse impacts and risks, that are diverse, irreversible and unprecedented . The impacts may extend beyond the project site, the areas of construction and/or the direct project area.	Projects with substantial impacts and risks are those where impacts occur in single areas that show a higher risk than category B projects but not as diverse and unprecedented as for A Projects. An example would be a small number of people affected by resettlement (see further indications below).	Moderate adverse impacts and risks are usually limited to the Project site and manageable with standard solutions and state of the art technology .	No or insignificant adverse impacts or risks. No particular management plans required.
Indications for the different E&S Risk Categories				
<i>A single indication for one risk category does not directly lead to this category. Rather the accumulation of indication is relevant. Therefore a comprehensive justification of the category and the consideration of the particular chosen category are important. The tool seeks to detecting risk at a rather early stage and being able to manage them along the project cycle.</i>				
	Indication for High E&S Risks	Indication for Substantial E&S Risks	Indication for Moderate E&S Risks	Indication for low E&S Risks
		Armed security personal (potentially "A")		
Social	Physical and/or economic resettlement > 200 people	Physical and/or economic resettlement < 200 people	Limited requirement of phys. and/or econ. Resettlement (single Households)	No adverse impacts on any people
	Resettlement of Indigenous people (phys./econ.)	Physical and economic resettlement of people with informal rights	No adverse impacts on indigenous people and/or cultural heritage	
	Impacts on indigenous people	Community land affected Pot. Impacts on indigenous people (e.g. project nearby)		
	Impacts on cultural heritage	Pot. Impacts on cultural heritage (e.g. project nearby)		
Health & Safety	Risks of child labour	Construction site with worker camp (independently from number of workers)	<100 construction workers	No need for construction or only limited construction required
	Risk of forced labour	Employment of youth workers Employees: > 20% temporary-, seasonal-, migrant-workers	No large construction site Up to 500 employees during operation	There will be no to a very small number of employees

	"A" High E&S Risk	"B+" Substantial E&S Risk	"B" Moderate E&S Risk	"C" low E&S Risk
	Projects with high adverse impacts and risks, that are diverse, irreversible and unprecedented . The impacts may extend beyond the project site, the areas of construction and/or the direct project area.	Projects with substantial impacts and risks are those where impacts occur in single areas that show a higher risk than category B projects but not as diverse and unprecedented as for A Projects. An example would be a small number of people affected by resettlement (see further indications below).	Moderate adverse impacts and risks are usually limited to the Project site and manageable with standard solutions and state of the art technology .	No or insignificant adverse impacts or risks. No particular management plans required.
Indications for the different E&S Risk Categories				
<i>A single indication for one risk category does not directly lead to this category. Rather the accumulation of indication is relevant. Therefore a comprehensive justification of the category and the consideration of the particular chosen category are important. The tool seeks to detecting risk at a rather early stage and being able to manage them along the project cycle.</i>				
	Indication for High E&S Risks	Indication for Substantial E&S Risks	Indication for Moderate E&S Risks	Indication for low E&S Risks
		Employees: > 50% women Employees: > 20% indigenous people > 500 employees during operation Extraordinary OHS risks (e.g. Explosion work, ordnance clearance)	General OHS risks (welding, hazardous material, working at heights, soil contamination)	
Impacts	Impacts are long term, irreversible and beyond project footprint	Impacts partly temporary and reversible	Impacts temporary and reversible	No or negligible adverse impacts
	Potential cumulative impacts	"Unknown" in one or more fields		
	Potential transboundary impacts			

Examples of the expected E&S categorization for the GCFI projects are provided in Table 14 depending on the project type. However, each project has its own unique E&S characteristics, often depending on its location, and as such Table 14 can only provide general guidance and is provided for illustrative purpose only. Projects have to be categorized according to the E&S screening process described under section 5.1 and the checklist provided in Annex 1.

Table 14. Initial E&S categorization for each GCFI intervention sector

GCFI Sectors	Examples of Related Activities	Indication for High E&S Risks "A"	Indication for Substantial E&S Risks "B+"	Indication for Moderate E&S Risks "B"	Indication for low E&S Risks "C"
Energy Sector	<ul style="list-style-type: none"> Acquisition of equipment for the repair and reconstruction of damaged electricity distribution and transmission infrastructure. Implementation of Electricity projects, which will include engineering and civil works. 	<ul style="list-style-type: none"> Involves involuntary resettlement or impacts protected areas 	<ul style="list-style-type: none"> Involves land acquisition or loss of livelihoods Construction work with capacity not exceeding 10 kV Requires worker camps Impact on areas of high ecological value Involves planned repair and reconstruction works 	<ul style="list-style-type: none"> Rehabilitation without change in land use 	<ul style="list-style-type: none"> Sourcing of equipment
Water and Sanitation Sector	<ul style="list-style-type: none"> Restoration of water, wastewater services by repairing, rehabilitation, and reconstruction of damaged infrastructure including: water intakes, pipelines, treatment / purification plants, pumping stations, storage tanks, distribution networks, house connections, sewers and trunk lines, wastewater treatment plants, and storm water drains, reservoirs, and outfalls. 	<ul style="list-style-type: none"> Involves involuntary resettlement Large urban water and sanitation project Involves larger reconstruction works (e.g. WWTP, pumping stations) combined with more sensitive baseline conditions 	<ul style="list-style-type: none"> Involves land acquisition or loss of livelihoods Impact on areas of high ecological value Involves larger reconstruction works (WWTP, pumping stations) combined with less sensitive baseline conditions 	<ul style="list-style-type: none"> A pilot, family or small village level project Involves rehabilitation without change in land use 	-

GCFI Sectors	Examples of Related Activities	Indication for High E&S Risks "A"	Indication for Substantial E&S Risks "B+"	Indication for Moderate E&S Risks "B"	Indication for low E&S Risks "C"
Roads and Bridges	<ul style="list-style-type: none"> Improvement of road assets, repairing and rehabilitating highly damaged segments of primary road network. Repair and reconstruction of critical bridges and major culverts. 	<ul style="list-style-type: none"> Involves involuntary resettlement or impacts protected areas Involves more extensive reconstruction works (e.g. involving abutments and pylons, requiring access to river) combined with more sensitive baseline conditions 	<ul style="list-style-type: none"> Involves land acquisition or loss of livelihoods Requires operation of quarries Requires worker camps Impacts area of high ecological value Involves asphalt roads longer than 2 km or rural roads longer than 10 km Involves road works in combination with more sensitive baseline conditions Extensive reconstruction works (e.g. involving abutments and pylons) combined with less sensitive baseline conditions 	<ul style="list-style-type: none"> Rehabilitation/upgrade project Involves minor bridge repair works, such as repairing the deck and surface 	
Health	<ul style="list-style-type: none"> Repair and supply of medical equipment to damaged hospitals and clinics. 	<ul style="list-style-type: none"> Involves both, expansion and land acquisition 	<ul style="list-style-type: none"> Involves land acquisition or loss of livelihoods Involves addition of new operation units that involves generation of new types of health wastes such as radioactive material. Requires worker camps Impacts area of high ecological value Extensive reconstruction works (e.g. involving abutments and pylons) combined with less sensitive baseline conditions 	<ul style="list-style-type: none"> Rehabilitation/upgrade project 	<ul style="list-style-type: none"> Supply of equipment/machines

5.1.1 Ineligibility Criteria

In addition to the KfW exclusion list of activities that are ineligible to be financed under the GCFI¹, the projects that have significant environmental and/or social impacts will not be ineligible for funding under the GCFI, as the respective approach in the WB EODP. Table 15 presents the list of criteria for ineligible projects under GCFI based on the WB EODP approach.

Table 15. Criteria for ineligible projects under GCFI

Project Sector	Ineligibility Criteria
Water and Sanitation	<p>If the project activities involve at least one of the following characteristics:</p> <ul style="list-style-type: none"> • Significant conversion or degradation of critical natural habitats; • Damages cultural property, archaeological and historical sites, religious monuments and cemeteries; • New wastewater treatment plant to serve 10,000 or more households; • Construction of dams more than 5 meters high and Rehabilitation of dams more than 15 meters high; or • New irrigation and drainage schemes.
Roads and Bridges	<p>If the project activities involve at least one of the following characteristics:</p> <ul style="list-style-type: none"> • Significant conversion or degradation of critical natural habitats; or • Damages cultural property, archaeological and historical sites, religious monuments and cemeteries.
Electricity	<p>If the project activities involve at least one of the following characteristics:</p> <ul style="list-style-type: none"> • Significant conversion or degradation of critical natural habitats; • Damages cultural property, archaeological and historical sites, religious monuments and cemeteries; or • New power generating capacity of more than 10 MW.
Health	<p>If the project activities involve at least one of the following characteristics:</p> <ul style="list-style-type: none"> • Significant conversion or degradation of critical natural habitats; or • Damages cultural property, archaeological and historical sites, religious monuments and cemeteries;

¹ KfW exclusion list available at: <https://www.kfw.de/nachhaltigkeit/KfW-Group/Sustainability/Sustainable-Banking-Operations/Sustainable-Investment/KfWs-Sustainable-Investment-Approach/Exclusion-Criteria/>

5.1.2 Explosive Remnants Risks

Due to the risks of explosive war remnants (EWR) concealed in and under the rubble (both unexploded ordnance - UXO, and deliberately planted explosives) an extensive explosive ordnance disposal (EOD) would have to be an integral part of rubble removal. The GoI with assistance from the European Union, and the rest of the international community including specialized agencies such as the United Nations Mine Action Service (UNMAS) will ensure that improvised explosive devices (IEDs) and UXOs are properly detected and removed prior to works activities begin especially where rubble is accumulated. Any rubble removal, repairs or reconstruction financed by the GCFI will only apply to those areas that have been declared safe of EWRs. Confirmation that project locations have been cleared of EWR, IEDs and UXOs will be sought from the relevant authorities (the Ministries of Interior and Defense). No project activities will be undertaken without this assurance. In a similar manner as the completion of the required safeguards documents, the declaration of absence of ERW will be a criterion to allow any GCFI project to proceed.

In case of the requirement for Clearance Certificate. It is the responsibility of the PMT to source an independent external Quality Control QC firm to certify that the demining is carried out to international standard. The cost for this exercise should be included in the operational budget of the respective implementation consultant.

Therefore, during the E&S screening process, the PMTs/ICs shall obtain a written confirmation from relevant authorities in the governorates to ensure clearance of Improvised Explosive Devices (IEDs), EWR, and UXOs at projects area. A UXO/EWR Risk Clearance Checklist to be used for each project is provided in Annex 1.

For infrastructure projects, the procedure for clearance of EWR/UXO/mines is exhibited in Table 16 and both requirements for Letter of Release of Land and/or Clearance of Certificate are obtained by the PMTs before the handover of the site to the contractor.

In case of the requirement for Clearance Certificate. It is the responsibility of the PMT to source an independent external Quality Control QC firm to certify that the demining is carried out to international standard.

Table 16. Procedure of EWR/UXO/Mine Clearance

Level of Risk	Requirement
Low risk	Letter of Release of Land
Medium and/or high risk	Clearance Certificate

Guidance for obtaining the Letter of Release of Land and the Clearance Certificate are governed by the national NMA Standards, such as:

1. [NMAS 07.11-2016.pdf Release of Land](http://www.moen.gov.iq/Portals/0/free%20land.pdf), <http://www.moen.gov.iq/Portals/0/free%20land.pdf>, in Arabic, last checked online 28 Nov

2018

2. NMAS 09.11.2010, Battle Area Clearance (BAC), <http://www.moen.gov.iq/Portals/0/war%20land%20clean.pdf>, in Arabic, last checked online 28 Nov 2018
3. NMAS 10.20-2018, Occupational Health and Safety at Work Site, <http://www.moen.gov.iq/Portals/0/work%20safe.pdf>, in Arabic, last checked online 13 Dec 2018

5.2 Preliminary Identification of Environmental and Social Receptors

Table 17 provides an overview of environmental and social receptors that are expected to be affected during the implementation of GCFI programme.

Table 17. Potential environmental and social receptors during the Implementation of GCFI programme

RECEPTOR	Description
Physical Environment	
Air Quality	The air quality at and around sites of GCFI projects.
Soil	The soils of areas in which GCFI projects activities are to occur
Water Resources	Surface water within the area of influence of projects (i.e. rivers, wetlands). Groundwater in the area in and around where projects activities are to occur.
Topography	The geomorphological landforms and terrain at the projects sites.
Biological Environment	
Flora	Plant species that could potentially occur in the areas in which the projects activities will occur
Fauna	Birds that rely on the area as a habitat and/or food source. Reptiles in the environment in which projects activities are to occur. Mammals in the environment in which projects activities are to occur Aquatic species present within rivers adjacent to projects sites

Natural Habitats	Land and water project related areas where (i) the ecosystems' biological communities are formed largely by native plant and animal species, and (ii) human activity has not essentially modified the area's primary ecological functions.
Critical Natural Habitats	Areas within or in close-proximity to project areas and that are classified as existing or proposed protected areas, that are recognized as protected by traditional local communities, or that maintain conditions vital for the viability of these protected areas. They also include areas with known high suitability for biodiversity conservation, and sites that are critical for rare, vulnerable, migratory, or endangered species.
Socio-economic Environment	
Population in the Vicinity of Activities	People that utilize the areas during projects activities
Land Use & Land Ownership	Existing uses of the land areas in which the projects activities are expected to occur. Traditional boundaries, access issues, permit requirements and distribution of any private and/or government-owned lands
Utilities and infrastructure	The utilities (e.g. power supply, water, sewage services) and infrastructure (e.g. commercial and industrial and leisure facilities) of areas in which the projects activities are expected to occur.
Archaeology and Cultural Heritage	
Archaeology / Cultural Property	Archaeological sites and properties that have cultural significance (if found in within or in the vicinity of the projects area).
Health and Safety	
Project Affected Persons (PAPs)	PAPs around and on projects sites who will be subjected to occupational hazards / public health effects such as noise, dust, etc.
Population in the Vicinity of Activity / Land user	Residents and land-users within or at the vicinity of the projects sites that can be exposed to potential hazards in regards to Health and Safety (noise, dust, air emissions, traffic, influx of laborer, etc.).

5.3 Preliminary Assessment of Environmental and Social Impacts of the GCFI

In general, projects include a range of potential positive and negative impacts that are very likely to arise during the implementation of the GCFI programme. This section outlines an overview of those impacts anticipated from the projects activities.

5.3.1 Positive impacts of GCFI Programme

It is anticipated that GCFI projects will have major positive environmental and social impacts in areas where interventions will take place. These impacts will incentivize the permanent return of IDPs to their home locations and contribute to the improvement of living conditions as well as the overall environmental status in the liberated areas. The key environmental and social benefits anticipated from the GCFI are as follows:

- Economic and social development of the liberated lands;
- Improved accessibility of people, goods and services;
- Improved public health due to provision of clean drinking water, reliable sanitation systems and municipal waste management;
- Improved safety conditions due to provision of reliable electricity service; and
- Job creation and local economic development.

5.3.2 Negative Impacts of GCFI Programme

The GCFI interventions will fund investments for the restoration and improvement of local economic and social infrastructure in liberated areas, through rehabilitation, reconstruction and/or supply of equipment. Most of these interventions will take place in urbanized areas, which are generally characterized as non-environmentally sensitive areas. However, activities of projects may entail adverse environmental and social impacts. Table 18 presents an initial identification of potential environmental impacts expected during the planning, implementation, and operation phased of GCFI projects.

Table 18. Initial identification of environmental and social (E&S) impacts of the GCFI

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
Planning Phase (Including Design Activities)			
All Sectors	The activities include: <ul style="list-style-type: none"> • identification of public investment measures • assessment and selection of proposals 	Physical Environment	<ul style="list-style-type: none"> • Designs that would change of drainage patterns in the area and risk for flooding/soil erosion upon project implementation.
		Biological Environment	<ul style="list-style-type: none"> • Assess use of marshland (if available) at planning stage and define livelihood restoration measures, if needed. • Floral and faunal habitat disturbance and loss.
		Socio-economic	<ul style="list-style-type: none"> • Designs that would cause threats to livelihoods of local communities due to land acquisition. • Impacts on resource users on site, upstream and downstream of project activity sites and potential impacts on their livelihoods. • Potential for unrealistic expectations and social rumors to cause conflict or social objection.
		Archaeological and Cultural Heritage	<ul style="list-style-type: none"> • Designs that would cause disturbance or damage to cultural heritage (including both tangible and non-tangible heritage) upon project implementation.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
Implementation Phase (Construction Activities)			
Energy Sector	Projects construction activities typically include: <ul style="list-style-type: none"> • Access road construction or upgrade • Site preparation and development • Removal of select vegetation • Grading and excavation of soils for the installation of structural foundations and site utilities • Land clearing for transmission line rights-of way • Dismantling of damaged equipment • Equipment staging areas • Substation construction and / or reconstruction • Installation of transmission line components 	Air Quality	<ul style="list-style-type: none"> • Emission of pollutants from engines of construction machinery and equipment. • Dust “lifting” due to earthwork and movement of construction trucks and equipment on unpaved roads.
		Noise	<ul style="list-style-type: none"> • Noise from heavy equipment and truck traffic.
		Soil, subsoil and land	<ul style="list-style-type: none"> • Soil erosion and sediment control from materials sourcing areas and site preparation activities. • Soil/subsoil contamination due to accidental spills and leaks from construction equipment. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of wastes from construction camps/offices. • Land occupation due to the installations in the working areas.
		Solid and hazardous waste as well liquid waste	<ul style="list-style-type: none"> • Production of construction wastes/demolition debris. • Solid wastes from construction camps/offices. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of fuel barrels, removed asphalt, paint containers, asbestos materials...etc. • Potential for hazardous materials and oil spills associated with heavy equipment operation and fueling activities.
		Water Resources	<ul style="list-style-type: none"> • Improper disposal of debris or construction wastes on river banks. • Improper discharge of domestic sewage from construction camps/offices into surface or subsurface water bodies. • Increase in water consumption used for construction works.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
		Flora, Fauna, and Sensitive (critical, natural etc.) habitats	<ul style="list-style-type: none"> • Removal of trees or green cover for rehabilitation or construction purposes may result in loss of habitats. • Pollution of rivers or waterways may negatively affect the aquatic ecosystem.
		Archaeological and cultural Heritage	<ul style="list-style-type: none"> • Impacts from the Potential Damage of Undiscovered Archaeological Remains.
		Traffic Congestion and Detours	<ul style="list-style-type: none"> • Traffic impacts due to road blockages for construction purposes and detours. This may be associated with traffic congestions, increasing commuting time and creating inconvenience to road users.
		Socio-economic environment	<ul style="list-style-type: none"> • Temporary nuisance and inconvenience as a result of the construction activities including noise, emissions, and road traffic. • Influx of workers and the potential implications on communities' privacy. • Employment, working conditions and safety of workers at the construction site. • Disturbance of public health and quietness due to construction/rehabilitation activities. • Land acquisition or obstructing access to amenities due to construction/rehabilitation activities. • Potential child labor employment by local subcontractors.
		Health and safety	<ul style="list-style-type: none"> • Occupational hazards from contact with live power lines during construction activities. • Occupational hazards when working at elevation during construction activities. • Vehicle/pedestrian accidents. • Falling into trenches during construction activities.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
			<ul style="list-style-type: none"> • Breathing dust and other air pollutants. • Back aches caused by handling heavy material. • Suffering hearing loss from noise.
Water and Sanitation Sector	Projects construction activities typically include: <ul style="list-style-type: none"> • access road Construction or upgrade • Site preparation and development • Trenching and excavation works • Storage of materials and Chemical / oil • Vehicle and equipment operation. • Land Use & Land Acquisition • Demolition, lifting and transporting of debris and rubbles • Repair, reconstruction and rehabilitation of damaged infrastructure; including water intakes, pipelines, treatment / purification plants, pumping stations, storage 	Air Quality	<ul style="list-style-type: none"> • Emission of pollutants from engines of construction machinery and equipment. • Dust “lifting” due to earthwork and movement of construction trucks and equipment on unpaved roads.
		Noise	<ul style="list-style-type: none"> • Noise from heavy equipment and truck traffic.
		Soil, subsoil and land	<ul style="list-style-type: none"> • Soil erosion and sediment control from materials sourcing areas and site preparation activities. • Soil/subsoil contamination due to accidental spills and leaks from construction equipment. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of wastes from construction camps/offices. • Land occupation due to the installations in the working areas.
		Solid and hazardous waste as well liquid waste	<ul style="list-style-type: none"> • Production of construction wastes/demolition debris. • Solid wastes from construction camps/offices. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of fuel barrels, removed asphalt, paint containers, asbestos materials...etc. • Potential for hazardous materials and oil spills associated with heavy equipment operation and fueling activities.
		Water Resources	<ul style="list-style-type: none"> • Improper disposal of debris or construction wastes on river banks. • Improper discharge of domestic sewage from construction camps/offices into surface or subsurface water bodies.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
	tanks, distribution networks, house connections, sewers and trunk lines, wastewater treatment plants, and storm water drains, reservoirs and outfalls		<ul style="list-style-type: none"> • Increase in water consumption used for construction works.
		Flora, Fauna, and Sensitive (critical, natural etc.) habitats	<ul style="list-style-type: none"> • Removal of trees or green cover for rehabilitation or construction purposes may result in loss of habitats. • Pollution of rivers or waterways may negatively affect the aquatic ecosystem.
		Archaeological and cultural Heritage	<ul style="list-style-type: none"> • Impacts from the Potential Damage of Undiscovered Archaeological Remains.
		Traffic Congestion and Detours	<ul style="list-style-type: none"> • Traffic impacts due to road blockages for construction purposes and detours. This may be associated with traffic congestions, increasing commuting time and creating inconvenience to road users.
		Socio-economic environment	<ul style="list-style-type: none"> • Temporary nuisance and inconvenience as a result of the construction activities including noise, emissions, and road traffic. • Influx of workers and the potential implications on communities' privacy. • Employment, working conditions and safety of workers at the construction site. • Disturbance of public health and quietness due to construction/rehabilitation activities. • Land acquisition or obstructing access to amenities due to construction/rehabilitation activities. • Potential child labor employment by local subcontractors.
		Health and safety	<ul style="list-style-type: none"> • Falling from heights. • Vehicle/pedestrian accidents. • Falling into trenches.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
			<ul style="list-style-type: none"> • Being buried in tunnels/excavations. • Breathing dust and other air pollutants. • Back aches caused by handling heavy material. • Suffering hearing loss from noise.
Roads and Bridges Sector	Projects construction activities typically include: <ul style="list-style-type: none"> • Access road construction or upgrade • Site preparation and development. • Trenching and excavation works • Storage of materials and Chemical / oil. • Vehicle and equipment • Demolition, lifting and transporting of debris and rubbles; • Repairing damaged parts of bridges • Repairing the approaches and paving the entire bridge 	Air Quality	<ul style="list-style-type: none"> • Emission of pollutants from engines of construction machinery and equipment. • Dust “lifting” due to earthwork and movement of construction trucks and equipment on unpaved roads.
		Noise	<ul style="list-style-type: none"> • Noise from heavy equipment and truck traffic.
		Soil, subsoil and land	<ul style="list-style-type: none"> • Soil erosion and sediment control from materials sourcing areas and site preparation activities. • Soil/subsoil contamination due to accidental spills and leaks from construction equipment. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of wastes from construction camps/offices. • Land occupation due to the installations in the working areas.
		Solid and hazardous waste as well liquid waste	<ul style="list-style-type: none"> • Production of construction wastes/demolition debris. • Solid wastes from construction camps/offices. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of fuel barrels, removed asphalt, paint containers, asbestos materials...etc. • Potential for hazardous materials and oil spills associated with heavy equipment operation and fueling activities.
		Water Resources	<ul style="list-style-type: none"> • Improper disposal of debris or construction wastes on river banks. • Improper discharge of domestic sewage from construction camps/offices into surface or subsurface water bodies.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
			<ul style="list-style-type: none"> • Increase in water consumption used for construction works.
		Flora, Fauna, and Sensitive (critical, natural etc.) habitats	<ul style="list-style-type: none"> • Removal of trees or green cover for rehabilitation or construction purposes may result in loss of habitats. • Pollution of rivers or waterways may negatively affect the aquatic ecosystem.
		Archaeological and cultural Heritage	<ul style="list-style-type: none"> • Impacts from the Potential Damage of Undiscovered Archaeological Remains.
		Traffic Congestion and Detours	<ul style="list-style-type: none"> • Traffic impacts due to road blockages for construction purposes and detours. This may be associated with traffic congestions, increasing commuting time and creating inconvenience to road users.
		Socio-economic environment	<ul style="list-style-type: none"> • Temporary nuisance and inconvenience as a result of the construction activities including noise, emissions, and road traffic. • Influx of workers and the potential implications on communities' privacy. • Employment, working conditions and safety of workers at the construction site. • Disturbance of public health and quietness due to construction/rehabilitation activities. • Land acquisition or obstructing access to amenities due to construction/rehabilitation activities. • Potential child labor employment by local subcontractors.
		Health and safety	<ul style="list-style-type: none"> • Falling from heights. • Vehicle/pedestrian accidents. • Falling into trenches.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
			<ul style="list-style-type: none"> • Being buried in tunnels/excavations. • Breathing dust and other air pollutants. • Back aches caused by handling heavy material. • Suffering hearing loss from noise.
Health Sector	Projects construction activities typically include: <ul style="list-style-type: none"> • Access road construction or upgrade • Site preparation and development. • Demolition, lifting and transporting of debris and rubbles; • Repairing of damaged buildings and medical facilities 	Air Quality	<ul style="list-style-type: none"> • Emission of pollutants from engines of construction machinery and equipment. • Dust “lifting” due to earthwork and movement of construction trucks and equipment on unpaved roads.
		Noise	<ul style="list-style-type: none"> • Noise from heavy equipment and truck traffic.
		Soil, subsoil and land	<ul style="list-style-type: none"> • Soil erosion and sediment control from materials sourcing areas and site preparation activities. • Soil/subsoil contamination due to accidental spills and leaks from construction equipment. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of wastes from construction camps/offices. • Land occupation due to the installations in the working areas.
		Solid and hazardous waste as well liquid waste	<ul style="list-style-type: none"> • Production of construction wastes/demolition debris. • Solid wastes from construction camps/offices. • Improper discharge of domestic sewage from construction camps/offices. • Improper disposal of fuel barrels, removed asphalt, paint containers, asbestos materials...etc. • Potential for hazardous materials and oil spills associated with heavy equipment operation and fueling activities.
		Water Resources	<ul style="list-style-type: none"> • Improper disposal of debris or construction wastes on river banks. • Improper discharge of domestic sewage from construction camps/offices into surface or subsurface water bodies.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
			<ul style="list-style-type: none"> • Increase in water consumption used for construction works.
		Flora, Fauna, and Sensitive (critical, natural etc.) habitats	<ul style="list-style-type: none"> • Removal of trees or green cover for rehabilitation or construction purposes may result in loss of habitats. • Pollution of rivers or waterways may negatively affect the aquatic ecosystem.
		Archaeological and cultural Heritage	<ul style="list-style-type: none"> • Impacts from the Potential Damage of Undiscovered Archaeological Remains.
		Traffic Congestion and Detours	<ul style="list-style-type: none"> • Traffic impacts due to road blockages for construction purposes and detours. This may be associated with traffic congestions, increasing commuting time and creating inconvenience to road users.
		Socio-economic environment	<ul style="list-style-type: none"> • Temporary nuisance and inconvenience as a result of the construction activities including noise, emissions, and road traffic. • Influx of workers and the potential implications on communities' privacy. • Employment, working conditions and safety of workers at the construction site. • Disturbance of public health and quietness due to construction/rehabilitation activities. • Land acquisition or obstructing access to amenities due to construction/rehabilitation activities. • Potential child labor employment by local subcontractors.
		Health and safety	<ul style="list-style-type: none"> • Falling from heights. • Vehicle/pedestrian accidents. • Falling into trenches.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
			<ul style="list-style-type: none"> • Breathing dust and other air pollutants. • Back aches caused by handling heavy material. • Suffering hearing loss from noise.
Operation Phase			
Energy Sector	Operational activities may include: <ul style="list-style-type: none"> • Maintenance of access to the transmission lines, towers and substations (e.g. low-impact trails or new / improved access roads) and Regular maintenance of vegetation within the rights-of-way • Upgrades and maintenance for existing infrastructure throughout the life cycle of the GCFI 	Physical Environment	<ul style="list-style-type: none"> • Fugitive dust and other emissions (e.g. from vehicle and equipment movements). • Emissions from wastes • Noise generated from vehicle and equipment movements. • Potential spillage of stored oil and chemicals. • Improper management of waste disposal.
		Biological Environment	<ul style="list-style-type: none"> • Potential fatal risk to birds and bats through collisions and electrocutions. • Disrupt wildlife and their habitats during the regular maintenance of rights-of-way to control vegetation. • Excessive vegetation maintenance may remove unnecessary amounts of vegetation resulting in the continual replacement of successional species and an increased likelihood of the establishment of invasive species. • Fires risk.as a result of accumulation vegetation maintenance slashes.
		Socio-economic	<ul style="list-style-type: none"> • Impacts on Labour and Working Conditions. • Potential for visual intrusion. • Potential positive impact for employment opportunities.
		Health and Safety	<ul style="list-style-type: none"> • Occupational hazards from contact with live power lines during maintenance and operation activities. • Occupational hazards when working at elevation during maintenance and operation activities. • Exposure to electric and magnetic fields due to working in proximity to electric power lines.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
			<ul style="list-style-type: none"> • Electrocutation hazards as a result from direct contact with high-voltage electricity or from contact with tools, vehicles, ladders, or other devices that are in contact with high-voltage electricity.
Water and Wastewater Sector	<p>The activities include:</p> <ul style="list-style-type: none"> • operation of water distribution systems • Water and wastewater treatment operations. • Entry and working into confined spaces, including manholes, sewers, pipelines, storage tanks, wet wells, digesters, and pump stations 	Physical Environment	<ul style="list-style-type: none"> • Breakages of water networks and emergency situations • Leaks and overflows from the sewerage system may cause contamination of soil, groundwater, and surface water. • Air emissions and odors generated from wastewater treatment operations. • Potential for noise generation. • Potential spillage of stored oil and chemicals. • Disposal of empty chemical containers used in water/wastewater treatment and agrochemicals.
		Biological Environment	<ul style="list-style-type: none"> • Disrupt wildlife and their habitats during the regular maintenance operations.
		Socio-economic	<ul style="list-style-type: none"> • Impacts on Labour and Working Conditions. • Potential for visual intrusion. • Potential positive impact for employment opportunities.
		Health and safety	<ul style="list-style-type: none"> • Accidents and Injuries may occur during operation activities. • Potential for health and safety risk on worker and operators due to exposure to chemicals and hazardous atmospheres. • Potential health influences workers and operators due to exposure to pathogens and vectors during operational activities.
Roads and	The activities include:	Physical Environment	<ul style="list-style-type: none"> • Fugitive dust and other emissions (e.g. from vehicle and equipment movements). • Noise generated from vehicle and equipment movements.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
Bridges Sector	<ul style="list-style-type: none"> • Regular roads and bridges maintenance • Replacement of traffic signs, signals, markings. • Painting Activities 	Biological Environment	<ul style="list-style-type: none"> • Excessive vegetation maintenance may remove unnecessary amounts of vegetation resulting in the continual replacement of successional species and an increased likelihood of the establishment of invasive species.
		Socio-economic	<ul style="list-style-type: none"> • Impacts on Labour and Working Conditions. • Traffic impacts due to road blockages for operations and maintenance purposes and detours. This may be associated with traffic congestions, increasing commuting time and creating inconvenience to road users.
		Health and safety	<ul style="list-style-type: none"> • Occupational hazards due to elevated and overhead works during maintenance and operation activities. • Accidents and Injuries may occur for pedestrians. • Traffic accidents.
Health Sector	<p>The health care facilities involves the following activities:</p> <ul style="list-style-type: none"> • Close contact among patients, health care providers, and support staff • Extensive use of sharps and instruments designed for diagnostic and curative (invasive and noninvasive) procedures 	Air Quality	<ul style="list-style-type: none"> • Potential impacts from emissions generated from exhaust air from heating, ventilation, and air conditioning (HVAC) systems, ventilation of medical gases. • Potential impacts from fugitive emissions released from sources such as medical waste storage areas, medical technology areas, and isolation wards.
		Hazardous and non-hazardous wastes	<ul style="list-style-type: none"> • Wastes generated during administrative, housekeeping, and maintenance functions. • High-risk impacts from specific categories of hazardous health care wastes.
		Water Resources	<ul style="list-style-type: none"> • Potential impacts from contaminated wastewater that may result from discharges from medical wards and operating theaters (e.g. body fluids and excreta, anatomical waste), laboratories (e.g. microbiological cultures, stocks of infectious agents), pharmaceutical and chemical stores; cleaning activities (e.g. waste storage rooms), and x-ray development facilities.

GCFI Intervention Sector	Project Activity / Environmental & Socio-Economic Aspect	E&S Receptor	Potential E&S Impact
	<ul style="list-style-type: none"> Utilization of pharmaceutical, chemical, radiological, and other agents for diagnosis, treatment, cleaning, and disinfection 	Health and safety	<ul style="list-style-type: none"> Health care providers and personnel may be exposed to general infections, blood-borne pathogens, and other potential infectious materials (OPIM) during care and treatment, as well as during collection, handling, treatment, and disposal of health care waste. health care providers / workers may be exposed to hazardous materials and wastes, including glutaraldehyde (toxic chemical used to sterilize heat sensitive medical equipment), ethylene oxide gas (a sterilant for medical equipment), formaldehyde, mercury (exposure from broken thermometers), chemotherapy and antineoplastic chemicals, solvents, and photographic chemicals, among others Occupational radiation exposure that may result from equipment emitting X-rays and gamma rays (e.g. CT scanners), radiotherapy machines, and equipment for nuclear medicine activities Fire occurring due to the storage, handling, and presence of chemicals, pressurized gases, boards, plastics, and other flammable substrates.

5.4 Environmental and Social Instruments

5.4.1 Overview

The types of safeguards instruments anticipated for the project range from abbreviated, checklist type ESMPs for simple, routine repair works, over more elaborate and comprehensive ESMPs to ESIA within clearly defined project boundaries. Also some projects would require some specific instruments (such as Medical Waste Management Plan for health projects). All project activities involving civil works on any scale will require some type of environmental / social management instrument, which will be determined and defined by the methodology presented in this section.

The safeguards instruments anticipated for the GCFI include the following:

- **Tailored Generic ESMPs** for simple routine repair works;
- **Rapid E&S Assessment and Specific ESMPs** for larger projects with more substantial construction works combined with less sensitive environmental and social conditions; and
- **Comprehensive ESIA/ESMPs** with more sensitive environmental and social conditions.

Most typologies within the expected scope of GCFI projects involve routine, simple civil works pertaining only to existing structures and footprints, where conflict-related damage was incurred. This includes, but not limited to, rehabilitation and reconstruction of damaged infrastructure (i.e. water intakes, pipelines, pumping stations, storage tanks, distribution networks, house connections, sewers and trunk lines), repairing and rehabilitation of damaged segments at primary road networks, and reconstruction of damaged electricity distribution and transmission infrastructure. For such typologies, Tailored Generic ESMPs will be prepared as appropriate safeguards instrument. In addition, the GCFI may include projects that have substantial construction works such as repairing and reconstruction of bridges, and repairing and reconstruction of damaged WWTPs. These projects require a Rapid E&S Assessment and Specific ESMPs or Comprehensive ESIA/ESMP depending on the sensitivity of environmental receptors within projects areas. A comprehensive ESIA will be required in case of projects that involve involuntary resettlement; impacts on protected areas; large urban water and sanitation project; or larger reconstruction works (e.g. WWTP, pumping stations) combined with more sensitive baseline conditions.

Rehabilitation of healthcare facilities will require developing a Medical Waste Management Plan (MWMP) to ensure that hazardous medical waste is handled according to best available technologies. The guide for medical waste management plan (MWMP) is provided in Annex 2.

Figure 10 shows the decision matrix for selection of the appropriate E&S safeguard instrument for a given project type taking in consideration GCFI project typologies combined with three environmental sensitivity scenarios range of 1) least sensitive(urban area), 2) more sensitive (rural area), to 3) most sensitive (rivers and natural habitats).

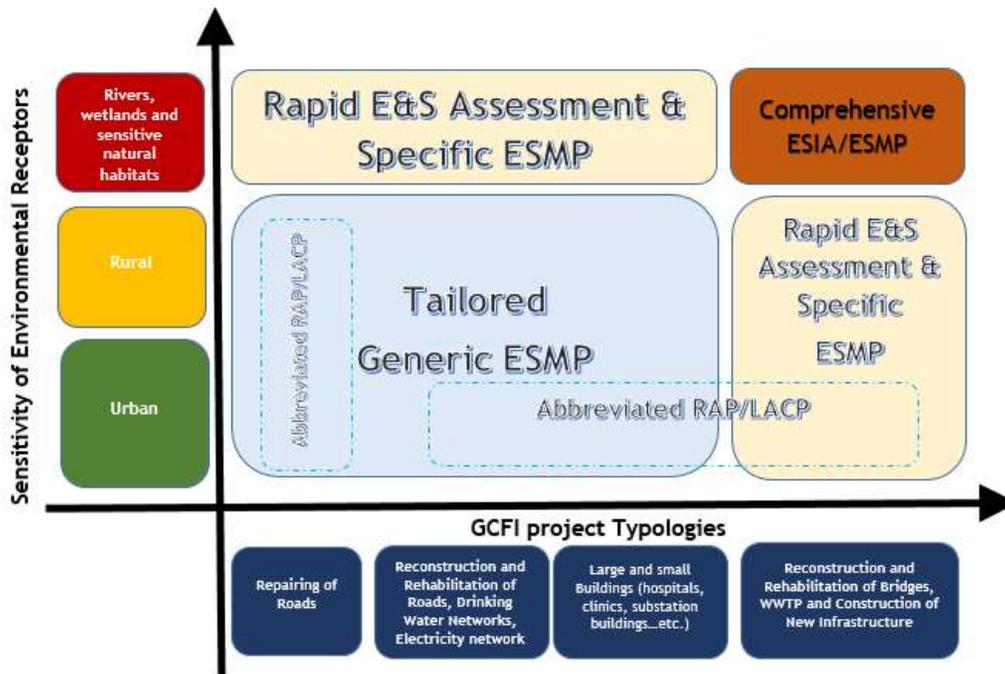


Figure 10: Decision Matrix for selection of E&S Safeguard Instruments

Based on outcomes of the environmental screening process and the categorization of each project, the PMTs/ICs shall use the E&S safeguard instruments discussed below during the implementation of GCFI projects. Under the GCFI, it is expected that the vast majority of the projects will be Category B. Category A projects are excluded and will not be conducted unless on exceptional basis and with KfW pre-approval.

5.4.2 Tailored Generic ESMPs

The main purpose of using this tool is to ensure basic compliance and good housekeeping for minor, routine civil works in non-sensitive environmental settings. In addition, it will help to have an easily enforceable contractual basis for E&S compliance during the implementation of construction activities.

This tool, which fits most planned rehabilitation and reconstruction activities of GCFI projects, provides a streamlined approach to identify, assess, and mitigate impacts that can occur during the implementation of civil works. It provides typical mitigation measures for projects of low-risk nature and small localized impacts. The template of this tool is included in Annex 3.

5.4.3 Rapid E&S Assessment and Specific ESMPs

This tool aims to capture E&S baseline conditions that are more sensitive and require management and mitigation measures beyond the standard good practice approach prescribed by the checklist ESMP. Furthermore, the tool provides a technical guidance and contractual basis to deal with specific, more sensitive or complex E&S issues. It contains tailored measures and provisions to deal with E&S issues of higher sensitivity and complexity, e.g. the protection of sensitive areas or habitats, old trees, cultural heritage, or agricultural / horticultural lands. The template of this tool is included in Annex 4.

5.4.4 ESIA and ESMP

The ESIA/ESMP tool is designed to screen and assess anticipated E&S impacts of larger scale works that are situated in areas where higher environmental and social sensitivities are expected. It provides a technical guidance and contractual basis to carry out the required assessments during projects design stage and more sensitive or complex environmental and social management, mitigation and monitoring measures during the implementation stage.

This tool would be a full set of ESIA and specific, derivative ESMP according to the requirements for an environmental Category A and some B+ project under the KFW sustainability Guideline and the World Bank's OP4.01. It contains a screening assessment of valued or sensitive environmental components and anticipated impacts, a detailed assessment thereof, and the design of specific, tailored management, mitigation and monitoring measures. The minimum content of an ESIA/ESMP is included in Annex 5.

In case a detailed ESIA is required, the impact assessment approach described hereafter shall be used.

5.4.4.1 Impact Assessment Approach for an ESIA

In this assessment approach, every identified aspect will be assessed in terms of its potential to cause an impact on natural and/or socio-economic receptors. In order to enable the determination of the overall significance of the impact, each identified aspect - receptor interaction will be ranked in terms of consequence and likelihood. Impact significance is expressed as the product of the consequence and likelihood of occurrence of the activity.

- **Consequence:** the resultant effect (positive or negative) of an activity's interaction with the legal, natural and/or socio-economic environments.
- **Likelihood:** the likelihood that an activity will occur.

Consequence

To assign a level of consequence to each environmental and social impact, criteria are defined for environmental and socio-economic consequence or severity. Legal issues are embedded in both criteria sets. The consequence categories and their ranking are presented in Table 19. "Catastrophic" represents the most severe consequence. It should be noted that it is often difficult to compare impacts consistently across different natural and socio-economic environments. In evaluating the environmental and socio-economic aspects, emphasis is placed on specific cause and effect relationships.

Table 19. Consequence Categories & Rankings

Consequence and Ranking	Description
5.Catastrophic	Massive effect-Persistent severe environmental and socio-economic damage, severe social disturbance of local community livelihood, or nuisance extending over a large area. In terms of commercial or recreational use or nature conservation, a major economic loss for the Company or even the country. Constant, high exceedance of statutory or prescribed limits.
4.Severe	Major effect - Severe environmental and socio-economic damage. Extensive measures are required to be taken to restore polluted or damaged environment to its original state, or to restore livelihood. Extended breaches of statutory or prescribed limits.
3.Critical	Localized effect - Limited discharges of known toxicity or community wide socio-economic disturbance. Repeated breaches of statutory or prescribed limit. Affecting neighborhood; several complaints. Spontaneous recovery of limited damage within one year.
2.Marginal	Minor effect - Contamination. Damage sufficiently large to attack the environment. Single exceedance of statutory or prescribed criterion. Single socio-economic complaint. No permanent effect on the environment.
1.Negligible	Slight effect - Local environmental damage. Within the fence and within systems. Negligible social or financial severity.
0 None	No impact.
+ Positive	Beneficial impact - enhances the environment and socio-economic conditions.

Scientific evidence as well as predictions based on observation of previous similar activities can and will be used in the impact assessment process. Where it has not been possible to fully quantify the effect that an activity may have on the environment or a component of the environment, or where there is a lack of scientific knowledge, qualitative judgment will be used. Such judgments will be based on a full understanding of the proposed project activities, the impact assessment team’s extensive experience in assessing similar activities to those proposed for the project and the team’s knowledge of the environment, social structure and general health aspects of the region in which the project’s activities will occur.

Likelihood

To assign likelihood to each activity, five categories are defined and ranked. The criteria for likelihood are shown in Table 20 where level five (Certain) represents the highest likelihood that the activity will occur.

Table 20. Likelihood categories and ranking

Category	Ranking	Definition
Certain	5	The activity will occur under normal operating conditions
Very Likely	4	The activity is very likely to occur under normal operational conditions
Likely	3	The activity is likely to occur at some time under normal operating conditions
Unlikely	2	The activity is unlikely to but may occur at some time under normal operating conditions
Very Unlikely	1	The activity is very unlikely to occur under normal operating conditions but may occur in exceptional circumstances

Significance

As described above, the significance of the impact is expressed as the product of the consequence and likelihood of occurrence of the activity, expressed as follows:

$$\text{Significance} = \text{Consequence} \times \text{Likelihood}$$

Figure 11 illustrates all possible product results for the five consequence and likelihood categories.

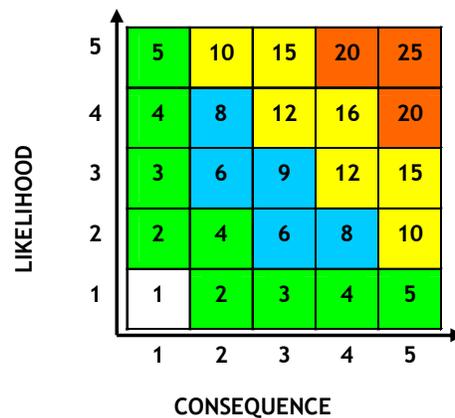


Figure 11. Product Results for Consequence & Likelihood Categories

Based on its consequence-likelihood score, each environmental and social aspect can be ranked into five categories or orders of significance as illustrated in Figure 12.

Ranking (Consequence X Likelihood)	Significance
>16	Critical
10-16	High
6-9	Medium
2-5	Low
<2	Negligible

Figure 12. Illustration of significance categories

To assist in determining and calculating the significance of an impact, impact assessment matrices shall be developed based on an aspect identification exercise. Those impacts rated as minor, moderate or major are considered to require mitigation measures in order to eliminate the impact or, where this is not possible, to reduce their significance ranking to minor or insignificant.

5.4.5 Types of E&S Instrument

A description of the of E&S instrument types for projects is presented in Table 21.

Table 21. Description of E&S instrument types for projects

Instrument	Purpose	Scope and Contents	Project Category	Annex
Generic Tailored ESMP	(i) To Ensure basic compliance and good housekeeping for minor, routine civil works in non-sensitive environmental settings; (ii) simple, easily enforceable contractual basis for E&S compliance during construction works.	Not very site-specific, covers all generic impacts that can occur during civil works; preconfigured template, where planned activities are checked and trigger clearly described, can be monitored and verifiable management and mitigation measures.	B	Annex 3
Rapid E&S Assessment and Specific ESMP	(i) To capture E&S baseline conditions that are more sensitive and could require management and mitigation measures beyond the standard good practice approach prescribed by the checklist	Besides the standard set of measures for good housekeeping, E&S management and mitigation, this instrument contains tailored measures and provisions to deal with E&S issues of	B+	Annex 4

Instrument	Purpose	Scope and Contents	Project Category	Annex
	ESMP; (ii) to provide technical guidance and contractual basis to deal with specific, more sensitive or complex E&S issues.	higher sensitivity and complexity, e.g. the protection of sensitive areas or habitats, cultural heritage, or agricultural lands.		
Comprehensive ESIA and ESMP	(i) To screen for, and assess anticipated E&S impacts of larger scale works that are situated in areas / locations where higher E&S sensitivities are expected; (ii) to provide technical guidance and contractual basis to carry out the required assessments during project design, and implement specific, more sensitive or complex E&S management, mitigation and monitoring measures during implementation & operation.	This would be a full set of ESIA and specific, derivative ESMP. It would contain a screening assessment of valued or sensitive environmental components and anticipated impacts, a detailed assessment thereof, and the design of specific, tailored management, mitigation and monitoring measures.	A	Annex 5
Medical Waste Management Plan	(i) To prevent and/or mitigate the negative EHS effects of medical waste and manage medical Wastes in a safe manner (ii) to prevent the spread of infection and reduce the exposure of health workers, patients and the public to the risks from medical waste.	Provide good/safe practices in medical waste management that will be used by health, sanitary and cleaning workers who manage medical waste.	A, B+ and B	Annex 2
RAP/LACP	To ensure that all negative impacts on peoples land, livelihoods or property are properly accounted for and compensated, and that no one is worse off after project implementation, than before.	A detailed description is contained in the Resettlement Policy Framework (RPF) prepared for the project.	A, B+ and B	Annex 6, Annex 7, & Annex 8

6 Monitoring of the ESMF

This chapter summarizes mitigation measures that will be applied during the GCFI in addition to determining roles and responsibilities of different stakeholders in implementing and monitoring these measures.

6.1 Overview of GCFI Mitigation Measures

Table 22 presents general mitigation measures foreseen for environmental and social impacts that are preliminarily identified for GCFI's project activities. It is worth to note that GCFI involves projects in four governorates that have different environmental and social conditions. Therefore, the PMTs/ICs shall consider the local E&S context of each project and tailor specific mitigation measures based on the environmental and social impact assessment findings.

Table 22. General Mitigation Measures during GCFI

E&S Aspect	Recommended Mitigation Measures
Construction Phase	
Air Quality	<ul style="list-style-type: none"> • Setting an appropriate site speed limit to reduce dust generation from vehicles travelling over unmade surfaces. • Dust generated during construction on unpaved roadways and work areas should be controlled by the application of water on an "as needs" basis, regular watering of roads for dust suppression in urban, residential areas and in areas with sensitive receptors • Unnecessary handling of dusty materials will be avoided such as minimizing drop heights when loaders dump soils into trucks. • Train workers to handle construction materials and debris during construction to reduce fugitive emissions. • Cover trucks when transferring fine and dusty materials outside the project location. • Daily cleaning of streets and pathways in vicinity of construction site that are affected by soil and dust. • Covering of excavated soil temporary stored on site • Ensure adequate maintenance and inspection of vehicles to minimize exhaust emissions. • Not running engines for longer than is necessary. • No burning of wastes on site
Noise	<ul style="list-style-type: none"> • The contractor shall use heavy equipment, machinery, and fuels in compliance with national regulations. • The contractor shall perform regular maintenance on all equipment, vehicle and machinery to prevent noise emissions. • The contractor shall limit idling of engines when not in use to reduce its contribution to noise emissions. • Apply appropriate schedule to avoid any works that may cause noise and vibration during 10 pm - 6 am especially near inhabited areas. Any nighttime activities should be done using noise reducing means or low-noise technologies

E&S Aspect	Recommended Mitigation Measures
	<ul style="list-style-type: none"> • Use vehicles and equipment that meet national standards for noise and vibration. • Publishing and registering working time of construction machines with local authorities and strictly compliance therewith. • Restricting use of noisy machines near sensitive receptors such as schools and hospitals, use noise-reducing means for construction machines, if required.
Soil	<ul style="list-style-type: none"> • A spill prevention and response plan shall be prepared by the contractor in order to control any inadvertent leakage or spillage. • Spill response measures shall be implemented (as necessary) to contain and clean up any contaminated soil. • Construction of bunds around relevant work and storage areas. Bunds in areas of hazardous chemical storage (including temporary storage) should be lined to contain accidental spillage and minimize the potential for migration to the underlying soil. • Any spilled chemical shall be immediately collected and disposed of in accordance with Spill Prevention and Response Plan and MSDS. • Contractor shall ensure that a spill kit and adequate PPE is available at the site for emergency cleanup activities in case of chemical/oil spillage. • Earthwork should be carried out during dry weather periods. • Stockpiling of earth should be done a safe distance away from waterways. • Other construction materials containing small/ fine particles should be stored in a place away from flooding. • If necessary, silt/sedimentation traps should be used to prevent soil particles from getting into drains and canals
Waste Generation	<ul style="list-style-type: none"> • Work sites should be cleared of residual solid waste and wastewater before work commences. • Temporary storage of solid wastes shall be done with appropriate containment to avoid spreading of waste, odor and avoid dust. • Temporary storage of solid waste should be done to avoid interfering with traffic obstacles and aesthetics. • Sites for collecting solid waste in each sub-project area should be determined prior to commencement of construction. These sites must be suitable with the transport, in order not to obstruct the activities of human beings and the waste must be transported during the day. • Construction wastes should be removed as much as possible within 24 hours from the site to ensure public safety in urban areas. • All waste should be collected and disposed in compliance with the local and national laws, in sites identified by the respective local authorities. • Excavated soil, if suitable, should be used for leveling and backfilling; • Dredging waste, resulting from clearing the canals, need to be handled according to its constituents. • No solid waste should be burned at the site. • Clean the construction site of solid wastes, wastewater etc. before its closing. <p>Domestic Waste</p> <ul style="list-style-type: none"> • Construction camps should be sited appropriately with consent from the necessary public authority or the PMT.

E&S Aspect	Recommended Mitigation Measures
	<ul style="list-style-type: none"> • Labor camps shall be provided with adequate and appropriate facilities for disposal of sewage and solid waste. • Domestic solid waste shall be collected and disposed of daily at the local authorities designated site or given for collection by the local authorities. • Discharge and disposal domestic waste from worker camps into water sources should be strictly avoided. • Burying and burning domestic waste in the project site should also be strictly avoided. • Avoid construction workers staying overnight in the construction sites. <p>Hazardous Wastes</p> <ul style="list-style-type: none"> • Wastes identified as “hazardous” will need special handling, transportation and disposal. For contaminated sites, a hazardous waste disposal plan will need to be prepared. • The contractor should be trained and made aware of the requirements prior to commencement of the sub-project. Special guidelines for handling of contaminated soils or hazardous wastes should be prepared and published by the PMT. • Hazardous wastes and contaminated soils should not be dumped on-site but removed to landfill/dumpsite designated by the local authority or the environmental agency as appropriate; • Oil and lubricant waste should not be buried or burnt in the project site, but collected and stored in proper oil-cans and disposed for re-use or local authority approved designated sites.
Water Resources	<ul style="list-style-type: none"> • Identification of reliable water resources and obtain necessary approvals from the relevant authorities to extract water prior to commencement of construction work. • Contractor should not obstruct or prevent water flow when working closer to water bodies. • Silt traps and erosion control measures should be used where the construction carry out closer proximity to water bodies to avoid entering of construction materials which cause turbidity and sediments. • Construction material and stockpiles should be covered to avoid run-off to water bodies. • Water conservation practices should be in place in construction offices and camps. • Camps should not be located near water ways, human settlements or near drinking water intakes.
Biodiversity and sensitive Habitats	<ul style="list-style-type: none"> • Washing, maintenance and service of vehicles and machinery should not be done closer to the freshwater habitats; • Solid waste, construction debris should not be dump into wetlands or natural habitats. • Minimize human and vehicular contact with fauna, including their burrows / nests and feeding grounds. • Hunting and pouching should be strictly prohibited • Underwater construction chemicals should be friendly to the marine environment. • A compensatory tree planting program should be developed to replant native species wherever available space beside the proposed project. • Workers should be instructed to protect flora and fauna including aquatic life as well as their habitats.

E&S Aspect	Recommended Mitigation Measures
Socio-economic	<ul style="list-style-type: none"> • In case of temporary or permanent land acquisition, apply the Resettlement Policy Framework and the implement a Resettlement Action Plan (RAP). • Mobilizing maximum capacity of skilled and unskilled labor force from the surrounding project area. • Identify location of camps with consultation with the local community and local authority. • Ensure installation of adequate construction camps and sanitation facilities for construction. • Workers to control of transmission of infectious diseases. • PMTs should intervene, monitor closely the working conditions, and ensure appropriate accommodation on site (if necessary). • Child labor should be totally prohibited. PMTs should include clear clauses in their work contracts to prevent child labor. In addition, close monitoring and supervision, especially on local subcontractors, should be performed by the PMTs.
Health and Safety	<p>Training and Competency</p> <ul style="list-style-type: none"> • Ensure constructors carry out suitable training programs on occupational health and safety for workers prior to commencement of construction. • Ensure only experienced and well trained workers are used for the handling of machinery, equipment and material processing plants • Ensure all persons, including managers, are trained and able to carry out their work without risk to the safety or health of themselves, other workers or the public. <p>Personal Protective Equipment (PPE)</p> <ul style="list-style-type: none"> • Ensure appropriate safety equipment, tools and protective clothing are provided to workers and that safe working methods are applied. A safety inspection checklist should be prepared taking into consideration what the workers are supposed to be wearing and monitored. • Any person who works or operates in an area where there is a risk of flying objects, such as splinters, should wear safety goggles at all time. These should be securely fitted to the face. Welders should protect the entire face from hot sparks and bright rays by using a welding mask. • Any person exposed to high levels of dust or hazardous gases (when working in tunnels) should wear respiratory protection in the form of disposal masks or respiratory masks which fit more snugly around the nose and mouth. • Any person working in an area where there is the risk of being struck on the head by a falling or flying object should wear a hard hat at all times. These should be well maintained in order to be fully effective, and any helmets or hard hats that are damaged or cracked should immediately be replaced. • All workers will be required to wear shoes or strong boots to prevent sharp objects from penetrating or crushing the foot. Those working in muddy conditions and in canals with polluted water should avoid hand/foot contact with water and should never wear slippers. • Road workers should wear reflective vests to avoid being hit by moving vehicular traffic. <p>Site Delineation and Warning Signs</p>

E&S Aspect	Recommended Mitigation Measures
	<ul style="list-style-type: none"> • Ensure delineation devices such as cones, lights, tubular markers, orange and white strips and barricades are erected to inform oncoming vehicular traffic and pedestrians in the area about work zones. • Ensure all digging and installing work items that are not accomplished are isolated and warned of by signposts and flash lamps in nighttime. • Ensure dangerous warning signs are raised to inform public of particular dangers and to keep the public away from such hazards. • Ensure rehabilitation of trenches progressively once work is completed. • The safety inspection checklist must look to see that the delineation devices are used, whether they are appropriately positioned, if they are easily identifiable and whether they are reflective. <p>Traffic Management</p> <ul style="list-style-type: none"> • Ensure traffic control plans and procedures are in place when work zone is set up and how to handle full or partial road closure, blocked intersections, sidewalk closure etc. • Ensure installation of transport signs and lighting systems in conspicuous places to assure transport safety. Transport signs should be installed at places where accidents may be easily happened (populated centers, schools, hospitals, commercial areas etc.). • Presence of flagman at the entrance and exit of the project site in order to control vehicles and truck movement. <p>Emergency Procedures</p> <ul style="list-style-type: none"> • Ensure an emergency aid service is in place in the work zone. • Ensure all site staff is properly briefed as to what to do in the event of an emergency, such as who to notify and where to assemble for a head count. This information must be conveyed to employees by the site manager on the first occasion a worker visits the site. <p>Local Communities</p> <ul style="list-style-type: none"> • Preparation of a community grievance mechanism and a Stakeholder Engagement Plan prior to construction. • Provide advance notice to local communities by way of information boards about the schedule of construction activities.
<p>Archaeological Resources & Cultural Heritage</p>	<ul style="list-style-type: none"> • All construction works shall be ceased if any potential historical or archaeological sites are chance found during construction. • In the event potential archaeological and/or cultural resources are discovered during construction activities, Department of Antiquities -shall be invited for consultations and assessment of the finding. • Work shall be resumed only Construction work could resume only when permission is given by Department of Antiquities.
<p>Operation Phase</p>	
<p>Occupational Health & Safety</p>	<p>Energy Sector</p> <ul style="list-style-type: none"> • Only qualified personal equipped with adequate protection equipment can perform the maintenance works to minimize risk of electrocution. <p>Water and Sanitation</p> <ul style="list-style-type: none"> • Proper health and safety procedures are established and followed within water treatment plants.

E&S Aspect	Recommended Mitigation Measures
	<ul style="list-style-type: none"> • Proper health and safety procedures are established and followed within wastewater treatment plants. <p>Health Sector</p> <ul style="list-style-type: none"> • Formulate an exposure control plan for blood-borne Pathogens. • Provide staff members and visitors with information on infection control policies and procedures. • Establish Universal / Standard Precautions²² to treat all blood and other potentially infectious materials with appropriate precautions. • Implement immunization for staff members, as necessary (e.g. vaccination for hepatitis B virus, tetanus immunization). • Provide adequate supplies of PPE for personnel involved in waste management including: overalls / industrial aprons, leg protectors, boots, heavy duty gloves, helmets, visors / face masks and eye protection (especially for cleaning of hazardous spills), and respirators (for spills or waste involving toxic dust or incinerator residue) as necessary. • Provide washing facilities for personal hygiene, particularly at waste storage locations. • Develop a comprehensive plan to control radiation exposure in consultation with the affected workforce. • Development of fire prevention or emergency response and evacuation plans with adequate guest for the health care facilities.
Community Health and Safety	<p>Roads and Bridges</p> <ul style="list-style-type: none"> • Provide speed bumps or similar device to reduce speed in villages or populated areas. • Implement a monitoring program that register places and nature of accidents and events triggering the integrity of the road and possible re-routing (such as landslides, rock falls, flooding, severe road damaging). • Dangers of the road must be communicated to users by adapting signage." <p>Energy Sector</p> <ul style="list-style-type: none"> • Access to climb electricity pylons needs to be restricted. • Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas). • Education / public outreach to prevent public contact with potentially dangerous equipment. <p>Water and Sanitation</p> <ul style="list-style-type: none"> • Request all projects to train users in leak detection and distribution system maintenance to reduce water loss. • Establish responsibilities for managing water distribution to enhance user ownerships and achieve sustainability". • Ensure appropriate testing of surface and groundwater quality prior to use (bacteria, metals, other chemicals). • Ensure that all drinking water provided complies with national acceptability standards and WHO Drinking Water Guidelines. • Set up a continuous drinking water monitoring and management program; apply disinfection and treatment as needed".
Hazardous Waste	<p>Health Sector</p> <ul style="list-style-type: none"> • Avoid mixing general health care waste with hazardous health care waste to reduce disposal costs.

E&S Aspect	Recommended Mitigation Measures
	<ul style="list-style-type: none"> • Segregate waste containing mercury for special disposal. • Management of mercury containing products and associated waste should be conducted as part of a plan involving specific personnel training in segregation and clean up procedures. • Segregate waste with a high content of heavy metals (e.g. cadmium, thallium, arsenic, lead) to avoid entry into wastewater streams. • Separate residual chemicals from containers and remove to proper disposal containers to reduce generation of contaminated wastewater. Different types of hazardous chemicals should not be mixed. • Establish procedures and mechanisms to provide for separate collection of urine, feces, blood, vomits, and other wastes from patients treated with genotoxic drugs. Such wastes are hazardous and should be treated accordingly. • Aerosol cans and other gas containers should be segregated to avoid disposal via incineration and related explosion hazard. • Segregate health care products containing PVC to avoid disposal via incineration or in landfills.

6.2 GCFI ESMF Monitoring

The monitoring of the ESMF aims mainly to outline the mechanism of ensuring application of mitigation and monitoring measures needed to eliminate or minimize environmental and social impacts associated with the implementation of GCFI projects.

During the GCFI, the PMTs/ICs shall prepare and implement a specific environmental and social monitoring and management plan for each project to address all activities that have potentially significant impacts on the environment and appropriate mitigation measures during normal and abnormal conditions. The environmental and social monitoring activities should be implemented based on direct or indirect indicators of emissions, effluents, and resource use applicable to the particular project. At a minimum, the ESMMP shall consist of the following:

- The relevant project activities,
- The potential negative environmental and social impacts,
- The proposed mitigation measures,
- The party responsible for implementing the mitigation measures,
- The proposed monitoring measure,
- The institutions responsible for monitoring the implementation of the mitigation measures and the frequency of the afore-mentioned measures,
- Staff dedicated for monitoring, and
- The cost estimates for these activities.

Such information on the ESMMP to be used by the PMTs/ICs during the GCFI is incorporated into the construction and operation tables of the E&S aspects and best practice mitigation measures in Annex 3.

7 Institutional Arrangements and Responsibilities for GCFI Safeguards Management

Key stakeholders along with their roles and responsibilities have been formalized in a Joint Declaration of Intent between the Iraqi Prime Minister's Office and the German Federal Foreign Office to serve as the inter-governmental foundation of the GCFI. This chapter defines the institutional and implementation mechanism for identifying, appraising, managing and monitoring E&S safeguards at all levels during the GCFI programme.

7.1 GCFI Implementation Arrangements

The overall responsibility of the GCFI programme lies with the Prime Minister's Office (PMO) representing the Gol. The Ministry of Finance (MoF) will be the borrower of individual loans for the GCFI and the recipient of a grant provided by the German Federal Foreign Office. MoF will be responsible to make the GCFI loan and grant funds available to the respective implementing entities.

The Iraqi-German Steering Committee (SC), which has been established for the GCFI, acts as governing body. It includes representatives from the General Secretariat of the Council of Ministers, ReFAATO, the Secretariat Chair of High Commission for Coordination among Provinces, the German Federal Foreign Office, and KfW. The SC is responsible for:

- the overall strategic orientation of the GCFI;
- the adoption of and revision of the GIM;
- the allocation of funds according to Iraq's reconstruction priorities; and
- the supervision of Programme implementation.

Throughout the GCFI programme, planning, implementation, and monitoring of the E&S safeguards will take place at three levels of 1) ReFAATO, 2) PMTs, and 3) Contractors. The MMC will provide management and monitoring support to ReFAATO, and capacity development support to PMTs at Governorate and line ministries level. The key roles and responsibilities of various parties involved in E&S safeguards management during GCFI programme are discussed below.

7.1.1 ReFAATO (PEA)

During the GCFI inception phase, ReFAATO (as PEA) together with the MCC, will be responsible to design and operationalize the overall E&S safeguards framework. During GCFI implementation phase, ReFAATO and the MCC will be responsible for monitoring and ensuring the implementation of E&S safeguard policies by the PMTs. More specifically, the key roles and responsibilities of ReFAATO / GCFI MMC include:

- Oversight overall policy and technical aspects of the E&S safeguards management under the GCFI programme;
- Developing relevant reporting templates and mechanisms and the monitoring of compliance with relevant E&S safeguards;
- Ensure suitably qualified and experienced personnel are in place in each PMT;
- Coordinate closely with the Environmental focal points in the PMTs in planning and managing the environmental assessment cycle in relation to the project implementation schedule;
- Provide necessary technical assistance to facilitate the implementation, management and monitoring of E&S safeguards;
- Review and endorse environmental screening reports, site specific environmental assessments/management plans prepared for each Category B+ and B project;
- Ensure that applicable mitigation measures included in the ESMP of each project are considered during the design stage and incorporated in the tender documents;
- Develop, organize and deliver environmental training programs and workshops for the staff of PMTs, and contractors;
- Develop programs to build long-term capacity in the PMTs for improved environmental and social management and monitoring;
- Prepare additional technical guidelines, if necessary, to support the ESMF in order to strengthen the implementation of environmental safeguards;
- Report to the SC on the overall environmental and social performance of the GCFI as part of periodic progress reporting;
- Hold regular review meetings with the environmental focal points of the PMTs;
- Promote community participation in the process of planning, and management and monitoring of environmental and social impacts of projects; and
- Provide guidelines on community participation in environmental and social monitoring to the PMTs.

7.1.2 PMTs

Designated line ministries will be the Project Implementing Agencies (PIAs) of the individual loans. The PMTs established within the ministries and provinces, with support of the GCFI ICs, will be responsible for overall project management, planning and implementation of activities pertaining to their jurisdiction. The Ministries and their PMTs will coordinate closely with the local governorate staff and authorities to identify and prioritize the projects to ensure the identified projects are in line with local expectations. Some of the PMTs have already been

established under WB-financed EODP, and staffed with engineering, environmental/social safeguards, financial management and procurement specialists.

Each PMT will assign focal point(s) for E&S safeguards. The environmental and social focal points/ICs shall work closely with ReFAATO/MCC to ensure harmonization and coordination of activities according to the ESMF requirements to ensure timely and sound application of E&S safeguards. The key roles and responsibilities of PMTs / ICs include:

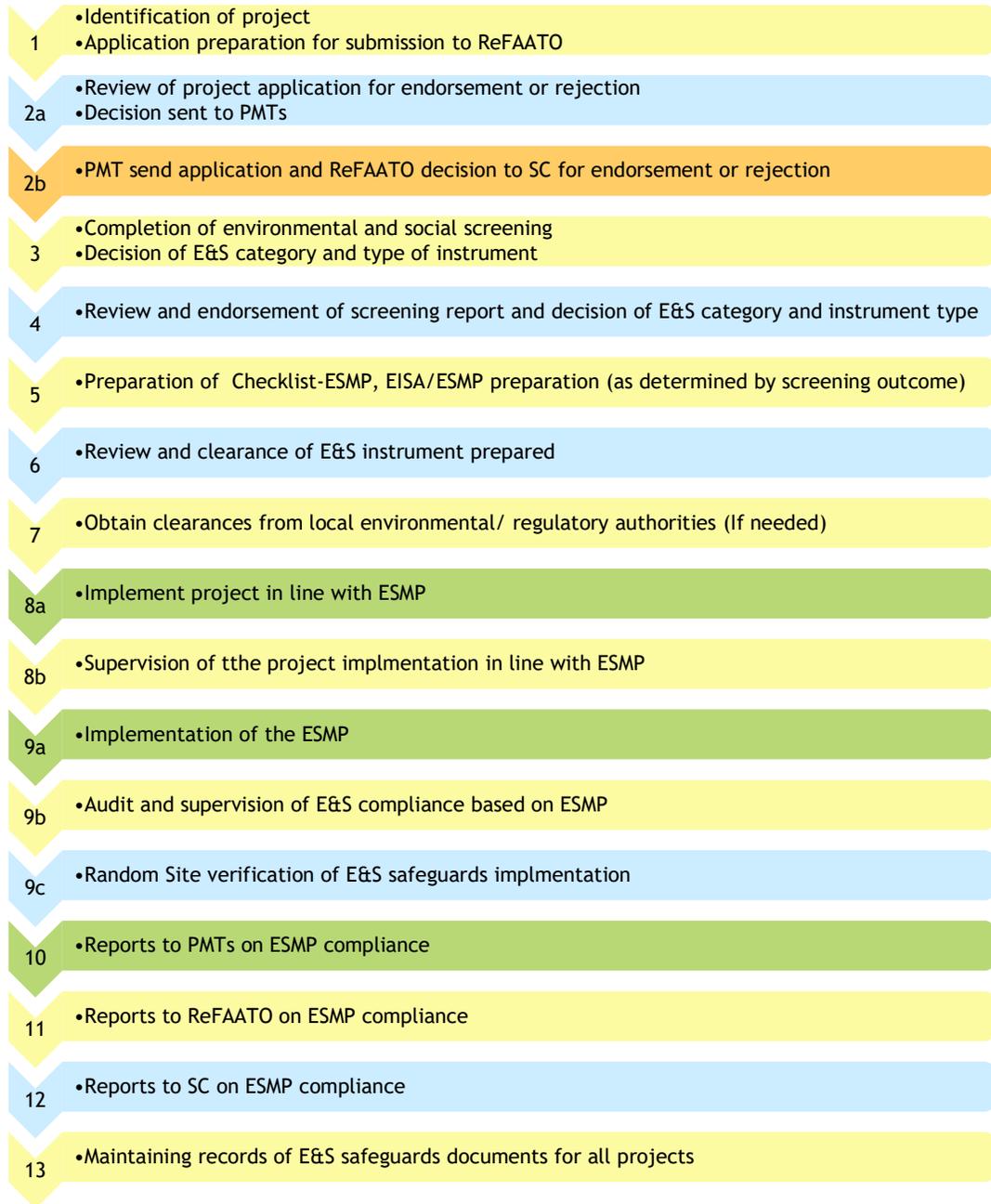
- Ensure environmental screening is carried out for each project as soon as conceptual technical design and scope have been defined;
- Closely coordinate with ReFAATO/MCC for review and endorsement of the screening decision and recommendation;
- Ensure timely preparation of Environmental Assessments/Management Plans for projects, as necessary (depending on screening outcome);
- Ensure consistency of safeguard documents with national environmental regulations; work with ReFAATO to obtain necessary clearances from environmental authorities for projects, where applicable;
- Ensure relevant ESMP provisions are included in the design; and ESMPs are included in the bid documents; and condition on compliance with ESMP is included in the contractor's agreement;
- Ensure compliance with ESMPs during the construction period and maintain close co-ordination with the site engineer and the Environmental focal point of the contractor;
- Coordinate with ReFAATO/MCC for planning and delivering short training programs and workshops for the contractors and field supervision staff on the project's safeguards requirements and procedures;
- Prepare and submit regular environmental monitoring and implementation progress reports to ReFAATO;
- Ensure adequate public consultation during environmental screening and ESMP preparation; encourage community participation in project planning, management and monitoring; and
- Ensure public complaints relating to nuisance and inconvenience caused by project implementation are addressed with corrective action and adequately documented.

7.1.3 Contractors

During the implementation of construction activities, Contractors are ultimately responsible for the implementation of Environmental and Social Management Plans (ESMPs) of projects. In conjunction with their obligations defined contractually, Contractors will plan, execute and document construction works pursuant to the Environment, Social, Health and Safety requirements defined by PMTs/ ICs during projects assessment stage.

7.2 E&S Safeguards Due-Diligence Process

Figure 13 illustrates the key steps for screening, review and approval during project cycles and main responsibilities among the different project key stakeholders.



Responsibilities color code: ■ SC ■ ReFAATO/MMC ■ PMTs/ICs ■ Contractors

Figure 13. Key steps in a project cycle (in chronological order) and the E&S safeguards responsibilities for GCFI projects

7.3 Capacity Development Requirements

The GCFI will offer the opportunity for institutions involved to build their capacity for integrating E&S safeguards into their work by providing support in capacity building and training. This section focuses on the adequacy of ReFAATO and PMTs to carry out responsibilities and roles identified in this ESMF and actions needed towards building their capacities to this end.

To ensure effective E&S safeguards management during the GCFI, ReFAATO and PMTs require implementation support in two main areas:

- Allocated staff and resources; and
- Training and awareness.

7.3.1 Allocated Staff and Resources

At a minimum, three engineers from ReFAATO staff (two from head office and one from Nineveh governorate) and four focal points from each PMT (at least one from Baghdad and one from each governorate) shall be allocated to monitor and manage E&S safeguards during the implementation of GCFI programme. The selection criteria for such engineers are as follows:

- Bachelor's degree, or higher, in civil engineering is preferable;
- Previous experience in supervising and managing construction projects;
- Strong communication and presentation skills;
- Fluency in English is preferable (a minimum level 2 to 3 on a 5 points scale is preferred); and
- Knowledge of the health, safety, and environmental requirements and related issues associated with construction projects.

Furthermore, it is recommended to involve more engineers during the programme to maximize the environmental and social awareness among ReFAATO team and ensure sustainability of the programme provisions in the future.

7.3.2 Training and Awareness

During the GCFI implementation, a training and mentoring programme will be developed targeting staff allocated from ReFAATO and PMTs to institutionalize E&S safeguards. This programme mainly aims to ensure that staff targeted has adequate capacity to analyse adverse environmental impacts, to prescribe mitigation measures, and prepare and supervise the implementation of environmental and social management plans appropriately.

The programme includes three training modules that will be provided at three levels described below.

7.3.2.1 Level 1: Introductory Workshop Model

This model aims to provide an introductory session to the most relevant staff at ReFAATO and PMTs to cover environmental and social aspects in general and safeguards in particular. This workshop aims to introduce the environmental and social requirements and set a basis for E&S workshops in the future. The Introductory workshop will cover the following topics:

- General Introduction to the environmental and social aspects;
- Importance of E&S safeguards during construction projects;
- Overview of Iraq's environmental laws and regulations;
- Overview of KfW sustainability guidelines and World Bank environmental and social policies and procedures;
- Overview of the EODP's ESMF and its relation to GCFI programme;
- Outline of the GCFI's ESMF and its importance; and
- Institution's roles and responsibilities during the GCFI implementation stage.

7.3.2.2 Level 2: Advanced Workshop Model

This model aims to provide an advanced workshop for engineers who are or will be potential specialists in the E&S safeguards during the implementation of the GCFI. This level identifies successful candidates. The advanced workshop will cover the following topics:

- World Bank environment and social safeguards policies and procedures;
- Environmental screening process;
- Environmental and social assessment process;
- Environmental and social concerns anticipated in the GCFI projects;
- GCFI E&S safeguards instruments; and
- Overview of the Grievance Redress Mechanism (GRM).

7.3.2.3 Level 3: Twinning Team Model

This model will be provided to engineers from ReFAATO and PMTs who will be allocated to handle E&S safeguards during the implementation of the GCFI. This model promotes continuous mentoring and coaching support for engineers involved through practical applications of the GCFI E&S safeguards and instruments. The model will cover the following topics:

- The GCFI ESMF;
- Participatory methodologies;
- Environmental analysis;
- Using the ESMP-checklist and the Specific ESIA/ESMP;
- Design of appropriate mitigation measures;

- Integrating environmental and social management aspects into the implementation of projects;
- Project supervision and monitoring;
- Grievance Redress Mechanism (GRM); and
- Reporting.

7.4 Progress Reporting

As part of reporting requirements under the GCFI, the progress reporting input on E&S safeguards will take place at three main levels:

1. **Reporting by ReFAATO to the GCFI SC:** The reporting will integrate information on environmental and social risks and safeguards based on the information provided by PMTs on a quarterly basis.
2. **Reporting by PMTs to KfW / ReFAATO:** As implementation agencies, PMTs will provide on a quarterly basis, and as part of the GCFI progress report, information on environmental and social risks and safeguards.
3. **Reporting by Contractors to PMTs:** During the implementation of the projects, all contractors shall submit monthly progress reports to respective PMTs detailing E&S, health and safety performance. The monthly report shall include provisions for HSE performance management on sites including training, incident investigation, inspection and audit findings.

7.5 Estimated Cost for E&S Safeguards Preparation and Implementation Process

The implementation of GCFI E&S safeguards lies under three levels as follows:

- ReFAATO (as PEA) together with the GCFI MCC;
- PIA through the PMTs established within the ministries and provinces, with support of the GCFI ICs; and
- Implementation Contractors.

Table 23 illustrates the activities anticipated by each party and estimated cost for the implementation process.

Table 23. Estimated Cost of Implementation of GCFI Monitoring

Entity	Activity	Estimated efforts (Man-Month)	Estimated Cost (EUR)
PEA (ReFAATO with support from the MMC)	<ul style="list-style-type: none"> – Design and operationalize the overall E&S safeguards framework. (The ESMF) – Monitoring and ensuring the implementation of E&S safeguard policies by the PMTs 		
PIA (through sector PMT with support from the IC o each sector)	<ul style="list-style-type: none"> – Implementation of ESMF requirements – Monitoring of the E&S safeguards implementation during the construction 	–	–
Contractors	<ul style="list-style-type: none"> – Implementation of Environmental and Social Management Plans (ESMPs) of projects 	– Included in construction costs	– Included in construction costs

7.6 ESMF Reviewing

The ESMF is a “living” document. It will be actively implemented and also reviewed and updated semi-annually. The information contained within this document reflects current understanding of the GCFI and its environmental and social conditions. As the programme proceeds, changes may be needed to reflect new information on the projects, sectors involved, and environmental and social conditions. Improvements to the specific templates and forms are also anticipated, as experience is gained during the implementation phase.

8 Resettlement Policy Framework

In general, the GCFI will unlikely involve resettlement impacts, as it will only fund interventions for rehabilitation and reconstruction of a damaged infrastructure of existing footprints. However, it is uncertain that if permanent or temporary land acquisition will occur during project implementation. The need for involuntary resettlement or land acquisition in the specific project area will only be known during project implementation, and when site-specific plans are available.

Accordingly, this chapter presents the Resettlement Policy Framework (RPF) developed for the GCFI to set down the principles for resettlement impact mitigation, as well as to clarify the organizational arrangements that may be needed during identification and implementation stages.

8.1 Objectives of the GCFI RPF

The following objectives of the RPF are attainable when introduced at an early stage of the project assessment and relevant to the availability of effective community consultation procedure:

- To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives.
- To avoid forced eviction.
- To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement cost and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation whichever is higher.
- To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.
- To keep resettlement and land acquisition to a minimum and to carry them out in accordance with the guiding documents of the RPF. Project proposals that would require demolishing houses or acquiring productive land should be carefully reviewed to minimize or avoid their impacts through alternative alignments. Proposals that require more than minor expansion along rights of way should be carefully reviewed. No land or asset acquisition may take place outside of this RPF.
- To strive to compensate negatively affected persons due to the project-design and to ensure that they will be assisted to improve, or at least to restore, their living standards, income earning or production capacity to pre-project levels regardless of their land tenure status.

8.2 Resettlement Legal Framework

The following Iraqi national laws, World Bank Operational Policy and EODP framework and KfW sustainability guidelines shall govern the RFP implementation.

- Iraqi civil law No. 40/1951
- The Land Acquisition Law no. 12/1981
- In addition, certain line ministries have legal articles related to land expropriation in relation to sector projects. For example, Public Road Law no. 35/2002 and Regulation No. 144 for roads and buildings, and
- Building-Encroachment Elimination law No. 76/2001

While national laws are designed to protect public interest and are based on common incidents. The management of IDPs and returnees is a special case, several practices and resolutions have been adapted in Iraq to address cases of land, property and housing resettlement for IDPs. The Ministry of Migration and Displacement in collaboration with other ministries and local social and traditional key figures are working to introduce and utilize such exceptional solutions for the IDPs.

- World Bank Policy on Involuntary Resettlement OP 4.12
- Emergency Operation for Development Project (EODP)(P155732), Additional Financing (P161515)- UPDATED RESETTLEMENT POLICY FRAMEWORK (RPF) SEPT 20, 2017- SFG3640,
- Emergency Operation for Development Project (EODP) (P155732), Environmental and Social Management Framework (ESMF)- SFG2247
- KfW Sustainability Guideline-Land Acquisition and Compensation Plan (LACP)

The proposed policies in this RPF shall be in-line with WB OP 4.12 and the following principles would be applied:

- Acquisition of land and other assets will be minimized as much as possible. Where land acquisition is unavoidable, the project will be designed to minimize adverse impact on the Project affected peoples (PAPs), especially the vulnerable groups;
- All PAPs will be informed and consulted prior to finalizing the relevant LACP in order to agree on the compensation arrangements and its details;
- All PAPs will be compensated so as to improve their standard of living, income earning capacity and production capacity, or at least to restore them to either pre-displacement or pre-project levels, whichever is higher;
- All PAPs cultivating land or having rights over resources within the project area are entitled to compensation for their losses and/or income rehabilitation. Lack of legal right to the assets lost will not bar the PAPs from entitlement to such compensation.

The Iraqi national laws addressing the protection of public interest and those of the WB and KfW on involuntary resettlement were compared to identify the gaps and the results are summarized in Table 24.

Table 24. Comparison between Iraqi national laws and WB/KfW requirements with respect to RPF

Key Issues	Iraq-RPF	WB/KfW-RPF
Policy of avoidance or minimization of displacement of persons	Not specified (but common practice by the Government has been to minimize this to the extent possible)	Avoid or minimize by exploring all viable alternatives; If resettlement required - execute as sustainable Program.
Definitions of Adversely Affected Persons	People impacted by involuntary taking of land resulting in loss of land, assets and livelihoods	People impacted by: 1. Involuntary taking of land 2. Loss of shelter, assets, income sources or livelihood 3. Involuntary restriction of access to protected areas resulting in adverse impacts on livelihood
Requirement for Resettlement Action Plan (RAP)/ Resettlement Policy Framework (RPF)	Law provides for identification through land title registration and a compensation committee is formed to verify adversely affected persons The law provides for cash compensation for one year of crops lost for the entire packet of land Leased/owned by the PAP. Council of Minister's Decision No. 360 of 2008 identifies compensation amounts for crops, trees, etc. 25% of agricultural land can be acquired without compensation. If the entire packet of land is acquired the PAP is provided with 12% equivalent as "private" land.	Full RAP required for 200+ adversely affected people. Abbreviated RAP for less than 200 adversely affected people
Consultations	The only consultation requirement is the negotiation procedure between affected parties with the compensation committee	Affected persons, communities, local authorities, NGOs - on eligibility criteria for compensation and assistance; Displaced persons & their communities and host communities - participate in planning, implementing and monitoring resettlement; PAP's will be meaningfully Consulted
Impact on Informal Settlers	Law does not provide for resettlement assistance or mitigation for informal/illegal settlers. However, in practice mitigation (cash) is often provided	Included, but only entitled to resettlement assistance for structure other assets lost (not land), and livelihood losses during resettlement.
Compensation for Housing/Structures	Not available.	Replacement houses or full replacement costs
Compensation for Land	Law provides for acquisition of 25% of land without compensation. Acquisition of whole packets of leased state land provide for compensation of 25% of that land packet size, sometime in agricultural areas and sometimes in Urban areas. Agricultural land: market value of land of equal productive potential in vicinity plus the cost of	Land in urban areas: market value of land of equal size/use w/similar public infrastructure and services in same vicinity, plus cost of any transfer taxes (BP 4.12) also known as replacement cost.

Key Issues	Iraq-RPF	WB/KfW-RPF
	preparing land to levels similar to affected land plus cost of transfer taxes & registration (BP 4.12); “Land” also includes anything growing or permanently affixed to land - including crops (OP 4.12).	
Livelihood Support/ Transitional Assistance	Not provided for.	Provide development assistance such as land preparation, credit facilities, training or job opportunities (also includes business premises); (For impacts on agricultural land - PAPs that are actively cultivating affected land are given combination of training, money to invest to improve productivity, agricultural extension and income restoration allowance).

8.3 Eligibility Classification

This RPF shall cover all the GCFI-project’s activities and shall apply to all displaced persons regardless of the total number affected, the severity of impact, and whether or not the affected persons have legal title to the land. Since resettlement often affects the most vulnerable and marginalized groups (economically, politically, and socially), the RPF shall be particularly sensitive to the affects which displacement may have on these groups, including but limited to IDPs, hosting communities, the poor, landless, elderly, women, children, ethnic minorities, or persons with specific mental or physical disabilities.

All PAPs who suffer a complete or partial loss of assets or access to assets shall be eligible for some kind of assistance, according to their rights to the land, if it can be proven that they occupied or used the land before the claim cut-off date. The Bank OP 4.12 specifically proposes three general categories for eligibility as illustrated in Table 25.

Table 25. Eligibility Classification

Displacement Category	Entitlement
Individuals who have formal legal rights to land (including customary and traditional rights recognized under the laws of Iraq)	<ul style="list-style-type: none"> - Compensation of loss in land and assets at full replacement cost - Support after displacement, until livelihoods and standards of living are restored to pre-displacement levels - Development assistance in addition to compensation measure (i.e., land preparation, credit facilities, training job opportunities).

Displacement Category	Entitlement
Individuals who do not have formal legal rights to land, but have a claim to such land or assets (provided that such claims are recognized under Iraqi laws or become recognized through a process identified in the resettlement plan)	<ul style="list-style-type: none"> - Compensation for loss in land assets at full replacement cost. - Support after displacement, until livelihoods and standards of living are restored to pre-displacement levels. - Development assistance in addition to compensation measures (i.e., land preparation, credit facilities, training, job opportunities).
PAPs who have no recognizable legal right or claim to the land they are occupying	<ul style="list-style-type: none"> - Resettlement assistance (such as cash, employment, other assets and land) in lieu of compensation for land - Other assistance necessary for achieving the objectives of the World Bank Policy OP 4.12

8.4 Categorization

Based on the number of persons that may be affected by the project, Project Affected People (PAPs) and the magnitude of impacts, projects will be categorized as follows:

- a) Projects that will affect more than 200 PAPs due to land acquisition and/or physical relocation and where a full Resettlement Action Plan (RAP) must be produced. At the earliest stage of a project.
- b) Projects that will affect less than 200 persons require the following documentation, as described in the abbreviated RAP/ Land acquisition and Compensation Plan (LACP) in following section: (i) a land acquisition assessment, (ii) the minutes or record of consultations which assess the compensation claimed and agreement reached, and (iii) a record of the receipt of the compensation, or voluntary donation, by those affected.
- c) Projects that are not expected to have any land acquisition or any other significant adverse social impacts; on the contrary, significant positive social impact and improved livelihoods are expected from such interventions.

8.5 Compensation Principles

The rehabilitation measures to be provided in the GCFI-projects are:

- compensation at full replacement cost for affected structures;
- compensation for land acquisition;
- full compensation for crops, trees and other similar agricultural products at market value;

Land-for-land is the preferred option. Land-for-land may be substituted by cash provided that:

- land is not available in the proximity of the project area;
- PAP willingly accept cash compensation for land and all assets on it and receive full replacement value without any deductions for depreciation; and
- Cash compensation is accompanied by appropriate rehabilitation measures, which together with project benefits results in restoration of incomes to at least pre-project level.

8.6 Valuation

The valuation of losses in physical assets will be carried out by assessing the market value of the assets, if known, and estimating the replacement cost. Replacement cost is simply calculated as the cost of replacing the lost assets plus any transaction costs associated with bringing the asset to pre-displacement value. However, the valuation of crops will be mainly relied upon the price lists developed by the Agriculture Directorate and revisited annually which is determined based on the market prices and productions. In case of the project involves any impacts on interruptions of businesses, compensation will be based on the actual loss of owners and workers. Replacement cost will differ depending on the type of asset, as illustrated in Table 26.

Table 26. Valuation of losses

Asset	Replacement Cost
Agricultural Land and leased agricultural lands	Equals the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes.
Urban Land	Equals the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located near the affected land, plus the cost of any registration and transfer taxes.
Crops and trees	Trees and crops will be compensated based on the market value. A committee of experts will determine the market value.

Compensation will be provided to all individuals whose assets or access to assets is affected or damaged, because of land acquisition or any other activities undertaken by the projects. While land shall be replaced with an equally productive plot and only if not possible be compensated in cash, the compensation for the loss of physical and nonphysical assets will vary depending on the type of loss, and eligibility of the PAPs. Compensation may come in the form of cash compensation, in-kind compensation, and/or assistance. All PAPs will be entitled

to monetary compensation at replacement cost, at market value (at the entitlement cut-off date) for affected tangible assets. Another option may be in-kind compensation where the affected assets would be replaced with an asset of similar size, value, and quality. The decision on which type of compensation is used should be jointly agreed upon between the project staff and the PAPs and shall be subject to the availability of replaceable assets. Moreover, development and resettlement transitional assistance needed to restore the livelihood and standard of living of PAPs under the project to either pre-displacement or pre-project levels, whichever is higher, shall also be part of the compensation component of any resettlement plan (i.e. short-term jobs, subsistence support, moving allowance, salary maintenance, food assistance, etc.). It should be noted here that compensation for losses in communal property shall only be in-kind for the community as a whole and shall take the form of reconstruction of the affected or damaged facility (i.e. public-school buildings, markets, etc.) to at least the same standard it was on prior to the project's implementation.

In the event that a project involves acquisition against compensation, ReFAATO/MMC through PMT/IC shall:

- d) not approve the project unless satisfactory compensation has been agreed by the affected persons; and.
- e) not allow works to start until the compensation has been delivered in a satisfactory manner to the affected persons.

8.7 Consultation Process

The PMT/IC will ensure that all occupants of land and owners of assets located in a proposed project area are consulted in a timely manner prior to finalizing the compensation arrangements and are compensated before the start of the construction works. Depending on the number of PAPs, consultations will be either held as community meetings or organized individually. During the consultations the PAPs will be informed about the required land acquisition and the means of compensation. They will be given the opportunity to discuss and negotiate all relevant details of the RAP/LACP in order to agree on its implementation. Minutes will be taken that include all issues raised and the agreements made on the preferred compensation arrangement.

8.8 Complaints and Grievances

The GCFI program-Grievance Redress Mechanism (GRM) will be established at project-level. The GRM is designed to ensure any grievance can be addressed in an amicable manner, and should be used in case of grievances related to the RAP/LACP.

While the Ministry of Finance is the custodian of land in Iraq and the department of land registration and records is part of the Ministry of Justice. In cases of the need for judicial producers, the official channel is through court to hand the complaints involved in land acquisition for example. When the land (either owned by an individual or a government institute)

cannot be purchased based on mutual agreement (through a willing buyer-willing seller approach), and there are no alternative sites for the project, the land has to be acquired by using eminent domain. In such case, the project entity or the responsible ministry will go to court and buy the land based on the value decided by the court. The land owners can appeal if they are not satisfied with the court decision. The second court decision will be the final.

8.9 Challenges and Risks

Every effort will be made to avoid or minimize the need for land acquisition and resettlement for any kind. In the unlikely and exceptional event that any of the projects under the program require additional land, houses and other assets becomes unavoidable; the projects shall adopt this RPF and its governing documents to settle such cases.

Experience and research indicate that physical and economic displacement, if unmitigated, may give rise to severe economic, social and environmental risks: production systems may be dismantled; people face impoverishment if their productive resources or other income sources are lost. For these reasons, involuntary resettlement should be avoided. Where involuntary resettlement is unavoidable, it will be minimized and appropriate measures to mitigate adverse impacts on displaced persons (and on host communities receiving displaced persons) will be carefully planned and implemented.

in certain situations, permanent land acquisition cannot be ruled out. Several issues may increase the complexity of land acquisition such as the lack of reliable land record systems, and the inability of people losing land to either document ownership or be physically present to make their claims for eligibility. In addition, the following cases of vulnerable groups have been observed in Iraq. All such cases shall be discussed at an early project stage between REFAATO/MMC and the PMT/IC and a mitigation solution shall be proposed.

8.9.1 Squatters

In very few cases IDP and other squatters are found occupying public and private buildings. The current practice is to reach resettlement for their re-location. However, within the understanding that squatters could be asked to evict involuntary by law.

8.9.2 Vulnerable women groups

Vulnerable groups particularly women are subject to traditional-norms that govern their particular communities. The program PMT/IC can consider providing free and confidential legal advice to women groups on civil issues, such as: inheritance and registration of property, especially in the case of one parent family or formal/informal marriage to combatant and ex-combatant both dead/alive or unknown. This is only in the case that the selected project is required to carry out such resettlement. The legal advisor service to vulnerable women groups is provided directly or through local SCOs, will express respect and understanding to local and traditional norms in the project area.

8.9.3 Informal Urban Development

Informal housing or urban development in certain urban settlements is apparent and the selection of project sites should avoid such areas. However, Governors are responsible for providing sites that have been cleared from any informal settlements. Relocation of informal settlers in urban areas may involve trade-offs. For example, the relocated families may gain security of tenure, but they may lose locational advantages that may be essential to livelihoods, especially among the vulnerable poor.

8.10 Monitoring and Evaluation

As part of the overall ESMF monitoring and evaluation system, REFAATO/MMC will establish procedures to monitor and evaluate the implementation of the program and will take corrective action as necessary during implementation to achieve the objectives of this RPF. The extent of monitoring activities will be proportionate to the project's risks and impacts. For all projects with significant involuntary resettlement impacts, REFAATO/MMC will require the PMT/IC to prepare and implement a Resettlement Action Plan RAP/abbreviate RAP. Affected persons will be consulted during the monitoring and evaluation process. Periodic monitoring reports will be prepared, and affected persons will be informed about monitoring results in a timely manner.

The following points will be evaluated to assess the implementation of the RPF:

- a) a brief description of the project and components for which land acquisition and resettlement are required, and an explanation of why an abbreviated RAP/LACP rather than a full Resettlement Action Plan RAP is being prepared;
- b) principles and objectives governing resettlement preparation and implementation;
- c) a description of the process for preparing and approving resettlement plans;
- d) estimated displacement impacts and estimated numbers and categories of displaced persons, to the extent feasible;
- e) eligibility criteria for defining various categories of displaced persons;
- f) a legal framework reviewing the fit between borrower laws and regulations and KfW requirements and measures proposed to bridge any gaps between them;
- g) methods of valuing affected assets;
- h) organizational procedures for delivery of compensation and other resettlement assistance;
- i) a description of the implementation process, linking resettlement implementation to civil works;
- j) a description of utilization of the grievance redress mechanisms GRM;
- k) a description of the arrangements for funding resettlement, including the preparation and review of cost estimates, the flow of funds, and contingency arrangements;

- l) a description of mechanisms for consultations with, and participation of, displaced persons in planning, implementation, and monitoring; and
- m) arrangements for monitoring by ReFAATO/MMC and, if required, by third-party monitors.

The Abbreviated RAP/LACP monitoring indicators will be simple but robust indicators or proxies that should be as far as possible visible and verifiable and that will, according to the nature of the impacts, measure the following key outcomes against the pre-resettlement baseline. Some key monitoring and evaluation indicators are shown in Table 27.

Table 27. Monitoring and Evaluation indicators of LACP

Monitoring	Evaluation
Percentage of individuals selecting cash or a combination of cash and in-kind compensation	Proposed use of payments
Payment of compensation to PAPs in various categories	Conformance to compensation policies described in the RAP
Number of grievances	Timeliness and quality of decisions made on grievances
Delivery of technical assistance, relocation, payment of transitional subsistence and moving allowances	Facilitation of access to technical and development assistance and transitional allowances
Delivery of income restoration and development assistance	Ability of individuals and households to restore sources of income
Public information dissemination and consultation procedures	Timeliness, quality, and effectiveness of procedures

8.11 Operationalization of the RPF

KfW Sustainability Guideline requires the preparation of a Land Acquisition and Compensation Plan (LACP) whenever private property must be acquired, or its use modified, for a project, and the acquisition or modification of privately-owned lands results in the loss of income or access to resources, either permanent or temporary and whether the occupation is legal or illegal.

If the displaced population comprises more than 200 people, a comprehensive Resettlement Action Plan (RAP) is required. The RAP should be prepared and implemented according to international standards as required by KfW's Sustainability Guideline, and those of the World Bank (OP 4.12), and the UN Basic Principles, the Guidelines on Development-based Evictions and Displacement, namely §§ 42, 49, 52, 54 and 60 and the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT). For the case of fewer than 200 people being displaced, an Abbreviated Resettlement Action Plan may be agreed.

An Abbreviated RAP/LACP is required for a project activity that affects less than 200 people, or if it creates insignificant and minor impacts on the Project affected peoples (PAPs). Impacts are considered minor and insignificant if the PAPs physically do not have to be relocated and not more than 10% of their productive assets are acquired by the project activity.

The RFP also introduces set of criteria for voluntary land donation and the relevant voluntary land transaction in written consent. ReFAATO/MMC will verify whether the criteria for voluntary land donation and the land donation transaction written consent is carried out by the PMT/IC to the satisfaction of their standards.

8.11.1 Resettlement Action Plan (RAP)

The RAP will not only be prepared as a documentation of the project, but as a key management tool, which informs and guides the planning, implementation as well as monitoring and evaluation of resettlement for the Project. Accordingly, the RAP should be seen as a 'living document' which needs to be prepared as early as possible in project development and updated as the project progresses.

Depending on the complexity of the project, and the duration of project planning, several iterations of the RAP may be appropriate, including a Preliminary, Interim and Final RAP. Annex 6 provides full description of the Terms of Reference (TOR) of the Resettlement Action Plan, including Livelihood Restoration Measures. The attached TOR will be generated by ReFAATO/MMC based on the project conditions and PMT/IC are responsible for the implementation of the TOR to the satisfaction of ReFAATO/MMC.

The TOR emphasis compliance of the RAP with the provisions of KfW's Sustainability Guideline (2016) and with the Guidelines on Incorporating Human Rights Standards and Principles, Including Gender, in Program Proposals for Bilateral German Technical and Financial Cooperation (Federal Ministry for Economic Cooperation and Development).

KfW Sustainability Guideline (2016) requires that all applicable national environmental, occupational health & safety and social laws and regulations as well as International Law including conventions and treaties adopted by the host country (Iraq) and applicable to the Project must be respected.

In the context of involuntary resettlement, the following international standards have to be applied, in addition to national legislation:

- WB OP 4.12 (in case of Indigenous Peoples, FPI Consent is required)
- UN Basic Principles and Guidelines on Development-based Evictions and Displacement, namely §§ 42, 49, 52, 54 and 60

In addition, the Project will respect the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (FAO 2012) known as the VGGT. The VGGT promote secure tenure rights and equitable access to land, fisheries and forests as a means of eradicating hunger and poverty, supporting sustainable development and enhancing the environment. The VGGT promote responsible governance of tenure of land, fisheries and forests, with respect to all forms of tenure: public, private, communal, indigenous, customary, and informal.

Contents of the TOR of the Resettlement Action Plan, including Livelihood Restoration Measures

The RAP terms of reference states in detail the required stages of the RAP and the required framework and topics to be address, including but not limited to:

- Project background, description, brief potential displacement impact and map of the project location with its attributes including infrastructures and social features of the neighborhood
- The institutional and legal framework of the project settings
- Project stakeholder analysis and formation of local resettlement committees
- Required baseline data, data-categories and their indicators
- Identification of project impacts and compensation framework
- Livelihood program approach
- Transitional Hardship and Vulnerability
- Protection of cultural heritage
- Grievance procedure
- Monitoring and Evaluation
- Resettlement budget and implementation schedule
- Reporting

8.11.2 Abbreviated RAP/LACP

For small rehabilitation-construction projects that have minor and clearly defined environmental and social risks, an abbreviated RAP/LACP streamlined approach is applied as part of the ESMF program environmental and social safeguards requirements, as well as general good international practice into projects.

In case of minor resettlement, it is expected that only project in rural and urban areas might require an Abbreviated RAPs. The approach of streamlining the abbreviated RAP/LACP into the selection of appropriate safeguards instruments is depicted in Figure 10.

Annex 7 provides Guideline for preparing a Land Acquisition and Compensation Plan (LACP) in the context of the Iraq project. The expected content of an abbreviated RAP/LACP are described below for the PMT/IC team:

- Description of the project activity. General description concerning the project activity and

identification of the project activity's site.

- Potential various impacts that may occur. The identification includes:
 - components of project activities that would require land acquisition;
 - areas to be affected by the activity.
- Census on the PAPs, and inventory of assets affected by the project activity.
- Results of the survey and asset inventory, which will include:
 - list of PAPs, which differentiate PAPs who have land rights and land users (tenants) who do not have land rights; and
 - inventory of land parcels and structures affected by the project activity.
- Information produced by the survey needs to be summarized into a table.
- Eligibility. Identification of which PAPs will be entitled to receive compensation and explanation of the criteria used to determine eligibility.
- Compensation, assessment of land and assets valuation, and resettlement assistance to be provided. This includes a description of the compensation options and resettlement assistance that will be offered to the PAPs. Assessment of land and asset values will be determined by the result of an assessment result by licensed appraisers.
- Public consultation with local community members who will lose their land and other assets. This include activities to:
 - inform the PAPs about various impacts of the project activity, available options for compensation and resettlement assistance, and procedures to obtain compensation, and
 - provide opportunity for the PAPs to express their opinion or concerns.
- Institutional Responsibility. Brief description concerning the organizational frameworks to implement the activities of land acquisition.
- Schedule of Implementation. An implementation schedule shall be made to include all land acquisition activities, including target deadlines for compensation payments. The schedule must describe how land acquisition activities are linked to the overall project activity's implementation.
- Cost and Budget. Costs estimations for land acquisition are required by the project activity.
- Complaints Handling Procedures and the project GRM.
- Monitoring. Plan to monitor land acquisition activities and compensation payment to the PAPs.

8.11.3 Requirements for voluntary land donations

Voluntary land donations are only acceptable provided that PMT/IC verify the fulfillment of the following criteria including the explanations on each criterion are fulfilled. If all criteria are fulfilled as advised by ReFAATO/MMC. The PMT/IC will ensure completion of the voluntary land transaction in written consent, exhibited with the criteria table as Annex 8 where, the donation will be verified by two witnesses who are community leaders but not beneficiaries of the project, to ensure that the land was voluntarily donated without any form of duress. The signed waivers will be submitted to ReFAATO/MMC to ensure that the voluntary land donation

has been conducted in accordance with the above criteria.

The following criteria are the minimum expected in the voluntary land donation and Re-FAATO/MMC may choose to add other criteria if deemed necessary:

- The land in question is free of squatters and no people with customary rights or no legal title are using it;
- The land in question is free from any dispute on ownership or any other encumbrances;
- No household relocation is involved;
- The amount of land being donated is minor and will not reduce the donor's remaining land area below that required (e.g., no more than 10% of total agricultural land holding donated) to maintain the donor's livelihood at current levels;
- The donor is expected to benefit directly from the Project;
- The donor is aware that refusal is an option;
- The donor has been appropriately informed and consulted about the Project and the choices available to him/her;
- A grievance redress mechanism is in place to hear complaints regarding land acquisition;
- Land transfer will be completed through registration after the donor has confirmed in writing his/her willingness to proceed with the donation; and
- For community or collective land, donation has occurred with the consent of individuals using or occupying the land.

9 Stakeholders Engagement Approach

Stakeholders engagement is an inclusive process conducted throughout the GCFI lifecycle. It helps ReFAATO and PMTs to have constructive and responsive relationships that are important for successful management of a project’s environmental and social risks. This process is most effective when initiated at an early stage of the project development process, and is an integral part of project decisions and the assessment as well as of the management and monitoring of the project’s environmental and social risks and impacts. This chapter provides a brief framework for meaningful stakeholder engagement and disclosure processes under the GCFI and that complies with the World Bank’s and KfW’s provisions.

9.1 Stakeholders Identifications

Stakeholders are defined as persons or groups who are directly or indirectly affected by a project, as well as those who may have interests in a project and/or the ability to influence its outcome, positively or negatively. Based on this definition, the stakeholders may include locally affected communities, central government and local officials, and other special interest groups.

For the GCFI, stakeholders are classified into internal stakeholders who have direct influence over the project lifecycle and its associated activities, and external stakeholders who indirectly influence or are indirectly impacted by the project. The stakeholders’ categories are summarized in the following sub-sections.

9.1.1 Internal Stakeholders

The internal stakeholders are those who work with ReFAATO, PIAs/PMTs or its key contractors and subcontractors, these stakeholders are directly involved in and benefitting from the programme. The sub-categories of internal stakeholders are presented in Table 28.

Table 28. Identified Internal Stakeholders

Stakeholder Sub-category	Stakeholders
ReFAATO, PIA/PMT of each sector (MoCH / Road and Bridges Directorate, Water and Sanitation Directorate, Ministry of Electricity ‘MoE’)	<ul style="list-style-type: none"> Project Manager, Resident Engineers, Coordinators...etc.
Contractors and Subcontractors	<ul style="list-style-type: none"> Workers engaged in the construction activities during the implementation of projects.

Stakeholder Sub-category	Stakeholders
Suppliers	<ul style="list-style-type: none"> • Suppliers for the site needs (i.e., food, construction materials, etc.)

9.1.2 External Stakeholders

The external stakeholders are individuals or groups who may influence the project and its activities indirectly during the construction stage. These stakeholders are identified in Table 29.

Table 29. Identified External Stakeholders

Stakeholder Sub-category	Stakeholders
Local Authorities	<ul style="list-style-type: none"> • Ministry of Defense. • Ministry of Environment. • Ministry of Health. • Ministry of Culture. • Ministry of Immigration and Displacement. • Provinces (Al-Anbar, Diyala, Nineveh, Salah al-Din) • Municipalities within provinces. • Traffic Directorates of provinces.
Local communities	<ul style="list-style-type: none"> • Community leaders, employed men and women, PAPs, farmers, households males and females, employed and unemployed labour force, youth and students.
International Agencies	<ul style="list-style-type: none"> • This includes international funding agencies that are funding projects in the liberated areas, such as the World Bank, the United Nations Development Programme (UNDP), etc.

During the GCFI implementation stage, the PMTs/ICs shall continue to engage with, and provide information to, project-affected parties and other interested parties throughout the life cycle of each project. Specifically, the PMTs/ICs shall:

- Ensure appropriate stakeholder engagement approach is adopted during the project implementation;
- Ensure that the identified stakeholders are appropriately engaged on issues that potentially affect them in addition to managing the public grievance mechanism that will be adopted by during the GCFI implementation;
- Establish and maintain an on-going relationship with the nearby communities affected (positively or negatively) throughout the life of each project;
- Ensure that the community grievance mechanism is accessible;
- Establish, maintain, and improve the worker-management relationship through ensuring that the workers grievance mechanism is accessible, and workers/employees concerns are

- addressed in a timely manner; and
- Engaging with existing workers and/or workers organisations whenever applicable in accordance with the Iraqi Labour Law.

9.2 Stakeholders Consultation Methods

Stakeholder consultation is an integral part of the environmental and social analyses conducted under GCFI projects. The PMTs/ICs shall consult with local communities in a structured and culturally appropriate manner. The process should emphasize on the project's environmental and social aspects and their respective concern. The process should also include representatives from local authorities in projects areas. This will enable the PMTs to have an in depth understanding of the stakeholder's requirements and eliminate/minimize potential conflicts.

Subsequently, the PMTs shall make the documentation of environmental and social assessments available to these communities prior to projects tendering stage through website or notices on media, as appropriate.

Participatory workshops, focus group meetings, face-to-face interviews and disclosure of the final output are the most commonly adopted methods of stakeholder consultations that could be carried out during the GCFI. The following subsections describe the approach to each method.

9.2.1 Participatory Workshops

Participatory workshops are effective when a large number of stakeholders with different interests and specializations are involved. Conducting effective participatory consultation workshops should involve the following elements:

- Orienting the workshop towards a clear destination. In this connection, it is necessary for the evaluator to present a very good project brief and the purpose of the consultation.
- Ensuring to build bridges and consensus among stakeholders.
- Dividing the participants into sub-groups to represent adequate mixture of different interest groups and allow the sub-groups to brainstorm among the group members and submit their views and comments as those of not the sub-groups and not the individuals.

9.2.2 Focus Group Meetings

This type of consultation is relevant when the stakeholders have similar interest, and thus are focused towards one common objective. This kind of consultation meetings are recommended for projects that involve relocation of families, protection of natural resources, etc.

9.2.3 Face-to-Face Interviews

Face-to-face interviews are the most effective method when stakeholders are not large in

number. This method is very flexible and permits in-depth discussions to understand the issues with low cost. However, this method should be carried out properly, otherwise it may lead to focus on individual issues and interests. Given that the projects under the GCFI are relatively small in size with limited foreseen impacts and stakeholders are small in numbers, the face-to-face interviews are recommended for the consultation required as part of projects screening process.

9.2.4 Public Disclosure

The final ESMF for the GCFI programme shall be disclosed. The disclosure will aim at enabling the affected population to access pertinent information about the GCFI and related E&S safeguards. Details of disclosure are indicated under Annex 9. for the GCFI, disclosure will be carried through publishing the entire English ESMF document along with an Executive Summary in both Arabic and English languages on ReFAATO's website.

9.3 Elements of Effective Stakeholder Consultations

Some of the most concerned elements of effective consultations are as follows:

- Well targeted.
- Early enough so as to make sure to get the stakeholder views adequately reflected in the project decisions.
- Transparent and provide all the information without hiding.
- Very simple and understandable so that clear answers and comments can be obtained.
- Consideration of gender equity.
- Documentation of consultation outcomes.
- Based on the principle of "Two way Process".
- Focusing on Risks, impacts, mitigation measures and opportunities.

9.4 Planned Stakeholder Engagement Activities

Since practical difficulties exists for continued consultation throughout the GCFI programme, at least consultation needs to be carried out at three stages; project preparatory / design stage, project implementation stage and project end stage so as to make sure that stakeholder concerns, interest, comments are adequately built into the whole project management process.

Table 30 presents a proposed programme for stakeholder engagement and the activities to be performed to ensure that all stakeholders are informed of the programme and are engaged and aware of their rights and the mechanism for voicing out their concerns.

Table 30. Planned stakeholder engagement activities during the GCFI

Stakeholder Engagement Activity	Stakeholders Consultation Method	Type of Information Disclosed	Stakeholder Groups to be Consulted / Engaged	GCFI Stage
Consultation with relevant governmental institutions	<ul style="list-style-type: none"> • Focus Group Meetings • Face-to-Face Interviews 	<ul style="list-style-type: none"> • Discussion of permits required and other monitoring requirements that will be needed for the implementation of the GCFI 	<ul style="list-style-type: none"> • Relevant ministries and municipalities 	<ul style="list-style-type: none"> • Inception Phase • Implementation Phase
Disclosure of the environmental and social documentations and reports	<ul style="list-style-type: none"> • Participatory Workshops • Focus Group Meetings • Face-to-Face Interviews 	<ul style="list-style-type: none"> • ESMF, GRM, RAP 	<ul style="list-style-type: none"> • Open to all 	<ul style="list-style-type: none"> • After the Inception Phase • Prior and throughout the Implementation Phase
Communication with local community members during the GCFI Implementation	<ul style="list-style-type: none"> • Participatory Workshops • Focus Group Meetings • Face-to-Face Interviews 	<ul style="list-style-type: none"> • PMTs/ICs/ Contractors to maintain open communication channels throughout the GCFI implementation phase with local community members in case of complaints / grievances 	<ul style="list-style-type: none"> • Local communities 	<ul style="list-style-type: none"> • Throughout the Implementation Phase

9.5 ESMF Consultation Workshop

A consultation workshop to discuss the draft ESMF was conducted on Thursday, September 13 2018 at ReFAATO office in Baghdad. The overall aim of the workshop is to present the ESMF prepared for the programme and to solicit feedback concerning environmental and social issues related to the GCFI.

Stakeholders attended the consultation workshop are from the Ministry of Electricity (MoE) and Ministry of Construction and Housing (MoCH), in addition to representatives from NGOs at Salah al-Din governorate and ReFAATO engineers. Annex 15 provides a detailed list of attendees.

Figure 14 below presents some pictures from the consultation workshop.



Figure 14. Pictures from the consultation workshop

The main issues of concern can be summarized as follows:

- The positive impact of the programme on local communities and how it will incentivize the permanent return of IDPs;
- Debris removal during programme implementation;
- Contractors commitment to adhere with the GCFI E&S safeguards during the implementation; and
- Involvement/Coordination with the Ministry of Environment during the programme implementation.

9.6 Preparation of Stakeholder Engagement Plan for GCFI Project

During the implementation phase of GCFI, the PMT/IC shall prepare a specific stakeholder engagement plan for each project. The guidance for preparation of a stakeholder engagement plan (SEP) and planning of stakeholder activities is provided in Annex 10.

10 Grievance Redress Mechanism

10.1 Overview

Community complaints and grievance mechanisms are just one part of a suite of processes that aim to prevent, defuse and resolve community tension and conflict. This report focuses on rights-compatible, non-judicial community grievance mechanisms supporting the implementation of investment packages.

The GCFI defines a grievance as follows: any complaint or concern raised during the project planning process (including the environmental assessment process and/or involuntary resettlement process) and incidents during the project implementation.

The GCFI Grievance Redress Mechanism (GRM) is a process for receiving, documenting, evaluating, and addressing project-related grievances from affected people, communities or other stakeholders. A key component of a successful GRM are multiple communication channels between key stakeholders at all levels of project planning and implementation.

Smooth execution of any GCFI project requires a robust GRM to timely and effectively address any problems that might arise during implementation. The structure of this GRM enables PMTs to address stakeholders' grievances before they escalate into unmanageable disputes, thereby reducing the likelihood of the need for judicial resolution.

The MMC team of two experts carried out desk-reviews and consultation workshops with program stakeholders, namely: ReFAATO, PMT from Ministry of Electricity and Ministry of Construction and Housing MOCH including both water supply and road and bridges and three CSOs. In addition, the team carried out semi-structured interviews with ReFAATO and line Ministries. The detailed agenda is exhibited in Annex 16.

10.2 GRM Terminology

Terms relevant to the scope of work in this GRM are:

- Grievance mechanisms
- Judicial and non-judicial
- Rights-compatible

10.2.1 Grievance Mechanism

In the GCFI programme, 'Grievance' is used to describe a concern, issue or problem that needs to be addressed. An individual or collective community group may express a grievance. Conflict is a broader term that describes tension at a number of different levels, including low-level disagreements to more escalated and complex situations that may involve violence

The evidence that an operational-level 'mechanism' is in place may include:

- A dedicated pathway (or pathways) and processes of engagement for handling grievances;
- Procedural elements e.g. a documented procedure outlining steps to be taken to prevent and handle community grievances;
- Records e.g. complaints/grievance logs and data, evidence of information and communication about the mechanism or process and outcomes;
- Dedicated resources e.g. human and financial resources, formally defined responsibilities for grievance handling;
- Evidence of dialogue with aggrieved parties, and/or use of alternative dispute resolution techniques (e.g. negotiation, mediation, arbitration etc.) where direct dialogue is not possible or does not lead to resolution of issues; and
- Substantive outcomes e.g. improved organizational practice and relationships, conflict resolution (validated by aggrieved parties).

Whether a grievance mechanism is aligned with internationally-agreed best practice principles will be determined by:

- The process of agreeing upon the pathways and processes to be used
- Whether agreed processes are followed
- The ability of parties to facilitate agreed and sustainable outcomes

10.2.2 Judicial and Non-Judicial

The GCFI focuses on non-judicial grievance mechanisms; that is, mechanisms that do not make determinations according to pre-existing legal rules and standards, such as litigation in court. It is important to understand the difference between judicial and non-judicial mechanisms (including remedies) and to recognize the potentially complementary (rather than mutually exclusive) relationship between them.

Non-judicial grievance resolution can have benefits such as being:

- able to address actual or potential issues before they
- escalate into conflict or become the subject of litigation
- less constrained by pre-determined legal procedures and precedents, able to hear complaints that do not amount to a course of action in law
- less costly than litigation
- enable companies to raise their own awareness and learn through direct and/or facilitated engagement with aggrieved community members
- contribute to earnings and maintaining a social license to operate
- more likely to provide an avenue for finding collaborative and innovative solutions
- enable those whose lives are affected to claim their rights and participate in the process of advancing their rights

10.2.3 Rights-compatible

Rights-compatible grievance resolution means that a mechanism is consistent with international human rights in terms of both process and substance; that is, the procedures followed, and the outcomes reached. In essence, rights-compatibility recognizes that an equitable process is a necessary precondition for an equitable outcome.

A rights-compatible grievance mechanism is based on principles of non-discrimination, equity, accountability, empowerment and participation, particularly of vulnerable people (for example, some groups of women, children, aged, ethnic minorities and Indigenous Peoples). An effective rights-compatible grievance mechanism can provide a channel through which communities impacted by a project can gain recognition for legitimate concerns and engage in a process to secure acceptable outcomes and share in the ownership of that process.

10.3 GRM Objectives

The GRM is an essential mechanism of the overall project preparation and implementation in ReFAATO approach to project management cycle. In the process of preparing this report, two major objectives were identified in discussions with stakeholders:

- **Reduce risk and negative social impact:** Community complaints and grievance mechanisms can form part of a broader ‘early warning system’ for identifying and understanding community concerns that could lead to more serious conflict.
- **Establish and maintain a social license to operate:** Increasingly, local CSOs and communities of both IDPS and hosting communities expect that rehabilitation and reconstruction infrastructure projects will avoid social harm, minimize adverse impacts, maximize benefits and respond to their complaints and grievances respectfully and systematically, using processes that the communities know and trust. The commitment to the establishment and operationalizing the proposed GRM provides an indication that the PMTs and contractors are willing to be held accountable, which enhances the potential for establishing a lasting social license to operate. They also provide an avenue for building relationships and dialogue, which are critical elements of this license to operate.

10.4 Benefits of GRM

Properly designed and implemented grievance mechanism can benefit both the GCFI Implementers and communities involved (i.e., Affected Persons/Entities) by increasing the likelihood of resolving minor disputes quickly, inexpensively and fairly (i.e., solutions that reasonably satisfy both sides). The grievance mechanism can also help identify and resolve issues before they are elevated to formal dispute resolution methods, including the courts.

10.4.1 Benefits to the GCFI Implementers

Benefits to the GCFI Implementers include:

- Provide information about project implementation;
- Provide an avenue to comply with government policies;
- Provide a forum for resolving grievances and disputes at the lowest level;
- Resolve disputes relatively quickly before they escalate to an unmanageable level;
- Facilitate effective communication between the projects and affected persons;
- Help win the trust and confidence of community members in projects and creates productive relationships between the parties;
- Ensure equitable and fair distribution of benefits, costs, and risks;
- Mitigate or prevents adverse impacts of the project on communities and produces appropriate corrective or preventive action; and
- Help avoid projects delays and cost increases, and improves quality of work.

10.4.2 Benefits to Affected Persons/Entities

Benefits to affected persons/entities include:

- Provide a cost-effective method to report their grievances and complaints;
- Establish a forum and a structure to report their grievances with dignity, and access to a fair hearing and remedy;
- Provides access to negotiate and influence decisions and policies of the project that might adversely affect them; and
- Facilitate access to information.

10.5 Grievance Prevention and the Public Information Strategy

Grievances cannot be avoided entirely, but much can be done to reduce them to manageable numbers and reduce their impacts. PMTs are aware and accept that grievances do occur, that dealing with them is part of the work, and that they should be considered in a work plan. The program's line ministries already have their GRM system already and as part of the GCFI would be supported to further develop their GCFI/project oriented GRM systems. It is recommended that PMTs with support from the IC should do the following in support of this mechanism:

- ***Provide sufficient and timely information to communities both IDPs and hosting communities.*** Many grievances arise because of misunderstandings; lack of information; or delayed, inconsistent, or insufficient information. Accurate and adequate information about a project and its activities, plus an approximate implementation schedule, should be communicated to the communities involved.
- ***Conduct meaningful community consultations.*** Project implementers should continue the process of consultation and dialogue throughout the implementation of a project. Sharing

information, reporting on project progress, providing community members with an opportunity to express their concerns, clarifying and responding to their issues, eliciting communities' views, and receiving feedback on interventions will benefit the communities and the project management. ReFAATO has already conducted successful community consultation at field level for women group only, the consultation was carried out in coordination with GRM communication consultant from the WB program.

- **Build capacity for project staff, particularly community facilitators and other field-level staff.** The community-level facilitators and field-level staff of the implementing agencies should be provided with adequate information on the project such as project design, activities, implementing schedules, and institutional arrangements as well as enhanced skills in effective communication, understanding community dynamics and processes, negotiation and conflict resolution, and empathizing with communities and their needs. Building trust, maintaining good rapport with the communities by providing relevant information on the project, and responding effectively to the needs and concerns of the community members will help solve issues before they even become grievances. It is also important that local CSOs and field-level staff provide regular feedback on their interactions with the IDPs and hosting communities to the higher levels of the implementing agencies.

10.6 Guiding Principles

The GCFI GRM aligns with the requirements of KfW, the World Bank EODP standards and procedures, and best international practices in the field, which requires that the non-judicial grievance mechanism should be:

- appropriate to the magnitude of impacts and risks caused by the Project;
- communicated to all likely affected people, local communities and stakeholders as early as possible in the engagement process;
- accessible to all affected people/entities, including vulnerable groups, without cost, in a language they can comprehend and report in, and in the easiest and fastest mean possible;
- enable affected persons to raise grievances in confidence and without prejudice;
- not obstructing aggrieved persons access to judicial or administrative processes;
- address grievances promptly and in a manner, that is transparent, ethical, lawful, rights-based and understandable to the affected party;
- record in writing all grievance details from the moment of the voicing out of the grievance until the complete implementation of agreed actions up to the satisfaction of aggrieved person/entity. This include the date and nature of the complaint, any follow up actions taken, the final decision and how this was communicated to the stakeholder; and
- allow the affected person/entity to redirect the grievance that are unresolved through a formal route to external or neutral experts to address.

There are also supplementary principles that are integral to guidelines governing operational-level grievance mechanisms. These include:

- engagement and dialogue

- cultural-appropriateness
- proportionality
- empowerment
- continual improvement

10.7 GRM Preparation Approach

The following steps are to be followed during the preparation for the GCFI GRM:

- Review and analyse the current context for grievances in the PMTs, and characterize current grievance patterns and trends;
- Assess strengths and gaps;
- Anticipate type of grievances; and
- Develop a joint foresight with PMTs for building on strengths and closing gaps.

Current records at ReFAATO exhibit that the average time to resolve a serious grievance is an average of four months; most grievances fall into one of three areas:

- Construction-related grievances that arise during construction; these include complaints due to traffic movement of Heavy-Loaded-Vehicles operated by the contractors, flooding of wastewater and damage to the power/communication grid.
- Social friction between community groups, including IDP-returnees.
- Ambiguity as regards housing and the return to informal residential areas.

10.8 Institutional Setup of GCFI GRM

During the implementation of projects construction activities, the PMTs/ICs will be responsible for:

- provide information and services to resource persons (construction project manager), as required by the GRM to deal with the reported grievances;
- register grievances using a prescribed form;
- document GRM proceedings, decisions, and recommendations;
- maintain grievance-related documents and reports;
- facilitate arrangements for field visits;
- present timely feedback to affected persons and agencies involved in grievances.

It is worth to note that other GRMs are already in operation by line ministries, municipalities and Governors' offices. The proposed GRM shall not undermine nor contradict the existing GRMs. During the GRM awareness and launching stage, efforts will be exerted to exchange experience and information with other GRMs as part of local setup of grievance redress committee

During the implementation of projects construction activities, the PMTs/ICs will be responsible for:

- Managing and supervising the works and activities of contractors.
- Ensuring that construction activities are carried out in compliance with the project's requirements, bid documents and the GCFI ESMF requirements.
- Ensuring that any potential health, safety, environmental hazards and social concerns related to the project are controlled and properly addressed.

10.9 Functional Organization and Responsibilities

A sequential level of functional organization with the responsibilities for the management of the GRM is illustrated in Table 31 and Figure 15.

The proposed option of including the contractor to receive grievances in the field is doable. However, the contractor has to provide an office outside the construction site in order to receive in-person complaints. This arrangement is for the security of the project and safety of complainants. When receiving grievances through contractors and in order to ensure impartiality in the process the PMT/IC can invite local CSOs to participate in the monitoring process of the GRM as part of the local grievance redress committee setup.

Table 31. Functional Organization of the GCFI GRM

Objective	Tasks	Responsibilities
Develop Grievance Mechanism and mainstream it within GCFI stakeholders (ReFAATO/MMC, PMT/IC, Contractor)	<ul style="list-style-type: none"> • Develop grievance mechanism, including procedures and forms • Create, organize and deliver training on grievance mechanism, procedures and forms targeting mechanism implementation entities • Establish monitoring and evaluation plan • Ensure that all requirements for effective implementation of the grievance mechanism are included for PMT/IC and contractor. 	ReFAATO/MMC
Develop GRM-communication network with CSOs	<ul style="list-style-type: none"> • Boost the engagement of qualified CSOs in the implementation of the grievance mechanism especially in the awareness stage and allocate sufficient resources for this engagement. 	PMT

Objective	Tasks	Responsibilities
Allocate the resources needed for effective implementation of the GRM at project level	<ul style="list-style-type: none"> • Assign mechanism implementation responsibilities to qualified staff (assuming the Environment, Health and Safety/ Liaison Officer). (The World Bank program with ReFAATO has demonstrated a success story in this regard. And it is recommended to replicate and consider the learnt lessons from their successful model. The model is based on assigning communication expert with sound experience and utilizing informal social media tools for communication with complainants. The model provides a good example of flexible, informal and cost-effective management of grievances). • Secure and allocate all necessary tools and requirements to ensure efficient and timely implementation of the mechanism (e.g. dedicated phone/mobile number, email and office address, website, etc.) • Ensure that the project organizational setup and system is compliant with the mechanism requirements and facilitate timely response and reporting. • Subject to the approval of ReFAATO, establish (or coordinate with EODP arrangements) Local ‘project-level’ Grievance Redress Committee (LGRC) to constitute the Governor (or his nominated representative) as chairperson of the committee, and members representing at least one CSO, the contractor and the PMT/IC representatives (one of them as secretariat to the committee). 	PMT/IC, Contractor
Disclose the GRM	<ul style="list-style-type: none"> • In coordination and collaboration with the Liaison Officers and CSOs, disclose the mechanism and the contact details of the mechanism to all communities within the anticipated area of influence through community meetings, street shows, distribution of information sheets, project website, street advertisement, etc. • Introduce grievance mechanism procedures and contact details to key local stakeholders (CSOs and local government). • Report on grievance mechanism disclosure activities to ReFAATO <p>It is important to note that pending on the nature and location of the projects, the projects shall be</p>	PMT/IC, Contractor

Objective	Tasks	Responsibilities
	<p>managed at central level by the PMT and others through PMT-directorate in governorates. In both cases the GRM system shall function through the project-Liaison Officer.</p>	
<p>Receive and track grievances (process administration and document control)</p>	<ul style="list-style-type: none"> • Establish and maintain efficient and effective grievance mechanism administration procedure including receipt, handling, screening and documenting of grievances. • Create and maintain effective and well-organized document control system for the grievance mechanism (Grievance Register and Database) which shall be accessible at any given time by ReFAATO/MMC and KfW, or to any third party nominated by ReFAATO or KfW. • Contractors to report on received and addressed grievances to PMT/IC as they are received. 	<p>PMT/IC, Contractor</p>
<p>Review and investigate grievances</p>	<ul style="list-style-type: none"> • Inspect for grievance/causality/relevance to the project. • Analyze causality link assessment. • Valuate the grievance review process. • Suggest measures / recommendations to reduce grievances. 	<p>PMT/IC, Contractor</p>
<p>Develop resolution options and prepare appropriate response</p>	<ul style="list-style-type: none"> • Form respective decisions. • Discuss decision with respective aggrieved person/entity and negotiating options. • Investigate effective methods to affect the agreed resolution/response measures. • Implement the agreed resolution/response measures and aggrieved person/entity satisfaction. • Finalize/sign grievance resolution agreement. 	<p>PMT/IC</p>
<p>Manage escalated grievance to grievance mediation</p>	<ul style="list-style-type: none"> • In instances where the proffered resolution/response measures are not efficient enough to redress the grievance, and/or whenever the aggrieved person/entity is not satisfied, PMT/IC to escalate the grievance to the LGRC. • Organize and coordinate LGRC meetings on bi-weekly basis to review, validate and approve resolutions and decisions regarding grievances escalated to the LGRC level for review, resolution mediation and decision. • Sign grievance resolution agreement. 	<p>PMT/IC, LGRC</p>

Objective	Tasks	Responsibilities
Response to resolution and implementation	<ul style="list-style-type: none"> • Implement the resolution/decision actions agreed upon with the aggrieved person/entity. Implementation activities will be the responsibility of the contractor /PMTs/IC; these activities will begin immediately upon the final signing of the agreement with the aggrieved parties. • Report to ReFAATO/MMC regarding the implemented measures and their efficiency in satisfying the aggrieved person/entity. All reports shall be documented and accompanied by a copy of the signed grievance resolution agreement if the complainant chose to sign on voluntary ground. 	PMT/IC, Contractor
Manage escalated grievance to court review/action	<ul style="list-style-type: none"> • Whenever the aggrieved person/entity is not satisfied with the resolution options and redress measures discussed with the contractor or the PMT/IC, and upon his action of filling his grievance to court, the contractor will be obliged to represent himself in front of court (if the court case is filled against him/her for a grievance caused by his activity) and shall report periodically to PMT/IC on case development, decision and decision implementation. • Based on the nature and seriousness of the grievance, ReFAATO/PMT may decide to freeze or to terminate the contractor-contract noting contract compliance requirements and conditions. Further actions are to be decided by ReFAATO/PMT in light of contractual obligations and contract conditions, and this may include compensation claims against the contractor for caused damages or losses. • Whenever an aggrieved person/entity is not satisfied with the resolution options and redress measures discussed with the PMT/IC/contractor, and upon his action of filling his grievance to court against the PMTs/IC/contractor are accordingly responsible for representing the project (as project owner) in a court of law and to take all necessary legal necessary steps to defend the project using transparent, proof-supported, correct and truthful information regarding the case. PMT/IC/contractor are obliged to effectively implement any/all court decisions in a timely manner. 	Re-FAATO/MMC , PMT/IC, LGRC, contractor

Objective	Tasks	Responsibilities
	<ul style="list-style-type: none"> • Report the decision of the court, to the LGRC and ReFAATO for the purposes of monitoring and record-keeping. • Sign grievance resolution agreement if the complainant chose to do voluntarily. 	
Monitor, evaluate and report, GRM	<ul style="list-style-type: none"> • Decision restoration measures • Monitor and supervise implementation measures 	ReFAATO/ MMC, PMT/IC, Contractors

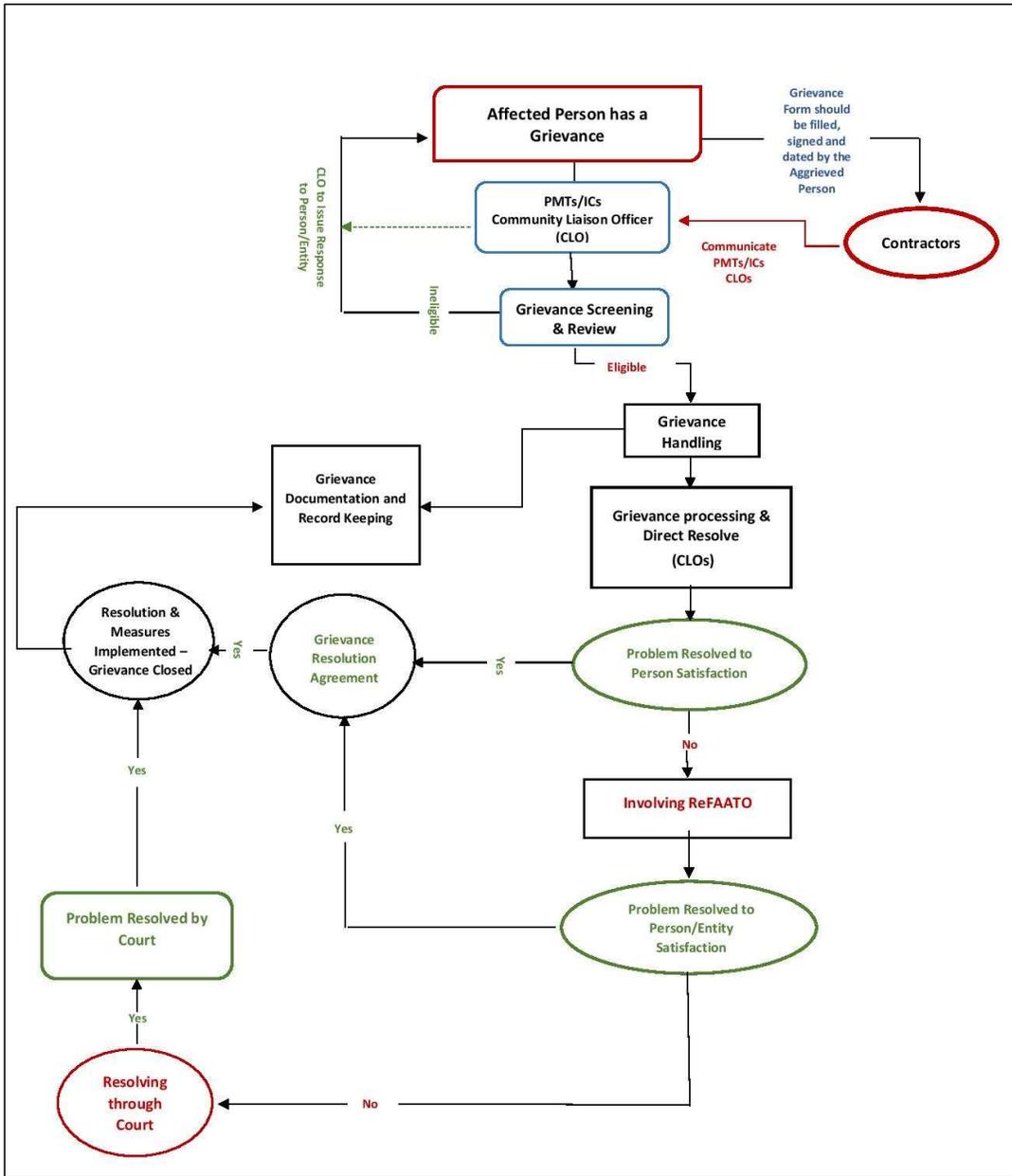


Figure 15. Functional Organization of the GCFI GRM

10.10 Workers Grievance Mechanism

The worker/employee grievance mechanism will allow employees/workers to address workplace disputes or concerns in a fair, easily accessible and transparent manner. The worker/employee grievance mechanism must take into account the following:

- The worker/employees must be aware of the responsible person that will be responsible to receive complaints. Details about the procedures should be clear and easily accessible in

policies or employee handbooks.

- The worker/employee has the right to keep the process of filing a grievance confidential and to appeal to a higher level of management if he or she is not satisfied with the initial findings.
- The worker/employee has the right to express his or her grievance to workers organisations to protect their rights.

Worker Grievance Procedure. The following is a standardized procedure for worker grievance applicable to all employees/workers involved in the GCFI.

- When a concern or an action has occurred the employee/worker must file a written grievance to the direct supervisor within 5 working days.
- The direct supervisor shall respond back within 5 working days. If the employee/worker was not satisfied with the supervisors' response, he/she can direct the grievance to the HR Department.
- The HR shall respond back within 5 working days. If the employee/worker was not satisfied with the response and wishes to appeal, he/she can direct the grievance to higher level or management within 5 working days of receiving the HR's response.
- If the employee/worker was not satisfied with the response of top management, then he/she can approach the workers organization that belongs to (where applicable) for further advice and assistance.
- If an employee/worker is not satisfied with the final determination of the internal grievance procedure, the employee can still hire a lawyer and resolve the issue at court.

10.11 Work Processes of the GRM

The typical steps in a grievance resolution mechanism proposed to PMTs can be tailored to the particular sector, governorate and project context. The main work processes are seven layers that are explained in details in Annex 11 exhibits the proposed generic work processes for the GRM. Receive and register grievance

1. Acknowledge, Assess, Assign
2. Develop a proposed response
3. Communicate proposed response to complainant and seek agreement on the response
4. Implement the response to resolve the grievance
5. Review the response if unsuccessful
6. Close out or refer the grievance

The assigned time for each step of the GRM work processes is to be determined by Re-FAATO/MMC in coordination with PMT/IC pending on the conditions of local communities in the project area, the project volume and activities and the governorate and PMT capacities.

10.12 GRM Database

Each PMT/IC shall establish and maintain a database of all grievances received, related communications, and the actions implemented to address/resolve them. Each grievance record in the database shall include at least the following:

- The grievance that has been raised by the complainant;
- Grievance submission date;
- Aggrieved person/entity (i.e. complainant) name and contact details; (optional);
- Details on proposed corrective/remedial action (and options) communicated to complainant;
- Date of response from responsible entity (Contractor, PMT as per of the responsibility matrix);
- Details on agreed corrective/remedial action(s) and response, along with signed agreement number and date, and a scanned copy of the agreement;
- Details on implemented corrective/remedial action(s) and response;
- Record of any further correspondence between the complainant and the responsible entity;
- If further actions are required (e.g. compensation, court action, etc.);
- Grievance closing out date; and
- Grievances logs, and report must be issued periodically by PMTs/IC to ReFAATO/MMC.

The current GRM is based on spreadsheets. The PMT/IC team could opt to design and operate a web-based system that provides real-time reports and monitoring dashboard at project, sector and Governorate level

10.13 Training on Grievance Mechanism

The MMC in coordination with ReFAATO intends to host training workshops to introduce the GRM to ReFAATO /PMTs and CSOs. The workshops are designed on the base of adult-participatory learning curriculum and will include group work, play-role exercises and case studies.

The program stakeholders at GRM implementation level have relevant planning and operational capacities to establish, operate and maintain the program GRM. During interviews with local CSOs and PMTs it became apparent that further capacity building efforts will be required to ensure the effectiveness in operating the GRM and realizing its goals and benefits. A capacity building assessment and strengthening reference is provided in Annex 12 to be customized and applied by the PMT/IC addressing the core areas in GRM capacities such as:

- Review and analysis of GRM context
- Assessment of current processes for grievance resolution
- Identification of current institutional strengthen and capacity gaps

Based on the findings of the capacity building assessment it is envisioned that the ICs shall

carry out sufficient workshops at the commencement of projects implementation at PMT and Governorate level. Participants are from PMTs and their Directorates, LGRC, contractors and CSOs dealing with IDPs-returnees and host communities.

A second series of training exercises will be offered after three to six months from starting the implementation of the projects and will focus on the review of reported grievances and respective administration and redress actions made. Periodic (perhaps semi-annual) review sessions can be arranged as part of the mentoring and technical advisement, to ensure compliance by all related stakeholders.

10.14 Awareness and Communication

GRM should be widely publicized by PMTs/ICs and in coordination with local CSOs among stakeholder groups such as the affected IDPs and hosting communities, local government agencies, and civil society organizations CSOs. Lack of knowledge about GRMs results in people not approaching and fully taking advantage of the opportunities that they afford. When not utilized as intended, they will increasingly lose relevance and the validity of the purpose for which they were created. People need to be informed about their options regarding complaints that they may perceive. Criteria for eligibility as regards problem resolution need to be communicated to all stakeholders involved. An effective awareness campaign based on public awareness of the roles and functions of the GRMs should include the following components:

- scope of the project planned construction phases, etc.;
- purposes for which the GRMs can be utilized, e.g., construction-related grievances, land acquisition and compensation-related grievances
- types of grievances not acceptable to the GRMs
- Accessibility and confidentiality of the GRMs
- how complaints can be reported to those GRMs and to whom these complaints should be forwarded and how, e.g., projects billboards, hotlines, phone and facsimile numbers, social media outlets, postal and email addresses, and websites of the GRMs including information that should be included in a complaint
- procedures and time frames for initiating the grievance redress process
- anticipated time frame to achieve resolution
- boundaries and limits of GRMs in handling grievances; and
- roles of different agencies such as project implementers.

Local communities are encouraged to learn their rights under applicable national legislations and the GCFI programme; this is to be raised through community meetings. A variety of methods can be employed to communicate information to the relevant stakeholders: these include displaying of posters in public places such as in government offices, project offices, community centres, local schools and market etc. distributing brochures to; community-based organizations; and utilizing print and electronic media, including radio. Special measure will be developed to both illiterate groups and people with disabilities such as the visually impaired.

ReFAATO/MMC will periodically monitor that public awareness activities are in place and whenever possible, contribute to the understanding of the grievance mechanism, while pointing to LGRC as a neutral local member acting to assure maximum transparency and fairness of the mechanism. CSOs, will play a pivotal role in the monitoring of correct and responsive implementation of the mechanism of responsible implementation entities.

The governor office should also be considered a critically important stakeholder to engage in mechanism implementation and should always be informed.

It is recommended that PMTs/ICs and in cooperation with Local CSOs organize workshops for youth, children and special meetings for women to be facilitated by women only in the projects' neighborhoods to promote the GRM at household level and enable local youth to be part of the awareness campaign through innovation activities. For example, support to local youth to implement creative methods of information dissemination including the reproduction the GRM brochure in a podcast with local dialogue, converting the GRM brochure into Braille print, and producing videos in sign language.

10.15 Monitoring and Evaluation of GRM

The GRM shall be subject to periodical monitoring and evaluation (M&E) by the ReFAATO/MMC in coordination with PMT/IC. Local CSOs and APs are invited to participate in the monitoring and evaluation exercise as well.

The objective of the GRM monitoring and evaluation exercise is to assess whether the GRM is legitimate, accessible, predictable, equitable, and transparent. Definition of these terms is provided in Annex 13.

The characteristics of a good GRM are:

- is known to the public and affected persons (APs),
- has a systematic way of recording and monitoring the progress of resolution of issues,
- is accessible to all APs irrespective of their economic status, literacy level, gender, disabilities, geographical location, etc.,
- includes participation, representation, and consultation of APs in its design, planning and operational processes,
- provides security (both physical and psychological) for APs to participate without fear of intimidation or retribution,
- has respect for the dignity and self-esteem of Aps,
- provides equitable access for APs to information, advice and expertise,
- has a reasonable time frame that prevents grievances from dragging on un-resolved,
- evidences of social and cultural appropriateness of the systems, approaches and methods adopted,
- possesses values, attitudes, and commitment to fairness and justice,
- shows transparency, accountability, and objectivity in conducting grievance redress processes and realizing their outcomes,
- is independent and has a clear governance structure with no external interference with the conduct of grievance redress processes and reaching agreements,

- shows respect for the freedom of APs to opt for alternative grievance redress mechanisms if they so decide,
- compliance with existing GRM systems without undermining them, and
- has flexibility in decision-making processes, considering the unique and diverse character of grievances.

Table 32 provides a generic set of questionnaires that can be addressed and discussed during the GRM monitoring and evaluation exercise.

Table 32. Questionnaire during GRM-M&E

Topic	Questions
Organization	
Organizational Commitment	Do the project's management and staff recognize and value the GRM process as a means of improving project management and enhancing accountability and transparency?
	Is grievance redress integrated into the project's core activities?
	Is grievance redress integrated into staff job descriptions and responsibilities?
	Is it appropriately resourced and monitored?
Principles	
Legitimacy	Does the GRM operate independently of interested parties?
	Is the GRM widely-perceived as independent?
Accessibility	Is the GRM accessible to all stakeholders?
	Are procedures to file grievances and seek action easily understood by project beneficiaries and impacted communities?
	Can grievances be filed anonymously?
	Is the GRM appropriately advertised and communicated to project-affected people?
Predictability	Is the GRM responsive to the needs of all complainants?
	Does the GRM clarify on the types of results it can (and cannot) deliver?
Fairness	Are grievances treated confidentially, assessed impartially, and handled transparently?
Rights Compatibility	Does it restrict access to other GRMs?
	Are the GRMs outcomes consistent with applicable national and international standards?
Transparency	Are the GRM procedures and outcomes transparent enough to meet the public interest concerns at stake?
Capability of Staff	Are there dedicated and trained staff available to handle the GRM?
	Are they given learning opportunities, and do they receive any systematic reviews of their performance?
Processes	
Uptake	Do multiple update channels exist?
	Are complaints acknowledged in writing?

Topic	Questions
Acknowledgement and Follow-up	Are there clear timetable that area publicly available?
Verification, investigation and actions	Is action taken on every grievance?
	Are investigators neutral or do they have stake in the outcome?
Monitoring & Evaluation	Are there indicators to measure grievances monitoring and resolution?
	Is the data being collected, is the data used to make policy and/ or process changes to minimize similar grievances in the future?
Feedback	Does user survey exist to get feedback on the credibility of the process?
	Is there right to appeal? If yes, are GRM users informed about this right?
Analysis	Is there a process/set of indicators to analyze the effectiveness of the GRM?

10.16 Risk Management of the GRM

Infrastructure projects are often stalled because of local community issues that are related to land acquisition, dealing with informal housing, settlers and squatters in public and private buildings, or accessibility to services and utilities. The GRM serves as the safe and objective venue for local community members to echo and pursue their grievances. The costs of ignoring such conflicts—or responding too late—are high. A core characteristic of an effective grievance mechanism is the ability to identify minor community incidents before they escalate into unmanageable disputes. In many instances, the grievance process can provide the opportunity for resolution via independent mediation or alternative dispute resolution, versus a lengthy court proceeding or compliance investigation.

Complaints often leak to media before reaching the right GRM channel and could result in public discomfort and even take political nature. It is recommended to invite the national and local media institutions during the GRM awareness campaign in order to familiarize them with the mechanism and promote its utilization among the public.

In certain location, communities are distant from public sector and its services and there could be a communication gap and mistrust. Complainants might fear retribution by public sector utilities and decline from placing their grievance due to this reason. PMTs shall demonstrate and share publicly grievances and how they are addressed with confidentiality and objectively.

Grievances initiated by women individuals and groups, especially in rural areas, shall be addressed effectively taking into consideration local cultural perspective. The program shall ensure that women protection and empowerment are incorporated into all program communications, plans and activities. In addition, plan will be made by PMT/IC that special women project-consultations and GRM awareness sessions are carried out for women only and managed by women experts from the program.

When linked to existing country institutions i.e., PMTs, the GRM can have lasting impact that continues even once Bank engagement ends. Building and strengthening existing country sys-

tems for managing grievances allows for greater impact, improved sustainability and an increase in potential value to the Borrower and beneficiaries. Simply using existing systems however, does not automatically strengthen them. The goal in this GCFI program is to create stronger, more credible institutions capable of managing risks and conflicts in many different areas.

10.17 Grievance Reporting

All grievance cases, procedures applied, decision made, and actions implemented by the PMTs Directorates/Governorates/Contractors shall be reported in the GRM to the program's stakeholders. The generic template for complaint registration and management, provided as Annex 14, is the main template to record the above-mentioned actions. The template serves as grievance entry and grievance-management record. The template covers in detail the followings:

- Complainant Information
- Complain Registration Number per sector and Governorate
- Type of complainant
- Mode of receiving the grievance
- Location of the problem/issue specified in the complaint:
- Type of problem/grievance
- Short description of the problem
- Short description of the factors causing the problem
- Assessing the severity of the complaint
- Actions taken by the Receiving Office
- Satisfaction of Complainant
- Attachments

Table 33 shows the GRM progress reporting contents, which are subject to adjustment as per the governorate and sector conditions and as per the requirements of ReFAATO/MMC. Pending on the GRM level of automation and programming, reports could be produced in real-time and presented in a monitoring dashboard that is accessed by ReFAATO/MMC. In-addition reports could be issued per sector and/or per governorate on weekly, monthly and quarterly basis. The reporting can also be based on specific requirements by ReFAATO/MMC. For example, monthly report on total number of complaints initiated by women affected by the water supply projects/sector in a specific governorate.

Table 33. GRM Reporting Content

Monthly Report	
Prepared by: PMT/IC	Addressed to: PMT and Governors Copied to: ReFAATO/MMC
Language: Arabic/English	Format: hard and binary copies
Contents:	
<ul style="list-style-type: none"> • monthly sum of data and information based on the GRM Complaint Registration and Management-template, and • the presentation of the monthly accumulative some of complaints and their resolution will be based on project/sector/governorate level 	
Quarterly Report	
Prepared by: PMT/IC	Addressed to: ReFAATO/MMC and Governors
Language: Arabic/English	Format: hard and binary copies
Contents:	
<ul style="list-style-type: none"> • quarterly accumulative sum of data and information based on the GRM monthly report, • summary of main success, challenges and innovation in managing GRM, and • recommendation of needed actions by program-stakeholders 	
Biannual Report	
Prepared by: ReFAATO/MMC	Addressed to: Steering Committee
Language: Arabic/English	Format: hard and binary copies
Contents:	
<ul style="list-style-type: none"> • summary of main GRM findings, • policy recommendation based on field findings at sector and governorate level, • identification of needed regulation at sector level in order to avoid future grievances, and • inclusion of new stakeholders as per sector requirements and the role of SCOs in the GRM. 	

11 References

- Ahmad, S.M., and Al-Hedny, S. 2013. Evaluation of long-term vegetation trends for north-eastern of Iraq: Mosul, Kirkuk and Salah al-Din. *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)*, 5(2), 67-76. e-ISSN: 2319-2380, p-ISSN: 2319-2372.
- CIA World Factbook. 2018. Iraq Demographics Profile 2018. Available at https://www.indexmundi.com/iraq/demographics_profile.html (accessed on 16 Apr. 2018).
- FRD (Library of Congress - Federal Research Division). 2006. Country Profile: Iraq.
- IAU (The Information Analysis Unit). 2009. Salah al-Din Governorate Profile. OCHA (United Nations Unit for Coordination of Humanitarian Affairs). Available at https://reliefweb.int/sites/reliefweb.int/files/resources/0BDD36464B63B98DC12576000033A01F-Full_Report.pdf (accessed on 13 Apr. 2018).
- IAU (The Information Analysis Unit). 2010a. Diyala Governorate Profile. OCHA (United Nations Unit for Coordination of Humanitarian Affairs). Available at https://reliefweb.int/sites/reliefweb.int/files/resources/BCB72FFDD35656D2C12576120034F2A1-Full_Report.pdf (accessed on 13 Apr. 2018).
- IAU (The Information Analysis Unit). 2010b. Anbar Governorate Profile. OCHA (United Nations Unit for Coordination of Humanitarian Affairs). Available at https://reliefweb.int/sites/reliefweb.int/files/resources/FF648724878184ACC12577EB0050C36D-Full_Report.pdf (accessed on 13 Apr. 2018).
- IAU (The Information Analysis Unit). 2010c. Ninewa Governorate Profile. OCHA (United Nations Unit for Coordination of Humanitarian Affairs). Available at https://reliefweb.int/sites/reliefweb.int/files/resources/4859DB127BC8BA3DC12577EB00510F96-Full_Report.pdf (accessed on 5 May 2018).
- IFC (International Finance Corporation -World Bank Group) . 2009. Good Practice Note: Addressing Grievances from Project-Affected Communities. Guidance for Projects and Companies on Designing Grievance Mechanisms. Number 7 / September 2009.
- Iraq EODP (Iraq: Emergency Operation for Development Project - P155732). 2017. Environmental and Social Management Framework (ESMF. SFG2247 REV).
- IRFAD (Iraqi Research Foundation for Analysis and Development). 2014. Iraq Governorate: Ninewa. Available at <http://www.irfad.org/iraq-governorate-ninewa/> (accessed on 13 Apr. 2018).
- JCIA (Japan International Cooperation Agency). 2011. Profile on Environmental and Social Considerations in Iraq.
- JICA and NTC (Japan International Cooperation Agency and NTC International Co., Ltd.). 2016. Data Collection Survey on Water Resource Management and Agriculture Irrigation in the Republic of Iraq. (7R. JR. 16-008).
- KfW (KfW Development bank). 2016. Sustainability Guideline. Assessment of Environmental, Social, and Climate Performance: Principles and Process.
- KfW (KfW Development Bank). Construction Environmental and Social Management Plan (ESMP) Guidance. (Provided by KfW to GCFI bidders on 27 October, 2017)
- LRMP-DOD (Legacy Resource Management Program - Department of Defence). na. Iraq Significant Sites. <https://www.cemml.colostate.edu/cultural/09476/iraq05a.html> (accessed on 13 Apr. 2018).

- Muhaimeed, A. na. Status of Soil Information in Iraq. Available at: <https://www.slideshare.net/FAOoftheUN/status-of-soil-information-in-iraq-by-ahmad-s-muhaimeed> (accessed on 6 May 2018).
- NA. na (Not Available). Governorate of Saladin. Available at <http://investpromo.gov.iq/wp-content/uploads/2013/05/Salahuddin-province-En.pdf> (accessed on 4 Jul. 2018).
- NCCI (NGO Coordination Committee for Iraq). 2016. Diyala Governorate Profile. Available at https://ncciraqbids.com/images/infobygov/NCCI_Diyala_Governorate_Profile.pdf (accessed on 13 Apr. 2018).
- NCCI (NGO Coordination Committee for Iraq). na (not available). Anbar: NCCI Governorate Profile. Available at https://ncciraqbids.com/images/infobygov/NCCI_Anbar_Governorate_Profile.pdf (accessed on 13 Apr. 2018).
- NCCI (NGO Coordination Committee for Iraq).2010. Ninewa: NCCI Governorate Profile. Available at https://ncciraqbids.com/images/infobygov/NCCI_Ninewa_Governorate_Profile.pdf (accessed on 13 Apr. 2018).
- OCHA (United Nations Office for the Coordination of Humanitarian Affairs). 2018. Iraq: Internally displaced people and returnee population by governorate. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/iraq_idps_and_returnees_by_governorate_dtm-iom_round_90_28_february_2018.pdf (accessed on 16 Apr. 2018).
- Trading Economics. 2015. Iraq - Forest area (% of land area). Available at <https://tradingeconomics.com/iraq/forest-area-percent-of-land-area-wb-data.html> (accessed on 3 Jul. 2018).
- WB (World Bank). 2017. The World Bank Environmental and Social Framework. The World Bank Group.
- Wikipedia (The Free Encyclopedia). 2018. Saladin Governorate. https://en.wikipedia.org/wiki/Saladin_Governorate (accessed on 13 Apr. 2018).

12 Annexes

- Annex 1. Environmental and Social Screening Form and UXO/EWR Risk Clearance Checklist
- Annex 2. A Guide for Medical Waste Management Plan (MWMP)
- Annex 3. Generic Construction Environmental and Social Management Plan (ESMP) Guidance
- Annex 4. Rapid E&S Assessment and Specific ESMP Template
- Annex 5. Standard ToR for ESIA
- Annex 6. Terms of Reference (TOR) of the Resettlement Action Plan (RAP)
- Annex 7. Guideline for preparing a Land Acquisition and Compensation Plan (LACP) in the context of the Iraq project
- Annex 8. Requirements for voluntary land donations
- Annex 9. Disclosure Requirements for E&S Instruments for Projects
- Annex 10. Guidance on the Preparation of A Stakeholder Engagement Plan (SEP)
- Annex 11. Detailed Work Processes of the GCFI GRM
- Annex 12. GRM Capacity Building Assessment and Strengthening Reference
- Annex 13. GRM Definition of Terms
- Annex 14. Grievance Registration and Monitoring Form
- Annex 15. List of the ESMF Consultation Workshop Attendees
- Annex 16. Consultation and meeting stakeholders during the GRM preparation

Environmental and Social Screening Form

[This form will be used by PMTs/ICs during the assessment stage of each project for initial screening of environmental and social impacts foreseen during project activities. It aims to facilitate the determination of E&S safeguards instrument based on the GCFl decision matrix designed for this purpose. This initial screening form shall be filled by the environmental staff of PMT/IC for each project. The filled form shall be submitted to ReFAATO/MCC for reviewing and approval.]²

<i>Project Sector</i>	
<i>Project Name</i>	
<i>Project Location</i>	
<i>Project Typology</i>	
<i>Project Description</i>	
<i>Sensitivity of Environmental Receptors</i>	<input type="checkbox"/> Less Sensitive (Urban Areas) <input type="checkbox"/> More Sensitive (Rural Areas) <input type="checkbox"/> Most Sensitive (Rivers and Natural Habitats)

² The italicized text in square brackets is a note to the user providing guidance to use this form. Notes to the user shall be deleted from the form before it is filled

E&S Screening Checklist for GCFI projects

<i>Questions</i>	<i>Answer</i>		<i>If Yes, briefly describe</i>
	<i>Yes</i>	<i>No</i>	
I. Environmental Related Issues			
A. Zoning and Land Use Planning			
Will the project affect land use zoning and planning or conflict with prevalent land use patterns?			
Will the project involve significant land disturbance or site clearance?			
Will the project land be subject to potential encroachment by urban or industrial use or located in an area intended for urban or industrial development?			
B. Utilities and Facilities			
Will the project require the setting up of ancillary production facilities?			
Will the project require significant levels of accommodation or service amenities to support the workforce during construction (e.g., contractor will need more than 20 workers)?			
C. Water and Soil Contamination			
Will the subproject require large amounts of raw materials or construction materials?			
Will the project generate large amounts of residual wastes, construction material waste or cause soil erosion?			
Will the project result in potential soil or water contamination (e.g., from oil, grease and fuel from equipment yards)?			
Will the project lead to contamination of ground and surface waters by herbicides for vegetation control and chemicals (e.g., calcium chloride) for dust control?			
Will the project lead to an increase in			

Questions	Answer		If Yes, briefly describe
	Yes	No	
suspended sediments in streams affected by road cut erosion, decline in water quality and increased sedimentation downstream?			
Will the project involve the use of chemicals or solvents?			
Will the project lead to the destruction of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards?			
Will the project lead to the creation of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors?			
D. Noise and Air Pollution Hazardous Substances			
Will the project increase the levels of harmful air emissions?			
Will the project increase ambient noise levels?			
Will the project involve the storage, handling or transport of hazardous substances?			
E. Fauna and Flora			
Will the project involve the disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes)?			
Will the project lead to the destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development?			
Will the project lead to the disruption/destruction of wildlife through interruption of migratory routes, disturbance of wildlife habitats, and noise-related problems?			
F. Destruction/Disruption of Land and Vegetation			

Questions	Answer		If Yes, briefly describe
	Yes	No	
Will the project lead to unplanned use of the infrastructure being developed?			
Will the project lead to long-term or semi-permanent destruction of soils in cleared areas not suited for agriculture?			
Will the project lead to the interruption of subsoil and overland drainage patterns (in areas of cuts and fills)?			
Will the project lead to landslides, slumps, slips and other mass movements in road cuts?			
Will the project lead to erosion of lands below the roadbed receiving concentrated outflow carried by covered or open drains?			
Will the project lead to long-term or semi-permanent destruction of soils in cleared areas not suited for agriculture?			
Will the project lead to health hazards and interference of plant growth adjacent to roads by dust raised and blown by vehicles?			
G. Cultural Property			
Will the project have an impact on archaeological or historical sites, including historic urban areas?			
Will the project have an impact on religious monuments, structures and/or cemeteries?			
Have Chance Finds procedures been prepared for use in the project?			
H. Expropriation and Social Disturbance			
Will the project involve land expropriation or demolition of existing structures?			
Will the project lead to induced settlements by workers and others causing social and economic disruption?			

Questions	Answer		If Yes, briefly describe
	Yes	No	
Will the project lead to environmental and social disturbance by construction camps?			
II. Site Characteristics			
Is the project located in an area with designated natural reserves?			
Is the project located in an area with unique natural features?			
Is the project located in an area with endangered or conservation worthy ecosystems, fauna or flora?			
Is the project located in an area falling within 500 meters of national forests, protected areas, wilderness areas, wetlands, biodiversity, critical habitats, or sites of historical or cultural importance?			
Is the project located in an area which would create a barrier for the movement of conservation-worthy wildlife or livestock?			
Is the project located close to groundwater sources, surface water bodies, water courses or wetlands?			
Is the project located in an area with designated cultural properties such as archaeological, historical and/or religious sites?			
Is the project in an area with religious monuments, structures and/or cemeteries?			
Is the project in a polluted or contaminated area?			
Is the project located in an area of high visual and landscape quality?			
Is the project located in an area susceptible to landslides or erosion?			

Questions	Answer		If Yes, briefly describe
	Yes	No	
Is the project located in an area of seismic faults?			
Is the project located in a densely populated area?			
Is the project located on prime agricultural land?			
Is the project located in an area of tourist importance?			
Is the project located near a waste dump?			
Does the project have access to potable water?			
Is the project located far (1-2 kms) from accessible roads?			
Is the project located in an area with a wastewater network?			
Is the project located in the urban plan of the city?			
Is the project located outside the land use plan?			
III. Social Aspects			
Will the project include/involve activities in/adjacent to historic building(s) and districts			
Will the project require acquisition of land or temporary / permanent impacts on livelihoods			
Will project activities cause any changes in land use?			
Will the project activities restrict peoples' access to natural resources?			
Will the project causes losses in livelihood opportunities for households?			

Questions	Answer		If Yes, briefly describe
	Yes	No	
Will the project activities affect any resources the people take from the natural environment			
Will the project require any resettlement or compensation of residents including squatters?			
Will there be any risk of accidents during project activities?			
IV. Explosive Remnants Risks			
Will the project have risk of unexploded ordinance (UXO)			
Availability of written confirmation from relevant authorities in the governorates to ensure clearance of Improvised Explosive Devices (IEDs), EWR, and UXOs at projects area?			

Conclusion and Safeguards Instruments Required

The project is classified as a Category _____ project as defined in the GCFI ESMF, and the following safeguards instruments will be prepared based on the GCFI decision matrix selection of E&S Safeguard Instruments:

1. _____
2. _____

Initial E&S Screening completed by PMT/IC staff

Name and Position:	
Date:	
Signature:	

Reviewed by ReFAATO/MMC Environmental Expert

Name and Position:	
Date:	

Signature:	
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UXO/EWR Risk Clearance Checklist

Project Title:

Name of Implementation Consultant (IC):

Reconstruction and rehabilitation Projects may present the risks of explosive war remnants (EWR) concealed in and under rubble (both unexploded ordnance - UXO, and deliberately planted explosives). Any repairs or reconstruction financed by KfW will only apply to those areas that have been declared safe of EWRs. Confirmation that project locations have been cleared of landmines, EWR, IEDs and UXOs will be sought from the relevant authorities and stakeholders. No Project activities will be undertaken without this assurance. The declaration of absence of EWR will be a criterion to allow any GCFI-financed works to proceed.

Was there armed fighting in the Project area within the last 20 years?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Has the area been used as ammunition depots, training camp by military or armed forces? Give details:	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Was there any landmine/UXO/EWR accident within the Project area within the last 20 years? Give details:	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Has the Project area been cleared for landmine/UXO/EWR in the past? When?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Are there any other elements indicating presence of landmine/UXO/EWR in the area? Give details:	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Mention the source of above information: <input type="checkbox"/> community <input type="checkbox"/> military <input type="checkbox"/> authorities <input type="checkbox"/> NGO <input type="checkbox"/> Documentation: Give details:		
Can the Implementation Partner declare to the best of his knowledge that the area considered as safe of mines before construction works?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Can the Implementation Partner take liability in case of landmine/UXO/EWR accident?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Does the Implementation Partner request a landmine/UXO/EWR clearance before the Project can start? If yes, give information on the area to be cleared: Current use: Surface: Exact location: (attach map and GPS data)	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Date, Name: _____

Medical Waste Management Plan (MWMP) Guidance³

Improper management and disposal of medical waste poses a risk to the environment and human health. Thus, it is important to develop a management plan commensurate with the amounts and risks related to the medical wastes generated at the Project site.

The Medical Waste Management Plan (MWMP) shall be embedded and linked to the overall Environmental and Social management Plan, waste management plans and training plans, if existent.

*The text in **italics and grey** highlighted include instructions for the authors of the MWMP (PMT/IC).*

³ This document is based on a Medical Waste Management Plan by IDA (Jan 2017): Yemen Emergency Health And Nutrition Project - Medical Waste Management Plan (SFG2908)

Introduction

The Project Management Team (PMT) <Name of the PMT> is planning to operate a <Name intervention, e.g. XYZ health facility in XYZ town> (“the Project”). The Project is located in <Name of location/ village/ country>.

This document represents the Medical Waste Management Plan (MWMP) for the Project.

Background and Objective of this MWMP

Improper management of medical waste poses a significant risk to patients, health-care workers, the community and the environment. Thus, proper management of medical waste is an important part of the overall management of Environmental, Health and Safety (EHS) risks and impacts of the Project.

According to the World Health Organization (WHO) medical waste refers to the entirety of waste generated by health care and medical research facilities and laboratories (see also Appendix I). According to this definition medical waste includes but is not limited to:

- **infectious waste:** waste contaminated with blood and other bodily fluids (e.g. from discarded diagnostic samples), cultures and stocks of infectious agents from laboratory work (e.g. waste from autopsies and infected animals from laboratories), or waste from patients in isolation wards and equipment (e.g. swabs, bandages and disposable medical devices);
- **pathological waste:** human tissues, organs or fluids, body parts and contaminated animal carcasses;
- **sharps:** syringes, needles, disposable scalpels and blades, etc.;
- **chemicals:** for example, solvents used for laboratory preparations, disinfectants, and heavy metals contained in medical devices (e.g. mercury in broken thermometers) and batteries;
- **pharmaceuticals:** expired, unused and contaminated drugs and vaccines;
- **genotoxic waste:** highly hazardous, mutagenic, teratogenic¹ or carcinogenic, such as cytotoxic drugs used in cancer treatment and their metabolites;
- **radioactive waste:** such as products contaminated by radionuclides including radioactive diagnostic material or radiotherapeutic materials; and
- **non-hazardous or general waste:** waste that does not pose any particular biological, chemical, radioactive or physical hazard.

Kitchen waste and general waste from patients and visitors is not classified as medical waste.

This MWMP’s overall objective is to prevent and/or mitigate the negative EHS effects of medical waste. Medical Waste must be managed in a safe manner to prevent the spread of infection and reduce the exposure of health workers, patients and the public to the risks from medical waste. The plan includes advocacy for good practices in medical waste management and is to be used by health, sanitary and cleaning workers who manage medical waste.

Project Description

Include a short Project description based on available documentation and site observations (in alignment with the overall Project Environmental and Social Management Plan (ESMP), if existent) including Project Context and Project Activities of the Health Facility.

Medical Waste Management Plan

Waste Minimization, Reuse, and Recycling

Waste reduction, reuse and recycling are the first steps that should always be considered as a first step. Facilities should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety considerations, including:

- Source reduction measures:
 - Consider options for product / material substitution to avoid products containing hazardous materials that require the product to be disposed as hazardous or special waste (e.g. mercury or aerosol cans), and preferring products with less packaging or products that weigh less than comparable products that perform the same function
 - Use of physical rather than chemical cleaning practices (e.g. using microfiber mops and cloths), where such practices do not affect disinfection and meet relevant standards for hygiene and patient safety.
- Waste toxicity reduction measures:
 - Consider options for product / material substitution for equipment containing mercury or other hazardous chemicals; products that may become hazardous waste when disposed; products made of polyvinyl chloride (PVC6); halogenated compounds; products that off-gas volatile organic compounds (VOCs), or products that contain persistent, bio-accumulative and
 - toxic (PBT) compounds; products that contain substances which are carcinogenic, mutagenic or reproductive toxins (CMR)
 - Use of efficient stock management practices and monitoring (e.g. for chemical and pharmaceutical stocks), including:
 - Small / frequent orders for products that spoil quickly and strict monitoring of expiry dates
 - Complete use of old product before new stock is used
- Reuse of equipment following sterilization and disinfection

Storage of Consumable Materials and Vaccinations

- Delete this Chapter if not applicable -

Medical products need storage in an access-controlled environment. It is important to identify products that are at risk of theft or abuse or have the potential for addiction, and to provide increased security for those items. This includes products that are in high demand or have the potential for resale (black market value).

Vaccine Storage and Handling

Exposure of vaccines to temperatures outside the recommended ranges can decrease their potency and reduce the effectiveness and protection they provide. Storage and handling errors can cost thousands of dollars in wasted vaccine and revaccination and create medical waste. Vaccine management, including proper storage and handling procedures, is the basis on which good immunization practices are built. Vaccines must be stored properly from the time they are manufactured until they are administered. Assuring vaccine quality and maintaining the cold chain is a shared responsibility among manufacturers, distributors, public health staff, and health-care providers. A proper cold chain is a temperature-controlled supply chain that includes all equipment and procedures used in the transport and storage and handling of vaccines from the time of manufacture to

administration of the vaccine. By following a few simple steps and implementing best storage and handling practices, providers can ensure that patients will get the full benefit of vaccines they receive.

Storage and Handling Plans

Every facility should have detailed written protocols for routine and emergency vaccine storage and handling and they should be updated annually. These policies and procedures should be available in writing as a reference for all staff members and easily accessible. A routine storage and handling plan provide guidelines for daily activities, such as:

- Ordering and accepting vaccine deliveries
- Storing and handling vaccines
- Managing inventory
- Managing potentially compromised vaccines

Every facility should also have an emergency vaccine retrieval and storage plan. The plan should identify a back-up location where the vaccines can be stored. Considerations when choosing this site include appropriate storage units, temperature monitoring capability, and a back-up generator that can maintain power to the vaccine storage units. Potential back-up locations might include a local hospital, pharmacy, long-term care facility, or the Red Cross. There should be an adequate supply of packing materials and portable refrigerators and freezers or qualified containers and packs on hand. Power outages or natural disasters are not the only events that can compromise vaccine. Forgotten vials of vaccine left out on the counter or doses of vaccine stored at improper temperatures due to a storage unit failure are other examples of how vaccines can be potentially compromised. Contact the local or state health department immunization program, vaccine manufacturer(s), or both for appropriate actions or guidelines that should be followed for all potentially compromised vaccines. Do not discard vaccines unless directed to by the immunization program and/or the manufacturer.

Measures to Prevent / Reduce Exposure to Infections / Diseases

Health care providers and personnel may be exposed to general infections, blood-borne pathogens, and other potential infectious materials (OPIM) during care and treatment, as well as during collection, handling, treatment, and disposal of health care waste. The following measures are recommended to reduce the risk of transferring infectious diseases to health care providers:

- Formulate an exposure control plan for blood-borne pathogens;
- Provide staff members and visitors with information on infection control policies and procedures;
- Establish Universal / Standard Precautions to treat all blood and other potentially infectious materials with appropriate precautions, including:
- Immunization for staff members as necessary (e.g. vaccination for hepatitis B virus)
- Use of gloves, masks, and gowns
- Adequate facilities for hand washing. Hand washing is the single most important procedure for preventing infections (e.g. nosocomial and community). Hand washing should involve use of soap / detergent, rubbing to cause friction, and placing hands under running water. Washings of hands should be undertaken before and after direct patient contacts and contact with patient blood, body fluids, secretions, excretions, or contact with equipment or articles contaminated by patients. Washing of hands should also be undertaken before and after work shifts; eating; smoking;

use of personal protective equipment (PPE); and use of bathrooms. If hand washing is not possible, appropriate antiseptic hand cleanser and clean cloths / antiseptic towelettes should be provided. Hands should then be washed with soap and running water as soon as practical

- Procedures and facilities for handling dirty linen and contaminated clothing, and preparing and handling food
- Appropriate cleaning and waste disposal practices for the health care workplace
- The following recommendations should be implemented when using and handling of needles / sharps:
 - Use safer needle devices and needleless devices to decrease needle stick or other sharps exposures.
 - Do not bend, recap, or remove contaminated needles and other sharps unless such an act is required by a specific procedure or has no feasible alternative
 - Do not shear or break contaminated sharps
 - Have needle containers available near areas where needles may be found
 - Discard contaminated sharps immediately or as soon as feasible into appropriate containers
 - Used disposable razors should be considered contaminated waste and disposed of in appropriate sharps containers
- Establish policies to exclude animals from facility property.

General Waste Management

Waste Segregation Strategies

At the point of generation, waste should be identified and segregated (*refer to general Waste Management Plan for the Project if available*). Non-hazardous waste, such as paper and cardboard, glass, aluminium and plastic, should be collected separately and recycled. Food waste should be segregated and composted. Infectious and / or hazardous wastes should be identified and segregated according to its category using a color-coded system. If different types of waste are mixed accidentally, waste should be treated as hazardous. Other segregation considerations include the following:

- Avoid mixing general health care waste with hazardous health care waste to reduce disposal costs;
- Segregate waste containing mercury for special disposal.
- Management of mercury containing products and associated waste should be conducted as part of a plan involving specific personnel training in segregation and clean up procedures;
- Segregate waste with a high content of heavy metals (e.g. cadmium, thallium, arsenic, lead) to avoid entry into wastewater streams;
- Separate residual chemicals from containers and remove to proper disposal containers to reduce generation of contaminated wastewater. Different types of hazardous chemicals should not be mixed;
- Establish procedures and mechanisms to provide for separate collection of urine, feces, blood, vomits, and other wastes from patients treated with genotoxic drugs. Such wastes are hazardous and should be treated accordingly
- Aerosol cans and other gas containers should be segregated to avoid disposal via incineration and related explosion hazard;
- Segregate health care products containing PVC to avoid disposal via incineration or in landfills

On-site Handling, Collection, Transport and Storage

Dealing and handling waste on the Project site should follow the following considerations:

- Seal and replace waste bags and containers when they are approximately three quarters
- Full bags and containers should be replaced immediately;
- Identify and label waste bags and containers properly prior to removal;
- Transport waste to storage areas on designated trolleys / carts, which should be cleaned and disinfected regularly;
- Waste storage areas should be located within the facility and sized to the quantities of waste generated, with the following design considerations:
 - Hard, impermeable floor with drainage, and designed for cleaning / disinfection with available water supply
 - Secured by locks with restricted access
 - Designed for access and regular cleaning by authorized cleaning staff and vehicles
 - Protected from sun, and inaccessible to animals / rodents
 - Equipped with appropriate lighting and ventilation
 - Segregated from food supplies and preparation areas
 - Equipped with supplies of protective clothing, and spare bags / containers
- Store mercury separately in sealed and impermeable containers in a secure location;
- Store cytotoxic waste separately from other waste in a secure location;
- Store radioactive waste in containers to limit dispersion, and secure behind lead shields.

Special Considerations for Medical Waste

Medical waste poses a special risk to the personnel handling it. Thus, special considerations need to be considered. An overview of medical waste types and handling and disposing rules are provided in Appendix II.

Handling Safety Measures

Personnel handling waste will follow the following safety measures:

- Never use hands to compress waste into containers
- Hold plastic bags at the top
- Keep bags from touching or brushing against the body while lifting or during transport
- All personnel handling infectious medical waste shall wear gloves and additional protective medical clothing and personal protective equipment (PPE) appropriate to the level of risk they encounter and shall remove any protective medical clothing used prior to leaving the work area and to place it in a designated area or container.
- Wear heavy-duty or utility gloves when handling and transporting solid wastes.
- Wearing glasses if you are working with material that may splash into your face or eyes
- When performing procedures where splashing is not expected, gloves are the minimum PPE that may be worn;
- Dispose of solid wastes by placing them in a plastic or galvanized metal container with a tight-fitting cover. Never recap needles after use.
- Collect the waste containers on a regular basis and transport the burnable ones to the incinerator or area for burning.

- If incineration is not available or waste is non-burnable, bury it.
- Remove utility gloves (wash daily or when visibly soiled and dry).
- Wash and dry hands or use an antiseptic hand rub as described above.
- Disposing of waste into designated containers as soon as it is generated
- Wearing boots, overalls, glasses and gloves when disposing of waste
- Using adequate tools to avoid contact with waste (brush, shovel)
- Do not submit protective medical clothing and PPE for laundering unless sterilized;

Segregation, Collection, and Transport

A programmed routine for biomedical waste collection should be established as part of the medical waste management plan. Waste should be separated into categories and placed in designated containers (i.e., covered buckets) as soon as it is generated in the treatment room or department. Health care workers are responsible for appropriately disposing of the waste. The number of places where patients and visitors can dispose of waste should be minimized (e.g. using designated containers in communal areas). WHO recommends that small amounts of chemicals can be collected with infectious waste.

Large amounts of hazardous chemicals should be packed in chemical resistant containers and be sent to specialized treatment facilities (if available).

Waste buckets should be transported with their lids securely in place to prevent spillage. When many containers need to be transported, a cart or trolley should be used to prevent back injury.

Storage and Packaging

The following general guidelines apply to typical medical waste storage, transfer, and collection areas:

- A temporary waste storage area, inside the waste zone, should be set aside to store soft waste until it can be picked-up or treated. Storage of medical waste should be for the minimum possible time, 24-48 hours in hot countries, 48-72 hours for cold countries (WHO).
- Areas used to store medical/infectious waste should be durable, easily cleanable, impermeable to liquids, and protected from vermin and other potential mechanisms that might spread infectious agents. Biomedical waste other than sharps and bulk liquids must be packaged in sealed in bags which are leak-proof and rip-resistant.
- Sharps shall be placed in rigid leak and puncture resistant containers.
- Bulk liquids to be transported off-site shall, in addition to the above requirements, be placed in rigid containers.
- The manner of storage should maintain the integrity of the containers, prevent leakage of waste from the container, provide protection from the weather, and maintain the waste in a non-pu-trescent, odourless state (this may require refrigeration).
- Storage areas should have adequate ventilation systems.
- Pathological waste stored anywhere for more than 24 hours must be refrigerated. Storage of bio-medical wastes may need to be stored at the facility of origin until a large enough quantity is accumulated to warrant on-site treatment, or until transport to an offsite treatment facility is scheduled.
- Access to the storage facility should be securely controlled and limited. Due to the hazardous

nature of some medical wastes, appropriate methods of storing waste will help to prevent accidents and infections. Storage locations should be accessible, exclusive, secure, hygienic and sanitary, located as far as possible from patient treatment areas. Storage locations should be integrated with the physical and architectural infrastructure of the healthcare facility.

Transport and Disposal to External Facilities

Offsite transport of hazardous waste should be subject to national regulations. If there are none, then the 'Recommendations on the transport of dangerous goods' published by the UN⁴ may be referred to. Certain recommendations should be followed by the sanitary workers and cleaners:

- Collection of medical waste should be from key sites (e.g. within nursing stations, mobile and fixed units), followed by transfer to the designated point(s) for segregation and/or treatment
- Waste should be collected daily at the same time (or as frequently as required) and transported to the designated central storage/treatment site.
- No bags should be removed unless they are labelled with their point of production (health unit/centre) and contents.
- Bags or containers should be replaced immediately with new ones of the same type.
- There should be enough buckets provided to ensure an appropriate number of clean buckets in rotation. Buckets should be washed and disinfected before reuse.
- The waste should be placed in rigid or semi-rigid and leak-proof containers.
- Transport waste destined for off-site facilities according to the guidelines for transport of hazardous wastes / dangerous goods in the World Bank/ IFC General EHS Guidelines⁵; Accordingly, the following considerations shall be followed:
 - Proper labelling of containers, including the identify and quantity of the contents, hazards, and shipper contact information
 - Providing a shipping document (e.g. shipping manifest) that describes the contents of the load and its associated hazards in addition to the labelling of the containers. The shipping document should establish a chain-of-custody using multiple signed copies to show that the waste was properly shipped, transported and received by the recycling or treatment/disposal facility
 - Ensuring that the volume, nature, integrity and protection of packaging and containers used for
 - transport is appropriate for the type and quantity of hazardous material and modes of transport involved
 - Ensuring adequate transport vehicle specifications
 - Training employees involved in the transportation of hazardous materials regarding proper shipping procedures and emergency procedures
 - Using labelling and placarding (external signs on transport vehicles), as required
 - Providing the necessary means for emergency response on call 24 hours/day
- Transport packaging for infectious waste should include an inner, watertight layer of metal or plastic with a leak-proof seal. Outer packaging should be of adequate strength and capacity for the specific type and volume of waste;
- Packaging containers for sharps should be puncture-proof;

⁴ https://www.unece.org/trans/danger/publi/unrec/rev19/19files_e.html

⁵ http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

- Transport vehicles should be dedicated to waste and the vehicle compartments carrying waste sealed.

On-Site Disposal

- Delete this Chapter if not applicable -

In facilities that have a waste zone, this is the final disposal site of the medical waste. A fully functional waste zone should have the following components:

- An incinerator or burner for treatment of soft waste.
- An ash pit for disposal of residues from the incinerator or burner and a covered pit with a hatch lid.
- A sharps pit for disposal of sharps containers. A sealed, covered pit with a 1m length of pipe incorporated in the top to prevent access to the contents.
- An organics pit for disposal of human tissue and other biological waste.
- An infiltration facility or sewer for the disposal of liquids.

The waste zone should be kept locked at all times. The waste manager has the responsibility for its correct management.

It should be mentioned that properly designed and operated sanitary landfills will be protect against air and groundwater contamination. Disposal of waste into open dumps is not considered good practice and should be avoided. Pre-treatment of waste prior to land disposal may involve encapsulation (filling containers with waste and an immobilizing material and sealing the containers).

Special Considerations for Liquid Contaminated Wastes

Liquid contaminated waste (e.g. human tissue, blood, feces, urine and other body fluids) requires special handling, as it may pose an infectious risk to healthcare workers with contact or handle the waste. Steps for the disposal of liquid contaminated wastes are the following:

- Wear PPE (utility gloves, protective eyewear and plastic apron)
- Carefully pour wastes down a utility sink drain or into a flushable toilet and rinse the toilet or sink carefully and thoroughly with water to remove residual wastes. Avoid splashing.
- If a sewage system doesn't exist, dispose of liquids in a deep, covered hole, not into open drains. This should be located at a safe distance from water sources.
- Decontaminate specimen containers by placing them in a 0.5% chlorine solution for 10 minutes before washing them.
- Remove utility gloves (wash daily or when visibly soiled and dry).
- Wash and dry hands or use an antiseptic hand rub as described above.

Acids and alkalis should be diluted; pH neutralized and disposed of to the sewer with water. Neutralization can be done with lime, which is cheap and effective.

In cases where wastewater is not discharged to sanitary sewage systems, HCF operators should ensure that wastewater receives on-site primary and secondary treatment, in addition to chlorine disinfection. Techniques for treating wastewater in this sector include source segregation and pre-treatment for removal / recovery of specific contaminants such as radio isotopes, mercury, etc.;

skimmers or oil water separators for separation of floatable solids; filtration for separation of filterable solids; flow and load equalization; sedimentation for suspended solids reduction using clarifiers; biological treatment, typically aerobic treatment, for reduction of soluble organic matter (BOD); biological or chemical nutrient removal for reduction in nitrogen and phosphorus; chlorination of effluent when disinfection is required; dewatering and disposal of residuals as hazardous medical / infectious waste.

Additional engineering controls may be required for (i) removal of active ingredients (antibiotics and miscellaneous pharmaceutical products, among other hazardous constituents), and (ii) containment and treatment of volatile constituents and aerosols stripped from various unit operations in the wastewater treatment system.

Wastewater generated from use of wet scrubbers to treat air emissions should be treated through chemical neutralization, flocculation, and sludge settling. Sludge should be considered hazardous, and may be treated off-site in a hazardous waste facility, or encapsulated in drums with mortar and landfilled. Sludge treatment should include anaerobic digestion to ensure destruction of helminths and pathogens. Alternatively, it can be dried in drying beds before incineration with solid infectious wastes.

Cholera Epidemic: In case of a cholera epidemic, hospital sewage must also be treated and disinfected. *Vibrio cholerae*, the causative agent of cholera, is easily killed and does not require use of strong disinfectants. Buckets containing stools from patients with acute diarrhoea may be disinfected by the addition of chlorine oxide powder or dehydrated lime oxide (WHO 1999).

The most contaminated waste water will come from the mortuary, showers, laundry, and kitchen washing area. Waste water from this area must, therefore, be disposed of in soak pits possibly after first going through grease traps (so that the soak pit does not become clogged). Soakaways must be located at least 30 meters from any groundwater source and the bottom of any soakaway pit is at least 1.5 meters above the water tables.

Incineration

- Delete this Chapter if not applicable -

Incineration is a high-temperature process that reduces the volume and weight of waste. This process is usually selected to treat waste that cannot be recycled, reused or disposed of in a sanitary landfill or dumpsite. Medical waste produced under this project will be incinerated at health facilities that are equipped with incinerators. In facilities with no incinerators, wastes will be properly collected and safely transported to bigger facilities with incinerators.

Types of Incinerators

Incinerators can range from extremely sophisticated, high-temperature ones to very basic units that operate at much lower temperatures. All types of incinerators, if operated properly, eliminate micro-organisms from waste and reduce the waste to ashes. Four basic types of incinerators are used for treating waste:

- a) Double-chamber, high-temperature incinerators are designed to burn infectious waste.
- b) Single-chamber, high-temperature incinerators are less expensive and are used when double chamber incinerators are not affordable.
- c) Rotary kilns operate at high temperatures and are used for destroying cytotoxic substances and heat-resistant chemicals.
- d) Drum or brick (clay) incinerators operate at lower temperatures and are less effective, but can be made locally using readily available materials.

Simple Drum Incinerator for Waste Disposal⁶

Simple drum incinerator is the best practice for biomedical waste treatment for healthcare facilities with limited resources and where high-temperature incinerators are not affordable, waste may be incinerated in a drum incinerator, a drum incinerator is the simplest form of single chamber incinerator. It can be made inexpensively and is better than open burning.

Steps for building & using simple drum incinerator are the following:

- Where possible, select a site downwind from the clinic.
- Build a simple incinerator using local materials (mud or stone) or a used oil drum (e.g. a 55-gallon drum). The size depends on the amount of daily waste collected.
- Collect all waste containers and locate them next to the incinerator for easy handling during operation.
- Make sure the incinerator has:
 - Sufficient air inlets underneath for good combustion
 - Loosely placed fire bars to allow for expansion
 - An adequate opening for adding fresh refuse and for removal of ashes
 - A long enough chimney to allow for a good draft and evacuation of smoke
- Place the drum on hardened earth or a concrete base.
- Burn all combustible waste, such as paper and cardboard, as well as used dressings and other contaminated wastes. If the waste or refuse is wet, add kerosene so that a hot fire burns all the waste. Ash from incinerated material can be treated as non-contaminated waste.
- Ashes should always be removed from the incinerator PRIOR to operation; otherwise the efficiency of combustion will be compromised.
- It is recommended to install an ashtray under the grate to catch the ashes.
- Pull out the ashtray and grate out and carefully clean with the brush and ash shovel.
- Dispose of the ash directly to the ash pit.
- Any remaining ashes inside the chambers should be removed with a small, long handled brush and the ash shovel, transferred to a bucket and disposed of in the ash pit.

Open Burning

Open is not recommended because it is dangerous, unsightly and the wind will scatter the waste. If open burning must be done, burn in a small, designated area, transport waste to the site just before burning and remain with the fire until it is out.

Types of Waste That Should Not Be Incinerated

While it is possible to incinerate soft waste, the below items SHOULD NOT be incinerated:

- Pressurized gas containers (aerosol cans)
- Large amounts of reactive chemical waste
- Silver salts and photographic or radiographic wastes
- Plastic containing polyvinyl chloride (blood bags, IV tubing or disposable syringes)
- Waste with high mercury or cadmium content, such as broken thermometers, used batteries and lead-lined wooden panels

⁶ See also Guidelines on How to Construct, Use, and Maintain a Waste Disposal Unit. WHO, 2005, and De Montfort Medical Waste Incinerator at <http://www.who.int/management/quality/Waste/en/index2.html>

- Ampoules or vials, as molten glass will cause the grate to block up and vials can explode.
- Bottles of chemicals and reagents due to risk of explosion and formation of toxic gases.
- Needles due to the risk of needle stick injury from the metal ash.
- Expired drugs.
- Kitchen waste as this is wet, does not burn and will lower the efficiency.

Solid wastes that should not be incinerated will be packaged, transported to and disposed of in Government recognized landfill.

Burying Waste

- Delete this Chapter if not applicable -

Only contaminated and hazardous waste needs to be buried. In healthcare facilities with limited resources, safe burial of wastes on or near the facility may be the only option available for waste disposal. To limit health risks and environmental pollution, some basic rules are:

- Access to the disposal site should be restricted (Build a fence around the site to keep animals and children away).
- The burial site should be lined with a material of low permeability (e.g. clay), if available.
- Select a site at least 50 meters (164 feet) away from any water source to prevent contamination of the water table. The site should have proper drainage, be located downhill from any wells, free of standing water and not in an area that flood.
- Large quantities (over 1 kg) of chemical (liquid) wastes should not be buried at the same time; burial should be spread over several days. Safe on-site burial is practical for only limited periods of time (1-2 years), and for relatively small quantities of waste. During the interval, staff should continue to look for a better, permanent method for waste disposal.

The following are the key steps for burying waste.

- Find an appropriate location.
- Dig a pit 1 meter (3 feet) square and 2 meters (6 feet) deep. The bottom of the pit should be 2 meters (6 feet) above the water table.
- Dispose of the contaminated waste in the pit and cover the waste with 10-15 cm (4-6 inches) of dirt each day. The final layer of dirt should be 50-60 cm (20-24 inches) and compacted to prevent odors and attraction of insects, and to keep animals from digging up the buried waste. Depending on the volume of waste, this pit should last 30 to 60 days.

Roles and Responsibilities

Even though all staff is responsible for managing waste, to ensure optimal waste management, the following roles and responsibilities are defined and designated in alignment with the overall Environmental and Social Management Plan (ESMP) and the site specific waste management plan if available.

- A lead responsible person for handling medical waste is being designated (the “Medical Waste Manager”). This person has the overall oversight and responsibility for the medical waste handling at site. He/she will lead on the delivery of training to the staff and the monitoring activities. He/she will be supported by the overall health facility management.
- In addition, there will be key personnel engaged in waste management activities are defined during all phases (i.e. Segregation, Storage and Packaging, Transportation and disposal).

<Please include names and positions in this section of the designated personnel.>

Awareness Raising & Capacity Building

Health care staff should be trained and aware of good practices and procedures of waste management under this plan. Such practices and procedures should be disseminated to the health care units/facilities through the following activities:

- The Medical Waste Manager will be responsible to train other health care staff on the management of generated waste on a regular basis. A training schedule will be developed and shared with the relevant personnel.
- Printing leaflets and booklets of good practices/procedures for waste management and disseminate these materials to the health units/facilities with medicine and vaccination.
- If needed, recruiting staff/consultants whose task is to train health care staff on managing wastes generated from facilities and units supported under this project.

<Make reference to overall training plan if existent.>

Monitoring

Monitoring is required to follow-up on decisions made to intervene in various activities of medical waste management in order to protect human health and the environment. This can be achieved through periodic internal and external processes of monitoring and evaluation on a continuous basis, at all institutional levels.

Monitoring Objectives

The objective of the monitoring is to establish appropriate criteria to address potential negative impacts of MWM and to ensure that unforeseen impacts are detected, and the mitigation measures implemented at an early stage. Specific objectives of the monitoring plan are to:

- ensure that any additional impacts are addressed appropriately;
- check the effectiveness of the recommended mitigation measures;
- ensure that the proposed mitigation measures are appropriate;
- demonstrate that medical waste management is being implemented according to plan and existing regulatory procedures; and
- provide feedback to implementing agencies in order to make modifications to the operational activities where necessary.

Monitoring Arrangements

<Provide further details on how and through which channels monitoring will be conducted on medical waste handling.>

Monitoring Indicators

Considering the type of interventions implemented by this project which are anticipated to have limited, site specific impacts, the following will be used to monitor progress in implementing the medical waste management plan:

- Roles, Responsibilities and Resources

- Existence of records on waste generation; and
- Existence of mechanisms for proper and safe medical waste management & disposal.

Appendix III includes a questionnaire for monitoring medical waste management.

Appendix I – WHO: Health Care Waste Fact Sheet



HEALTH-CARE WASTE

Fact sheet N° 253
Updated November 2015

Key facts

- Of the total amount of waste generated by health-care activities, about 85% is general, non-hazardous waste.
 - The remaining 15% is considered hazardous material that may be infectious, toxic or radioactive.
 - Every year an estimated 16 billion injections are administered worldwide, but not all of the needles and syringes are properly disposed of afterwards.
 - Health-care waste contains potentially harmful microorganisms, which can infect hospital patients, health workers and the general public.
 - Health-care waste in some circumstances is incinerated, and dioxins, furans and other toxic air pollutants may be produced as emissions.
-

Health-care activities protect and restore health and save lives. But what about the waste and by-products they generate?

Of the total amount of waste generated by health-care activities, about 85% is general, non-hazardous waste comparable to domestic waste. The remaining 15% is considered hazardous material that may be infectious, toxic or radioactive.

Types of waste

Waste and by-products cover a diverse range of materials, as the following list illustrates:

- **infectious waste:** waste contaminated with blood and other bodily fluids (e.g. from discarded diagnostic samples), cultures and stocks of infectious agents from laboratory work (e.g. waste from autopsies and infected animals from laboratories), or waste from patients in isolation wards and equipment (e.g. swabs, bandages and disposable medical devices);
 - **pathological waste:** human tissues, organs or fluids, body parts and contaminated animal carcasses;
 - **sharps:** syringes, needles, disposable scalpels and blades, etc.;
 - **chemicals:** for example, solvents used for laboratory preparations, disinfectants, and heavy metals contained in medical devices (e.g. mercury in broken thermometers) and batteries;
 - **pharmaceuticals:** expired, unused and contaminated drugs and vaccines;
 - **genotoxic waste:** highly hazardous, mutagenic, teratogenic¹ or carcinogenic, such as cytotoxic drugs used in cancer treatment and their metabolites;
-

- **radioactive waste:** such as products contaminated by radionuclides including radioactive diagnostic material or radiotherapeutic materials; and
- **non-hazardous or general waste:** waste that does not pose any particular biological, chemical, radioactive or physical hazard.

The major sources of health-care waste are:

- hospitals and other health facilities
- laboratories and research centres
- mortuary and autopsy centres
- animal research and testing laboratories
- blood banks and collection services
- nursing homes for the elderly

High-income countries generate on average up to 0.5 kg of hazardous waste per bed per day; while low-income countries generate on average 0.2 kg. However, health-care waste is often not separated into hazardous or non-hazardous wastes in low-income countries making the real quantity of hazardous waste much higher.

Health risks

Health-care waste contains potentially harmful microorganisms which can infect hospital patients, health workers and the general public. Other potential infectious risks may include the spread of drug-resistant microorganisms from health facilities into the environment.

Health risks associated with waste and by-products also include:

- radiation burns;
- sharps-inflicted injuries;
- poisoning and pollution through the release of pharmaceutical products, in particular, antibiotics and cytotoxic drugs; and
- poisoning and pollution through waste water; and by toxic elements or compounds such as mercury or dioxins that are released during incineration.

Sharps-related

Worldwide, an estimated 16 billion injections are administered every year. Not all needles and syringes are disposed of safely, creating a risk of injury and infection and opportunities for reuse.

Injections with contaminated needles and syringes in low- and middle-income countries have reduced in recent years, partly due to efforts to reduce reuse of injection devices. Despite this progress, in 2010, unsafe injections were still responsible for as many as 33 800 new HIV infections, 1.7 million hepatitis B infections and 315 000 hepatitis C infections¹.

A person who experiences one needle stick injury from a needle used on an infected source patient has risks of 30%, 1.8%, and 0.3% respectively of becoming infected with HBV, HCV and HIV.

Additional hazards occur from scavenging at waste disposal sites and during the manual sorting of hazardous waste from health-care facilities. These practices are common in many regions of the world, especially in low- and middle-income countries. The waste handlers are at immediate risk of needle-stick injuries and exposure to toxic or infectious materials.

In 2015, a joint WHO/UNICEF assessment found that just over half (58%) of sampled facilities from 24 countries had adequate systems in place for the safe disposal of health care waste.

Environmental Impact

Treatment and disposal of healthcare waste may pose health risks indirectly through the release of pathogens and toxic pollutants into the environment.

- Landfills can contaminate drinking-water if they are not properly constructed. Occupational risks exist at disposal facilities that are not well designed, run, or maintained.
- Incineration of waste has been widely practised, but inadequate incineration or the incineration of unsuitable materials results in the release of pollutants into the air and of ash residue. Incinerated materials containing chlorine can generate dioxins and furans, which are human carcinogens and have been associated with a range of adverse health effects. Incineration of heavy metals or materials with high metal content (in particular lead, mercury and cadmium) can lead to the spread of toxic metals in the environment.
- Only modern incinerators operating at 850-1100 °C and fitted with special gas-cleaning equipment are able to comply with the international emission standards for dioxins and furans.

Alternatives to incineration are now available, such as autoclaving, microwaving, steam treatment integrated with internal mixing, and chemical treatment.

Waste management: reasons for failure

Lack of awareness about the health hazards related to health-care waste, inadequate training in proper waste management, absence of waste management and disposal systems, insufficient financial and human resources and the low priority given to the topic are the most common problems connected with health-care waste. Many countries either do not have appropriate regulations, or do not enforce them.

The way forward

The management of health-care waste requires increased attention and diligence to avoid the substantial disease burden associated with poor practice, including exposure to infectious agents and toxic substances.

Key elements in improving health-care waste management are:

- building a comprehensive system, addressing responsibilities, resource allocation, handling and disposal. This is a long-term process, sustained by gradual improvements;
- raising awareness of the risks related to health-care waste, and of safe practices; and
- selecting safe and environmentally-friendly management options, to protect people from hazards when collecting, handling, storing, transporting, treating or disposing of waste.

Government commitment and support is needed for universal, long-term improvement, although immediate action can be taken locally.

WHO's response

WHO developed the first global and comprehensive guidance document, “Safe management of wastes from health-care activities”, now in its second edition. It addresses aspects such as regulatory framework, planning issues, waste minimization and recycling, handling, storage and transport.

tation, treatment and disposal options, and training. The document is aimed at managers of hospitals and other health-care facilities, policy makers, public health professionals and managers involved in waste management.

In collaboration with other partners, WHO also developed a series of training modules on good practices in health-care waste management covering all aspects of waste management activities from identification and classification of wastes to considerations guiding their safe disposal using both non-incineration or incineration strategies.

WHO guidance documents on health-care waste are also available including:

- a monitoring tool;
- a cost assessment tool;
- a rapid assessment tool;
- a policy paper;
- guidance to develop national plans;
- management of waste from injection activities;
- management of waste at primary health care centres;
- management of waste from mass immunization activities; and
- management of waste in emergencies.

In addition, WHO and UNICEF together with partners in 2015 launched a global initiative to ensure that all health care facilities have adequate water, sanitation and hygiene services. This includes addressing health care waste.

1Pépin J, Abou Chakra CN, Pépin E, Nault V, Valiquette L. Evolution of the global burden of viral infections from unsafe medical injections, 2000-2010. PLoS One. 2014 Jun 9;9(6):e99677.

2Lanphear BP, Linnemann CC Jr., Cannon CG, DeRonde MM, Pender L, Kerley LM. Hepatitis C virus infection in healthcare workers: risk of exposure and infection. Infect Control Hosp Epidemiol 1994; 15:745-50.

3Bell DM. Occupational risk of human immunodeficiency virus infection in healthcare workers: an overview. Am J Med 1997;102(suppl 5B):9-15.

4Mitsui T, Iwano K, Masuko K, et al. Hepatitis C virus infection in medical personnel after needle-stick accident. Hepatology 1992; 16:1109-14.

5WHO/UNICEF, 2015. Water, sanitation and hygiene in health care facilities: status in low- and middle-income countries. World Health Organization, Geneva.

Appendix II: Treatment and Disposal Methods for Categories Of Health Care Waste

Type of waste	Summary of treatment and disposal options / notes
<p>Infectious waste: Includes waste suspected to contain pathogens (e.g. bacteria, viruses, parasites, or fungi) in sufficient concentration or quantity to cause disease in susceptible hosts. Includes pathological and anatomical material (e.g. tissues, organs, body parts, human fetuses, animal carcasses, blood, and other body fluids), clothes, dressings, equipment / instruments, and other items that may have come into contact with infectious materials.</p>	<p>Waste Segregation Strategy: Yellow or red coloured bag / container, marked “infectious” with international infectious symbol. Strong, leak proof plastic bag, or container capable of being autoclaved.</p> <p>Treatment: Chemical disinfection; Wet thermal treatment; Microwave irradiation; Safe burial on hospital premises; Sanitary landfill; Incineration (Rotary kiln; pyrolytic incinerator; single-chamber incinerator; drum or brick incinerator)^e</p> <p>Highly infectious waste, such as cultures from lab work, should be sterilized using wet thermal treatment, such as autoclaving.</p> <p>Anatomical waste should be treated using Incineration (Rotary kiln; pyrolytic incinerator; single-chamber incinerator; drum or brick incinerator).</p>
<p>Sharps: Includes needles, scalpels, blades, knives, infusion sets, saws, broken glass, and nails etc.</p>	<p>Waste Segregation Strategy: Yellow or red colour code, marked “Sharps”. Rigid, impermeable, puncture-proof container (e.g. steel or hard plastic) with cover. Sharps containers should be placed in a sealed, yellow bag labelled “infectious waste”.</p> <p>Treatment: Chemical disinfection; Wet thermal treatment; Microwave irradiation; Encapsulation; Safe burial on hospital premises; Incineration (Rotary kiln; pyrolytic incinerator; single-chamber incinerator; drum or brick incinerator)^e</p> <p>Following incineration, residues should be landfilled.</p> <p>Sharps disinfected with chlorinated solutions should not be incinerated due to risk of generating POPs.</p> <p>Needles and syringes should undergo mechanical mutilation (e.g. milling or crushing) prior to wet thermal treatment</p>

Type of waste	Summary of treatment and disposal options / notes
<p>Pharmaceutical waste: Includes expired, unused, spoiled, and contaminated pharmaceutical products, drugs, vaccines, and sera that are no longer needed, including containers and other potentially contaminated materials (e.g. drug bottles vials, tubing etc.).</p>	<p>Treatment: Sanitary landfill^a; Encapsulation^a; Discharge to sewer ^a; Return expired drugs to supplier; Incineration (Rotary kiln; pyrolytic incinerator ^a); Safe burial on hospital premises^a as a last resort.</p> <p><u>Small quantities:</u> Landfill disposal acceptable, however cytotoxic and narcotic drugs should not be landfilled. Discharge to sewer only for mild, liquid pharmaceuticals, not antibiotics or cytotoxic drugs, and into a large water flow. Incineration acceptable in pyrolytic or rotary kiln incinerators, provided pharmaceuticals do not exceed 1 percent of total waste to avoid hazardous air emissions. Intravenous fluids (e.g. salts, amino acids) should be landfilled or discharged to sewer. Ampoules should be crushed and disposed of with sharps.</p> <p><u>Large quantities:</u> Incineration at temperatures exceeding 1200 °C. Encapsulation in metal drums. Landfilling not recommended unless encapsulated in metal drums and groundwater contamination risk is minimal.</p>
<p>Genotoxic / cytotoxic waste: Genotoxic waste may have mutagenic, teratogenic, or carcinogenic properties, and typically arises from the feces, urine, and vomit of patients receiving cytostatic drugs, and from treatment with chemicals and radioactive materials. Cytotoxic drugs are commonly used in oncology and radiology departments as part of cancer treatments.</p>	<p>Waste Segregation Strategy: See above for “infectious waste”. Cytotoxic waste should be labelled “Cytotoxic waste”.</p> <p>Treatment: Return expired drugs to supplier; Chemical degradation; Encapsulation^a; Inertization; Incineration (Rotary kiln, pyrolytic incinerator);</p> <p>Cytotoxic waste should not be landfilled or discharged to sewer systems.</p> <p>Incineration is preferred disposal option. Waste should be returned to supplier where incineration is not an option. Incineration should be undertaken at specific temperatures and time specifications for particular drugs. Most municipal or single chamber incinerators are not adequate for cytotoxic waste disposal. Open burning of waste is not acceptable.</p> <p>Chemical degradation may be used for certain cytotoxic drugs - See Pruss et al. (1999) Annex 2 for details.</p> <p>Encapsulation and inertization should be a last resort waste disposal option.</p>

Type of waste	Summary of treatment and disposal options / notes
<p>Chemical waste: Waste may be hazardous depending on the toxic, corrosive, flammable, reactive, and genotoxic properties. Chemical waste may be in solid, liquid, or gaseous form and is generated through use of chemicals during diagnostic / experimental work, cleaning, housekeeping, and disinfection. Chemicals typically include formaldehyde, photographic chemicals, halogenated and nonhalogenated solvents^d, organic chemicals for cleaning / disinfecting, and various inorganic chemicals (e.g. acids and alkalis).</p>	<p>Waste Segregation Strategy: Brown bag / container. Leak-proof plastic bag or container resistant to chemical corrosion effects.</p> <p>Treatment: Return unused chemicals to supplier; Encapsulation^a; Safe burial on hospital premises^a; Incineration (Pyrolytic incinerator^a; Facilities should have permits for disposal of general chemical waste (e.g. sugars, amino acids, salts) to sewer systems.</p> <p><u>Small hazardous quantities:</u> Pyrolytic incineration, encapsulation, or landfilling.</p> <p><u>Large hazardous quantities:</u> Transported to appropriate facilities for disposal, or returned to the original supplier using shipping arrangements that abide by the Basel Convention. Large quantities of chemical waste should not be encapsulated or landfilled.</p>
<p>Radioactive waste: Includes solid, liquid, and gaseous materials that have been contaminated with radionuclides. Radioactive waste originates from activities such as organ imaging, tumor localization, radiotherapy, and research / clinical laboratory procedures, among others, and may include glassware, syringes, solutions, and excreta from treated patients.</p>	<p>Waste Segregation Strategy: Lead box, labelled with the radioactive symbol.</p> <p>Treatment: Radioactive waste should be managed according to national requirements and current guidelines from the International Atomic Energy Agency. IAEA (2003). Management of Waste from the Use of Radioactive Materials in Medicine, Industry and Research. IAEA Draft Safety Guide DS160, 7 February 2003.</p>
<p>Waste with high content of heavy metals: Batteries, broken thermometers, blood pressure gauges, (e.g. mercury and cadmium content).</p>	<p>Waste Segregation Strategy: Waste containing heavy metals should be separated from general health care waste.</p> <p>Treatment: Safe storage site designed for final disposal of hazardous waste.</p> <p>Waste should not be burned, incinerated, or landfilled. Transport to specialized facilities for metal recovery.</p>

Type of waste	Summary of treatment and disposal options / notes
<p>Pressurized containers: Includes containers / cartridges / cylinders for nitrous oxide, ethylene oxide, oxygen, nitrogen, carbon dioxide, compressed air and other gases.</p>	<p>Waste Segregation Strategy: Pressurized containers should be separated from general health care waste.</p> <p>Treatment: Recycling and reuse; Crushing followed by landfill; Incineration is not an option due to explosion risks; Halogenated agents in liquid form should be disposed of as chemical waste, as above.</p>
<p>General health care waste (including food waste and paper, plastics, cardboard):</p>	<p>Waste Segregation Strategy: Black bag / container. Halogenated plastics such as PVC should be separated from general health care facility waste to avoid disposal through incineration and associated hazardous air emissions from exhaust gases (e.g. hydrochloric acids and dioxins).</p> <p>Treatment: Disposal as part of domestic waste. Food waste should be segregated and composted. Component wastes (e.g. paper, cardboard, recyclable plastics [PET, PE, PP], glass) should be segregated and sent for recycling.</p>

Source: Safe Management of Wastes from Health-Care Activities. International Labour Organization (ILO), Eds. Pruss, A. Giroult, and P. Rushbrook (1999)

Notes:

- a. Small quantities only
- b. Low-level infectious waste only
- c. Low-level liquid waste only
- d. Halogenated and nonhalogenated solvents (e.g. chloroform, TCE, acetone, methanol) are usually a laboratory-related waste stream for fixation and preservation of specimens in histology / pathology and for extractions in labs.
- e. Halogenated and nonhalogenated solvents (e.g. chloroform, TCE, acetone, methanol) are usually a laboratory-related waste stream for fixation and preservation of specimens in histology / pathology and for extractions in labs.
- f. Note on incinerators. Pyrolytic and rotary kiln incinerators should be used. Use of single-chamber and drum / brick

Appendix III: Medical Waste Management Monitoring Questionnaire

Health Facility (name, location): _____

Type/Category of Health Facility (tick one):	<input type="checkbox"/> Tertiary: Specialist, National, Teaching Hospitals
	<input type="checkbox"/> Secondary: Governorate Gen. Hospitals, Sub-HCF Hospital, Private Hospitals
	<input type="checkbox"/> Primary; Health Centre, Dispensary
	<input type="checkbox"/> Mobile health care unit

No. of inpatients: _____ /day

No. of outpatients: _____ /day

No. of beds (total): _____ /day

Type of solid waste produced and estimated quantity

(Consult classification and mark X where waste is produced)

Type	Estimated Quantity
Sharps	
Pathological waste	
Infectious waste	
Pharmaceutical waste	
Pressurized containers	

Waste segregation, collection, storage, and handling

Describe briefly what happens between segregation (if any) and final disposal of:

Sharps	_____
Pathological waste	_____
Infectious waste	_____
Pharmaceutical waste	_____
Pressurized containers	_____

Waste segregation, collection, labelling, transport, and disposal

1. Handling of segregated waste	Sharps	Pathological waste	Infectious waste	Pharmaceutical waste	Pressurized containers
Indicate by X the type of waste (if any) that is segregated from general waste stream.					
Where is the segregation taking place (i.e. operating room, laboratory, among others)?					
What type of containers/bags (primary containment vessels) are used to segregate waste (bags, cardboard boxes, plastic containers, metal containers, among others)? describe accurately.					
What type of labelling, colour-coding (if any) is used for marking segregated waste? Describe					
i. Who handles (removes) the segregated waste (designation of the hospital staff member)? ii. Is the waste handler using any protective clothing (gloves, among others) during waste handling? Yes/No.					
What type of containers (plastic bins, bags, cardboard boxes, trolleys, wheelbarrows, safe boxes, metal containers, among others) are used for collection and internal transport of the waste? Describe.					
Where is the segregated waste stored while awaiting removal from the hospital for disposal? Describe.					
Describe briefly the final disposal of segregated waste (taken to municipal landfill, buried on hospital grounds, incinerated (external incinerator, own incinerator), open burned, removed from premises, among others)					

1. Handling of segregated waste	Sharps	Patho-logical waste	Infec-tious waste	Phar-ma-ceu-tical waste	Pres-sur-ized con-tain-ers
If removed from premises; who is responsible for removal? Health facility/self, private collector, State Environmental protection Agency					
If removed from premises; what form of transport is used? Enclosed waste track, open waste track, open pick-up, among others					
How often is the waste removed from site?					
Daily					
3 - 4 times per week					
1 - 2 times per week					
Once a week					
Every two weeks					
Once a month					
Less often					

Is safety clothing issued to staff involved in medical waste collection, i.e. gloves, aprons, among others? Yes No

If yes, please list the safety clothing/items issued to medical waste collectors and the frequency of issue:

Items issued	Daily	Weekly	Monthly	As Needed
Aprons				
Gloves				
Safety shoes				
Overhalls				
Others (specify)				

Which of these waste collection, handling, transport and disposal activities are undertaken by Health-care staff and which are outsourced? List the party responsible for that activity, where the activity is out-sourced and the start and end dates of the contract entered into:

ACTIVITY	RESPONSIBLE PARTY (self/facility, Environmental Protection Agency, Private collector, among others)	NAME OF THE RESPONSIBLE PARTY/PRIVATE COLLECTOR
Collection		
Handling		
Transport		
Incineration		
Disposal		

Personnel involved in the management of Health-care waste

1. (a) Designation of person(s) responsible for organization and management of waste collection, handling, storage, and disposal at the hospital administration level.

- (b) Has he/she received any training on hospital waste management? Yes No

If yes, what type of training and of what duration?

Tailored Generic Environmental and Social Management Plan (ESMP) Guidance

This document outlines the key elements of an Environmental and Social Management Plan (ESMP) capturing the typical Environmental and Social (E&S) impacts and associated mitigation measures that need to be considered at minimum in the context of construction activities. The scope of application is small and medium-scale buildings and infrastructure projects including those projects which are implemented under time constraints in the context of natural disaster-, crisis, or conflict settings (Category B and C projects according to the World Bank environmental and social risk categorisation⁷). Such projects may include basic social infrastructure (schools, health centres), building rehabilitation, water supply (intake, pipes, wells), small markets, or other building/ infrastructure activities.

The intention of this ESMP Guidance is to assist the Project Management Team (PMT) responsible for a specific construction project in avoiding/mitigating negative E&S impacts during the planning and construction phases of the project. The PMT will typically engage a construction contractor (Contractor) to undertake the construction works. Therefore, the contract between the PIA and Contractor should include the obligation of the Contractor to implement the ESMP during the project construction works.

The implementation of this ESMP will be a mandatory part of the construction contract so that the Contractor will be obliged to support preparation- and ensure implementation of the ESMP. The PIA will oversee and monitor the ESMP implementation and will have ultimate responsibility for it. The mitigation measures, responsibilities and monitoring requirements need to be further conveyed to any sub-contractors engaged by the Contractor. In the end every worker on the ground needs to be aware of the ESMP and his or her specific responsibilities under it.

The PMT together with the IC - shall use this document as guidance and amend it to the project specifications, characteristics and risks. Thus, this ESMP Template should not be used “as is” for a project but serves as a basis for a project-specific Construction ESMP, commensurate with the relevant E&S risks and expected impacts of the project.

*The main body of this guidance document serves as a template to be amended with project specific information on project description, roles and responsibilities, training requirements and stakeholder engagement approach. The text in *italics and grey* highlighted includes instructions for the authors of the ESMP (PMT/IC). Based on a sound description of the project and its activities, the relevant baseline conditions in the Area of Influence as well as a consistent impact assessment the mitigation, management and monitoring measures of the ESMP should be specified and adapted in order to safeguard the environmental and social due diligence of the proposed project.*

Each project has its own unique characteristics and some of the mentioned topics may not be relevant at all, while others may be highly acute and challenging to tackle. As such, this guidance should be applied in a prudent and realistic manner as appropriate on a case-by-case basis. In the event that any E&S issues become critical, the PIA’s programme managers should seek for support of the experts in KfW’s Environmental Department (KCUS).

⁷ For Category B and C Projects this ESMP Guidance document may be used to prepare a Project specific ESMP. For Category A Projects and for Category B+ Projects with single significant E&S risks and potential impacts, the establishment of a full Environmental and Social Impact Assessment including an Environmental and Social Management Plan is required

Content of the Tailored Generic Environmental and Social Management Plan (ESMP) Guidance

Introduction

The Project Implementing Agency (PIA), for example: GCFI-line ministries <Name of the PIA> is planning to construct a <Name intervention, e.g. school, water distribution system etc.> (“the Project”). The Project will be constructed at a site in <Name of location/ village/ country>. The construction activities will be executed by the construction contractor (Contractor) <Name of the Contractor> with the following sub-contractors: <Name of the sub-contractors if known already>. The construction activities will be supervised by the Implementation Consultant (IC) <Name of the consultant if known already>.

The purpose of this Construction Environmental and Social Management Plan (ESMP) is to provide a consolidated summary of all the Environmental and Social (E&S)⁸ commitments relevant for the construction phase of the Project. The measures focus on environmental (such as air emissions, biodiversity and environmental contamination) and social aspects (such as the protection of human rights, communication with local stakeholders, safety of workers and communities). This ESMP also gives an overview about the E&S Management System that is being implemented to ensure systematic and effective execution of these commitments, including roles and responsibilities between the Project Management Team (PMT)/Implementation Consultant (IC) and the Contractor.

The ESMP can be updated as the Project proceeds through detailed design and construction to reflect the results of discussions with stakeholders and to include details of any other E&S developments.

Project Description

Add here a description of the Project. This description should be based on:

- a) Available documentation (e.g. the technical design, existing project descriptions, maps, aerial pictures) and
- b) Site visit(s) to the proposed project site to understand the overall site setting and to identify sensitive areas. Interviews should be conducted with persons present in the area (if any) to understand the land ownership and land use, locally available resources, potential constraints for the project, social/ cultural/ economic/ ecologic sensitivities etc.

Under the headings below you find some topics that may be relevant for your Project. Please fill with Project specific information.

Environmental and social Baseline conditions

- Define the Project Area of Influence and present baseline data on the relevant environmental and social characteristics within the chosen site area considering the present activities. Specifically, the baseline conditions should include information on the physical, biological and socio-cultural environment:

⁸ For the sake of simplicity, the acronym E&S is used throughout this document, but this acronym should be interpreted as including environment, social, occupational health and safety, human rights and labour aspects.

o Physical Environment

As applicable, for example:

- *Ecosystem types*
- *Hydrography: watershed, surface water bodies, groundwater.*
- *Climate and meteorology (temperatures, storms, rains etc. that are important to consider).*
- *Natural resources with economical interest (mines, forests, etc.).*

o Biological Environment

As applicable, for example:

- *Biodiversity: flora / fauna species found in the area with their respective protection status as per national and international (IUCN Red List or similar) standards.*
- *Any habitat fragile or needing specific consideration in the area (wetlands, forests, nesting areas).*
- *Location of the next protected areas or buffer zones per national or international status.*

o Human, Socio-Economic and cultural Environment

As applicable, for example:

- *Demographic data: population, ethnicity, religion, age.*
- *Villages, dwellings, social infrastructure in the area.*
- *Utilities (power, roads/tracks, health/education/administration infrastructure, water and sanitation etc.*
- *Main economic activities in the areas / livelihood's patterns.*
- *Livelihood associated natural resources (agriculture, grazing areas, forest, fishing, hunting, mines) with economic interest to be considered (ecosystem services).*
- *Places of spiritual, social, cultural, religious or historical/archaeological interest to be considered in the area.*
- *Human challenges to be considered (conflicts, threats).*
- *Any other Projects that could be either influence this Project, be influenced by this Project or lead to similar impacts on the receptors.*

• Some guiding questions that should be answered here are the following:

- o Is it a greenfield (undeveloped land) or brownfield (previously developed land) development?
- o How is the land ownership status? Who owns the land to be used for the Project? (including informal/traditional users and land title rights, conflicting land claims if any),
- o How is the land currently used? (Agriculture, pasture, forest, no use, vacant)
- o Are there any protected areas or sites of cultural importance close by? Are there minority or vulnerable communities living in the area? How far away is the closest house/settlement?
- o Are there other construction activities close by?

- What is the Project's Area of Influence which is the area where the Project itself and any associated infrastructure (e.g. water pipelines) are located? The AoI should be presented in a map.
- Provide any further information relevant for the Project Context.

Project Activities

- Describe Type of Project, e.g. building (e.g. school), infrastructure (water pipeline), etc.
- Describe activities to be completed during preparation and construction, e.g. site levelling, excavation activities, demolition of existing buildings, use of heavy equipment, construction of access roads and power supply etc.
- Provide a map of the project design (technical drawings) if available.

Stakeholders

- Provide names of statutory entities/ authorities/ ministries involved with the Project.
- Describe other local stakeholders both impacted and benefiting of the project, e.g. current land owners/ users, communities adjacent to the Project site, local decision makers, opinion leaders (traditional or formal).

Rapid Assessment of potential environmental and social impacts

Identify and assess significant positive and negative impacts (direct, indirect and cumulative impacts, and immediate and long-term) related to the construction phase of the proposed facilities as well as for their operation phase. A special attention should be put to identify impacts that are unavoidable or irreversible. In order to evaluate the significance of identified environmental and social impacts, it is necessary to apply a simple rating of significance in order to evaluate the significance of the predicted impacts by considering their magnitude and likelihood of occurrence, and the sensitivity, value and/or importance of the affected resource/receptor.

Roles and Responsibilities

Please provide further details around responsibilities within the PMT/IC and the Contractor along the headings below.

Project Implementing Agency

The PMT and Implementation Consultant (IC) has the overall responsibility for environmental and social management during the construction phase of the Project. This includes the following responsibilities:

- Ensuring compliance with all relevant national legislation, as well as with the environmental controls and mitigation measures contained in this ESMP.
- Ensure that the design and planning is in compliance with national requirements and aligned with international best practise (See Chapter 6.1)

- Monitoring the performance of contractors and sub-contractors used for providing workforce, supplies and services (see Monitoring provisions in Chapter 6.2, *Table 1*).
- Acting as point of contact for consultation and feedback to stakeholders and the public (stakeholder engagement).
- Training of construction workers to raise awareness in the fields of E&S topics and in general implementation of this ESMP.

Please provide further details around responsibilities within the PMT/IC. Who is responsible for implementation of this ESMP? Who is responsible for monitoring? Who is responsible for overseeing the Contractor performance with respect to E&S management and the implementation of this ESMP?

Include an organizational chart.

Contractors

The Contractor is required to fulfil the commitments as set out in this ESMP and also to ensure that its sub-contractors fulfil the ESMP. This includes the following:

- Conduct monitoring and on-site audits to verify implementation of the ESMP (see Monitoring provisions in Chapter 6.2, *Table 1*) and report on findings to the PIA.
- Communicate any environmental issues and incidents to the PIA immediately.
- Support the PIA with the training of the construction workers to raise awareness in the fields of E&S topics and in general implementation of this ESMP.

Please provide further details around responsibilities within the Contractor. Who is responsible for implementation of this ESMP? Who is responsible for monitoring? Who is responsible for overseeing the sub-Contractors performance with respect to E&S management and the implementation of this ESMP?

Include an organizational chart.

Other Entities

Counterparts (public authorities) if involved in the Project shall be informed on the ESMP and involved in its implementation. Also, responsibilities of these authorities shall be named.

Training

The PMT/IC will provide an Induction Training to all its employees and Contractor personnel working on the Project before early works start. This Induction Training shall be conducted for all new workers, also if they join the construction site later during construction activities. The goal of the training is for PMT/IC employees and Contractor personnel (including sub-contractors) to understand:

- The mitigation measures included in this ESMP and how it will be implemented on site including responsibilities;
- The sensitivities of the area (if any) in which the Project will be constructed and operated;
- Occupational Health and Safety (H&S) rules at the construction site (e.g. personal protective equipment, rules of conduct, first aid);

- The Project's Grievance Mechanism and the basic worker's rights (see 8 Core Labour Standards below);
- How to deal with enquiries/ questions/ grievances by the public/ local stakeholders;
- Interaction rules with the people living close to the construction site (Code of Conduct) and how to deal with unauthorised visitors to the site;
- How to deal with site security and EWR issues, unforeseen incidents/ emergency situations;
- The roles and responsibilities within the PMT/IC, the Contractors, sub-Contractors and workers with respect to environmental and social issues;

The IC keeps records of the training sessions. The training will be repeated as needed during the construction activities.

The training should as a minimum includes the above topics. Please amend the text as needed to add further topics to the induction training. After completing the Induction Training refresher trainings may be needed. It is in the responsibility of the PIA and the Contractor to prepare a detailed training plan, especially for the construction workers.

Project Standards (National and International)

For each project respective national legislation needs to be respected:

- National legal context with regard to e.g.:
 - Labour
 - Occupational and Community Health and Safety
 - Environment
 - Land Acquisition and compensation
 - Permit and Monitoring requirements
 - Contractor management

The management and mitigation measures outlined in this document (especially Chapter 6) are aligned with international best practice standards for the management of E&S risks. Reference sources are:

- 8 Core Labour Standards from the International Labour Organisation (ILO):
 1. Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
 2. Right to Organise and Collective Bargaining Convention, 1949 (No. 98)
 3. Forced Labour Convention, 1930 (No. 29)
 4. Abolition of Forced Labour Convention, 1957 (No. 105)
 5. Minimum Age Convention, 1973 (No. 138)
 6. Worst Forms of Child Labour Convention, 1999 (No. 182)
 7. Equal Remuneration Convention, 1951 (No. 100)
 8. Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

[The list of countries adhering to the Core Labour Standards is shown here:](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11001:0::NO::\)

<http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11001:0::NO::\>
- KfW Sustainability Guidelines

https://www.kfw.de/Download-Center/Konzernthemen/Nachhaltigkeit/englisch/Umwelt-u-Sozialeitsaetze_E.pdf

- World Bank Environmental and Social Safeguards
<http://www.worldbank.org/en/programs/environmental-and-social-policies-for-projects/brief/environmental-and-social-safeguards-policies>
- EHS Guidelines from the World Bank Group (general and project scope specific):
http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/our+approach/risk+management/ehsguidelines
- Management Guidelines of the Food and Agriculture Organisation (FAO):
<http://www.fao.org/documents/card/en/c/127e4e07-030b-45df-b848-71813591857c/>
- Guidelines from the World Health Organisation (WHO):
http://www.who.int/phe/health_topics/outdoorair/outdoorair_agg/en/ ;
http://www.who.int/water_sanitation_health/publications/gdwq4-1st-addendum/en/; http://www.who.int/water_sanitation_health/sanitation-waste/wastewater/wastewater-guidelines/en/
- International Commission on Irrigation and Drainage (ICID)
<http://icid.org/>

Stakeholder Engagement and Grievance Mechanism

The PMT/IC will ensure that the local communities are informed at an early stage about the planned Project, timelines, expected impacts and communication channels. The PIA will also seek for feedback from the communities about the Project. As part of its community liaison process, the PIA will implement a Grievance Mechanism to ensure that all stakeholder comments, suggestions and objections are captured and considered. It will allow the affected community and the workers to express their concerns and any complaints directly to the PIA. Contact details and information on the procedure, including grievance form, will be distributed to the local communities. It is envisaged that in general, grievances will be responded to within 20 working days after receipt.

All comments and complaints will be investigated by the PMT/IC and appropriate action taken as necessary. Records of all complaints and actions will be maintained on site and project-records.

Please include a reference to a separate Stakeholder Engagement Plan or Grievance Mechanism if available. As part of preparation of this ESMP the PMT/IC should visit the Project area and conduct interviews with some of the neighbouring communities (if any), also to feed into the Project Description (see Chapter 0).

Register of E&S Aspects

This section provides best practice measures usually to be applied for small and medium-

scale buildings and infrastructure projects. Not all the aspects, impacts and mitigation measures outlined in the below text and Table 1 may be relevant for each project due to the regional context, the seasonality and project specifications. Deleting mitigation measures should, however, only be done with a thorough justification. Additional measures may be added as needed.

Planning and Design

The Project will be planned and designed by the PMT/IC with the following basic considerations:

- Avoid land acquisition of private land and resettlement of persons.
- Avoid forests, protected areas or ecologically sensitive areas.
- Avoid culturally schedules, seasons and sensitive areas (e.g. places of worship, holy trees).
- Design the Project to:
 - Ensure that key maintenance and operations can be implemented by the community/beneficiaries.
 - Apply low-maintenance solutions in the design of buildings, e.g. based on other buildings of the same type in the region.
 - Account for proper ventilation and adequate resistance to severe weather or natural disasters.
 - If feasible, develop a maintenance plan with the beneficiaries of the building.
- Plan the Project to make use of local resources to avoid construction traffic and associated impacts to the communities.
- Plan the Project so as to minimize use of natural resources (material, water, land).
- Plan the Project in a climate-friendly way so as to minimize its carbon footprint and tap into the mitigation potential of the building and construction industry.
- Engage with the persons living in the area around the Project site (including neighbours, local decision makers) early in the planning process and throughout construction activities to inform them about the planned construction and also seek for their feedback around potential sensitivities (protected areas, places and seasons of worship, holy trees etc.). Site visits and discussions with the local population should be conducted throughout the design and planning phase. A grievance mechanism will be designed and established for workers and the public during the planning phase already.
- Hire unskilled workers and skilled workers, if available, from the local communities to encourage social growth and development in the region.
- Conduct Induction Training for workers as outlined in this ESMP before start of construction.
- Establish core E&S procedures already at the planning stage. This includes as a minimum:
 - Incident Reporting (fatal accidents, medical treatment cases; first aid cases; restricted work injuries; near misses; environmental events)
 - Grievance Mechanism (one combined mechanism for workers and community)
 - Recruitment Procedure for the upcoming construction phase.

- Training Procedures/ Training material as outlined above (Occupational H&S; Community H&S; environmental sensitivities)
- Work site/ construction site risk assessment and corresponding Construction H&S Plan

Construction

The *Table* below sets out all E&S commitments that are to be fulfilled by the Contractor - supported supervised by the PMT/IC - during the construction activities. The table includes 5 columns (Topic/ potential impact, Mitigation/ Enhancement Measure, Means of verification of fulfilment, Responsibility and Monitoring provisions). Note: This table requires adjustments and/or complementation in order to specify the measures and actions that follow from activities and typologies triggered under Part 2 and 3. For each triggered activity or typology the table contains a list of concrete, practical actionable measures and action that the Contractor needs to implement / consider during the works implementation. These measures can be easily checked, verified and reported by e.g. the PMT/IC supervising Engineer

Construction Phase E&S Aspects and best Practice Mitigation Measures

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Occupational Health and Safety							
Occupational Health and Safety	Provide H&S Training to the construction workforce (including sub-contractors, temporary workers and drivers)	Training performed and recorded	Contractor	Check Training records	Monthly	PMT/IC	Average
	Ensure site premises are provided with appropriate fencing (where applicable) and lighting. Use hazard notices/signs/barriers to prevent access to dangerous areas.	H&S planning of construction site done, items installed	Contractor	Random site inspection	Monthly	PMT/IC	Average
	Ensure speed limits on site and on transporting routes.	Speed signs installed	Contractor	Random site inspection	Monthly	PMT/IC	Average
	Ensure the use of Personal Protective Equipment (PPE) for workers.	PPE used on-site by workers	Contractor	Random site inspection	Monthly	PMT/IC	Average
	Maintain high standard in housekeeping on site.	Good house-keeping on-site	Contractor	Random site inspection	Monthly	PMT/IC	Average
	Ensure provision of Health and Safety (H&S) facilities at the Project site, including shaded welfare areas, bathrooms, and potable water.	H&S Facilities provided at site	Contractor	Random site inspection	Monthly	PMT/IC	Average

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Ensure that the workers camp and construction areas are open only to formal employees.	Access controlled	Contractor	Random site inspection	Monthly	PMT/IC	Average
Fire Prevention	Provide necessary fire prevention equipment on site in line with applicable regulations.	Fire prevention equipment in place	Contractor	Regular site inspection	Monthly	PMT/IC	Average
Labour Rights	Ensure that workers have access to and are aware about the Grievance Mechanism	Grievance Mechanism in place and grievances recorded	PMT/IC and Contractor	Review of grievance register	Monthly	PMT/IC	Minimum
	Ensure minimum legal labour standards as per ILO regulations (child/forced labour, no discrimination, working hours, minimum wages) are met	Grievance Mechanism Records, Training recorded	PMT/IC and Contractor	Inspection reports (also from labour authorities), Review of grievance register and training record	Monthly	PMT/IC	Minimum
	Provide hygienic, adequate facilities for workers, ensuring toilets and changing rooms are separated to male and female employees.	Appropriate facilities in place	Contractor	Random site inspection	Monthly	PMT/IC	Average
	Ensure the workforce has access to primary healthcare on site, providing prescriptions.	Healthcare available on site	Contractor	Random site inspection	Monthly	PMT/IC	Average

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Provide housing conditions in accordance with all applicable health and safety regulations and norms by ensuring the provision of adequate space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.	Appropriate housing conditions for workers	Contractor	Random site inspection Worker interviews	Monthly	PMT/IC	Average
Security							
EWR, landmines, IEDs and UXO	Ensure project and construction site management compliance with all recent instructions by relevant authorities	Communication with relevant authorities	PMT/IC	Check records of and compliance with communication with relevant authorities	Daily	PMT/IC	High
	Report to relevant security authorities in case of flooding or land side in the project and site area, and security-risk-areas upstream of the project and site area	Communication with relevant authorities	PMT/IC	Check records of and compliance with communication with relevant authorities	Occasional	PMT/IC	Minimum
Ambient Air							
Dust emissions (especially in dry conditions)	Ensure watering of transportation roads during dry and windy conditions. Generally, keep roads in good condition.	Watering conducted, roads in good conditions	Contractor	Random site inspection, inspection of roads and complaints reports	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Cover truck loads with canvas to avoid dust blow.	Trucks covered	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Ensure optimal traffic routes and avoid school and pedestrian routs. Enforce vehicle speed limits on unpaved roads.	Speed limit signs Driver Training Records	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Ensure appropriate stockpile management (friable materials) to minimise dust blow. Minimise drop heights for material transfer activities such as unloading of friable materials.	No extensive dust blow	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Emissions from equipment and vehicles	Use equipment and vehicles in appropriate technical conditions. Provide emissions control equipment where applicable (e.g. filters).	Technical Specification Sheet	Contractor	Each time new equipment/vehicle is used at the site Random site inspection	Monthly	PMT/IC	Minimum
	Use low sulphur content and lead-free fuels, in line with legal provisions in force as well as local availability.	Technical Specification Sheet	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Ensure optimal traffic routes to minimise lengths of travel while avoiding settlements if possible.	Optimal routes chosen	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Ensure vehicles and equipment are switched off when not in use.	Engines switched off	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Noise and Vibrations							
	Compliance with national Noise Law No. 41	Test site records	Contractor	Noise meter and analyser	Monthly	PMT/IC	High
Noise and vibration impacts at the construction sites and from construction traffic	Limit the hours of operation for specific pieces of equipment or operations, especially mobile sources operating through community areas or close to residential houses (typically between 10 pm and 7 am). Avoid vehicle movements at night.	No work conducted between 10pm and 7 am/ Grievance Mechanism	Contractor	Random site inspection, Review of filed grievances, review of timesheets of workers	Monthly or upon a grievance	PMT/IC	Minimum
	Use of state-of-the-art technology and limit the number of machines operated simultaneously.	Grievance Mechanism	Contractor	Spot checks, Review of filed grievances	Monthly	PMT/IC	Minimum
	Ensure the use of modern and well-maintained equipment (e. g. use of silencers).	Technical Specification Sheet	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Set traffic speed limits. Verify drivers' behaviour with respect to driving speed and safety.	Speed limit signs Driver Training Records as part of Induction training	Contractor	Random site inspection, Review of training records	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Plan vehicle routes to avoid settlements where possible and do not run engines when not in use	Safest routes selected, Grievance Mechanism	Contractor	Review of traffic routes, Review of filed grievances	Monthly	PMT/IC	Minimum
	Use protective hearing equipment for workers conducting noisy activities.	Protective hearing equipment used.	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Traffic and Transport							
Disruption, noise and increased air pollution	Schedule traffic activities to avoid peak hours on local roads if feasible.	Peak hours on local roads avoided, Grievance Mechanism	Contractor	Review of filed grievances	Monthly	PMT/IC	Minimum
	Ensure safe driving by Project personnel (e.g. through training/induction).	Driver Training Records as part of Induction training	Contractor	Review of training records	Monthly	PMT/IC	Minimum
	Organise carpools/buses for worker transportation where possible to avoid additional traffic pressure.	Carpools/ buses used	Contractor	None	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Prevent storage of construction materials, equipment and machineries on traffic lanes.	Dedicated storage areas in place	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Soil and Groundwater							
Environmental contamination/spills	Collect and segregate wastes and ensure safe storage and in line with legal requirements.	Waste collection areas existent, waste inventories	Contractor	Random site inspection, Review of waste inventories	Monthly	PMT/IC	Minimum
	Ensure disposal through waste contractors licensed for treatment/removal/recycling of each of the waste types.	Disposal through licensed contractors	Contractor	Random site inspection Inspect offsite waste disposal facilities if feasible	Monthly	PMT/IC	Minimum
	Ensure appropriate containment and disposal of construction wastewater, including sanitary water.	Water disposal compliant with legal requirements	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Ensure appropriate and safe storage of contaminants such as fuels, construction materials and wastes. Provide absorbent and intervention materials in sufficient quantities and at relevant locations for intervention in case of leakages/spills.	Safe storage of hazardous materials, Spill remediation equipment in place.	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Implement appropriate secondary containment and spill controls for maintenance or refuelling works.	Containment and spill controls in place	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Ensure immediate cleaning of any spills and remediation of contaminated areas after construction.	Workers trained.	Contractor/PMT/IC	Random site inspection One-time inspection after construction	Monthly	PMT/IC	Minimum
Best practice soil handling	Ensure appropriate storing of topsoil removed. After construction topsoil will be used as backfill for restoration of the area.	Topsoil stored and re-used	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Limit stockpile height to 2 m maximum to avoid soil compaction.	Stockpile height limited	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Reinstatement of construction working area to the best possible after construction activities are completed.	Reinstatement completed	Contractor / PIA	One-time inspection after construction	Monthly	PMT/IC	Minimum
	If construction takes place on inclined surfaces/slopes, ensure preventive erosion control measures are applied (e.g. plan to retain trees and other vegetation, use of natural contours for roads and drainage networks, excavated drainage channels). And carry earthwork during dry weather periods.	Preventive erosion control measures in place	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Sedimentation traps used to prevent soil particles from getting into drains and canals (where necessary)	Preventive control measures in place	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Solid (construction wastes/demolition debris, camps, etc.) waste disposal							
	On site segregation of stored solid wastes into hazardous, non-hazardous recyclable construction material, plastic, paper, etc.	Records of waste management action plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Onsite trash bins within each construction site to prevent littering	Records of waste management action plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Collection of solid waste at regular intervals and disposal as per a waste management procedure	Records of waste management action plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Construction debris to be disposed of at an approved site	Records of waste management action plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Water, Hydrology and hydrogeology							
Surface Water Quality	Pending on the rainwater quality, prioritise the use of rainwater/storm-water over surface water/groundwater abstraction by using harvesting equipment and systems on site.	Water harvesting conducted	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Restrict excavation activities during periods of intense rainfall. Use temporary bunding to reduce the risk of sediment, oil or chemical spills to the receiving waters.	No excavation during intense rainfall	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Carry out excavation works in cut off ditches to prevent water from entering excavations.	No water entering excavations	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Reuse treated wastewater wherever feasible.	Treated wastewater re-used	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Pollution of rivers or waterways	Stockpiling of earth done at a safe distance from waterways	Site management plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	A spill prevention and response plan is available	Site management plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Proper storage of construction materials containing small/ fine particles to prevent reaching waterways due to floods	Site management plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Sedimentation traps used to prevent soil particles from getting into drains and canals (where necessary)	Site management plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Avoid obstruction of water flow when working closer to water bodies	Site management plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Construction material and stockpiles should be covered to avoid run-off to water bodies	Site management plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Water consumption	Extraction of water supply from a source approved by the relevant authority	Inspection of document indicating the approved source of water	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Ground water	Protect ground water resources and ensure maintenance of well heads if they exist at the project site(s)	Mark and protect well-heads	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Ensure monitoring and reporting ground water table	Reporting/ monitoring system are available	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Liquid and solid waste disposal	Storage and collection of sanitary, solid and organic wastes in septic tanks for regular disposal at approved locations	Site supervision and inspection of document indicating the approved site for waste disposal	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Medical waste disposal	Storage and collection of medical waste for disposal through approved method	Site supervision and inspection of document indicating the approved method for medical waste disposal	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Flora and Fauna							
Areas of high ecological value	Assess the occurrence of protected areas and/or natural/critical habitats at and around the construction site. Avoid these areas where possible through traffic management and site setup.	areas of ecological value avoided	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Site Clearance-Vegetation removal and habitat disturbance	Limit vegetation clearing to areas within the site boundary where it is absolutely necessary.	Vegetation clearing minimal	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Avoid clearing mature trees.	No mature trees cleared	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Avoid off-road vehicle traffic. Use existing roads.	No off-road traffic	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Ensure revegetation of cleared areas where possible after construction using native species.	Revegetation completed	Contractor	One-time inspection after construction	Monthly	PMT/IC	Minimum
Disturbance to biodiversity	No dumping into wetlands or natural habitats	Records of waste management action plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Minimize human and vehicular contact with fauna and their habitats (burrows, nests, feeding grounds)	Site management plan	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Prohibit hunting by workers	Encroachment records	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Light	Shield lighting downwards towards the site to avoid side-spill. Avoid tall masts where possible.	Light nuisance minimised	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Consider, if feasible, the use of flood light and solar powered light	Light nuisance minimised	Contractor	Random site inspection	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Pesticide Use and Management	If pesticides are to be used for agriculture program, only those that are low in human toxicity, that are known to be effective against the target species, and that have minimal effects on non-target species and the environment shall be used.	Pesticide Specification sheet	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
	Consider, if feasible, the use of natural pest control methods	Natural pest control instruction	Contractor	Random site inspection	Monthly	PMT/IC	Minimum
Socio-Economic							
Stakeholder Engagement and Grievance Mechanism	Engage/ communicate with communities and plan sufficient time for participation. Ensure regular consultations with the local authorities and communities regarding the management of construction. See also Planning stage (Chapter 6.1).	Minutes of Meetings Grievance Mechanism	PMT/IC/ Contractor	Review of grievance register	Monthly	PMT/IC	Minimum
	Initiate an efficient Grievance Mechanism to allow potentially affected individuals to voice their concerns on the Project. See also Planning stage (Chapter 6.1).	Grievance Mechanism in place, grievances recorded	PMT/IC/ Contractor	Review of grievance register	Monthly	PMT/IC	Minimum
Local Employment & Procurement	Ensure local communities are preferred for the supply of goods and services to the Project and Project personnel, where appropriate.	Local Procurement and Employment Records	Contractor	Review procurement and employment rules and records	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Land Acquisition and Compensation, Physical Displacement/ Economic Displacement	<p>Avoid land take and hereby avoid physical relocation of both, formal and informal land owners/land users</p> <p>Engage with the local community and potential affected households to understand the land ownership and land use.</p> <p>Should land acquisition and displacement be inevitable, prepare a Management Plan for Land Acquisition and Compensation including provisions for resettlement.</p>	<p>Grievance Mechanism records</p> <p>Management Plan for Land Acquisition and Compensation if needed</p>	PMT/IC	Review grievance records and RAP	Occasional	PMT/IC	High
Impacts on livelihoods/ Economic Displacement	<p>Engage with the local community and potential affected households to understand their needs and identify the risk of damage to their livelihood basis through the Project (e.g. take of pasture land, lack of access to water).</p> <p>Should land acquisition and displacement be inevitable, prepare a Management Plan for Land Acquisition and Compensation including provisions for livelihood support for the affected parties.</p>	<p>Minutes of Meetings</p> <p>Grievance Mechanism records</p> <p>Management Plan for Land Acquisition and Compensation if needed</p>	PMT/IC	Review of grievance register and meeting minutes and RAP	Occasional	PMT/IC	High

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Community Health and Safety	Ensure all contractors implement codes of conduct concerning employment and workforce behaviour (including but not limited to safety rules, zero tolerance for substance abuse, environmental sensitivity of the area, dangers of sexually transmissible diseases and HIV/AIDS, gender equality and sexual harassment, respect for the beliefs and customs of the populations and community relations in general).	Workers Code of Conduct Grievance Mechanism records	Contractor and PMT/IC	Worker interviews, Review of grievance register	Monthly and upon surveillance records	PMT/IC	High
	Target signage and outreach activities to improve public awareness of traffic changes and potential hazards for high-risk sections of public roads, including near the site and laydown areas.	Warning signs Minutes of Meetings	Contractor	Inspection of traffic routes, Review of grievance register	Monthly	PMT/IC	Minimum
	In case of security personnel at the site, ensure proper training and in the use of force and appropriate conduct toward workers and affected communities	Training Records	Contractor	Review of training records and grievance register	Monthly	PMT/IC	Minimum
	Ensure compliance with local cultural calendar of social and cultural activities, i.e., pilgrimage, visits to shrines and fasting activities	Availability of local cultural calendar	Contractor	Review of local cultural calendar	Monthly	PMT/IC	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification	Responsibility	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Communicable Diseases	Report any occurrence of any communicable diseases amongst the workforce (STD, HIV/AIDS, TB, malaria and Hepatitis B and C) and set up disease prevention programme if needed.	Communicable Diseases Register	Contractor/PMT/IC	Review of diseases register and disease prevention programme if available.	Monthly and upon surveillance records	PMT/IC	High
Cultural Heritage							
Damage of Cultural Heritage	Ensure all chance finds of cultural heritage (e.g. graves, old ceramic, old building fragments) are reported immediately to the relevant authority. If possible, avoid excavation in the ultimate neighbourhood of a chance find, fence the chance find and await instructions from the competent authority.	Training records, records about chance finds Inspection of chance find reports for the site and availability of letters of permission to resume work	Contractor/PMT/IC	Random site inspection	Monthly and upon reporting records	PMT/IC	High

Operation Phase E&S Aspects and best Practice Mitigation Measures

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Occupational Health and Safety	Maintain compliance and application of H&S procedures and standards.	Compliance records with H&S	Project Operator	Check H&S records	Quarterly	Line Ministry/Directorate	Minimum
	Ensure site premises are provided with appropriate fencing (where applicable) and lighting. Use hazard notices /signs/barriers to prevent access to dangerous areas.	H&S planning of construction site done, items installed	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure speed limits on site and on transporting routes.	Speed signs installed	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure the use of Personal Protective Equipment (PPE) for workers.	PPE used on-site by workers	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Maintain high standard in housekeeping on site.	Good housekeeping on-site	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure provision of Health and Safety (H&S) facilities at the Project site, including shaded welfare areas, bathrooms, and potable water.	H&S Facilities provided at site	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure that the workers accommodation is open only to formal employees.	Access controlled	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure all site staff is properly briefed on to what to do in case of an emergency	Orientation and training	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Public health and safety	Preparation of a community grievance mechanism and a Stakeholder Engagement Plan	Availability of functioning GRM	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Access to climb electricity pylons needs to be restricted.	Availability of fences	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Use of signs, barriers (e.g. locks on doors, use of gates, use of steel posts surrounding transmission towers, particularly in urban areas).	Availability of signs	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Education / public outreach to prevent public contact with potentially dangerous equipment	Public awareness programme	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Advance notice to local communities about the schedule of construction activities	Public communication programme	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Set up a continuous drinking water monitoring and management programme; apply disinfection and treatment as needed".	Availability of the water quality programme	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
Fire Prevention	Provide necessary fire prevention equipment on site in line with applicable regulations.	Fire prevention equipment in place	Project Operator	Regular site inspection	Quarterly	Line Ministry/ Directorate	Minimum
Labour Rights	Ensure that workers have access to and are aware about the Grievance Mechanism	Grievance Mechanism in	Line Ministry/Directorate	Review of grievance register	Quarterly	Line Ministry/ Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
		place and grievances recorded					
	Ensure minimum legal labour standards as per ILO regulations (child/forced labour, no discrimination, working hours, minimum wages) are met	Grievance Mechanism Records, Labour registration recorded	Line Ministry/Directorate	Inspection reports (also from labour authorities), Review of grievance register and training record	Quarterly	Line Ministry/ Directorate	Minimum
	Provide hygienic, adequate facilities for workers, ensuring toilets and changing rooms are separated to male and female employees.	Appropriate facilities in place	Line Ministry/Directorate	Random site inspection	Quarterly	Line Ministry/ Directorate	Minimum
	Ensure the workforce has access to healthcare services on site, providing prescriptions.	Healthcare available on site	Line Ministry/Directorate	Random site inspection	Quarterly	Line Ministry/ Directorate	Minimum
	Provide housing conditions in accordance with all applicable health and safety regulations and norms by ensuring the provision of adequate space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire and disease-carrying ani-	Appropriate housing conditions for workers	Line Ministry/Directorate	Random site inspection Worker interviews	Quarterly	Line Ministry/ Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	mals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.						
EWR, landmines, IEDs and UXO	Ensure project and construction site management compliance with all recent instructions by relevant authorities	Communication with relevant authorities	Project Operator	Check records and compliance with communication from relevant authorities	Daily	Line Ministry/ Directorate	Minimum
	Report to relevant security authorities in case of flooding or land side in the project area, and security-risk-areas upstream of the project area	Communication with relevant authorities	Project Operator	Check records and compliance with communication from relevant authorities	Occasional	Line Ministry/ Directorate	Minimum
Dust emissions (especially in dry conditions)	Ensure watering of transportation roads during dry and windy conditions. Generally, keep roads in good condition.	Watering conducted, roads in good conditions	Project Operator	Random site inspection, inspection of roads	Quarterly	Line Ministry/ Directorate	Minimum
	Cover truck loads with canvas to avoid dust blow.	Trucks covered	Project Operator	Random site inspection	Quarterly	Line Ministry/ Directorate	Minimum
	Ensure optimal traffic routes and avoid school and pedestrian routes. Enforce vehicle speed limits on unpaved roads.	Speed limit signs Driver Training Records	Project Operator	Random site inspection	Quarterly	Line Ministry/ Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	Ensure appropriate stockpile management (friable materials) to minimise dust blow. Minimise drop heights for material transfer activities such as unloading of friable materials.	No extensive dust blow	Project Operator	Random site inspection	Quarterly	Line Ministry/ Directorate	Minimum
Emissions from equipment and vehicles	Use equipment and vehicles in appropriate technical conditions. Provide emissions control equipment where applicable (e.g. filters).	Technical Specification Sheet	Project Operator	Each time new equipment/vehicle is used at the site Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Use low sulphur content and lead-free fuels, in line with legal provisions in force as well as local availability.	Technical Specification Sheet	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	
	Ensure optimal traffic routes to minimise lengths of travel while avoiding settlements if possible.	Optimal routes chosen	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure vehicles and equipment are switched off when not in use.	Engines switched off	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
Noise and vibration impacts at the project sites	Limit the hours of operation for specific pieces of equipment or operations, especially mobile sources operating through community areas or close to residential houses (typically between 10 pm and 7	No work conducted between 10pm and 7 am/ Grievance	Project Operator	Random site inspection, Review of filed grievances, review of timesheets of workers	Quarterly	Line Ministry/Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
and from the operation traffic	am). Avoid vehicle movements at night.	Mechanism					
	Use of state-of-the-art technology and limit the number of machines operated simultaneously.	Grievance Mechanism	Project Operator	Spot checks, Review of filed grievances	Quarterly	Line Ministry/Directorate	Minimum
	Ensure the use of modern and well-maintained equipment (e. g. use of silencers).	Technical Specification Sheet	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Set traffic speed limits. Verify drivers' behaviour with respect to driving speed and safety.	Speed limit signs Driver Training Records as part of Induction training	Project Operator	Random site inspection, Review of training records	Quarterly	Line Ministry/Directorate	Minimum
	Plan vehicle routes to avoid settlements where possible.	Safest routes selected, Grievance Mechanism	Project Operator	Review of traffic routes, Review of filed grievances	Quarterly	Line Ministry/Directorate	Minimum
	Use protective hearing equipment for workers conducting noisy activities.	Protective hearing equipment used.	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Disruption, noise and increased air pollution	Schedule traffic activities to avoid peak hours on local roads if feasible.	Peak hours on local roads avoided, Grievance Mechanism	Project Operator	Review of filed grievances	Quarterly	Line Ministry/Directorate	Minimum
	Ensure safe driving by Project personnel (e.g. through training/induction).	Driver Training Records as part of Induction training	Project Operator	Review of training records	Quarterly	Line Ministry/Directorate	Minimum
	Organise carpools/buses for worker transportation where possible to avoid additional traffic pressure.	Carpools/ buses used	Project Operator	Review plan	Quarterly	Line Ministry/Directorate	Minimum
Environmental contamination/spills	Collect and segregate wastes and ensure safe storage and in line with legal requirements.	Waste collection areas existent, waste inventories	Project Operator	Random site inspection, Review of waste inventories	Quarterly	Line Ministry/Directorate	Minimum
	Ensure disposal through waste contractors licensed for treatment/removal/recycling of each of the waste types.	Disposal through licensed contractors	Project Operator	Random site inspection Inspect offsite waste disposal facilities if feasible	Quarterly	Line Ministry/Directorate	Minimum
	Ensure appropriate containment and dis-	Water disposal compliant with	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	posal of construction wastewater, including sanitary water.	legal requirements					
	Ensure appropriate and safe storage of contaminants such as fuels, construction materials and wastes. Provide absorbent and intervention materials in sufficient quantities and at relevant locations for intervention in case of leakages/spills.	Safe storage of hazardous materials, Spill remediation equipment in place.	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Implement appropriate secondary containment and spill controls for maintenance or refuelling works.	Containment and spill controls in place	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure immediate cleaning of any spills and remediation of contaminated areas.	Workers trained	Project Operator	Random site inspection	Monthly	Line Ministry/Directorate	Minimum
	Prepare a spill prevention and response plan	Workers trained	Project Operator	Random site inspection	Monthly and in case of accident reporting	Line Ministry/Directorate	Minimum
	Appropriate disposal of medical waste as per medical waste management plan of the project	Workers trained	Project Operator	Random site inspection	Monthly and in case of accident reporting	Line Ministry/Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Surface Water	Reuse treated wastewater wherever feasible.	Treated wastewater re-used	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
Ground water	Protect ground water resources and ensure maintenance of well heads if they exist at the project site(s)	Mark and protect well-heads	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
	Ensure monitoring and reporting ground water table	Reporting/ monitoring system are available	Project Operator	Random site inspection	Quarterly	Line Ministry/Directorate	Minimum
Flora and Fauna							
Light	Consider, if feasible, the use of flood light and solar powered light	Light nuisance minimised	Project Operator	Random site inspection	Bi-annual	Line Ministry/Directorate	Minimum
Pesticide Use and Management	If pesticides are to be used for agriculture program, only those that are low in human toxicity, that are known to be effective against the target species, and that have minimal effects on non-target species and the environment shall be used.	Pesticide Specification sheet	Project Operator	Random site inspection	Bi-annual	Line Ministry/Directorate	Minimum
	Consider, if feasible, the use of natural pest control methods	Natural pest control instruction	Project Operator	Random site inspection	Bi-annual	Line Ministry/Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
Socio-Economic							
Stakeholder Engagement and Grievance Mechanism	Engage/ communicate with communities and plan sufficient time for participation. Ensure regular consultations with the local authorities and communities regarding the management of operation.	Minutes of Meetings Grievance Mechanism	Project Operator	Review of grievance register	Quarterly	Line Ministry/Directorate	Minimum
	Initiate an efficient Grievance Mechanism to allow potentially affected individuals to voice their concerns on the Project.	Grievance Mechanism in place, grievances recorded	Project Operator	Review of grievance register	Quarterly	Line Ministry/Directorate	Minimum
Local Employment & Procurement	Ensure local communities are preferred for the supply of goods and services to the Project and Project personnel, where appropriate.	Local Procurement and Employment Records	Project Operator	Review procurement and employment rules and records	Bi-annual	Line Ministry/Directorate	Minimum
	Target signage and outreach activities to improve public awareness of traffic changes and potential hazards for high-risk sections of public roads, including near the site and laydown areas.	Warning signs Minutes of Meetings	Project Operator	Inspection of traffic routes, Review of grievance register	Bi-annual	Line Ministry/Directorate	Minimum
	In case of security personnel at the site, ensure proper training and in the use of force and appropriate conduct toward	Training Records	Project Operator	Review of training records and grievance register	Bi-annual	Line Ministry/Directorate	Minimum

Topic/ Potential Impact	Mitigation, Management and Enhancement Measures	Means of Verification of Mitigation Measures	Institutional responsibility for implementing mitigation	Monitoring Procedure	Frequency of monitoring	Institutional Responsibility for monitoring	Monitoring Cost Estimate
	workers and affected communities						
	Ensure compliance with local cultural calendar of social and cultural activities, i.e., pilgrimage, visits to shrines and fasting activities	Availability of local cultural calendar	Project Operator	Review of local cultural calendar	Bi-annual	Line Ministry/Directorate	Minimum
Communicable Diseases	Report any occurrence of any communicable diseases amongst the workforce (STD, HIV/AIDS, TB, malaria and Hepatitis B and C) and set up disease prevention programme if needed.	Communicable Diseases Register	Project Operator	Review of diseases register and disease prevention programme if available.	Monthly	Line Ministry/Directorate	Minimum
Cultural Heritage							
Damage of Cultural Heritage	Ensure all chance finds of cultural heritage (e.g. graves, old ceramic, old building fragments) are reported immediately to the relevant authority. If possible, avoid operation in the ultimate neighbourhood of a chance find, fence the chance find and await instructions from the competent authority.	Training records, records about chance finds	Project Operator	Random site inspection	Bi-annual	Line Ministry/Directorate	Minimum

ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA) TEMPLATE

This template provides high-level guidance on the elements to be included in further documentation required for Projects classified into Category B+ per the Environmental and Social screening checklist (Annex 1). This template should be used for Category B+ Projects that require undergoing an Environmental and Social Assessment (ESA) after confirmation of categorisation by PMT/IC. For other Project Categories specific reports should be used base on the impacts triggered as advised in the E&S Screening Checklist.

It is the responsibility of the PMT/IC to provide sufficient and qualified environmental and social (E&S) capacities to complete this document.

The following sections include instructions and information on the content and input that needs to be provided/obtained by the party completing the further studies/documentation which are highlighted in grey and italics.

As a rule, this template is intended to give guidance on the elements that need to complement the generic Environmental and Social Management Plan (ESMP) to ensure sufficient assessment of the E&S impacts of the Project. However, structure and content can be modified as necessary by the party completing the template to address the identified risks as deemed suitable by best professional judgement and therefore should not be seen as compulsory.

In other words, such an E&S Assessment need only contain those sections that are applicable for the Project and to a level of detail that is appropriate for describing the relevant E&S topics identified during the screening exercise.

Introduction & Background

The PMT/IC should provide background information, document the stakeholder engagement actions and land issues (ownership, land acquisition, compensation) for all Category B Projects.

Project Information

Project Name:		
Project Exact Location:		
Implementation Partner:		
Project Description: <i>Objective and need for/ purpose of the Project</i> <i>Infrastructure to be built and its exact location, including associated facilities (temporary such as worker camps and/or permanent) as relevant. This should include a location map where possible.</i> <i>Give an overview of the envisaged schedule, stakeholders involved in the Project.</i>		
Permitting Obligations Associated with this Project <i>List all permits that need to be granted by the administration of the host country to authorise the Project, provide status of the document (incl. if the obligation has been lifted) and information of steps to be taken to receive authorisation to implement the Project - if any</i>		
Document	Status	Actions
	N	
E&S Assessment prepared by: <i>name date signature</i>		

Land Issues

The PMT/IC should document and record all the information concerning the acquisition of land, including at least the following:

- Previous site use (e.g. greenfield or brownfield);
- Land use and conversion (residential, industrial, agricultural area etc.);
- Land status (e.g. protected area, high ecological value area);
- Land ownership (private, community, public, non-formal ownership etc.);
- Total land used;
- Land clearance (document if this will be necessary or not and why. In case of UXO or other explosives presence, document land clearance process)
- The land agreements (private land owners, land donation, informal ownership rights) should also be documented and in case of public land acquired the compensation issues should be recorded and the need of further documentation should be identified, as mentioned in the Screening Checklist.
- In case there is NO land acquisition related to the Project, please confirm briefly.

Methodology

The methodology should be described comprising the following topics:

E&S Assessment Justification

E&S risks and impacts that need to be further assessed in this report have been identified during the screening and categorization exercise. The justification for ESA are:

Insert here criteria for Categorization of the Project in Category B Project as per Screening and Categorization Checklist: e.g. new land use more than 2ha, loss of livelihoods, Project in high ecological value land etc.

This stage is intended to ensure that the ESA focuses on those issues that are most important for design, decision-making and stakeholder interest and will be subject to a further E&S assessment. The topics triggered are:

Insert here ONLY the topics that will be further analysed in this ESA based on the Categorization Checklist choosing from the following:

transboundary impacts, impacts on other Project, surface water, hazardous substances/wastes, workers camp, UXO/explosives, H&S (occupational and community), land use and ownership justification (private/community), land acquisition/ loss of livelihood, indigenous peoples/ cultural heritage etc.

Applicable Standards

This ESA aims to help the Project to achieve compliance with the E&S standards set in xx E&S Policy. Those standards are:

National legal environmental and social requirements incl. labour

To be completed as needed by references related to ESA triggering topics

KfW Sustainability Guidelines requirements, which encompasses acceptable international standards such as World Bank Group Sustainability Framework as well as relevant Environmental Health & Safety Guidelines for the purpose of the Project.

Baseline Conditions

Introduction

This section describes the environmental and social baseline conditions in the Project area with focus primarily on what might be affected or could affect the Project and already identified in Chapter 0.

Purpose

To provide a context within which the impacts of the Project can be assessed, a description of physical, biological, human / socio-economic and cultural conditions (as applicable for this assessment) that would be expected to prevail within the Project Study Area. The Baseline includes information on all E&S Topics that were identified during categorisation as having the potential to be significantly affected by the Project.

Sources of information

This ESA is based on the following sources of information: *delete or complete as applicable*:

- Site visit *date, scope, persons met* ;
- Technical /Engineering documents *name, author, date*;
- Publicly available source of information *name, author, date of documents and/or websites*;
- Consultation with key informants/ specialists *name them: NGOs, Experts, Authorities, Universities, Consultants etc.*;
- Sample analysis *what, how, by whom, when, where*;
- Professional Judgement;

etc.

Physical Environment

As applicable, for example:

Key landscape features: mountains, valleys, plains, points of special interest.

Ecosystem types (alpine, continental).

Hydrography: watershed, surface water bodies, groundwater.

Climate and meteorology (temperatures, storms, rains etc. that are important to consider).

Natural resources with economical interest (mines, forests, etc.).

Biological Environment

As applicable, for example:

Biodiversity: flora /fauna species found in the area with their respective protection status as per national and international (IUCN Red List or similar) standards.

Any habitat fragile or needing specific consideration in the area (wetlands, forests, nesting areas).

Location of the next protected areas or buffer zones per national or international status.

Human, Socio-Economic and cultural Environment

As applicable, for example:

Demographic data: population, ethnicity, religion, age.

Villages, dwellings, social infrastructure in the area.

Utilities (power, roads/tracks, health/education/administration infrastructure, water and sanitation etc..)

Main economic activities in the areas / livelihoods patterns.

Livelihood associated natural resources (agriculture, grazing areas, forest, fishing, hunting, mines) with economic interest to be considered (ecosystem services).

Places of spiritual, social, cultural, religious or historical/archaeological interest to be considered in the area.

Human challenges to be considered (conflicts, threats).

Any other Projects that could be either influence this Project, be influenced by this Project or lead to similar impacts on the receptors.

Impact Assessment

The impact assessment should be done in a consistent manner per the following methodology for the identified relevant topics (e.g. impacts on water bodies due to hazardous wastes) during the baseline description:

Impact assessment: to determine if the Project and the associated activities could potentially impact the resources/receptors, to evaluate the significance of the predicted impacts by considering their magnitude and likelihood of occurrence, the sensitivity, value and/or importance of the affected resource/receptor. Transboundary and cumulative impacts should be identified during this stage (IF ANY).

Mitigation and enhancement: to identify appropriate and justified measures to mitigate negative impacts and enhance positive impacts.

Residual impact evaluation: to evaluate the significance of impacts assuming effective implementation of mitigation and enhancement measures.

Prediction and Assessment of Impacts

Describe here for each identified topic:

How the Project is likely to adversely affect the different components of the environment and which benefits could potentially be raised by the Project?

How the environment may be affected by the Project?

How the Project is likely to contribute to cumulative impacts (cumulated effects originating from different activities that would have similar impacts on same receptors)?

Evaluate the significance of the predicted impacts by considering their magnitude and likelihood of occurrence, and the sensitivity, value and/or importance of the affected resource/receptor.

Recommended Mitigation Measures

Identify appropriate and justified measures to mitigate negative impacts and enhance positive impacts

Determine the relevant Mitigation Measures for the Project-specific ESMP.

Residual Impact Assessment Conclusions

Insert a discussion of the outcome of the assessment once mitigation measures are assumed to have been applied and if specific impacts cannot be mitigated or outstanding impacts remain despite the measures applied. The discussion should be clear about which aspects of the impact have been affected by the implementation of the specific mitigation measure.

Stakeholder Engagement

This step should be part of the documentation of all Category B Projects.

The Implementation Partner should keep records of all stakeholder activities carried out throughout the Project, as defined in the Screening Checklist and ESMP. The purpose of stakeholder engagement is to allow for stakeholders to interact with the decision making process, express their views and influence mitigation and technical solutions to concerns voiced during the process.

Mention here the Project specific activities that require stakeholder engagement actions e.g., community H&S risks, community workforce flux, community participation, temporary disruptions, public information and disclosure, impacts on the community, workers' camp etc.

Engagement Activities

During preparation of this Project (Project preparation and ESA preparation) following activities were organised to disclose information and engage with stakeholders:

Stakeholder	Date	Method
<i>Who? Communities, Authorities (official/traditional), NGOs,</i>	<i>When?</i>	<i>How? Interviews, public consultation, grievance mechanism</i>
<i>30 persons representatives of village XY</i>	<i>2nd January 2018</i>	<i>Public consultation including presentation of Project and Q&A session</i>
<i>Road and Transport District Director</i>	<i>3rd January 2018</i>	<i>Individual interview by IP</i>

Any entries in the grievance mechanisms should be reviewed by the consultant for the ESA preparation and listed in the next section

Key Findings

Following concerns and suggestions were identified within stakeholder engagement and will be considered by the *implementation partner and/or its contractor(s) if any:*

Concern/Suggestion	Stakeholder	Responses by the Project
<i>What?</i>	<i>Who?</i>	<i>How the Project will respond to that</i>
<i>What?</i>	<i>Who?</i>	<i>How the Project will respond to that</i>

Management & Monitoring

Project-Specific ESMP - following Generic ESMP Format

Topic	Mitigation Measure	Responsibility	Monitoring	Indicator

Provide the additions to the Project-specific ESMP including responsibilities and monitoring requirements.

Standard Terms of Reference

Environmental and Social Impact Assessment (ESIA)

[@Project Name/ Location]

@PLEASE NOTE AND DELETE AFTER READING:

DOCUMENT INSTRUCTIONS

- Throughout the document, *[red text in italics]* represents instructions (to be deleted after reading) and **highlighted text** optional text or paragraphs for the Tender Agent, the (IC), responsible for preparing the ToR for the purpose of tendering an ESIA for any kind of project, independent of its environmental and social risk category.
- Please adapt the text accordingly, and delete paragraphs, sections or tasks which can be excluded or are not required. If you are not certain if specific studies will be required it shall be the task of the IC to scope topics out as part of the assignment. to find all instructions and optional text, these are marked with an “@”

NOTE:

- The “Project” refers to the project subject of the Assignment (e.g. a water treatment plant) and includes ‘Associated Facilities’ as defined by the International Finance Corporation (IFC) Performance Standard 1.
- The “IC” refers to the consultant who shall perform the Assignment.
- The “Assignment” refers to the services the IC is required to perform.
- The “Project Executing Agency” (PMT) refers to the project developer responsible for the implementation of the Project.
- The “Relevant Standards” refer to international guidelines and requirements and must be defined for each Project, depending on the Project structure

Background

KfW Development Bank (KfW) will finance *[@short description of the program and the potential measures, adapt text below as needed]*

@The Project Background shall include at a minimum the following information if available:

- Project setup (explain who is the Project Executing Agency (PMT), involvement of KfW and other lenders) and rationale for the overall Project and this Assignment;
- Concise description of the Project in terms of:
 - Project type, (e.g. rehabilitation of water treatment plant etc.), size/area (m², ha), capacity (e.g. cubic meter/time, output), number of employees (construction/operations), any phased or related developments; Characteristics of the construction
 - Project location and layout maps if available;
 - Known sensitivities, e.g. located in a protected area, resettlement required, protests of local communities; amounts of foreign workers;
 - The current status of the Project (e.g. conceptual design/feasibility, detailed design/engineering, or construction) and tentative development/ implementation schedule.
- List of all documents relevant to environmental and social aspects of the Project/Program, e.g.:
 - Any reports relating to environmental and social baseline;
 - Existing Action Plans, Stakeholder Engagement Plans;
 - Feasibility Studies;
 - Detailed design engineering studies;
 - Project Layout drawings;

[@Not all of this information may be available while preparing the ToR but this description is an important source of information for the IC and should thus be as detailed as possible. If deemed appropriate, these documents can be attached to the ToR.]

Objectives of the Assignment

In alignment with KfW's Sustainability Guideline the Environmental and Social Impact Assessment (ESIA) aims to identify and assess potentially negative and positive environmental and social risks and impacts of all phases of the proposed project. Through the ESIA mitigation measures shall be developed to avoided, minimized or mitigated potential negative environmental and social impacts and risks, while striving to enhance benefits to local communities and the environment.

In this regard, the Project shall address potential risks and impacts through an ESIA in order to:

- Identify and assess the potential positive and negative environmental and social risks and impacts stemming from the project in the, construction, operation and the decommissioning phases (direct, indirect and cumulative impacts);
- Design appropriate mitigation, management, and monitoring measures to implement an

environmentally friendly and socially acceptable project, without compromising its technical and economic feasibility and help determine crucial elements that facilitate the decision-making process.

Accordingly, the ESIA shall describe the social and ecological baseline environment, assess the risks and potential impacts associated with the Project's activities, and establish adequate safeguard measures in line with international good practice and Relevant (environmental and social) Standards (see Chapter 0). The ESIA is intended to be used for decision-making by local authorities including the local permitting process, lenders and internally by the Project developer. Additionally, the ESIA process is intended to inform the development of an Environmental and Social Management Plan (ESMP) to mitigate any potential negative impacts, enhance benefits and establish ongoing monitoring activities. Furthermore, a Stakeholder Engagement Plan (SEP) will be required to identify potential stakeholders to inform about disclosure and participation in the project. *[@if resettlement is required and details are already known at this stage of the project:]* -If the Project will result in economic and physical displacement, a Resettlement Action Plan (RAP) has to be prepared in line with relevant standards.

The contract for the IC will be awarded under the terms of KfW's "Guidelines for the Assignment of Consultants in Financial Cooperation with Partner Countries"⁹.

Relevant Standards and Legal Requirements

To ensure that potentially negative environmental and social risks and impacts stemming from Project activities are minimized, and in order to strive to enhance benefits for local communities in the Project area, the Assignment will be conducted in accordance with the following Relevant Standards and Guidelines *[@adapt the text accordingly and strike out the standards on topics that are not relevant for your project]:*

- *[@host country name]* laws and regulations;
- International Law including conventions and treaties adopted by *[@host country name]* and applicability to the Project;
- *[@The PMT's or Sponsor's EHS and Social Standards e.g. any existing frameworks (if relevant)]*;
- Sustainability Guidelines of the KfW Development Bank¹⁰ and therewith:
 - *[@for public sector involvement]* World Bank Environmental and Social Policies¹¹;
 - *[@for private sector involvement]* IFC Performance Standards¹²;
 - Environmental, Health and Safety (EHS) Guidelines of the World Bank Group, including:
 - The General EHS Guidelines¹³ and
- *[@Industry Specific EHS Guidelines, as applicable; check if sector is availa-*

⁹ <https://www.KfW-entwicklungsbank.de/Download-Center/PDF-Dokumente-Richtlinien/Consulting-E.pdf>

¹⁰ https://www.KfW-entwicklungsbank.de/PDF/Download-Center/PDF-Dokumente-Richtlinien/Nachhaltigkeitsrichtlinie_EN.pdf

¹¹ <http://www.worldbank.org/en/projects-operations/environmental-and-social-policies>

¹² www.ifc.org/performancestandards

¹³ <https://www.ifc.org/wps/wcm/connect/554e8d80488658e4b76af76a6515bb18/Final+-+General+EHS+Guidelines.pdf?MOD=AJPERES>

ble:https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines;]

- Guidelines on Incorporating Human Rights Standards and Principles, Including Gender, in Programme Proposals for Bilateral German Technical and Financial Cooperation¹⁴;
- The Fundamental Conventions of the International Labor Organization (ILO) well as IFC Performance Standard 2 on Labor and Working Conditions;
- *[@For the resettlement aspects, in addition to WB OP 4.12 in public sector projects:]* UN Basic Principles and Guidelines on Development-based Evictions and Displacement (namely §§ 42, 49, 52, 54 and 60)¹⁵ and guidance provided within the IFC Handbook for Preparing a Resettlement Action Plan (2002)¹⁶ and World Bank Involuntary Resettlement Sourcebook (2004)¹⁷;
- *[@For land tenure issues:]* Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT)¹⁸;
- *[@For aspects related to law enforcement:]* UN Code of Conduct for Law Enforcement Officials¹⁹ and the „Basic Principles on the Use of Force and Firearms by Law Enforcement Officials”²⁰;

As part of the assignment, the specific applicability of the requirements under each of these Legal Requirements, Standards and Guidelines needs to be evaluated and scoped out as appropriate, including the relevance and rationale and then referred to as “Relevant Standards”

Scope of Work

The scope of work described below will lead to an ESIA [and RAP] which meets the requirements set out in Chapter 0 and 0 of the ToR.

The ToR aims to outline the IC’s tasks in as much detail as possible. Nevertheless, the IC shall critically verify the scope of services indicated and may extend, reduce or amend those services wherever such is deemed necessary according to his/her own professional judgement and knowledge. Any suggested amendments to the ToR should be clearly documented within the IC’s submission, including accompanying justification for the proposed amendments. Furthermore, it is understood that the IC will perform all necessary works and services in order to ensure the fulfilment of the outlined objectives - i.e producing a fit-for-purpose ESIA [and RAP] for the Project.

It is anticipated that the Assignment will be undertaken through the following tasks:

- Task 1: Scoping Study
- Task 2: Stakeholder Engagement

¹⁴ http://www.bmz.de/en/zentrales_downloadarchiv/themen_und_schwerpunkte/menschenrechte/Leitfaden_PV_2013_en.pdf

¹⁵ https://www.ohchr.org/Documents/Issues/Housing/Guidelines_en.pdf

¹⁶ <https://www.ifc.org/wps/wcm/connect/22ad720048855b25880cda6a6515bb18/ResettlementHandbook.PDF?MOD=AJPERES&CACHEID=22ad720048855b25880cda6a6515bb18>

¹⁷ <http://documents.worldbank.org/curated/en/206671468782373680/pdf/301180v110PAPE1ettlement0source-book.pdf>

¹⁸ <http://www.fao.org/docrep/016/i2801e/i2801e.pdf>

¹⁹ <https://www.ohchr.org/Documents/ProfessionalInterest/codeofconduct.pdf>

²⁰ <https://www.ohchr.org/Documents/ProfessionalInterest/codeofconduct.pdf>

- Task 3: Preparation of the ESIA and the Report
- Task 4: Environmental and Social Management Plan (ESMP)
 - [@ OPTIONAL strike out if not required]*
 - [if resettlement and/or land acquisition can not be excluded or if the location and/or footprint of the project will be finalized during project implementation phases]:
 - @Task 5a: Resettlement and Land Acquisition Policy Framework
 - [if it is clear that resettlement and/or land acquisition is required and footprint and location have been finalized]:
 - @Task 5a: Resettlement Action Plan
 - Cross-Cutting-Task: Project Management

The tasks are described in the sub-section below. Further details of the required scope and guidance on content and proposed methodologies are provided in the annexes to the ToR (to be considered as appropriate in the IC's proposal). If no guidance is given or the IC would like to suggest a different approach (e.g. for a specific modelling approach), the proposed methodology shall be presented as part of the proposal.

Task 1: Scoping Study

[@for category B projects this section may also be integrated in the Feasibility Study]

The PMT will provide available information in regards to the environmental and social aspects of the Project. The IC shall become familiar with the documentation and relevant standards as listed above. The IC shall propose a kick-off meeting (or a kick-off-call, as appropriate) if the initial review of the documentation may cause any divergence in the assumed work plan.

The IC will carry out a scoping exercise/study and must meet current internationally accepted standards of data collection, reporting and analysis and comply with existing environmental and social standards. Further, it must be assessed how national and international requirements can be streamlined throughout the ESIA process.

The Scoping Study shall clearly outline the scope of the ESIA to allow a focus on the environmental and social impacts and risks based on their significance. Further it shall scope out any insignificant effects or components by providing a comprehensive rationale. *@If baseline data is already available from previous studies (e.g. previous phases of the project, feasibility, etc.) the IC shall evaluate relevance, accuracy if the data as well as if they are still valid.*

The Scoping Study will cover the physical, biological, socioeconomic and cultural environments within the proposed Project scope and identify the key issues relevant to the Project to be considered in the full ESIA. The scoping study will also define the scope of the required baseline studies, ongoing stakeholder engagement and impact assessment.

The Scoping Study should be undertaken through the following steps:

- i. Desk top review of available data
- ii. Site verification visit
- iii. Engagement with key stakeholders (please see 0 for further detail on the stakeholder engagement aspects related to the overall ESIA process)
- iv. Preparation and disclosure of a Scoping Report.

The results of the scoping shall be summarized and presented within a concise Scoping Report that can be disclosed to the public. The report should cover the following aspects at a minimum:

- Brief description of the project, size and layout of the project area, as well as associated facilities; including a brief description of the project phases and related activities;
- Outline of Project Area of Influence for the different environmental and social receptors;
- Brief description of the applicable legal framework and standards; initial gap analysis of national legal frameworks in relation to applicable international standards;
- Brief description of the physical environment and socio-economic setting;
- Identification of the key environmental and social risk and potential impacts, i.e. aspects/areas that could potentially be impacted by the project, including identification of potentially affected local communities;
- Brief description of the alternatives to be considered in the ESIA;
- Brief stakeholder analysis/stakeholder mapping to identify the stakeholder groups who may be affected by and/or may have an interest in/influence on the Project, including initial consultation of local communities and statutory stakeholders for the scoping process;
- Outline of methodology and approach for community engagement to be applied during ESIA, including national legal provisions for public information and disclosure;
- Outline of the methodology, the approach and the general timeline for the ESIA, including activities and other necessary studies as required;

Attention shall focus on (but not be limited to) issues related to: *[@to be adjusted to the nature and scope of the project]*

- **Physical environment:** topography, geology, soils, meteorology and climate/climate change, surface and underground water resources (hydrology, water quality and drainage patterns); ambient air quality and noise levels, land use and land cover, landscape and visual amenity;
- **Biological environment:** fauna, flora, rare or endangered species, ecosystem services, protected areas and critical habitats;
- **Social, economic and cultural environment:** urban and rural livelihoods, land use (including seasonal land use), land tenure, agriculture/livestock farming, demographics, employment, socio-cultural institutions and cultural norms, community health and safety, education, infrastructure, waste management, landscape aesthetics, cultural heritage, vulnerable groups including persons with disabilities;

If potential effects of the Project on these receptors (and any additionally identified receptors) are not considered as relevant, a reasonable explanation must be provided; these items are then considered to be “scoped out”.

Based on the Scoping the IC shall provide the PMT and KfW in addition to the Scoping Report alongside:

- A detailed work plan for the ESIA, including timeline of activities and other necessary studies as required;
- Terms of Reference for any additional baseline studies or assessment methodologies

needed, which will be implemented through the next ESIA tasks, that were not presented in the proposal.

Deliverables Task 1:

- Draft Scoping Report in English and Final Scoping Report in English @and Arabic
- Detailed ESIA Work Plan
- ToR for additional studies if required

Task 2: Stakeholder Engagement

Stakeholder Engagement is an inclusive process conducted throughout the project life cycle and a key aspect of any ESIA process. A transparent engagement between the PMT and project stakeholders is an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.

The IC will, in cooperation with the PMT, undertake planning and implementation of stakeholder engagement activities to inform the ESIA (including Scoping) process and disclosure outcomes.

The stakeholder engagement activities should continue throughout the ESIA process and contain the following activities:

- Preparation of a SEP including an appropriate grievance procedure; and [for category B projects the stakeholder engagement plan may be integrated in the ESIA report and not necessarily a standalone document]
- Implementation of stakeholder engagement activities.

Beside the requirements and content as set out in the following sub section it shall be recognized that Stakeholder Engagement must meet [host country] requirements.

Preparation of a Stakeholder Engagement Plan (SEP)

The IC shall prepare a SEP to guide stakeholder engagement activities to be undertaken during the Project stage(s) (as applicable, e.g. Project planning/design, construction, operation and maintenance) to the SEP should ensure that any interested and affected stakeholder group/communities encountered within the project footprint will be consulted in a culturally appropriate and participatory manner regarding the positive and negative impacts of the Project. [KfW here to confirm for each Project the scope of the SEP required - i.e. KfW could require here an SEP for the Project lifetime; during Project implementation only; or just for the ESIA and planning phase. This will depend on the stage of the Project. As a minimum, this would be for the ESIA. This could also be - depending also on the level of information on the local communities and other stakeholders available - for the construction and operational phases].

Generally, the SEP shall be aligned with the Good Practice Handbook on Stakeholder Engagement of the IFC (2007)²¹ and scaled to the project potential risks and impacts, as well as the respective development stages and be tailored to affected communities.

As part of the SEP the IC will establish a grievance mechanism proportionate to the potential risks and impacts of the project that is accessible and inclusive. The IC shall evaluate if existing formal or informal grievance mechanisms exist at the PMT and if it is feasible and suitable for the project to utilize existing structures. If so, it shall be evaluated if any supplement project-specific arrangements are needed.

The grievance mechanism is expected to address concerns promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all project-affected parties, at no cost and without retribution for the project affected parties.

Implementation of stakeholder engagement activities

Based on the IC's knowledge of the legislative requirements of the host country and the Project context, the IC shall prepare a Scope of Work (SoW) for the public consultation activities to be undertaken during the Assignment.

The aim of the SoW is to present the project to the concerned population and to collect their comments and reactions regarding the project and its related potential impacts.

In order to facilitate the procedure of the public consultation and its implementation, the information and population consultation meetings related to the project will be organized by the IC in coordination with the PMT, and in consultation with local authorities.

The SEP will have to be updated throughout the project cycle. If updates are required to the SEP during the assignment for the ESIA, the IC will be responsible for these updates. During the development of the SEP, the IC will, jointly with the PMT, undertake an assessment of the PMT's capacity to implement the SEP. The IC will then update the SEP activities for the construction and operation phases and provide adequate recommendations for resources and responsibilities.

Deliverables Task 2 [*@adapt accordingly*]:

- Draft SEP in English and Final SEP in English @and Arabic
- Provision of relevant updates of the SEP during the assignment if required

Task 3: Preparation of the Environmental and Social Impact Assessment (ESIA) Report

After the approval of the Scoping Report and agreement on the detailed scope and structure of the ESIA by KfW and the PMT, the IC will start preparing the ESIA document and acquire all missing data for evaluating the project impacts in order to develop the corresponding documents.

²¹ [Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets \(2007\)](#). Available in English, Spanish, French, Portuguese, Chinese, and Russian.

The IC will carry out the necessary studies and processes culminating in a detailed ESIA Report including the ESMP (Environmental and Social Management Plan) report and supporting documents.

The following sub-sections outline which aspects should be covered by the ESIA at minimum.

Description of the Project and its associated facilities

The IC shall produce a concise and comprehensive project description supported by maps, plans, graphs and charts to provide an easy and structured overview. The description shall be based on information on existing project reports and documents (e.g. this may be an extract from the pre-feasibility study or other design documents) and illustrate the geographic layout of all key components. The level of detail of the project description shall be commensurate with potential project effects on the receiving environment. This may include -depending on the project - energy demand and consumption, nature and quantity of the materials and natural resources (including water) used, etc. Furthermore, this should include an estimate - by type and quantity - of expected residues and emissions (i.e water, air, and quantities and types of waste produced during the construction and operation phases).

Assessment of Alternatives

A systematic identification and consideration of feasible alternatives to the Project in terms of location, technology, design and scale in terms of potential environmental and social impact shall be compiled. Specifically, the alternative analysis should provide an overview of the main reasons and rationale for selecting the chosen option, including a comparison of the environmental and social effects. The analysis should include the 'do-nothing' option. Mitigation and compensation measures should be considered when assessing alternatives, both with a view to strengthening the feasibility of the Projects, and to improving the Project's design. The Alternative Assessment chapter shall contain a description of the reasonable alternatives that were assessed and an indication of the main reasons for selecting the chosen option with regards to their environmental and social impacts and risks.

Data collection and description of the baseline environment

Based on the scoping results the IC shall collect, collate and present baseline information on the natural (biological and physical) and human environments (social, cultural and economic) of the study area with qualified experts. This baseline description shall be derived from both secondary sources and fieldwork to collect primary data where required and should be inclusive of, but not be limited to:

- Physical environment (hydrographic network, geology, ground topography, climate, air quality, fauna and flora, aquatic environment, ecological system);
- Biological environment (i.e., flora and fauna types and diversity, endangered species, sensitive habitats, ecosystem services etc.);
- Social and cultural environment, including present and projected (i.e., demography, population, land use, planned development activities, infrastructure facilities/community social structures, employment and labor market, sources and distribution of income, cultural/religious sites and properties, vulnerable groups and indigenous populations etc., infrastructure and basic social services.);
- Economic activities (agriculture, livestock, fisheries, small scale industries);

Data gaps or uncertainties inherent in the baseline description shall be stated and explained. Data presented within the baseline description shall be sufficient to describe the key aspects of the Area of Influence (Aol) of each environmental and social component and be focused on identified determinants such as project location, design or operational controls. Baseline description shall also indicate the accuracy, reliability and sources of the data presented.

Based on the IC's professional experience and judgement, required studies or surveys to be performed for baseline data gathering shall be presented in the document.

[@If the studies listed below or others applicable to the Project are relevant, the section below must be adapted accordingly. This will highlight specific studies to inform the baseline and impact assessment of the ESIA. This could for example include:

- e.g. Socioeconomic survey;
- e.g. Biodiversity study, including critical habitat assessment;
- e.g. Groundwater study;
- e.g. Surface water/ hydrology study;
- e.g. Ambient air quality monitoring;
- e.g. Ambient Noise monitoring ;
- e.g. Baseline studies specific to the Project technology e.g. monitoring of aquatic life for river-related projects;

If no guidance is given or the IC would like to suggest a different approach or additional specialist studies based on professional experience the justification and proposed methodology shall be presented as part of the proposal.

The IC shall provide a justification of the timeframe (given in number of weeks or months) required for the specific field studies, including the consideration of seasonality.

Description of the legislative and regulatory framework and requirements, including a gap analysis with international standards

The IC shall provide a comprehensive and appropriately detailed description of the legislative requirements and framework relevant to the Project (i.e. describing the key laws, regulations or ordinances etc. in the area of environment, social aspects, labour conditions and occupational health and safety). This description should include the context of national/regional/local environmental and social programs, as well as regional development or sector development frameworks in place. The legislative framework should identify relevant environmental and socio-economic legal requirements (laws) applicable to the assessment and to be adhered to within project implementation (e.g. related to air emissions, wastewater discharge, noise, etc.). This may also include internal requirements the PMT has to follow (referred to as borrower framework). Additionally, the IC shall describe the relevant international environmental and social obligations of the country (conventions etc.) as well as details of the international environmental and social standards which are referenced for the Project in Chapter 0. The legislative framework shall also include a description of gaps between national legislation

and the applicable international standards. The IC shall develop a structured gap analysis to present the gaps between the national legislation and the international requirements outlined in Chapter 3 above. Based on the analysis the IC will provide measures and recommendations in the Project context to bridge the gaps between the policies.

[@if for the sector or country legislative frameworks and/or gap analysis are already available to KfW or the PMT from similar or comparable projects, these shall be provided to the IC as Annex to the ToR and the Tender shall be required to verify if any update is required to avoid duplication of work.]

Assessment of environmental and social impacts and risks of project facilities and activities

The IC will identify the positive and negative environmental and social impacts (direct, indirect and cumulative, temporary and permanent) potentially stemming from the Project. This should include impacts in terms of magnitude, significance, reversibility/potential for mitigation, extent, duration (major, moderate, minor and negligible impacts) during the pre-construction, construction and operation/ maintenance phases as well as for decommissioning or closure and reinstatement. To do so, the IC will make use of a robust and consistent qualitative or semi-qualitative methodology. Quantitative data should be employed to the extent possible. The assessment will also compare the identified impacts with the “without project”-scenario impacts.

The chapter should also identify opportunities for environmental enhancement and identify key uncertainties and data gaps. Where Third Parties such as contractors are involved, their roles and capacities, and the degree of control the project can exert over them, should be considered.

Supply chain issues that are central to the project’s core functions should be considered where the resource utilized by the project is ecologically sensitive or where low labor cost is a material factor of the project’s competitiveness. The Impact Assessment will include the use of available remote sensing imagery and other relevant means to identify potential sensitive receptors (human and ecological) that are likely to be affected by project activities (mainly during the construction phase). The IC shall then identify indicators against which impacts on these receptors can be evaluated.

[@to be added if transboundary impacts cannot be excluded:] Any transboundary impacts should be identified and addressed (as applicable) as part of the ESIA process. The assessment and consultation process should be consistent with the principles of the UNECE Convention on EIA in a Transboundary Context (the ‘ESPOO Convention’).

Impact Assessment will also cover cumulative impacts, climate change impacts (and to the extent appropriate) a health impact assessment.

*[@Based on the sector and project experience, a list of quantitative modelling studies that are expected to be required (if not already contracted under a feasibility study), shall be presented here. This should include studies that KfW would like to see scoped and costed within the proposal. If it is clear at the stage of the ToR that no modelling is required, please strike out the whole section between the “*****”]*

In order to quantify the impacts of the Project, the IC shall undertake the following quantitative modelling studies as part of the ESIA, if applicable:

- Noise modelling;
- Air quality modelling;
- Visual impact modelling;
- Ecological flow modelling;
- Hydrological modelling;
- Sediment modelling;
- Traffic modelling

If no guidance is given or the IC would like to suggest a different approach or additional modelling requirement based on professional experience, the justification and proposed methodology shall be presented as part of the proposal.

The IC should make reasonable assumptions to justify the inclusion of additional studies and provide an approach based on international recognized standards. Please note that these studies are expected to be required for this ESIA but will be confirmed in the Scoping Report.

Mitigation and Management of Impacts and Risks

Working in collaboration with the PMT, other responsible institutions, agencies, organisations and representatives of affected groups, the IC will identify and develop realistic and cost-effective mitigation measures for significant negative impacts predicted to occur as a result of the different project phases (Pre-construction phase, Construction, Operation and maintenance, Decommissioning or closure and reinstatement) - whether direct, indirect or cumulative, temporary or permanent.

These measures will avoid, minimize and/or compensate or offset such impacts, in that order of priority to be aligned with the mitigation hierarchy. Any residual negative effects after mitigation measures will be described. These measures will cover all aspects and phases of the project and may include, but are not limited to, changes in the project's footprint, design details and operating procedures, land management, social support, institutional development and capacity building for both government and civil society organisations. The measures will pay particular attention to the principles of sustainability, including equitable social development with minimal impacts on biodiversity and ecosystem services. At the same time, these measures to improve livelihoods of all project-affected persons should be included. As well as the identification of community enhancement measures, such as topics or issues with relevance to the project, where a small investment would result in a large benefit.

With regard to social issues, mitigation measures should be developed inline with policy frameworks of the country that may exist on various governmental levels and, if applicable, any international policies. (e.g. policies on infrastructure development, etc.). With regard to measures related to education and health, it is particularly important that mitigation measures are linked to public sector provisions in order to maximize positive impact and to ensure sustainability.

Residual Impacts and Risks

The IC will describe key residual impacts and their significance. Environmental risks such as the potential for accidents and incidents should also be considered. The IC shall also describe proposed contingency planning and measures and evaluate their adequacy.

Social risks are context-specific and could include factors such as:

- Economic changes, e.g. inflationary trends;
- Political changes that could make it difficult to implement particular mitigation measures;
- Unforeseen events, e.g. natural disasters;
- Lack of people with the necessary skills to implement mitigation measures.

Environmental and Social Opportunities for Project Enhancement

[@this aspect is optional if applicable and feasible in the project context]

KfW's vision goes beyond 'do no harm' to maximize development gains. Therefore, the IC shall as part of the ESIA identify potential development opportunities associated with the project and in collaboration with the line ministries and their PMTs, discuss the feasibility of integrating these opportunities in the project. Examples of such opportunities could include:

- for environmental aspects: Habitat enhancement, ecological set-aside, site remediation and clean-up, Energy and resource efficiency; cleaner production; institutional strengthening, capacity building, etc;
- for social aspects: temporary and permanent jobs within the project; opportunities for local firms to sub-contract services; opportunities for local firms to supply goods; in cases where relocation is required there may be opportunities to improve the housing condition of people relocated; the Project may be able to link up with local schools to create opportunities for learning; strengthening of vulnerable groups

Opportunities for facilitating development gains will be specific to the project context and should be considered in consultation with the local community. Particular attention should be given to any development strategy that relates to vulnerable people within the area of impact, due to the high risk that they will be excluded from development gains unless specific measures are taken to include them. It is important to note that participatory or community-demand-driven approaches to development will not necessarily ensure the inclusion of vulnerable people. Furthermore, special measures may be required to enable certain vulnerable people to take part in activities (e.g. employing persons with disabilities may require the provision of special facilities).

Compiling relevant ESIA Annexes

The Annex shall be used to present supporting information to the ESIA to allow for the main text to remain relevant. The Annex shall include:

- The names of the people responsible for preparing the ESIA
- The Terms of Reference of the consultancy conducting the ESIA
- References and sources of information

- Stakeholder Engagement Plan and Records of public meetings and consultations held
- The Scoping Report
- Details on the Legal Framework
- Supporting technical data / Supporting special studies
- A photo log

Preparation of a Non-Technical Summary (NTS)

The IC shall compile and include an easy-to-understand NTS of the ESIA and stakeholder engagement. The NTS will serve to inform the general public and other interested parties of project activities. The IC shall take into consideration that KFW requires the PMT to disclose the NTS. The NTS shall be in the form of a concise, standalone document and should include:

- (i) A concise summary description of the proposed project;
- (ii) The rationale for the proposed project;
- (iii) The geographical area that the project will influence (Aol);
- (iv) A short description of the baseline in the Aol;
- (v) Any significant environmental and social impacts;
- (vi) Any significant issues or opportunities;
- (vii) A summary of key aspects of the ESMP;
- (viii) Residual risks/issues and material information gaps or the need for further studies should be highlighted;
- (ix) The nature of the developer's/project's systematic approach to managing the environmental and social aspects of the project including monitoring activities; and
- (x) A summary of stakeholder consultation held and further activities, information about availability of grievance mechanism and contact details for further information.

Deliverables Task 3:

- Draft ESIA with Annexes in English and Final ESIA with all finalized Annexes in English @and Arabic
- Non Technical Summary in English @and Arabic

The ESIA report shall be presented in a logical and clear format and include an assessment of the impacts prior to and following the implementation of mitigation measures. It should identify constraints associated with the mitigation methods recommended, and allow provision for modification.

Task 4: Preparation of the Environmental and Social Management Plan (ESMP)

[@for moderate Category B Projects and small construction works, a general ESMP template for construction is available on the KFW intranet ([dms LINK](#)). This can be handed over to the IC with the duty to tailor the ESMP to a specific project. The template can be attached to the ToR as Annex XYZ]

Based on the results of the ESIA, the IC shall prepare an Environmental and Social Management Plan (ESMP) that compiles the impacts and required mitigation measures as identified in the ESIA, as well as the monitoring requirements to ensure that the identified measures are implemented and any unforeseen impact is identified and handled aligned with the ESMP.

The ESMP shall include:

- details on specific management plans that will be required
- a table of the commitments based on the mitigation measures identified, which should include details on:
 - the anticipated objectives or target of each measure,
 - related milestones and time frames and
 - reporting requirements as well as
 - required resources (competencies, human resources, required equipment, materials and budgets required for the implementation of this commitment).
- Details on appropriate monitoring activities to ensure that (a) mitigation measures are effective, (b) unforeseen negative impacts or trends are detected and addressed, and (c) expected project benefits or opportunities are achieved. Indicators should be aligned to elements of the existing pre-project baseline and be (a) Specific, (b) Measurable, (c) Achievable; (d) Relevant and (e) Time-bound.

Also, the IC shall include a precise and specific action plan, detailing required training (technical assistance, equipment and supplies, organizational changes) for the management and monitoring of environmental and social impacts as well as corresponding costs. Where significant residual impacts remain after application of mitigation measures, the IC shall propose measures to compensate/offset the identified impacts.

If relevant to the project, the tender shall present a change management procedure that outlines the requirements for additional environmental and social assessment if design changes occur after finalizing the ESIA process.

The ESMP shall be clearly structured and should cover all Project phases.

Deliverables Task 4:

- Draft ESMP in English and Final ESMP in English @and Arabic

[@optional] Task 5a: Resettlement Policy Framework

The IC shall prepare a Resettlement Policy Framework (RPF) for the project. The purpose of the RPF is to clarify resettlement and compensation principles, organizational arrangements, and design criteria to be applied to subprojects or project components to be prepared during project implementation. It shall describe the principles of how the framework will be expanded into specific plans proportionate to potential risks and impacts, once the subproject or individual project components are defined and the necessary information becomes available.

The RPF also estimates, to the extent feasible, the total population to be displaced and the overall resettlement costs.

The Resettlement Policy Framework shall not be prepared as a desk based study, but shall be developed in the course of a consultative process with relevant stakeholders, including the public disclosure of the Draft RPF.

[@for category A and B+ project ideally, at least two RPF workshops should be conducted in the context of the preparation of the RPF.]

Deliverables Task 5a:

- Draft PRF in English and Final RPF in English @and Arabic

[@optional] Task 5b: Development of Resettlement Action Plan (RAP), including Livelihood Restoration Plan

The IC shall prepare a Resettlement Action Plan (RAP) for the project, should the Project result in economic and physical displacement. The development of the RAP must be in line with national legislation and World Bank OP 4.12/IFC PS 5, where the most stringent standard is expected to take precedence. Forced evictions are not tolerated at any point in this investment and no land clearance, expropriations or works should occur until the RAP is elaborated and cleared by the PMT and lenders alike.

[@enter here project specific details on number and type of project affected people and/or amount of land that is required, if already known]

The following sub-sections outline which aspects the RAP should cover a minimum.

Census Survey and Socio-Economic Baseline

The socio-economic baseline information for the RAP will be established in coordination with the socio-economic baseline work for the ESIA and will be undertaken in line with the requirements outlined below.

NOTE: The assignment covers the process of identification of appropriate resettlement sites, in line with national administrative and legal procedures and in line with the Relevant Standards, embedded into a consultative and participatory process, involving directly affected communities as well as potential host communities.

Preparation of the RAP

The RAP will be developed in line with the Relevant Standards, the provisions of national legislation and in line with these ToR. The IC may propose amendments/ changes to these ToR in his proposal.

Overall, the RAP will comply with the following principles:

- a) Involuntary resettlement should be avoided where feasible, or minimized, by exploring all viable alternative project designs;
- b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient invest-

ment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs;

- c) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher;
- d) The resettlement plan includes measures to ensure that the displaced persons are:
 - i) Informed about their options and rights pertaining to resettlement;
 - ii) Consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives; and
 - iii) Provided with prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.
- e) If the impacts include physical relocation, the resettlement plan includes measures to ensure that the displaced persons are:
 - i) Provided assistance (such as moving allowances) during relocation; and
 - ii) Provided with residential housing or housing sites, or, as required, agricultural sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site.
- f) Where necessary to achieve the objectives of the policy, the RAP also includes measures to ensure that displaced persons are:
 - i) Offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and
 - ii) Provided with development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities.
- g) Host communities will be considered by meaningful consultation and will be part of the overall participatory process for the selection of resettlement sites; host communities will be integrated into the development approach for the RAP and in the community development plans (as referred to in section 4 above) for the Project; any negative impacts on host communities from the resettlement process will be avoided, mitigated and/or compensated as part of the RAP and/or of the set of environmental and social management plans to be prepared for the Project, including the ESIA for resettlement sites.

Specifically, the IC will develop the RAP.

The RAP should also contain sufficient graphics, photographs and plans to fully illustrate site locations, characteristics, key project elements, impacts, and resettlement plans and designs.

Stakeholder Engagement including a Grievance Procedure for the RAP

The Stakeholder Engagement Section in the RAP has to be coordinated with and be consistent with the provisions of the SEP for the ESIA. In considering Stakeholder Engagement, the RAP shall include stakeholder identification and activities specifically for the RAP. This includes host communities and the provisions for public disclosure.

As part of the RAP specific stakeholder engagement activities, a Guide to Land Acquisition and Compensation (GLAC) shall be prepared to inform the public about the compensation approach and entitlements. The GLAC shall be written in an easy-to-understand and culturally appropriate language. It shall include, at minimum, a project description, the expected impacts on land, the criteria for entitlements for the groups of PAPs and the planned expropriation process with responsibilities as well as information regarding stakeholder engagement and grievance procedures.

Deliverables Task 5b:

- Draft RAP in English and Final RAP in English (@and Arabic)
- GLAC in English and @Arabic

Cross-Cutting-Task: Project Management

The IC shall manage the Assignment to ensure that the tasks are delivered to the agreed schedule and that these meet the standards set out for the Assignment.

The ESIA [@and RAP] project management activities should include:

- a) Management of the IC's team;
- b) Communication activities with the PMT key contacts, the technical consultants/feasibility consultant, KFW, and other parties;
- c) Regular reporting on schedule, budget and progress of the Assignment;
- d) Health and Safety (H&S) planning for the Assignment.

As part of the tender submission, the IC shall provide a description of the ESIA/RAP project management and H&S activities and organisation.

The IC is expected to coordinate with the detailed design consultant when appointed, to ensure that any needs and recommendations for design requirements and changes resulting from the ongoing ESIA- and RAP processes are available for discussion at the earliest opportunity.

It is expected that the IC provides regular [monthly/bi-monthly] short progress reports about the status of the assignment including critical paths, preferably in a tabular format.

Deliverables Cross-Cutting-Task:

- Progress Reports in English

Deliverables

The IC will submit as part of the proposal a detailed work plan and schedule, including timelines for draft and final versions of deliverables as required in these ToR. The work plan and schedule will be established along the general estimates of the overall time frame of the assignment, as outlined in the Chapter 0 Schedule. The IC may adapt timing based on experience and professional judgement, accompanied by an acceptable justification.

[@adapt the specific deliverables accordingly to the text above]

Deliverables Task 1:

- Draft Scoping Report in English and Final Scoping Report in English @and Arabic
- Detailed ESIA Work Plan
- ToR for additional studies if required

Deliverables Task 2:

- Draft SEP in English and Final SEP in English @and Arabic
- Provision of relevant updates of the SEP during the assignment if required

Deliverables Task 3

- Draft ESIA in English and Final ESIA in English @and Arabic
- Non-Technical Summary in English @and Arabic

Deliverables Task 4

- Draft ESMP in English and Final ESMP in English @and Arabic

Deliverables Task 5a

- Draft PRF in English and Final RPF in English @and Arabic

Deliverables Task 5b

- Draft RAP in English and Final RAP in English @and Arabic
- GLAC in English @and Arabic

Deliverables Cross-Cutting-Task:

- Progress Reports in English

Schedule

[@this text provides an indication and some guidance how a schedule could look like, but needs to be adapted to each project!]

The total duration of the assignment will be [@x] months *[@depending on the project, timing can range between 6-24 months, for a moderate category B project 6 months might be enough, for A or B+ with seasonal survey requirements and/or resettlement 18-24 months might be required].*

The IC will complete the ESIA process within [@X] months of taking up the Assignment. Initial

drafts of the ESIA reports will be submitted within [X] months after taking up the Assignment. Final versions of the ESIA reports are expected within [X] months from contract signature *[for a category B project it is expected the Scoping Study to be completed within one to two months, the remaining ESIA tasks would be an additional five to twelve months depending on the local context and seasonality of specialist studies. It is suggested providing details here of any financing deadlines or milestones that the IC will need to consider. The available time for the ESIA may define the extent of baseline and assessment detail that is feasible).*

The Scoping Report, SEP and the Detailed ESIA Works plan should be completed within [1.5-2.5] months. The IC will complete the ESIA process (including requested specialist studies) and the Draft ESMS within [X] months *[reasonable time prior the end of the assignment taking into consideration review and disclosure of the draft and finalisation of the documents]* of taking up the Assignment.

[optional if RAP is required] The overall duration of the RAP process, including determination of resettlement sites and ESIA for these is estimated to be [20-24] months.

All draft reports shall be drafted in English. The final drafts of all documents required for disclosure shall be translated into [Arabic].

The draft versions of the reports shall be provided to the PMT and to Lenders in soft copy via a safe download link. The final versions of the reports shall be submitted as soft and hard copies to the PMT and Lenders.

The IC shall assume that each of the reports shall be updated to address subsequent sets of comments from the PMT, Lenders, government agencies and public comments.

Staff and Qualification

[experts and experience given below are a general assumption and must be changed or amended according to the project]

The project team and their qualifications have to reflect the scope of services and show excellent technical and professional qualifications.²² The IC shall provide a description of tasks to be performed by each team member as well as details on the selection and experience of the proposed members with regard to their tasks.

The IC shall provide updated curricula vitae (CV) of the proposed international and local / regional staff in standard KfW format (see [Annex 1](#)) showing relevant experience and shall not exceed four (4) pages. Key staff should have adequate education, professional experience, language skills and experience in the region/ with similar tasks. Please note that key staff presented in the IC's proposal may not be replaced without the prior approval of KfW.

The following staff should be included in the proposal as a minimum *[to be adapted accordingly]*:

- An overall responsible Project Director/manager
- Key ESIA (environmental) experts international
- Key ESIA (social) experts international

²² All key personnel shall not be in or standing before retirement or reactivated from retirement.

- Key ESIA experts local/national

Other international and local experts, as needed with specific expertise in the key areas to be studied within the ESIA.

Key expert 1: ESIA Expert international (Environment)

Qualifications and skills:

- University degree in environmental management, biology, geography or related disciplines.

General professional experience

- Minimum 8/10/15 years of experience in conducting ESIA in [sector] projects according to international environmental and social safeguards (e.g. World Bank, IFC, ADB, EBRD...)
- Expert must have done an ESIA study of at least three (3) projects of a similar nature within the past 8/10 years.
- Expert must have at least 3 years working experience in [country/region] or other developing or emerging countries.
- Knowledge in national resource management and environmental and social management plans.

Specific professional experience

- Experience in minimum [4-6] xyz sector projects of similar nature and complexity and working experience in minimum 3 countries, one of them being a [region] country would be an advantage. Fluency in English is mandatory; knowledge of [Arabic] is an advantage.

Key expert 2: ESIA Expert international (Social)

Qualifications and skills

- University degree in anthropology / sociology or related disciplines.

General professional experience

- Minimum 8/10/15 years of experience in conducting ESIA and in relevant sectors according to international standards.
- He/She must have done an ESIA of at least three (3) projects of a similar nature within the past 8/10 years.
- He/She must have at least 3 years working experience in [country] or other [region] countries.
- Knowledge in developing and implementing resettlement plans, stakeholder engagement in particular with vulnerable social groups and environmental and social management plans. [add or remove as required]

Specific professional experience

- Experience in minimum [4-6] xyz sector projects of similar nature and complexity and working experience in minimum 3 countries, one of them being a [region] country would be an advantage. Fluency in English is mandatory; knowledge of [Arabic] is an advantage.

Key expert 3: ESIA Expert local

Qualifications and skills:

- University degree in environmental management, biology, geography, anthropology / sociology or related disciplines.

General professional experience

- Minimum 8 years of experience in conducting ESIA's in [country] projects according to international environmental and social safeguards (e.g. World Bank, IFC, ADB, EBRD...)
- Profound knowledge in [country] environmental and social legislation as well as national requirements for the Environmental (and Social] Impact Assessment process.

Specific professional experience

- Experience in minimum [4-6] projects of similar nature and complexity Fluency in English and [Arabic] is mandatory.

Within the proposal the IC shall confirm that the key experts will be available for the respective position throughout the whole duration of the assignment.

[NOTE: in Iraq an official registration is required to submit national impact assessment studies to the authorities, the local expert/or the local partnering consultancy must have this certification and the requirement has to be added to the qualification requirements]

Terms of Reference

Resettlement Action Plan, including Livelihood Restoration Measures

Background and Rationale

The Project will entail a combination of permanent and temporary involuntary resettlement (both physical (for those living in project affected area), and economic (for those conducting any agricultural, pastoral or working activity there).

The Project needs to consider the effective mitigation of such impacts, including through compensation for temporary and permanent loss of land and livelihood assets (e.g., crops, trees), provision of effective livelihood restoration programs and associated supports, and provision of alternative housing, business premises and farmland in the case of permanent displacement.

If the displaced population comprises more than 200 people a comprehensive Resettlement Action Plan (RAP) is required, which has to be prepared and implemented according to international standards as required by KfW's Sustainability Guideline, particularly those of the World Bank (OP 4.12), and the UN Basic Principles, the Guidelines on Development-based Evictions and Displacement, namely §§ 42, 49, 52, 54 and 60 and the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT). For the case of fewer than 200 people being displaced an Abbreviated Resettlement Action Plan may be agreed.

The RAP will not only be prepared as a documentation of the project, but as a key management tool, which informs and guides the planning, implementation as well as monitoring and evaluation of resettlement for the Project. Accordingly, the RAP should be seen as a 'living document' which needs to be prepared as early as possible in project development, and updated as the project progresses.

Depending on the complexity of the project, and the duration of project planning, several iterations of the RAP may be appropriate, including a **Preliminary, Interim and Final RAP**.

Environmental and Social Safeguard Requirements

As KfW is the Lender for the Project, the RAP has to comply with the provisions of KfW's Sustainability Guideline (2016) and with the Guidelines on Incorporating Human Rights Standards and Principles, Including Gender, in Programme Proposals for Bilateral German Technical and Financial Cooperation (Federal Ministry for Economic Cooperation and Development).

KfW Sustainability Guideline (2016) requires that all applicable national environmental, occupational health & safety and social laws and regulations as well as International Law including conventions and treaties adopted by the host country (**insert name of country**) and applicable

to the Project must be respected.

In the context of involuntary resettlement, the following international standards have to be applied, **in addition to national legislation:**

- WB OP 4.12 (in case of Indigenous Peoples, FPIC consent is required)
- UN Basic Principles and Guidelines on Development-based Evictions and Displacement, namely §§ 42, 49, 52, 54 and 60

In addition, the Project will respect the [*Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*](#) (FAO 2012) known as the VGGT²³. The VGGT promote secure tenure rights and equitable access to land, fisheries and forests as a means of eradicating hunger and poverty, supporting sustainable development and enhancing the environment. The VGGT promote responsible governance of tenure of land, fisheries and forests, with respect to all forms of tenure: public, private, communal, indigenous, customary, and informal.

In these ToR, the standards and legislation as mentioned above will be referred to as **Applicable Standards**.

Objectives and of the Assignment

The Consultant will develop a RAP for the Project, in line with the Applicable Standards (and following the guidance from the Resettlement Policy Framework, if applicable) as described above and with the requirements as outlined below.

The RAP will correspond to the up to date available information from technical planning for the Project and may hence require updates, as technical planning proceeds, with the objective to finally entirely reflect the final design of the Project.

The socio-economic baseline information for the RAP will be established in coordination with the socio-economic baseline work for the ESIA and will be undertaken in line with the requirements outlined below.

The development of the RAP will be undertaken embedded into a meaningful process of stakeholder engagement, specifically with consultations of local communities who are likely to be affected. Stakeholder engagement will include public disclosure of the Draft RAP in a formal and accessible process, in line with provisions of national legislation and of international standards.

Task 1: Preparation and Work Plan

Familiarization with Applicable Standards and with the Resettlement Policy Framework (if applicable), Site Reconnaissance Visit

Task 1 comprises the familiarization with the Applicable Standards and with the available information (i.e. E&S documentation, Resettlement Policy Framework, if applicable) as well as a site reconnaissance visit/project area reconnaissance visit of the RAP Team.

²³ <http://www.fao.org/cfs/cfs-home/activities/vgg/en/>

Based on the review of documentation and the reconnaissance visit, the Consultant will prepare, participate in and document a kick-off meeting/workshop for RAP development with the Project Executing Agency (PEA) and other participants as deemed necessary.

During the meeting, the RAP Team will present the draft work plan for the assignment. The work plan shall be based on these ToR and on the results of documentation review and site visit. The work plan shall also demonstrate how activities for the RAP will be coordinated with work for the ESIA and how information would be communicated between the ESIA- and the RAP Teams, the Technical Planning Teams and the PEA.

The objective of the kick-off meeting is to agree on the work plan for the development of the RAP and on any logistic arrangements which have to be undertaken in order to ensure a completion of tasks in line with these ToR. The results of the workshop will be integrated into the final work plan. The draft work plan/final work plan will be shared with PEA and KfW for comments and no objection (for the final version).

Deliverables Task 1

- Draft Work Plan, including brief report of site visit
- Kick- off Meeting: Preparation, Participation, Documentation
- Final Work plan

Task 2: Development of the Resettlement Action Plan

The RAP will be developed in line with the Applicable Standards, in line with the provisions of the Resettlement Policy Framework (if applicable) and in line with these ToR.

Corresponding to the provisions of WB OP 4.12, the RAP will comply with the following principles:

- Involuntary resettlement should be avoided where feasible, or minimized, by exploring all viable alternative project designs;
- Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs; and,
- Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
- The resettlement plan includes measures to ensure that the displaced persons are:
 - Informed about their options and rights pertaining to resettlement;
 - Consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives; and
 - Provided prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.
- If the impacts include physical relocation, the resettlement plan includes measures to ensure that the displaced persons are:

- Provided assistance (such as moving allowances) during relocation; and
 - Provided with residential housing or housing sites, or, as required, agricultural sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site.
- Where necessary to achieve the objectives of the policy, the resettlement plan also includes measures to ensure that displaced persons are:
 - Offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and
 - Provided with development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities.

Specifically, the RAP will cover the elements and topics as described below.

Key Elements of the RAP

The RAP must include the following key elements:

1. Contents Page
2. Glossary of Terms
3. List of Abbreviations
4. Summary
5. Preamble and Proponent's Commitment
6. Introduction
7. Institutional & Legal Framework
8. Stakeholder Engagement
9. Baseline Data Collection & Analysis
10. Identification of Project Impacts
11. Compensation Framework
12. Resettlement Planning
13. Livelihood Restoration & Community Development
14. Transitional Hardship & Vulnerability
15. Protection of Cultural Heritage
16. Household Sign-Off & Moves
17. Grievance Procedures
18. Monitoring, Evaluation and Reporting
19. Organizational Framework, including any needs for capacity building
20. Resettlement Budget & Implementation Schedule
21. Change Management.

The RAP should also contain sufficient graphics, photographs and plans to fully illustrate site locations, characteristics, key project elements, impacts, and resettlement plans and designs.

RAP Contents, Glossary of Terms & List of Abbreviations (items 1-3 of key elements)

A full list of contents should be detailed as per sections listed (1-21) above. The contents should also include a separate List of Figures and a List of Tables for ease of reference. Figures and Tables should be numbered accordingly.

The Glossary of Terms should be in alphabetical order and include all key terms used in the RAP. Some terms will be generic to most RAPs, while others may be project or country specific.

RAP Summary (item 4 of key elements)

The summary should include an overview table of project displacement impacts within an 'Identification of Project Impacts' section. This should include the following at a minimum:

- The total land take area by project component
- The number of economically displaced household
- The number of economically displaced persons
- The number of physically displaced households
- The number of physically displaced persons
- The number of institutional buildings affected
- Area of public land and area of community land affected
- Note the following definitions, distinguishing between economic and physical displacement:
- **Economic Displacement:** Loss of income streams or means of livelihood resulting from land acquisition or obstructed access to resources (land, water, or forest), which results from the construction or operation of a project or its associated facilities.
- **Economically Displaced Households:** Households whose livelihoods are impacted by the Project, which can include both resident households and people living outside the Project Area but having land, crops, businesses or various usage rights there.
- **Physical Displacement:** Loss of shelter and assets resulting from the acquisition of land associated with a project that requires the affected person(s) to move to another location.
- **Physically Displaced Household:** Households who normally live in the Project Area and who will lose access to shelter and assets resulting from the acquisition of land associated with the Project that requires them to move to another location.

Non-Technical Summary for Public Disclosure

A Non-Technical Summary (NTS) of the RAP will be prepared in order to support the public disclosure of the Draft RAP. The NTS may also need to be translated as appropriate into local languages, as will be determined by PEA.

Preamble & Proponents Commitment (item 5 of key elements)

The RAP should include a Preamble & Proponents Commitment to implementing the RAP. This may be similar to the following:

"Preamble

This document represents the Preliminary/Interim/Final Resettlement Action Plan (RAP) for the

[insert name] Project. The document contains a record of the procedures, actions and commitments being formulated and taken to resettle, relocate, and compensate the people and households impacted by the Project, consistent with the laws of [host country] and the World Bank's and KfW's applicable policies and guidelines on Involuntary Resettlement.

Proponent's Commitment

PEA endorses the Preliminary/Interim/Final RAP presented in this document, and commits to its complete, timely and effective implementation. The Preliminary/Interim/Final RAP will be made public, along with PEA's stated commitment to implement the RAP."

Introduction (item 6 of key elements)

The introductory section must introduce the purpose and format of the RAP, including whether the RAP is a preliminary, interim or final, and the rationale for this. The objectives of the RAP should be clearly outlined and go beyond basic analysis and assessment. The objective of a RAP is also to effectively manage mitigation of impacts through compensation and livelihood programs.

The Introduction should then include the following:

- Project background
- Project description
- Detailed description of works
- Brief discussion of potential displacement impacts.

Clear maps of the project location, including the route of any power lines, main infrastructure, villages and roads, should supplement the introductory section.

Institutional & Legal Framework (item 7 of key elements)

The Institutional and Legal Framework section of the RAP should establish the governance framework within which the resettlement element of the project will be designed, implemented and operated.

The Institutional & Legal Framework Section should include distinct subsections on:

- International Best Practice
- National Institutional Framework (National, Regional and Local)
- National Legal Framework
- Applicable Standards
- Project Policies
- Gap Analysis of National Law and Applicable Standards, including, KfW/World Bank Standards/VGGT/UN Basic Principles and Guidelines on Development-based Evictions and Displacement

In addition this chapter outlines the governance structures relevant to the Project location, and the various government and international agencies involved in, or influencing the Project, either directly or indirectly (at national, regional and local level). This should include details and analysis on the role and function of the various local government institutions traversed by the transmission line, down to village level. This should include districts, counties, sub-counties, parishes and vil-

lages. Each institution's role in approval processes, valuations and oversight of resettlement processes should be presented. This will also aid in ensuring that all government stakeholders are identified at the outset. This is particularly important with regard to consultations and cooperation on livelihood initiatives.

The RAP should outline all laws and regulations relevant to the Project which impinge on issues of land access and resettlement. This includes reference to the National Constitution, the Land Act and property rights, environmental legislation, and any specific legislation and guidance related to resettlement, stakeholder engagement and livelihood restoration.

A subsection titled "**Applicable Standards**" (corresponding to section 2 above) should include the requirements of the KfW Sustainability Guideline, and which international standards have to be applied to comply with KfW's Sustainability Guideline (2016) and with the Guidelines on Incorporating Human Rights Standards and Principles, Including Gender, in Programme Proposals for Bilateral German Technical and Financial Cooperation, namely:

- Involuntary Resettlement Policy (Operational Policy 4.12, requiring FPIC consent in case Indigenous Peoples will be affected)
- The UN Basic Principles and Guidelines for Development Based Eviction and Displacement (please refer to the specific paras (§§ 42, 49, 52, 54 and 60 and refer to these in the section below)
- Voluntary Guidelines on Responsible Governance of Tenure of Land, Forests, and Fisheries (VGGT).

In Brief: The Voluntary Guidelines on Responsible Governance of Tenure of Land, Forests, and Fisheries (VGGT), relevance for Resettlement Planning

The Guidelines provide guidance and information on internationally accepted practices for systems that deal with the rights to use, manage and control land, fisheries, and forests.

As per Section 3, guiding principles of responsible tenure governance, states should:

- Recognize and respect all legitimate tenure right holders and their rights by taking reasonable measures to identify, record and respect legitimate tenure right holders and their rights, whether formally recorded or not, to refrain from infringement of tenure rights of others, and to meet the duties associated with tenure rights.
- Safeguard legitimate tenure rights against threats and infringements by protecting tenure right holders against the arbitrary loss of their tenure rights, including forced evictions that are inconsistent with their existing obligations under national and international law.
- Promote and facilitate the enjoyment of legitimate tenure rights by taking active measures to promote and facilitate the full realization of tenure rights or the making of transactions with the rights, such as ensuring that services are accessible to all.
- Provide access to justice to deal with infringements of legitimate tenure rights by providing effective and accessible means to everyone, through judicial authorities or other approaches, to resolve disputes over tenure rights; and to provide affordable and prompt enforcement of outcomes. States should provide prompt, just compensation where tenure rights are taken for public purposes.

- Prevent tenure disputes, violent conflicts, and corruption by taking active measures to prevent tenure disputes from arising and from escalating into violent conflicts. They should endeavor to prevent corruption in all forms, at all levels, and in all settings.

Under section 4.6, States should remove and prohibit all forms of discrimination related to tenure rights, including those resulting from change of marital status, lack of legal capacity, and lack of access to economic resources. In particular, States should ensure equal tenure rights for women and men, including the right to inherit and bequeath these rights. Such State actions should be consistent with their existing obligations under relevant national law and legislation and international law, and with due regard to voluntary commitments under applicable regional and international instruments.

Under section 6.6, States and other parties should consider additional measures to support vulnerable or marginalized groups who could not otherwise access administrative and judicial services. These measures should include legal support, such as affordable legal aid, and may also include the provision of services of paralegals or parasurveyors, and mobile services for remote communities and mobile indigenous peoples.

Under section 8.1, States should ensure that appropriate systems are used for the fair and timely valuation of tenure rights for specific purposes, such as the operation of markets, security for loans, transactions in tenure rights as a result of investments, expropriation, and taxation. Such systems should promote broader social, economic, environmental and sustainable development objectives.

Under section 8.2, Policies and laws related to valuation should strive to ensure that valuation systems consider non-market values, such as social, cultural, religious, spiritual and environmental values where applicable.

Under section 10, entitled, Informal Tenure,

- Where informal tenure to land, fisheries and forests exists, States should acknowledge it in a manner that respects existing formal rights under national law and in ways that recognize the reality of the situation and promote social, economic and environmental well-being. States should promote policies and laws to provide recognition to such informal tenure. The process of establishing these policies and laws should be participatory, gender sensitive and strive to make provision for technical and legal support to affected communities and individuals. In particular, States should acknowledge the emergence of informal tenure arising from large-scale migrations.
- Whenever States provide legal recognition to informal tenure, this should be done through participatory, gender-sensitive processes, having particular regard to tenants. In doing so, States should pay special attention to farmers and small-scale food producers. These processes should facilitate access to legalization services and minimize costs. State should strive to provide technical and legal support to communities and participants

Under section 12.1, State and non-state actors should acknowledge that responsible public and private investments are essential to improve food security. Responsible governance of tenure of land, fisheries and forests encourages tenure right holders to make responsible investments in these resources, increasing sustainable agricultural production and generating

higher incomes. States should promote and support responsible investments in land, fisheries and forests that support broader social, economic and environmental objectives under a variety of farming systems. States should ensure that all actions are consistent with their existing obligations under national and international law, and with due regard to voluntary commitments under applicable regional and international instruments.

Under section 12.4, Responsible investments should do no harm, safeguard against dispossession of legitimate tenure right holders and environmental damage, and should respect human rights. Such investments should be made working in partnership with relevant levels of government and local holders of tenure rights to land, fisheries and forests, respecting their legitimate tenure rights. They should strive to further contribute to policy objectives, such as poverty eradication; food security and sustainable use of land, fisheries and forests; support local communities; contribute to rural development; promote and secure local food production systems; enhance social and economic sustainable development; create employment; diversify livelihoods; provide benefits to the country and its people, including the poor and most vulnerable; and comply with national laws and international core labour standards as well as, when applicable, obligations related to standards of the International Labour Organization.

As per section 23.1, States should ensure that the legitimate tenure rights to land, fisheries, and forests of all individuals, communities or peoples likely to be affected, with an emphasis on farmers, small-scale food producers, and vulnerable and marginalized people, are respected and protected by laws, policies, strategies and actions with the aim to prevent and respond to the effects of climate change consistent with their respective obligations, as applicable, in terms of relevant climate change framework agreements.

A Gap Analysis should present, in tabular format, the relevant national legislation and international standards pertinent to the key aspects of the resettlement process, including stakeholder engagement, baseline data collection, resettlement and livelihood planning, etc. An example format is shown in the Table below.

Example Gap Analysis

Resettlement Topic	National Legislative Requirements	WB / KfW Policy	Gap	Strategy for Gap Closure
Stakeholder Engagement				
Minimization of Displacement				
Baseline Surveys				
Entitlement Cut-off Date				
Valuation of Assets				
Land Tenure & Land Rights				

Resettlement Topic	National Legislative Requirements	WB / KfW Policy	Gap	Strategy for Gap Closure
Food Security				
Eligibility & Entitlements				
Compensation Choices				
Physical Resettlement				
Payment, Sign-Off & Moves				
Additional Assistance				
Livelihood Restoration				
Vulnerables Assistance				
Gender Considerations				
Grievance Management				
Monitoring & Evaluation				

Stakeholder Engagement (item 8 of key elements)

In considering Stakeholder Engagement, the RAP should include detailed sub-sections on:

- Stakeholder Engagement Plan Objectives and Principles
- Stakeholder Identification & Analysis
- Stakeholder Engagement to Date (with detailed appendices or annexes if appropriate)
- Engagement Methodologies & Forums
- Future Stakeholder Engagement, including information disclosure, consultation, negotiation, and participatory planning and - implementation measures
- Record Keeping & Monitoring
- Provisions for Public Disclosure of the Draft RAP, in line with national legislation and the Applicable Standards

This section may form the *de facto* Stakeholder Engagement Plan (SEP) for the Project, so it should be carefully developed, in accordance with best practice, outlining and documenting all consultation and disclosure practices being implemented for the Project.

Stakeholder Identification should envisage a comprehensive stakeholder identification exercise, which should identify all impacted stakeholders, including various local government authorities as

well as directly impacted households. This exercise is also important in view of the need to identify potential livelihood program targets, and partners in design, delivery and management of projects.

A variety of engagement methodologies and forums appropriate to the various identified stakeholders should be considered. These include, but are not limited to,

- Workshops,
- Meetings with government authorities,
- Public meetings,
- Focus groups,
- Surveys,
- Key person interviews, and,
- Participatory site visits.

In accordance with best practice, the RAP should include the establishment of Local Resettlement Committees (LRCs) that may include community leaders, Project Affected Households (PAH) and representatives of relevant local government departments that will be involved in capacity building, sensitization, consultation on resettlement and livelihood initiatives, monitoring of sign-off and moves, and participation in the grievance process.

A detailed Stakeholder Engagement Schedule should be incorporated, with engagements efficiently timed to allow discussions of, among others: project information; baseline data gathering; potential design reviews; compensation and valuation procedures and, resettlement and livelihood program proposals. The schedule can be included in a summary table similar to the one below and also as a more detailed Gantt chart showing indicative timing.

Example Stakeholder Engagement Schedule

Topic	Stakeholder Group	Format	Lead	Date / Frequency
Project co-ordination meetings				
Ongoing Consultations				
RAP Disclosure				
Follow-Up Surveys				
Household Sign-Off / Valuation Disclosure				
Household Moves and Construction				

Topic	Stakeholder Group	Format	Lead	Date / Frequency
Post-Relocation and Construction				
Livelihood and Vulnerable Program				

Baseline Data Collection & Analysis (item 9 of key elements)

Baseline data collection & analysis serves several important purposes in land access and resettlement planning:

- Identification of potential impacts (negative and positive) on directly and indirectly affected communities, which informs the development of mitigation measures and development of social plans (including resettlement and livelihood restoration planning)
- Determination of ownership and details of all impacted assets (structures, farms, crops, etc.)
- Establishment of a pre-project baseline which can be used to monitor and evaluate mitigation measures and demonstrate success.

The RAP should detail relevant findings and show these in tabular and graphic format, such that they can be interpreted by a wide range of external stakeholders. How the findings have informed resettlement planning and implementation should also be discussed.

The Chapter should include the following:

- Methodology
- Survey and Census Data Collection
- Baseline Conditions
- Baseline Analysis

A complete census and asset survey of all displaced households and landowners based on the Project Area should be conducted. This includes the following:

- Collecting basic information on the entire population within each displaced household (for example: age, gender, family size, education levels, occupation and household monthly income).
- Enumerating movable assets (household and livestock) and immovable assets (for example, buildings: houses, business structures, outbuildings, toilets, kitchens, or other uses; other structures: water tanks, fences, cattle chutes, etc.; land; crops; and trees) belonging to each household, enterprise or community.
- Mapping of affected communities (including infrastructure), the locations of individual households and their assets; and cultural heritage sites. Mapping and collecting information on the type of land and land uses for displaced households and communal land users.
- Recording preliminary resettlement site preferences.

The baseline conditions in the Project area should be depicted in graphic or tabular form and

should include key indicators as depicted in the table below.

Example Baseline Data Indicators

Category	Indicator
Demographic	<ul style="list-style-type: none"> • Population Distribution • Ethnicity • Religion • Marital Status • Languages • Migration
Household Structure	<ul style="list-style-type: none"> • Head of Household Demographics • Average Household Size • Average Number of Children per Household
Education	<ul style="list-style-type: none"> • Proximity to Closest School • Literacy Rate • Population Currently Studying • Primary and Secondary School Enrolment and Completion • Factors that Limit Education
Health	<ul style="list-style-type: none"> • Common Illnesses by Age Group • Incidence of Vaccinations • Incidence of Nodding Disease • Gender Empowerment on Health Issues • Maternal Health • Factors that Limit Health
Economic	<ul style="list-style-type: none"> • Regional Economic Drivers • Rate of Inflation • Key Productive Activities • Livestock Ownership
Livelihoods	<ul style="list-style-type: none"> • Median household income • Average Household Income and Expenditure • Level of Household Food Security • Land Tenure • Savings and Debt • Key Crops • Associational Membership
Infrastructure	<ul style="list-style-type: none"> • Quality of Housing • Access to Public Services • Quality of Infrastructure

Category	Indicator
Ecosystem Services	<ul style="list-style-type: none"> • Natural Resources Used by Households • Change in Access to Natural Resources • Change in Quality of Natural Resources • Perceived Impacts of Human Activities on the Natural Environment
Civic Engagement	<ul style="list-style-type: none"> • Level of Participation in Development Planning • Level of Participation in Community Organizations • Level of Trust in Community Members
Governance	<ul style="list-style-type: none"> • Citizen Evaluation of Governance Capacity including Local Chairperson and District Chairperson • Degree of Integration of Leaders' Opinions into Local Plans • Access to Planning Tools and Information • Level of Collaboration between Stakeholders

The analysis of the baseline data should:

- Include description of data collected and results for each category and key indicators;
- Incorporate qualitative data for context, including focus groups and key stakeholder interviews;
- Include impacts on a household basis, including area/proportion of farmland affected, loss of crops, perennial trees, structures etc. This can also be broken down by village and infrastructure element (e.g. substations) as relevant;
- Indicate for each household with an impacted structure, the availability of alternative land for reconstruction;
- Indicate for each household with affected farmland, the proportion/area of farm holdings affected, and availability of alternative land. This should include any households significantly impacted by the restriction on perennial trees in the RoW;
- Indicate for each household that is potentially vulnerable, the type and level of vulnerability against an agreed set of criteria, agreed with PEA.

Identification of Project Impacts (item 10 of key elements)

The RAP should describe the key project displacement related impacts and the level of impact. Project impacts may include loss of farmland, loss of structures, loss of primary residences, loss of access, loss of public land etc. The impacts should be detailed in terms of number and percentage of individuals / households / hectares impacted, as may be appropriate to clearly illustrate the impacts to be addressed through the RAP. Where relevant, the impacts should also be broken down by project component or phase.

The RAP should:

- Include a sub-section "Identifying Project Impacts" which draws out the salient impacts from the preceding socio-economic data analysis
- Analyze the evidence contained in the socio-economic data to provide adequate detail on

the impacts that includes:

- Project impacts by household and type of impact (physically / economically displaced)
- Project impacts by town and village and infrastructure (tower design, conductors, transmission line routing, optical fiber ground wires, substation location)
- Project-affected public infrastructure and facilities
 - Project-affected businesses
- Include a sub-section dealing with International Best Practice that refers to the IFC Resettlement Handbook which requires that planning resettlement should identify a project's adverse impacts and the populations that will be affected
- Include a sub-section on Physical Impact of the Project which is supported by a summary table of temporary and permanent land take and access restriction
- Provide a summary table of key impacts to consider in developing resettlement measures which includes:
 - Total number of impacted households
 - Total number of economically displaced households
 - Total number of impacted structures (including kitchens, toilets, animal pens)
 - Number households requiring resettlement (loss of primary residence)
 - Number households losing over 20% of total productive farmland
 - Number of affected households with less than 1 ha of land (the figure depends on the respective country/local context and would have to be confirmed/adjusted)
- Include a sub-section dealing with Efforts to Minimize Project Impacts. This will include technical details on how the Project has considered avoidance and minimization of resettlement.

Where impacts are particularly relevant to resettlement and livelihood considerations, these should be highlighted and the implications discussed separately. For example, where households are losing primary residences, or a significant proportion of farmland. The topic of which individuals and households are especially vulnerable to project displacement impacts is of particularly importance.

In order to meet the Standards outlined in the VGGT, significant impacts on farmland, particularly related to small land holders and food security, should be outlined, assessed and discussed. The topic of which individuals and households are especially vulnerable to project displacement impacts is of particularly importance.

Compensation Framework (item 11 of key elements)

Determining eligibility and entitlements is a crucial aspect of any land access and resettlement process. Practitioners often use the two terms interchangeably, but their meaning is different. Eligibility refers to those who are eligible for compensation, resettlement and related assistance as a result of project impacts (negative and positive). Entitlement refers to the types of compensation and assistance developed to address various impacts and to which various categories of eligible persons may be entitled.

An Entitlement Matrix should be used to identify all affected people (eligible persons), the types of impacts incurred, and the types of compensation and other assistance being provided to eligible persons to address those impacts (the entitlements).

In accordance with the WB OP 4.12, in-kind replacement of assets is preferred to cash compensation to reduce the risk of impoverishment. This is particularly important in cases where 20% or more of the land owned is affected. Government compensation rates are often well below local market rates and should not be relied on or used as justification for lower rates. The RAP should explain the valuation methodologies used to determine rates of compensation for different types of impacted assets.

Provision of compensation and resettlement benefits needs to occur in tandem with livelihood restoration strategies and adequate financial and money management training. Remember that under international standards even households with no legal rights to the land they occupy are eligible for assistance. See also VGGT Section 10, households with no legal rights to the land they occupy are eligible for assistance.

The RAP should ensure that land valuation 'replacement cost'²⁴, that is, the market value of the assets plus transaction costs, are as per the full definition in the standards. Ensure that the most recent rates for crops and economic trees are used; if government rates are out of date then a valuer should be used. As per the Standards of the VGGT, careful attention should be paid to ensuring full rationale for the rates used is included in the RAP.

For in-kind compensation, include measures for replacement land and housing, detailing site identification and selection, the need for ESIA for resettlement sites, house designs, additional permitting, security of tenure arrangements, eligibility criteria, etc. How any identified host communities will be engaged with, and how they will benefit from the resettlement process also needs to be considered.

In cases with in-kind replacement, the RAP should undertake to ensure that replacement housing plots and land are available and secured, including provision of adequate security of tenure for affected households.

The RAP should include a distinct section on the Household Sign-Off and Moves process which should provide detail on the steps that will be followed with households, including:

- Ongoing Public Consultation with affected households
- Identification and Notification of land resource holders
- Documentation of Holdings and Assets
- Agreement on Compensation and Preparation of Contracts
- Compensation Payments
- Moves
- Follow Up.

²⁴ "Replacement cost" is defined as follows: For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes. For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes. For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset.

The RAP should include an Entitlement Matrix which is supported by a brief description of assistance measures, along the example below:

Example Entitlement Matrix

No.	Category of loss	Category of PAP	Basis of Entitlement	Packages / Assistance
1	AGRICULTURAL LAND: Permanent loss of agricultural land	Titled Land: land Held under a registered title deed		
		Untitled Land: land Held under customary Ownership, and not yet Registered		
		Rented Land: Land rights obtained temporarily as per a customary rental agreement		
2	RESIDENTIAL LAND: Permanent loss of residential land	Titled land: land Held under a registered title deed		
		Untitled Land: Land held under customary ownership and not registered		
3	STRUCTURES: Loss of immovable assets	Residential Houses: habitable houses used as a permanent primary residence		
		Non residential Structures: business premises, walls, fences, animal pens etc.		
4	CROPS & Commercial Trees: Loss of crops and commercial trees	Standing non Perennial crops: removal or destruction of crops whether permanent or temporary land loss; Includes damage to crops during construction		

No.	Category of loss	Category of PAP	Basis of Entitlement	Packages / Assistance
		Standing Perennial crops		
5	LOSS OF INCOME	Business owner Landlord		
6	DISTURBANCE & MOVING ASSISTANCE	Physically impacted households (whether owner-occupier or tenant)		
7	LOSS OF LIVELIHOODS	Farmers		
8	EXISTING OR PROJECT INDUCED VULNERABILITY	Identified existing & potentially vulnerable households		
9	LOSS OF SENSE OF PLACE	Impacted households		
10	ADDITIONAL MEASURES	All impacted households		

Resettlement Planning (item 12 of key elements)

Where replacement land and housing is to be provided in a resettlement site, a specific section should be developed detailing how the resettlement site was selected, any ESIA requirements in respect of these sites, planning and permitting requirements, house design development, the choices made available to PAPs, and how affected households and any host communities have been involved in the process.

Livelihoods Restoration and Community Development (item 13 of key elements)

Resettlement is not complete until impacts on livelihoods have been addressed. However, livelihood restoration is one of the most challenging aspects of resettlement. The challenge is often exacerbated by the difficulty of finding enough replacement land to replace agricultural livelihoods. Therefore, it is essential to remember that livelihood restoration is typically a long-term process, and should be planned as such in the RAP.

Livelihood programs as part of the RAP will be developed. Given the prevalence of agriculture as a main source of income in most areas, livelihood programs will be largely focused on supporting and strengthening agricultural livelihoods. Other examples of common livelihoods include fishing and herding. In accordance with the VGGT and given the importance of natural resources, such as trees, farmland, grazing land, fishing resources and hunting grounds, livelihood programs should actively incorporate measures to restore critical natural resources. In addition, livelihood programs in semi-urban or urban settings will be considerably focused on supporting micro and small enterprises, particularly informal businesses. Programs should support the rapid re-establishment of businesses in conjunction to capacity building measures. It is essential that livelihoods

programs are rooted in the existing practices of the affected households and do not significantly alter their way of life. The livelihood programmes should be guided by, and consistent with, the following principles that are recommended by international best practice:

- Plan and negotiate livelihood restoration and improvement activities with displaced persons- Due to the complexity involved in sustainable livelihoods, restoration, and improvement activities cannot be a purely technical exercise, but require a high level of interaction with displaced people as well as communal land users in order to develop the most feasible and desirable activities.
- Livelihoods restoration is individual - The goal is that no person will suffer an economic loss due to the Project. Thus, to the extent possible, restoration activities will be planned to take account of each context. Women and men within a displaced household will be considered to have equal entitlement - and equal benefit - to any livelihood restoration activity. When it is determined that individuals or groups of individuals are unable to access and benefit equally - within or outside of the household, supplementary activities will be provided.
- Implement pilot activities where possible - Existing livelihood systems have evolved and adapted to particular environmental, socio-economic and cultural circumstances over a long period. Displacement of livelihoods may have complex, unpredictable, and often immeasurable effects. As such, even lower risk livelihood interventions are not guaranteed to succeed. Therefore, livelihood interventions should be based on initiatives and practices employed elsewhere in the project area and the country. Insofar as possible, interventions that are new to the area will be tested through pilot or demonstration activities. This will enable any potential issues (technical or human) to be identified before full-scale implementation. By basing pilot activities on the actual farms and under the ownership of displaced households, demonstrations can help all displaced persons to make more informed choices while creating community-based 'champions' able to educate and support displaced persons to make informed choices of alternative activities.
- Focus on investments rather than direct interventions - As cash compensation forms a significant portion of the compensation package, livelihood interventions will incentivise the use of compensation funds towards household and community investments in areas that contribute towards livelihoods outcomes. International best practice has demonstrated that incentive based livelihood approaches have greater sustainability than interventions that prioritise in-kind assistance.
- Give priority to the replacement of existing livelihood activities - Subject to consultations with displaced persons, livelihood mitigation measures should be planned according to the following hierarchy:
 - Category 1 - Restoration of existing livelihoods: Generally, the lowest risk option will be to re-establish existing livelihoods, so that displaced persons can continue doing what they know best and what is known to work in the local situation. While the opportunity may be taken to introduce proven enhancements to the existing livelihoods (for example, replacement of fruit trees with locally tested, superior varieties), the emphasis should be on replacing the livelihood assets with new assets of at least equal quality. In this case, there is little risk of failure due to technical, economic or social factors. Even if, for any reason, displaced persons choose not to continue their previous activities, it can still be shown that they were provided with all the means to do so.

- Category 2 - Intensification of existing livelihoods: For land-based livelihoods, in the event that there is insufficient available replacement land of at least equal quality, in many cases a viable option is to bring about a permanent, sustainable intensification of land use, so that a smaller area of land can be made to produce as much or more than the original land base, net of any additional labour or other costs on an on-going basis. Sustainable intensification of non-land-based livelihoods may also be possible. Since any technical intervention is not guaranteed of success in a particular situation, care will be taken to identify interventions for which there are successful precedents under very similar conditions, and having the fewest identifiable risk factors. Consultation and experimentation through pilot programmes will improve the chances of success.
- Category 3 - Introduction of alternative livelihoods: The substitution of a new type of livelihood (for example doing business) for an existing one (for example farming) should only be considered when there is no feasible way of restoring the existing means of livelihood. Objectively, developing new livelihoods carries much more risk of failure than restoring existing livelihoods, or intensifying existing livelihoods. For existing livelihoods, usually, the factors needed to maintain those livelihoods can be identified with some confidence. However, for new livelihoods, even with the best planning, it may not be possible to ensure that all the technical, economic, human and intangible factors are in place for the new activities to be successful and self-sustaining. If the introduction of a new livelihood activity is only partially successful, then the goal of restoring livelihoods of all displaced persons may not be met. In this case, the promotion of alternative livelihoods is only appropriate under livelihood improvement and community development programmes, which are not intended to mitigate specific economic losses for specific individuals. Displaced households themselves should suggest any newly introduced livelihoods.
- Create, foster and enhance networks with relevant government departments and existing civil society organisations and stakeholders - to maximise the sustainability of programmes in place it is vital to facilitate the development and strengthening of social support networks, primarily from government agencies, but also from multilateral agencies and NGOs.

The Livelihoods Strategy needs to be considered under the following subsections within the RAP:

Livelihood Programme Approach

- Provide details on the paradigm that will be used, for example, the Sustainable Livelihoods Framework which has been adopted in various forms by many international development agencies.

Livelihoods Assets and Capabilities

- Provide an outline of household assets and capabilities showing what and how households respond to shocks and stresses
- Provide detail of what makes them resilient and provide a summary of the types of livelihoods assets they have and rely on.

Livelihoods Needs Assessment

- Conduct a needs assessment for each household. This should be based on the existing and up-to-date baseline data. Consider that World Bank guidance indicates that when over 20% of productive lands are impacted they should receive additional assistance and this may be the basis for assessing eligibility for livelihood programs - but note that this is a guide, not a clear cut-off point
- Ensure that vulnerable and potentially vulnerable households will be eligible to be fast-tracked onto the livelihood program where possible.

Project Livelihood Impacts and Key Stakeholders

- Present the Project impacts per stakeholder group. A simple table like the one below can be used.

Example Stakeholder Group Support

Stakeholder Group	Key Impacts	Entitlements	Additional Livelihood Supports
e.g. Tenants			
e.g. Farmers			

Proposed Livelihood Programme Components

- Provide detail on the support interventions that will support the predominant livelihood strategies in the Project area
- Explain if transitional hardship assistance for identified vulnerable households will also be available
- Ensure that any capacity building interventions are specified
- Mention where potential partners in delivery will be identified, including Community-Based Organizations and NGOs
- Explain that the program components will be reconfirmed and agreed with government, communities and key stakeholders
- For each proposed programme include the following:
 - Expected result
 - Programme description
 - Justification
 - Cost

Livelihood Programme Management, Implementation and Partnership

- Provide detail of the development partnerships that will be used to deliver the livelihoods programme (e.g. NGOs, CSOs)
- Detail government and other agency roles and responsibilities for involvement in delivery
- Explain how the programme will be managed internally by the Project for the duration of

the livelihoods program

[Monitoring and Development of Indicators](#)

- Develop objectively verifiable indicators to measure implementation progress
- Focus on outcomes, as well as outputs

Schedule and Budget

- The livelihood programme schedule, and indeed the overall RAP schedule, must be fully integrated with overall Project scheduling
- An integrated schedule should be developed in consultation with Project engineers
- A detailed livelihoods budget can only be developed following the costing of programs in detail with delivery partners (in the case of agricultural and financial training programs)

In addition, the chapter on livelihood restoration should comprise the following aspects:

[Local Employment and Procurement](#)

Provide detail of any Local Recruitment and Procurement Policy, which should focus on the most impacted households and vulnerable groups. Unskilled and semi-skilled labour should be sourced from PAHs wherever possible. Opportunities for local procurement should also be investigated.

[Community Development Measures](#)

While livelihood restoration plans are required to mitigate impacts on directly-affected households and, as a minimum, restore their standard of living to pre-project levels, community development or investment seeks to bring project development benefits to the wider community, including both directly and indirectly impacted households.

A Community Development Plan (CDP) should be considered to ensure that the communities affected by the Project share in Project benefits to the utmost extent possible. CDP are distinct from individual livelihood programs, extend beyond directly-impacted households, and take a more holistic, communal approach. Community development interventions should focus on providing benefits to entire communities.

Transitional Hardship & Vulnerability (item 14 of key elements)

Vulnerability may be viewed in the context of two stages:

- Pre-existing vulnerability
- Transitional hardship vulnerability, caused by project related physical and economic displacement.

Pre-existing vulnerability is vulnerability that occurs, with or without the Project development, whilst transitional hardship vulnerability occurs as a result of those directly affected by the project being unable to adjust to new conditions due to shock or stress related to project activities.

Involuntary resettlement, if not managed well, may increase impoverishment, vulnerable households being particularly susceptible to the adverse effects of land acquisition and resettlement activities. Potential vulnerabilities should be carefully managed in the country context, especially

in areas of conflict, post conflict and fragile environments.

The main hazards leading to impoverishment as a direct result of the resettlement process are:

- Landlessness – irreplaceable loss of land assets, including common property
- Joblessness – loss of workplaces
- Homelessness – loss of shelter
- General economic set-back
- Increased rates of crime, disease and mortality
- Food insecurity and malnutrition
- Loss of access to common assets
- Social disorganization.

In resettlement projects several of these hazards, such as loss of land, employment and housing, are often realized simultaneously. This may further exacerbate vulnerability of households.

Therefore, the RAP should:

- Include sub-sections on the Types of Vulnerability, Vulnerability in the Project Area (including up-to-date data on the number of vulnerable households) and Temporary Hardship Assistance measures (including Objectives, Outcomes, Strategies, Practices and Services)
- Provide details on both Pre-existing vulnerability and Transitional hardship vulnerability, caused by Project related physical and economic displacement
- Assess the baseline data to identify potentially vulnerable households. The most prominent categories of potentially vulnerable persons will vary from project to project, but may include:
 - Stakeholders with no buildings, fields, livestock of their own, or who are losing the land they work
 - Poor female headed households without extended family support
 - Elderly poor, especially those without extended family support
 - Orphan and youth headed households
 - Households losing over 20% of productive lands
 - Households with small land areas (e.g. Less than one hectare, but depending on local factors)
 - Households experiencing food shortages
 - Households with small land holdings close to semi urban or urban centres
- It is important that vulnerability is determined on a household basis. While individuals may be identified as vulnerable, if they are within households which have economically productive members then the household as a whole is not necessarily vulnerable
- Include a full assessment of potentially vulnerable households on the basis of the socio-economic and asset survey data. It will be important to liaise with government social protection departments to align on definitions of vulnerability and any identified households

in the area

- Develop a Vulnerable / Transitional Hardship Programme that may include food aid, a transitional allowance, and priority for local employment schemes, as well as fast-tracking on available livelihood programs
- Identify existing government Departments and agencies, NGOs, and CSOs who provide services and who could be partners in the identification of vulnerable households and the design and delivery of assistance.

Livelihood program components, particularly those related to farming, will be the primary mechanism to address issues of landlessness, homelessness and joblessness as a result of resettlement activities. However, Temporary Hardship Assistance measures may also need to be developed to target those households identified as requiring additional supports for a time as the transition of resettlement occurs.

The goal of the Temporary Hardship Assistance should be to provide a safety net until identified vulnerable households can become self-sufficient and resilient to economic stresses resulting from land access and resettlement. The objective is to identify, assess, support, remediate, and monitor project-affected households experiencing severe hardship, as part of the overall Livelihood Assistance Package for each household. Each household should have a place to live, means of income, access to medical care, and ability to feed itself.

A central focus of the VGGT is the protection of small land holding farmers, which are particularly at risk of project induced vulnerability and food insecurity. In fact, objective 1.1 of the VGGT emphasizes the importance of specifically supporting the vulnerable, poor, marginalized and small land owners to improve food security and support sustainable livelihoods. Therefore, it may be necessary to put in place measures to ensure that vulnerable people are adequately engaged with and monitored during the different phases of the resettlement process.

It may also be necessary to put in place measures to ensure that vulnerable people are adequately engaged with during the different phases of the RAP implementation process.

Protection of Cultural Heritage (item 15 of key elements)

Cultural Heritage can be both tangible and intangible. Projects will often need to take account of intangible cultural heritage such as the traditional practices, lifestyles, heritage and shared history of communities. This may include working with communities to ensure recording of cultural histories, stories, and music, as well as supporting the protection and enhancement of heritage through provision of cultural centres and other supports.

The essential goal is to ensure displacement and resettlement does not adversely impact such heritage, but ensures community cohesion and continuity.

Tangible elements of cultural heritage which can be physically impacted by land access and resettlement may include:

- Archaeological and historic sites
- Traditional cultural or sacred sites
- Cemeteries and graves.

Therefore, in considering Cultural Heritage, the RAP should:

- Include a section outlining the procedures for the treatment of graves if applicable, including the detailed consultation process to be followed. The treatment of graves should include the development of specific working groups and committees as required, including affected households, government authorities, and national specialists. Arrangements for relocation or in situ treatment should be detailed, how agreements will be made, and how monitoring and follow-up will take place
- Include a sub-section dealing with the procedure around 'chance finds', in order to inform the Project proponent and contractors of the procedures to be followed in the case of archaeological or cultural finds during construction
- Where required, ensure access to an archaeologist during construction activities, including training environmental professionals on site regarding chance find procedures. A specialist should address on-going cultural heritage issues that may be encountered throughout the Project development.

Household Sign-Off & Moves (item 16 of key elements)

The RAP has to comprise a detailed description of the process for finalization of agreements regarding delivery of all entitlements including compensation payments, resettlement site and house designs (if applicable), allocation of replacement land (if applicable) and livelihood programs/additional assistance/vulnerables assistance. The RAP has to provide:

- An efficient and transparent sign-off process so each household understands their entitlements and that they are being treated fairly (the same applies in respect of public and communal assets and facilities)
- An efficient move to resettlement sites (in case applicable to the Project)
- Efficient allocation of replacement agricultural land (if applicable)
- Effective follow-up with resettlers and host communities (if applicable), to ensure there are no issues at the new site, particularly concerning potentially vulnerable households.

The RAP should:

- Include a thorough account of the sign-off, moves and follow-up with households and community leaders, which will occur as part of the implementation of the RAP.
- Outline how follow-up of household's welfare will occur.
- Include the schedule for follow-up visits with all resettled households, as well as how particular attention will be paid to those within the projects vulnerables program. The same personnel involved throughout the resettlement process should undertake these visits to ensure continuity and familiarity.
- Identify additional assistance programmes, if necessary, and the implementing partners (e.g. local social welfare personnel).

Grievance Procedures (Item 17 of key elements)

No matter how a project addresses impacts and risks and engages with local communities, grievances will still arise. What is critical is how a project handles grievances - This is truly a case where process is as important as outcome. Grievance mechanisms are a systematic method for recording, processing and resolving grievances between a project and local communities.

In considering Grievances, the RAP should develop a grievance mechanism in accordance with National law and international standards. The Grievance Mechanism should be:

- Easily understood by stakeholders
- Easily accessible, including special measures for vulnerable persons
- Culturally and locally appropriate
- Considered fair by stakeholders
- Cost free
- Restitution free
- Timely in addressing impacts and feeding backing to complainants
- Capable of tracking and record grievances for immediate and future reference
- Able to take account of, and not impede, access to judicial or administrative remedies

The RAP should provide details of all organizations and institutions (including community systems) involved in the resolution process, and any community capacity building which may be required in relation to mediation and resolution of grievances.

The RAP should include recommendations for the development of a project database for all grievances, to be discussed with PEA.

Monitoring, Evaluation & Reporting (item 18 of key elements)

In the context of land access and resettlement, monitoring and evaluation (M&E) primarily answers the question: Are project displacement impact mitigation and other measures in place, on time and having the intended effects as planned in the RAP?

The RAP should ensure that indicators are included to assess the outcomes of compensation payments and livelihood measures in terms of the economic status of Project-Affected Households. These should be 'outcome' based, considering socio-economic status of households, and not just 'output' based.

There are two key types of evaluation:

- Internal Evaluation: This is conducted by the Project Executing Agency as an integral part of its management and development processes.
- External Evaluation: This is conducted periodically by third party consultants and serves as an extra level of assurance that company practice is in line with the applicable standards.

Internal evaluation should be based on the following criteria:

- Effectiveness of programming: Has the planned purpose, objectives and results been achieved? Was the intervention logic correct? Were the resources applied appropriately in

relation to the outcome expected? Were the means commensurate with the goal(s)?

- Efficiency of the Project: Were resources (human, financial, material, time) used satisfactorily to achieve outcomes? What could be done differently to maximise impact within acceptable and sustainable resource structures?
- Impact of programming: To what extent has the program contributed towards its longer-term goals? Why or why not? What unanticipated positive and negative consequences did it have? To what extent has the Project achieved the central resettlement objective that affected communities and households have opportunities to improve their pre-Project livelihoods and standard of living levels? Why or why not?
- Sustainability of results: Are positive impacts that are a result of the program continuing? Will they continue once the program has been completed? Why or why not?

External Evaluation endeavours to determine the following:

- Compliance of Project activities with Project Executing Agency commitments, objectives, policy and procedures.
- Effectiveness of planned mitigation measures, particularly with regards to resettlement impacts, and development measures in restoring or enhancing Resettlement-Affected People's quality of life and livelihoods.

In considering M&E and Reporting, the RAP should develop key indicators at the outset, ideally agreed with all stakeholders. These should include outcome oriented (not output) indicators, and ensure that they contain quantity, quality, time and place variables in each one.

Indicator selection for the purpose of monitoring and evaluation should be guided by the following principles:

- Preference for fewer indicators that have significant validity over more indicators of less significant value
- Preference for indicators used by national institutions in order to be able to compare results with control groups, and avoid reinventing the wheel
- Measuring outcome and impacts on the following levels:
 - Monetary measuring of livelihoods through a quantitative income or expenditure survey
 - Proxy-indicators of livelihood improvements
 - Qualitative indicators measuring perception of Project-Affected Persons.

The RAP should develop indicators that deal specifically with livelihoods improvement and change, including both quantitative and qualitative measures, as well as indicators to assess the outcomes of compensation payments. Where these cannot be easily generated, consider the use of proxy indicators.

Explain how stakeholder participation will be included, particularly with directly affected communities (e.g. participatory monitoring of household surveys, valuation, sign-off, construction activities, and livelihood program activities).

A Completion Audit should also be undertaken to determine whether the RAP has fulfilled all obligations to mitigate project impacts, including in particular the restoration of livelihoods. A Completion Audit may include a wide range of external experts and observers. Government

agencies and NGOs may also be integrated with the Completion Audit, and also commit to handover of ongoing monitoring or assistance efforts.

Organizational Framework (item 19 of key elements)

The RAP needs to outline the organizational framework - the team which will achieve the effective planning, implementation and M&E of the RAP.

The organizational framework should therefore not only consider the immediate technical team responsible for RAP planning and implementation, but how this team needs to work with overall project planners, other relevant project departments, regulatory agencies, and community representative groups, as well as other partners in planning and delivery.

The RAP should outline the organizational framework in a clear organogram, and the roles and responsibilities of various actors in a table.

In this section also any needs for capacity building for RAP implementation will be indicated, including any needs of local stakeholders/the resettlement committees for capacity building in order to fully participate in the process.

Resettlement Budget & Implementation Schedule (item 20 of key elements)

The level of detail of the RAP schedule and budget will vary according to the stage of the Project. A preliminary RAP will have a high-level budget and schedule while a Final RAP should detail the final budget as spent and the detailed schedule.

In considering the Budget and Schedule, the RAP should:

- Ensure that all costs be estimated carefully and included in a detailed RAP budget
- Itemize resettlement costs by categories of entitlement, and other resettlement expenditures including training, project management and monitoring
- Have budget lines for Land Compensation, Buildings and Structures, Crop Compensation, Tree Compensation, Fruits compensation, Livelihood Restoration, and a Contingency
- Link the budget to a detailed implementation schedule for all key resettlement and rehabilitation activities
- Include a budget line for livelihoods (it can be further broken down and reconfirmed once the livelihood programs have been confirmed and detailed)
- Integrate RAP implementation and construction schedules by highlighting the dates for these processes. The livelihoods planning and roll-out can be detailed so as to coordinate with the moves and construction processes
- Develop the livelihood schedule iteratively alongside the development of program components and consultations. Once the proposed livelihood approaches are outlined in a revised RAP, these need to be discussed and agreed in principle with PEA.

The budget should be summarized in tabular format, with a clear breakdown of key costs, including in relation to compensation payments, physical resettlement, livelihood programs,

and other assistance. The schedule should be detailed in Excel or MS project formats, and detailed according to the key steps in the resettlement planning and implementation process, as described in the RAP.

Change Management (item 21 of key elements)

As discussed, the RAP should be seen as a ‘living document’ which will be updated as the Project progresses. It is not just a documentation of the Project, but a management tool to manage all impacts and mitigation measures associated with the land access and resettlement aspects of the Project.

Where the RAP is developed as a preliminary or interim RAP, a Change Management section can outline the steps required before formulation of the Final RAP. This may include, for example, completion of detailed design of infrastructure and livelihood assistance programs.

In considering Change Management, the preliminary RAP should include:

- The rationale for a RAP at the current stage in the process
- Further steps in RAP development, including follow-up surveys, livelihood program development, sign-off processes, etc.
- Proposed further iterations of the RAP and their timing.

Task 4: Reporting and RAP Implementation Workshop

The Consultant will establish the Draft RAP document along the key elements as described above. The main RAP document will be accompanied by an appropriate set of Annexes, including, but may not be limited to

- Maps indicating structures, land and other assets affected by the Project
- Template for Compensation Agreement
- Documentation of Stakeholder Engagement
- Sample Socio-Economic Questionnaires and any other guiding material used for consultations and stakeholder engagement during RAP preparation
- Tables with summaries of losses (land, structures, trees etc.)
- Any other supporting documentation, including documentation required by national legislation

The draft version of the RAP will be shared with PEA and KfW for comments.

The Consultant will then develop the agenda for the RAP implementation workshop based on the Draft RAP, including response to comments from PEA and KfW. The workshop shall focus on the development of a joint understanding and agreement on the provisions of the RAP and the corresponding activities and institutional arrangements. The workshop will be organized by PEA, ideally in the Project area, with the support of the Consultant and will aim to have all relevant stakeholders, including representatives of affected communities, as participants. The Consultant will develop workshop material, will facilitate the workshop and document the results.

The workshop agenda will be shared with PEA/KfW for comments.

NOTE: Ideally the RAP implementation workshop will be held after public disclosure of the Draft RAP so that results of the disclosure process could be considered.

The Consultant will prepare the final version of the RAP (including provisions for any future updated versions in the section on change management), under consideration of the results of the workshop and the public disclosure process.

The final version of the RAP will be submitted to PEA and KfW for no objection.

Deliverables Task 4

- Draft Resettlement Action Plan, Annexes
- Preparation of RAP Workshop including workshop materials, Facilitation of Workshop, Documentation
- Final version of Resettlement Action Plan, Annexes

Timing of the Assignment

To be determined

Required Expertise for the Assignment

The Tenderer shall provide a description of tasks to be performed by each team member as well as details on the selection and experience of the proposed members with regard to their tasks. The Tenderer shall provide updated curricula vitae (CV) of the proposed international and local / regional staff. Key staff should have adequate education, professional experience, language skills and experience in the region/ with similar tasks.

For the Social & Resettlement Experts *[one international, one national]* the following qualification is required in particular:

- University degree in anthropology / sociology or related disciplines;
- At minimum 10 years experiences with socio-economic studies, impact assessments and social management plans, in depth-familiarity with participatory field work as well as preferably with a focus on the [X] sector;
- Profound experience with conducting environmental & social risk assessments, preferably with a focus on the [X] sector
- Profound experience with stakeholder engagement and the establishment of stakeholder engagement plans, preferably with a focus on the [X] sector;
- At minimum 10 years experiences with involuntary resettlement planning in line with requirements of international standards, preferably with a focus on the [X] sector;
- Working experience in the resettlement context of [country], preferably with a focus on the [X] sector;
- Excellent reporting skills;

Please note that key staff presented in the Tenderer's proposal may not be replaced without the prior approval of KfW.

Annex 7. Guideline for preparing a Land Acquisition and Compensation Plan (LACP) in the context of the Iraq project

Guideline for preparing a Land Acquisition and Compensation Plan (LACP) in the context of the Iraq project

KfW Sustainability Guideline requires the preparation of a Land Acquisition and Compensation Plan (LACP) whenever private property must be acquired, or its use modified, for a project, and the acquisition or modification of privately-owned lands results in the loss of income or access to resources, either permanent or temporary and whether the occupation is legal or illegal. An Abbreviated LACP is required for a project activity that affects less than 200 people, or if it creates insignificant and minor impacts on the Project affected peoples (PAPs). Impacts are considered minor and insignificant if the PAPs physically do not have to be relocated and not more than 10% of their productive assets are acquired by the project activity.

This guideline provides principles and instructions how private or community land shall be acquired under the project in case land acquisition other than state-owned land cannot be avoided and serves as an information document for preparing LACPs.

Rationale for a Land Acquisition and Compensation Plan (LACP)

The project will unlikely involve land acquisition as it will only finance repair and reconstruction of damaged infrastructure of existing footprints. However, while physical displacement is excluded from finance, in certain situations permanent land acquisition cannot be ruled out. Several issues may increase the complexity of land acquisition such as the lack of reliable land record systems, and the inability of people losing land to either document ownership or be physically present to make their claims for eligibility.

Any livelihoods impact or impacts on private lands (temporary and/or permanent acquisition) will be addressed through this RAP in accordance with the provisions of the World Bank's Operational Policy (O.P 4.12) and relevant Iraqi laws and regulations: In this specific project context potential impacts could encompass the following (in green):

Displacement Category	Entitlement
Individuals who have formal legal rights to land (including customary and traditional rights recognized under the laws of Iraq)	1. Compensation for loss in land and assets at full replacement cost.
	2. In case of physical relocation, provide assistance during relocation (i.e. moving allowances) and residential housing and / or agricultural site with productive and location advantages equivalent to the lost sites.
	3. Support after displacement, until livelihoods and standards of living restored to pre-displacement levels.
	4. Development assistance in addition to compensation measures (i.e. land preparation, credit facilities, training, job opportunities).
Individuals who do not have formal legal rights to land, but have a claim to such land or assets (provided that such claims are recognized under Iraqi laws or become recognized through a process identified in the resettlement plan)	5. Compensation for loss in land and assets at full replacement cost.
	6. In case of physical relocation, provide assistance during relocation (i.e. moving allowances) and residential housing and / or agricultural site with productive and location advantages equivalent to the lost sites.
	7. Support after displacement, until livelihoods and standards of living restored to pre-displacement levels.
PAPs who have no recognizable legal right or claim to the land they are occupying	8. Development assistance in addition to compensation measures (i.e. land preparation, credit facilities, training, job opportunities).
	9. Resettlement assistance (such as cash, employment, other assets and land) in lieu of compensation for land
	10. Other assistance necessary for achieving the objectives of the World Bank Policy OP 4.12

According to KfW's Sustainability Guideline any land acquisition triggers the implementation of a LACP based on the requirements outlined in OP 4.12 of the World Bank.

Key Principles of a LACP

In line with WB OP 4.12 the following principles would be applied for a LACP:

1. Acquisition of land and other assets will be minimized as much as possible. Where land acquisition is unavoidable, the project will be designed to minimize adverse impact on the Project affected peoples (PAPs), especially the vulnerable groups;
2. All PAPs will be informed and consulted prior to finalizing the LACP in order to agree on the compensation arrangements and its details;
3. All PAPs will be compensated so as to improve their standard of living, income earning capacity and production capacity, or at least to restore them to either pre-displacement or pre-project levels, whichever is higher;

4. All PAPs cultivating land or having rights over resources within the projects areas are entitled to compensation for their losses and/or income rehabilitation. Lack of legal right to the assets lost will not bar the PAPs from entitlement to such compensation measures;

The rehabilitation measures to be provided in this specific project are

- compensation at full replacement cost for affected structures;
- compensation for land acquisition;
- full compensation for crops, trees and other similar agricultural products at market value;

Land-for-land is the preferred option. Land-for-land may be substituted by cash provided that:

- land is not available in the proximity of the project-area;
- PAP willingly accept cash compensation for land and all assets on it and receive full replacement value without any deductions for depreciation; and
- Cash compensation is accompanied by appropriate rehabilitation measures which together with project benefits results in restoration of incomes to at least pre-projects levels

Eligibility Criteria

All PAPs who suffer a complete or partial loss of assets or access to assets shall be eligible for some kind of assistance, according to their rights to the land, if it can be proven that they occupied or used the land before the claim cut-off date. The Bank OP 4.12 specifically proposes three general categories for eligibility as illustrated in the following table (in green are the relevant ones to this project):

Displacement Category	Entitlement
Individuals who have formal legal rights to land (including customary and traditional rights recognized under the laws of Iraq)	1. Compensation for loss in land and assets at full replacement cost.
	2. In case of physical relocation, provide assistance during relocation (i.e. moving allowances) and residential housing and / or agricultural site with productive and location advantages equivalent to the lost sites.
	3. Support after displacement, until livelihoods and standards of living restored to pre-displacement levels.
	4. Development assistance in addition to compensation measures (i.e. land preparation, credit facilities, training, job opportunities).
Individuals who do not have formal legal rights to land, but have a claim to such land or assets (provided that such claims are recognized under Iraqi laws or become recognized through a process identified in the resettlement plan)	5. Compensation for loss in land and assets at full replacement cost.
	6. In case of physical relocation, provide assistance during relocation (i.e. moving allowances) and residential housing and / or agricultural site with productive and location advantages equivalent to the lost sites.
	7. Support after displacement, until livelihoods and standards of living restored to pre-displacement levels.
PAPs who have no recognizable legal right or claim to the land they are occupying	8. Development assistance in addition to compensation measures (i.e. land preparation, credit facilities, training, job opportunities).
	9. Resettlement assistance (such as cash, employment, other assets and land) in lieu of compensation for land
	10. Other assistance necessary for achieving the objectives of the World Bank Policy OP 4.12

Methods for valuation and compensation

The valuation of losses in physical assets will be carried out by assessing the market value of the assets, if known, and estimating the replacement cost. Replacement cost is simply calculated as the cost of replacing the lost assets plus any transaction costs associated with bringing the asset to pre-displacement value. However, the valuation of crops will be relied upon the price lists developed by the Agriculture directorate and revisited annually which is determined based on the market prices and productions. In case of the project involves any impacts on interruptions of businesses, compensation will be based on the actual loss of owners and workers. Replacement cost will differ depending on the type of asset, as illustrated in the following table (in green are the relevant ones to this project):

Asset	Replacement Cost
Agricultural Land and leased agricultural lands	Equals the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer

Asset	Replacement Cost
	taxes. For leased lands the responsible Ministry will buy the land from the Ministry of Agriculture and the Ministry of Agriculture will equals the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land.
Urban Land	Equals the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
Houses / Other Structures	Equals the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labour and contractors' fees, plus the cost of any registration and transfer taxes.
Crops and trees	Trees and crops will be compensated based on the market value. The market value will be determined by a committee of experts.

Compensation

Compensation will be provided to all individuals whose assets or access to assets is affected or damaged, as a consequence of land acquisition or any other activities undertaken by the projects. While land shall be replaced with an equally productive plot and only if not possible be compensated in cash, the compensation for the loss of physical and nonphysical assets will vary depending on the type of loss, and eligibility of the PAPs. Compensation may come in the form of cash compensation, in-kind compensation, and/or assistance. All PAPs will be entitled to monetary compensation at replacement cost, at market value (at the entitlement cut-off date) for affected tangible assets. Another option may be in-kind compensation where the affected assets would be replaced with an asset of similar size, value, and quality. The decision on which type of compensation is used should be jointly agreed upon between the project-PMT and the PAPs and shall be subject to the availability of replaceable assets. Moreover, development and resettlement transitional assistance needed to restore the livelihood and standard of living of PAPs under the subproject to either pre-displacement or pre-project levels, whichever is higher, shall also be part of the compensation component of any resettlement plan (i.e. short-term jobs, subsistence support, moving allowance, salary maintenance, food assistance, etc.). It should be noted here that compensation for losses in communal property shall only be in-kind for the community as a whole and shall take the form of reconstruction of the affected or damaged facility (i.e. public-school buildings, markets, etc.) to at least the same standard it was on prior to the project's implementation.

Consultation

The project agency will ensure that all occupants of land and owners of assets located in a proposed subproject area are consulted in a timely manner prior to finalizing the compensation arrangements and are compensated before the start of the construction works. Depending on the number of PAPs, consultations will be either held as community meetings or organized individually. During the consultations the PAPs will be informed about the required land acquisition and the means of compensation. They will be given the opportunity to discuss and negotiate all relevant details of the LACP in order to agree on its implementation. Minutes will be taken that include all issues raised and the agreements made on the preferred compensation arrangement.

Grievance Mechanism

The grievance mechanism for acquiring land should consider the availability of judicial recourse as well as traditional and community dispute resolution mechanisms. Prior to the official channel, the existing Grievance Redress Mechanism that was established at the project level for the parent project to ensure any grievance can be addressed in an amicable manner should be used in case of grievances.

In Iraq, the official channel is through court to hand the complaints involved in land acquisition. When the land (either owned by an individual or a government institute) cannot be purchased based on mutual agreement (through a willing buyer-willing seller approach), and there are no alternative sites for the project, the land has to be acquired by using eminent domain. In such case, the project entity or the responsible ministry will go to court and buy the land based on the value decided by the court. The land owners can appeal if they are not satisfied with the court decision. The second court decision will be the final.

Monitoring and Evaluation

The LACP monitoring indicators will be simple but robust indicators or proxies that should be as far as possible visible and verifiable and that will, according to the nature of the impacts, measure the following key outcomes against the pre-resettlement baseline. Some key monitoring and evaluation indicators are shown in the following table:

Monitoring	Evaluation
Percentage of individuals selecting cash or a combination of cash and in-kind compensation	Proposed use of payments
Payment of compensation to PAPs in various categories	Conformance to compensation policies described in the RAP
Number of grievances	Timeliness and quality of decisions made on grievances
Delivery of technical assistance, relocation, payment of transitional subsistence and moving allowances	Facilitation of access to technical and development assistance and transitional allowances

Monitoring	Evaluation
Delivery of income restoration and development assistance	Ability of individuals and households to restore sources of income
Public information dissemination and consultation procedures	Timeliness, quality, and effectiveness of
	consultation and information disclosure

Contents of an abbreviated LACP

An abbreviated LACP shall include, at minimum, the following components:

1. Description of the project activity. General description concerning the project activity and identification of the project activity's site.
2. Potential various impacts that may occur. The identification includes:
3. components of project activities that would require land acquisition;
4. areas to be affected by the activity.
5. Census on the PAPs, and inventory of assets affected by the project activity.
6. Results of the survey and asset inventory, which will include:
7. list of PAPs, which differentiate PAPs who have land rights and land users (tenants) who do not have land rights; and,
8. inventory of land parcels and structures affected by the project activity.
9. Information produced by the survey needs to be summarized into a table
10. Eligibility. Identification of which PAPs will be entitled to receive compensation and explanation of the criteria used to determine eligibility.
11. Compensation, assessment of land and assets valuation, and resettlement assistance to be provided. This includes a description of the compensation options and resettlement assistance that will be offered to the PAPs. Assessment of land and asset values will be determined by the result of an assessment result by licensed appraisers.
12. Public consultation with local community members who will lose their land and other assets. This include activities to
13. inform the PAPs about various impacts of the project activity, available options for compensation and resettlement assistance, and procedures to obtain compensation, and
14. provide opportunity for the PAPs to express their opinion or concerns.
15. Institutional Responsibility. Brief description concerning the organizational frameworks to implement the activities of land acquisition.
16. Schedule of Implementation. An implementation schedule shall be made to include all land acquisition activities, including target deadlines for compensation payments. The schedule must describe how land acquisition activities are linked to the overall project activity's implementation.
17. Cost and Budget. Costs estimations for land acquisition are required by the project activity.

18. Complaints Handling Procedures. A workable procedure must be set up, which can be accessed by complainants for settlement of disputes arising from the land acquisition; such complaints' mechanisms should consider the options to go to the district court as well as community-based and traditional dispute resolution mechanisms.
19. Monitoring. Plan to monitor land acquisition activities and compensation payment to the PAPs.

Annex 8. Requirements for voluntary land donations

Requirements for voluntary land donations

Voluntary land donations are only acceptable provided that the Implementation Partner verifies and demonstrates that all voluntary land transactions meet the following criteria:

Criteria	Yes + explanation	No + explanation
The land in question is free of squatters and no people with customary rights or no legal title are using it;		
The land in question is free from any dispute on ownership or any other encumbrances;		
No household relocation is involved;		
The amount of land being donated is minor and will not reduce the donor's remaining land area below that required (e.g., no more than 10% of total agricultural land holding donated) to maintain the donor's livelihood at current levels;		
The donor is expected to benefit directly from the Project;		
The donor is aware that refusal is an option;		
The donor has been appropriately informed and consulted about the Project and the choices available to him/her;		
A grievance redress mechanism is in place to hear complaints regarding land acquisition;		
Land transfer will be completed through registration after the donor has confirmed in writing his/her willingness to proceed with the donation;		
For community or collective land, donation has occurred with the consent of individuals using or occupying the land.		

The Implementation Partner, i.e., line Ministries/Governors, through field technical teams, will verify the fulfillment of these criteria and provide further explanations on each criterion. If all criteria are fulfilled, the Implementation Partner will ensure completion of the voluntary land transaction in written consent form (see sample waiver below). The donation will be verified by two witnesses who are community leaders but not beneficiaries of the subproject, to ensure that the land was voluntarily donated without any form of duress. **The signed waivers will be submitted to the relevant line Ministry and Governorate and** verified by the Bank in order to ensure that the voluntary land donation has been conducted in accordance with the above criteria.

A SAMPLE VOLUNTARY DONATION OF LAND AGREEMENT

The following agreement has been made on day of between Mr./Ms., aged, resident of zone, district (the Owner) and (the Recipient/Subproject Proponent).

1. That the land with certificate no..... is a part of, is surrounded from eastern side by....., western side by....., northern side by, and southern side by.....
2. That the Owner holds the transferable rights of land (area in square meters), with plot no..... at the above location (include a copy of the certified map, if available).
3. That the Owner testifies that the land/structure is free of squatters, no people with customary rights or no legal title are using it, no household relocation will be needed and that there is no dispute on ownership or any other encumbrances in regards to the land.
4. That the Owner ensures that the amount of land being donated is minor and will not reduce the Owner's remaining land area below that required (i.e., no more than 10% of total agricultural land holding donated) to maintain the Owner's livelihood at current levels.
5. That the Owner has been appropriately informed and consulted about the Project and the choices available (including refusal) as well as possible ways to address grievances.
6. That the Owner hereby grants to the..... (name of the Recipient) this asset for the construction and development of thefor the benefit of the community and that the Owner's property rights will be handed over to and registered in the name of (name of the Recipient).
7. That the Owner will not claim any compensation against the grant of this asset nor obstruct the construction process on the land in case of which he/she would be subject to sanctions according to law and regulations.
8. That the(name of the Project Proponent) agrees to accept this grant of asset for the purposes mentioned.

Name and Signature of the Owner
sentative

Signature of Subproject Proponent/Representative

.....
(Signature, name and address)

.....
(Signature, name and address)

Witnesses 1:

Witnesses 2:

1.....
(Signature, name and address)

2.....
(Signature, name and address)

Annex 9. Disclosure Requirements for E&S Instruments for Projects

A public consultation and disclosure campaign as required by OP 4.01 and OP4.12 will be prepared, organized and carried out. The Project Owner's representative (PMU or a Consultant) will assemble appropriate materials, (maps, graphs, drawings, simulations, models, key environmental figures) disclose them in a manner acceptable to Bank policies (timely prior to consultation, usually at least 4 weeks, in a form and language that are understandable, in locations accessible with reasonable effort to the groups being consulted) and organize one or more venues which will enable the affected population to participate without excessive undue efforts. Suggested venues would be one or more of the potentially affected (by visibility, traffic, land take or other nuisances) communities near the planned project site.

The materials and information to be disclosed will have to cover the following aspects of the project: (i) General project design and layout, emphasizing areas directly impacted by permanent or temporary works and structures, access and service roads, and areas indirectly impacted by construction or operation (noise, dust, borrow pits, landscape aesthetics etc.); (ii) summary of major environmental impacts generally associated with large scale civil construction works and landfill operations, (iii) overview of relevant World Bank environmental and social safeguards policies applicable to the project (OP4.01, OP4.04, OP4.11, OP4.12) and the approaches and instruments for mitigation of environmental and social impacts, which are commonly applied in landfill projects; (iv) overview environmental and social impact assessments. (v) a presentation and discussion of any alternative sites and landfill configurations.

The Project Owner will assure the presence at the consultations of competent technical staff familiar with the project. Discussions will be conducted in local language. With assistance of the project proponent, materials will be prepared clearly describing the project in a manner understandable for non-specialists: these can be maps, pictures, plans, diagrams and other information materials which are understandable to a non-technical audience, yet truly and fully characterize the project, the expected impacts and planned mitigation measures.

The PMU or Consultant will provide documentation of the following:

- Manner in which notification of the consultation was announced: media used, date(s), description or copies of the announcement:
 - Date(s) consultation(s) was (were) held.
 - Location(s) consultation(s) was (were) held.
 - Who was invited (Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office).
 - Who attended (Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office).
 - Meeting Program/Schedule (What is to be presented and by whom, how much time for input by the public).
 - Summary Meeting Minutes (comments, questions and response by presenters).
 - List of decisions reached, and any actions agreed upon with schedules, deadlines and responsibilities.

Excerpts on Consultation and Disclosure from OP4.01

Public Consultation

14. For all Category A and B projects proposed for IBRD or IDA financing, during the EA process, the borrower consults project-affected groups and local nongovernmental organizations (NGOs) about the project's environmental aspects and takes their views into account. The borrower initiates such consultations as early as possible. For Category A projects, the borrower consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the borrower consults with such groups throughout project implementation as necessary to address EA-related issues that affect them.

Disclosure

15. For meaningful consultations between the borrower and project-affected groups and local NGOs on all Category A and B projects proposed for IBRD or IDA financing, the borrower provides relevant material in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted.

16. For a Category A project, the borrower provides for the initial consultation a summary of the proposed project's objectives, description, and potential impacts; for consultation after the draft EA report is prepared, the borrower provides a summary of the EA's conclusions. In addition, for a Category A project, the borrower makes the draft EA report available at a public place accessible to project-affected groups and local NGOs. For projects described in paragraph 9 above, the borrower/FI ensures that EA reports for Category A projects are made available in a public place accessible to affected groups and local NGOs.

17. Any separate Category B report for a project proposed for IDA financing is made available to project-affected groups and local NGOs. Public availability in the borrowing country and official receipt by the Bank of Category A reports for projects proposed for IBRD or IDA financing, and of any Category B EA report for projects proposed for IDA funding, are prerequisites to Bank appraisal of these projects.

18. Once the borrower officially transmits the Category A EA report to the Bank, the Bank distributes the summary (in English) to the executive directors (EDs) and makes the report available through its InfoShop. Once the borrower officially transmits any separate Category B EA report to the Bank, the Bank makes it available through its InfoShop.¹⁶ If the borrower objects to the Bank's releasing an EA report through the World Bank InfoShop, Bank staff (a) do not continue processing an IDA project, or (b) for an IBRD project, submit the issue of further processing to the EDs.

Annex 10. Guidance on the Preparation of A Stakeholder Engagement Plan (SEP)

Guidance on the preparation of a Stakeholder Engagement plan (SEP) and planning of stakeholder activities

The SEP shall contain information on the following (at least but not limited to):

- **Background information:** Overview of the proposed Project design and its activities during the different project stages (planning, construction, operation, maintenance), its purpose, costs and financiers;
- **Public consultation regulations and requirements:** Description of national regulations and requirements as well as international Standards and international Best Practice. Where ever there are gaps between national and international requirements, the most stringent will be applied;
- **Previous public consultation and disclosure activities:** Summarize all public consultation and information disclosure activities to date. This should include the types of information disseminated, the locations and dates of meetings, descriptions of those individuals/groups involved. An overview of issues discussed, how they were responded to and how they were communicated back to the concerned publics.
- **Stakeholder identification:** The first step of the stakeholder engagement activities is the identification and characterization of the Project stakeholders. In this regard, provide an inventory of key stakeholder groups who were/will be informed and consulted about the project. This would include authority, local communities, landowners, civic organizations, Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs) and government representatives as well as consider power/influence relations and inter- and intra- social dynamics across all stakeholders, identifying under-represented and vulnerable groups. The identified stakeholders shall be compiled in a list.
- **Stakeholder planning:** The SEP shall describe the engagement planning activities to be undertaken. The planning activities should define the goals of the SEP, its methods for information disclosure and consultation, including appropriate communication methods (culturally appropriate and relevant language(s)), timing and activities for stakeholder engagement as well as the issues to be presented based on the ESIA study. Also, a schedule detailing when public consultation and information disclosure will occur, with which stakeholder groups, at what stages of the project's process/project cycle, and through what formats will be provided.
- **Stakeholder documentation:** The PMT/IC shall prepare the necessary documentation required for engagement activities. This will include a Background Information Document (BID), presentation for use at stakeholder meetings, advertisements and notices as well as maps, pictures and posters as required.
- **Stakeholder interactions:** including meetings, provision of information, advertisements, notices, radio and TV advertisements.
- **Reporting:** The results of the stakeholder interactions should be summarized within the Scoping Report and ESIA Reports. The issues raised should be listed and grouped, and the ESIA should demonstrate how these issues have been addressed within the ESIA. Additional Annexes (e.g. stakeholder register, consultation log, grievance forms...) should be included.

- **Grievance Procedure:** If not in place, a Grievance Mechanism must be set up that is scaled to fit the level of risks and impacts of the project. It should fit and be integrated into the Programme Executing Agency (PEA) broader process of stakeholder engagement. It is important that the process is accessible, transparent and tracked through a form of records of each grievance and complain. (see details below)
- **Monitoring, reporting and review:** Monitoring activities for review of the stakeholder engagement activities and the need for updating of the SEP through a management of change process. Identify where and when the results of public consultation and information disclosure will be reported. This should include at a minimum reporting on the results of consultations at the draft ESIA stage and annual monitoring reports.
- **Resource and Responsibilities:** The staff and resources that will be required to implement and manage stakeholder management activities and how it will be integrated in the current management activities.
- **Disclosure:** The stakeholder engagement activities should include sufficient disclosure of Project information, including release of the Scoping Report and ESIA Report.

General scope of the Grievance Mechanism

1. The scope, scale and type of grievance mechanism required will be proportionate to the nature and scale of the potential risks and impacts of the project.
2. The grievance mechanism may include the following:
 - (a) Different ways in which users can submit their grievances, which may include submissions in person, by phone, text message, mail, e-mail or via a web site;
 - (b) A log where grievances are registered in writing and maintained as a database;
 - (c) Publicly advertised procedures, setting out the length of time users can expect to wait for acknowledgement, response and resolution of their grievances;
 - (d) Transparency about the grievance procedure, governing structure and decision makers; and
 - (e) An appeals process (including the national judiciary) to which unsatisfied grievances may be referred when resolution of grievance has not been achieved.
3. The PEA may provide mediation as an option where users are not satisfied with the proposed resolution.

Exemplary Table of Content of a SEP

The following exemplary table of content shall be used or amended accordingly to the impacts and risks of the Project

1. Introduction

- 1.1 Project Description
- 1.2 Public Consultation and Project Design, Construction and Operations
- 1.3 Project Purpose and Objectives
- 1.4 Total Project Cost and Associated Financiers and Lenders

2. Public Consultation Regulations and Requirements

- 2.1 Local Regulations and Requirements
- 2.2 International Best Practice

3. Previous Public Consultation and Disclosure Activities

- Summarize all public consultation and information disclosure activities to date. This should include the types of information disseminated, the locations and dates of meetings, descriptions of those individuals/groups involved.
- An overview of issues discussed, how they were responded to and how they were communicated back to the concerned publics.

4. Stakeholders

- Provide an inventory of key stakeholder groups who will be informed and consulted about the project.
- Account for inter- and intra- social dynamics across all stakeholders, identifying under-represented and vulnerable groups.

5. Stakeholder Engagement Plan

5.1 Goals of the Plan

5.2 Methods for Information Dissemination and Public Consultation

5.3 Information Disclosure and Public Consultation

5.3.1 Issues Scoping

5.3.2 ESIA Review

5.3.3 Construction and Operations

6. Schedule and Timetable

- Provide a schedule detailing when public consultation and information disclosure will occur, with which stakeholder groups, at what stages of the project's process/project cycle, and through what formats.

7. Resources and Responsibilities

- Indicate budgets allocated to the realisation of all activities foreseen in the Plan
- Indicate management and expert staff devoted to, and responsible for, the public consultation and disclosure programme.

8. Grievance Mechanism

- Describe how the operation- affected people can bring their concerns to the project authority and how they will be considered and addressed.

9. Monitoring and Reporting

Identify where and when the results of public consultation and information disclosure will be reported. This should include at a minimum reporting on the results of consultations at the drafting of the ESMP and the ESMMP stage

Guidance for the implementation of stakeholder engagement activities

Stakeholder Engagement activities may be but not be limited to:

- Gathering of all the people concerned by meaningful means (publication of an open invitation in local newspapers, radio, etc. and specific invitations in collaboration with adjacent communities) and at least two weeks in advance of each meeting. The nature, frequency, and number of the engagement meetings (if required separate meeting for different stakeholder groups to facilitate participation) shall be determined by the PMT/IC as appropriate

for the project nature and context;

- Every effort should be taken to include broad representation from all stakeholder groups with particular attention to include potentially marginalized or vulnerable groups;
- Presentation of the project during the meeting with adapted and appropriate languages;
- The PMT/IC will have to present the project in the less technical way, and the nearest to the population's concerns;
- The presentation should include a clear summary of the main information contained in the ESIA, and especially the information related to potential positive or negative impacts of the project and the measures to be implemented to avoid, mitigate or compensate harmful consequences of the project on the human and natural environment. It should also contain a situation plan detailing the borders of the predictable area impacted by the Project.
- Organization of a debate session to answer the questions raised by people attending the meeting; and
- Efforts should be made to accurately and thoroughly document the meeting attendees, their affiliation, gender, profession, views and concerns as well as all questions and answers and signed attendance sheet.

In addition, the PMT/IC should note the following in the preparation of the proposal for this work:

- Stakeholder engagement activities need to satisfy the Iraqi legal requirements, guidelines and formats.
- Engagement meetings will be well advertised, at least two weeks in advance of each meeting. The communication mechanisms shall be culturally appropriate and shall be defined within the PMT/IC workplan.
- Every effort should be taken to include broad representation from all stakeholder groups, including both the impacted and benefiting communities of the project, with particular attention made to include potentially marginalized or vulnerable groups such as women, lower income groups and people with disabilities. Efforts should be made to accurately and thoroughly document the meeting attendees, their affiliation, gender, profession, views and concerns.

The nature, frequency, and number of the engagement meetings shall be determined by the PMT/IC as appropriate for the Project nature and context.

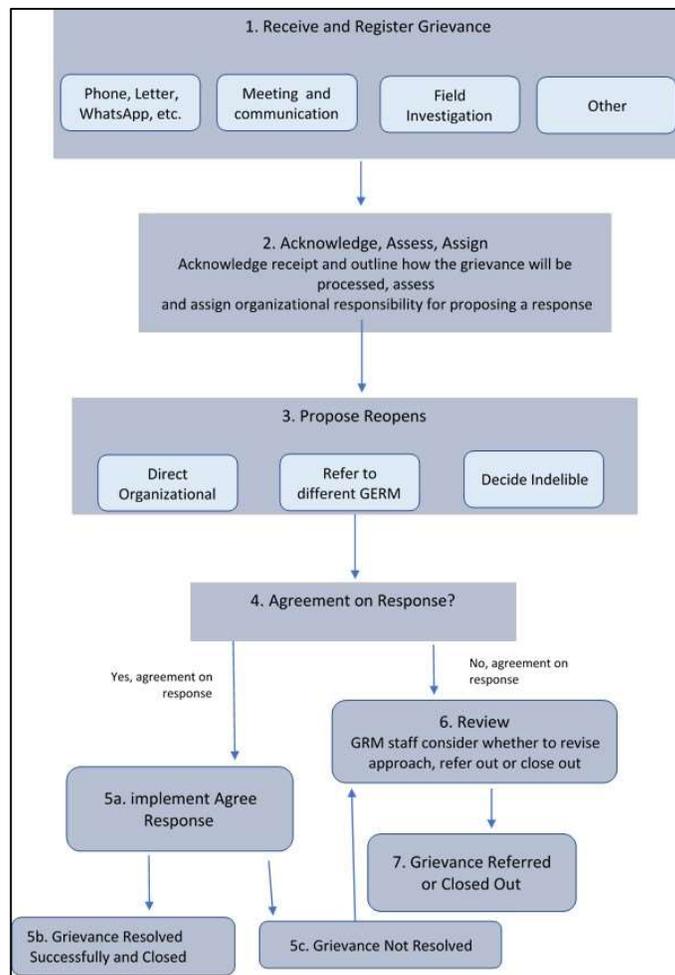
Annex 11. Detailed Work Processes of the GCFI GRM

Detailed Work Processes of the GCFI GRM

Based on the IFC Good Practice Note No.7/2009 for Addressing Grievances from Project-Affected Communities (IFC, 2009), the grievance mechanism shall consist of the following work-processes:

- Acknowledge, Assess, Assign
- Develop a proposed response
- Communicate proposed response to complainant and seek agreement on the response
- Implement the response to resolve the grievance
- Review the response if unsuccessful
- Close out or refer the grievance

The figure shows typical steps in a grievance resolution mechanism, which is proposed to PMTs and can be tailored to the particular sector, governorate and project context.



The following are the main work processes of the GRM-operation:

1. Receive and register grievance

The GRM should enable aggrieved stakeholders to communicate their grievances through a variety of accessible and at no-cost channels: phone, letter, fax, email, website, social media applications including sharing photos of the grievance site and location, in-person meeting, and others. It is proposed that complainants have the option to provide their names or otherwise. However, only a reply contact is required in order to update the complaints of the status of his grievance. In certain situation this could also be optional as per the complainant's choice.

While recognizing that many complaints may be resolved" on the spot" and informally by the PMTs' Directorates-GRM staff. There are still opportunities to encourage these informal resolutions to be logged into a GRM database to (i) encourage responsiveness; and (ii) ensure that repeated or low-level grievances are being noted in the system. the following chart exhibits the proposed GRM work-processes

2. Acknowledge, Assess, Assign

Acknowledging receipt: The staff who have received the grievance, or a central grievance office, should provide a timely communication back to the complainant(s) that their grievance has been received, will be logged and reviewed for eligibility, and if eligible, will generate an initial organizational response. Normally, initial acknowledgement should come within 3-5 days of receipt, and can be in the form of a standard letter, email or a registered phone call. A reference name or number for the complaint is provided to the complainant.

Assessing eligibility for the GRM: To ensure that the issue being raised is relevant to the PMTs projects and activities. A decision on eligibility is only meant to trigger an initial assessment and response. It is not an admission that the contractor/others have caused an impact, or a commitment to provide the complainant with any specific form of redress. The staff responsible for the initial response need to follow clear guidelines on what kinds of issues are eligible to be handled through the GRM, what issues should be referred to other mechanisms (such as internal audit departments, internal and external anti-corruption offices, police, etc.), and what issues or contexts may not be eligible for an organizational response.

Those assessing eligibility also need to decide whether the complainant should be directed to a different office within the Ministry and its Directorates, or to a different organization altogether.

Eligibility is often determined on the basis of four broad criteria:

- Does the complaint indicate that any of the programs' projects has caused a negative economic, social, or environmental impact on the complainant, or has the potential to cause such an impact?
- Does the complaint specify what kind of impact has occurred or may occur, and how the program has caused or may cause that impact?
- Does the complaint indicate that those filing the complaint are the ones who have been impacted, or are at risk of being impacted; or that those filing the complaint are representing the impacted or potentially impacted stakeholders at their request?

- Does the complainant provide enough information for GRM staff to decide on the first three questions?
- Assigning responsibility: Complaints should be referred to PMT/IC members. A simple categorization of complaints—i.e., type of issue raised and the effect on the environment/claimant if the impacts raised in the complaint were to occur—may support faster referral to the appropriate entity or person. The process of assigning cases is generally more successful when it is done in a way that is transparent for complainants.

3. Develop a proposed response

GRMs typically generate three primary types of response to complaints:

- Direct action to resolve the complaint
- Further assessment and engagement with the complainant and other stakeholders to determine jointly the best way to resolve the complaint
- Determination that the complaint is not eligible for the GRM, either because it does not meet the basic eligibility criteria, or because another mechanism (within the organization or outside it) is the appropriate place for the complainant to go.

Many complaints can be resolved through direct and relatively straightforward action on the part of the PMT/IC: e.g., investigating alleged damage caused by a vehicle; changing the time and location of a consultation; making public information more accessible in a community.

In other cases, further assessment involving multiple stakeholders and issues, and potentially an extended process of joint fact-finding, dialogue and/or negotiation, will be necessary to resolve the complaint. In these cases, the GRM should propose a stakeholder assessment and engagement process to respond to the complaint.

4. Communicate proposed response to complainant and seek agreement on the response

The GRM is responsible for communicating the proposed response back to the complainant in a timely fashion, in writing using language that is easily accessible to the complainant. Responders may also contact the complainant by telephone or set up a meeting to review and discuss the initial approach with the complainant. The response should include a clear explanation of why the response is being proposed; what the response would be; and what the complainant's choices are, given the proposed response. Those choices may include agreement to proceed, request for a review of an eligibility decision or a referral decision, further dialogue on a proposed action, or participation in a proposed assessment and engagement process. In addition, the response should note any other organizational, judicial or non-judicial but official government avenues for redress that the complainant may wish to consider.

Though practice varies, communication of the proposed response should normally occur within 14-21 days from receipt of a complaint. In the case of complaints alleging serious harm or risk of harm, and/or serious rights violations, the GRM's standard operating procedures should call for a fast-track response, whether by the GRM or by immediate referral to another office or organization and immediate notification to the complainant of that referral.

The complainant may or may not agree with the proposed response. If there is agreement, then the organization can proceed with the proposed response, whether direct action, further

assessment, or referral. If the complainant challenges a finding of ineligibility, rejects a proposed direct action, or does not want to participate in a more extensive process of stakeholder assessment and engagement, the GRM staff need to clarify the reasons why the complainant does not accept the proposed response, provide additional information, and, where possible, revise the proposed approach.

If there is still not agreement, GRM staff need to make sure the complainant understands what other recourse may be available, whether through the judicial system or other administrative channels, and to document the outcome of the discussions with the complainant in a way that makes clear what options were offered and why the complainant chose not to pursue them.

For sensitive and challenging cases, the GRM may seek agreement to use independent assessments, mediation or adjudication to seek appropriate resolution of the case. If mediation is used, it may be appropriate to safeguard the integrity of the process by incorporating, for example, requirements for technical expertise, pre-approved rosters or sources of qualified mediators to be selected by agreement of the parties, or observers of the mediation process such as senior representatives of key stakeholder groups (e.g., government, international partners, communities, CSOs, and/or businesses involved). In the case of adjudication, in addition to rigorous and unbiased selection of adjudicators, other mechanisms to ensure impartiality and strategic oversight of the process can also be put in place, such as a review board to whom a party could appeal in case of bias.

5. Implement the response to resolve the grievance

When there is agreement between a complainant and the GRM staff to move forward with the proposed action or stakeholder process, then the response should be implemented.

6. Review the response if unsuccessful

As noted above, in some cases it may not be possible to reach agreement with the complainant on the proposed response. The GRM staff should review the situation with the complainant and see whether any modification of the response might meet the concerns of the complainant, the organization, and other stakeholders. If not, the GRM staff should inform the complainant about other alternatives that may be available, including the use of judicial or other administrative mechanisms for recourse. Whatever alternative the complainant chooses, it is important for GRM staff to document their discussion with the complainant and the complainant's informed choice among alternatives.

7. Close out or refer the grievance

The final step is to close out the grievance. If the response has been successful, the GRM staff should document the satisfactory resolution. In cases where there have been major risks, impacts and/or negative publicity, it may be appropriate to include written documentation from the complainant indicating satisfaction with the response. In others, it will be sufficient for the GRM staff to note the action taken and that the response was satisfactory to the complainant and the organization. In more complex and unusual grievance situations, it may be useful to document key lessons learned as well.

If the grievance has not been resolved, GRM staff should document steps taken, communication with the complainant, and the decisions made by the organization and the complainant about referral or recourse to other alternatives, including legal alternatives.

In general, GRM documentation on particular cases should maintain confidentiality about details, while making public aggregate statistics on the number and type of complaints received, actions taken, and outcomes reached. It may be appropriate in some cases to make basic information about the identity of complainants publicly available, with the consent of the complainant.

Accurate case documentation using an electronic database is essential for public accountability, organizational learning, and resource planning. Therefore, closing a case is both a formal way to account for the response to a particular grievance, and a critically important moment for ensuring that key information and lessons are captured.

Annex 12. GRM Capacity Building Assessment and Strengthening Reference

GRM Capacity Building Assessment and Strengthening Reference

GRM capacity development step	Key questions
Review and analyze GRM context, characterize current grievance patterns and trends	<ul style="list-style-type: none"> • History of grievances directed at the agency? • Evolution of agency responses? • Stakeholder perceptions of the agency's response? • Recent/current grievances: number, frequency, type, responses, outcomes, and trends? • Agencies policies, programs and actions associated with grievances? • Organizational, political, social and economic factors driving grievances and responses?
Review of define GRM goals and principles, identify potentiality conflicting agency policies, procedures and actions	<ul style="list-style-type: none"> • GRM goals and operating principles? • Legal and policy basis? • Alignment with national and international good practices? • Tensions with agency policies, programs and actions that trigger grievances? • Opportunities to clarify and/or align GRM and other agency goals with good practice?
Access current processes for grievance resolution	<ul style="list-style-type: none"> • How closely do current practices conform to law, policy and regulations? • How well do current practices meet key performance criteria”: • Transparency, accessibility, predictability, legitimacy, equity, rights compatibility, stakeholder dialogue, continuous learning? • Other national and international guiding goals/principles?
Identify current institutional strength and capacity gaps	<ul style="list-style-type: none"> • What changes within the agency, and/or among current and potential GRM users, will have the most positive impact on performance? • Who needs to decide, support implement and monitor these changes?
Develop a joint plan for building on strengths and closing gaps	<ul style="list-style-type: none"> • What actions will agency and external actors take to make the changes needed?
Implement the plan with joint organizational and external stakeholder participation	<ul style="list-style-type: none"> • What actions will agency and external actors take to make the changes needed?
Jointly monitor, evaluate and learn from implementation	<ul style="list-style-type: none"> • How is implementation of changes affecting performance? • What other factors are affecting performance?
Refine the GRM based on joint learning	<ul style="list-style-type: none"> • How can the GRM be further improved based on learning from monitoring and evaluation?

GRM Definition of Terms

Legitimate: a mechanism must have clear, transparent and sufficiently independent governance structures to ensure that no party to a particular grievance process can interfere with the fair conduct of that process.

Accessible: a mechanism must be publicized to those who may wish to access it and provide adequate assistance for aggrieved parties who may face barriers to access, including language, literacy, awareness, finance, distance or fear of reprisal.

Predictable: a mechanism must provide a clear and known procedure with a timeframe for each stage and clarity on the types of process and outcome it can and cannot offer, as well as a means of monitoring the implementation of any outcome.

Equitable: a mechanism must ensure that aggrieved parties have reasonable access to sources of information, advice and expertise necessary to engage in a grievance process on fair and equitable terms. **Rights-compatible:** a mechanism must ensure that its outcomes and remedies accord with internationally recognized human rights standards.

Transparent: a mechanism must provide sufficient transparency of process and outcome to meet the public interest concerns at stake and should presume transparency wherever possible; non-state mechanisms in particular should be transparent about the receipt of complaints and the key elements of their outcomes.

Annex 14. Grievance Registration and Monitoring Form

Grievance Registration and Monitoring Form

Complainant Information (Person Reporting)							
Name (Optional)		Address (Optional)		Telephone/Mobile (Optional)			
Fax (Optional)		Email (Optional)		Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female			
Age group: (Optional) <ul style="list-style-type: none"> • Less than 18 • 19-40 • 41-60 • More than 60 		Disability, if any: (Optional)		Literacy: (Optional)			
Complain Registration Number per sector and Governorate							
Sector:							
Electricity: El		Water & Sanitation: WS					
Health: HI		Education: Ed					
Governorate:							
Al Anbar: An		Nineveh: Ni					
Diyala: Di		Salah Al Din: SD					
Complaint No.		i.e, E-Ni ?????		Date of complaint registration:		DD-MM-YY	
Type of complainant							
Affected person/s (AP)		Intermediary (on behalf of the AP)		Civil Society Organization (CSO)		Others (Specify)	
Mode of receiving the grievance							
Letter		Phone call		Fax			
Hot-line		Verbal complaint (walk in)		Suggestion box			
Email		Social Media (specify		Project-Billboard			
Through local CSOs		Through others (specify)					
Others (Please specify)							
Location of the problem/issue specified in the complaint:							
Governorate		City/Town/Village		Street Address			

Type of problem/grievance:		
Land acquisition	Resettlement site	Compensation
Evacuation	Loss of crops	Damage to property
Water flooding	Wastewater flooding	Debris
Solid waste	Nosie	Vibration
Dust	Soil Erosion	Access road
Material Transportation	Water quality and quantity	Oil spill
Traffic accidents	Social discomfort	Consideration to religious, cultural and social events
Related to military forces	Others (Specify)	
Short description of the problem:		
Short description of the factors causing the problem: (from the complainant perspective)		
Project/Person/agency responsible for causing the problem:		
Past action/s taken by the complainant (if any):		
Assessing the severity of the complaint		
potential impact on the well-being of an individual or group		
potential impact on the project		
public profile of the issue		

Reasons for rejection of complaint, if any:		
Details of the Liaison Officer (LO) that received the complaint:		
Name of the LO who received the complaint:	Position	Name of the receiving office
Date:	Signature:	
Actions taken by the Receiving Office		
Description of Action: (Provide evidence)		
Name of action person	Name of action agency	Date
Final Resolution: (Provide evidence)		
Duration to reach final resolution in weeks:	<ul style="list-style-type: none"> • Less than on week • 1 to 4 weeks 	<ul style="list-style-type: none"> • 5 to 8 weeks • 9 weeks and above
Satisfaction of Complainant: (Evidence)	Satisfied	Not Satisfied
Attachments:		

Annex 15. List of the ESMF Consultation Workshop Attendees

List of the ESMF Consultation Workshop Attendees



برنامج القرض الألماني (GCFI)
ورشة العمل التشاورية لوثيقة أطر الإدارة البيئية والاجتماعية (ESMF)
الخميس، 13 أيلول 2018 / صندوق إعادة إعمار المناطق المتضررة من العمليات الارهابية

E-mail البريد الإلكتروني	Telephone Number رقم الهاتف / الموبايل	Organization / المنظمة	Title المسمى الوظيفي	Name الاسم	No. الرقم
Mustafa.codp@gmail.com	07710817379	دائرة الطرق والحسور مريت (EODP)	م. مهندس	م. حارث عبد الجبار	1
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mustafa.m.rgvc@gmail	07703020121	مجلس سنان تكريت (منظمة دكتور تكريت)	مترجم	مصطفى مشتاق ابراهيم	3
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برنامج القرض الألماني (GCFI)

ورشة العمل التشاورية لوثيقة أطر الإدارة البيئية والاجتماعية (ESMF)

الخميس، 13 أيلول 2018 / صندوق إعادة إعمار المناطق المتضررة من العمليات الارهابية

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Annex 16. Consultation and meeting stakeholders during the GRM preparation

Consultation and meeting stakeholders during the GRM preparation

Date	Name	Position	Institution	Location
12 Sept 18	Dr Majida Mo-hammad	WB-ReFAATO program, Communication Officer	World Bank	ReFAATO
12 Sept 18	Ms Yasmin Amin	Focal point for GCGI at ReFAATO	ReFAATO	ReFAATO
13 Sept 18	Group consultation,	ReFAATO and PMTs, CSOs	ReFAATO, Ministry of Electricity, Ministry of Housing, CSOs	ReFAATO
16 Sept 18	Ms Yasmin	Focal point for GCFI at ReFAATO	ReFAATO	ReFAATO
16 Sept 18	Mr Falah El Avousi Mr Mustafa Muthana	CSOs management	CSOs	ReFAATO