

Tulu Moye Geothermal Power Project, Iteya, Ethiopia

Resettlement Action Plan and Livelihood Restoration Plan Package

September 2022



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Chapter One: Introduction

The Project RAP & LRP exclusively focuses on the impacts associated with civil works and initial site development of geothermal power, for Phase I of the Project. The civil works include:

- Expansion and upgrading of the existing 15 km all-weather gravel road from Iteya to the Project area;
- Site development at potential drilling areas in the lava field, including construction of the power plant;
- Laydown area; and
- Accommodation camp.

The Project has employed several strategies to avoid and minimize possible displacement impacts. These include design considerations such as directional drilling for the initial exploration wells, which results in having more wells per well pad and thus a smaller surface footprint; and location considerations via the selection of the well pad placement where there would be a minimal local disturbance and where less civil work is required in terms of road accessibility. Additionally, when the exploration wells are turned into production wells, they can be connected at the well pad and share well testing equipment and therefore decreasing further infrastructure works.

The choice to site the well pads for Phase I in the Gnaro lava field was driven by a Project commitment to avoid physical displacement and the attempt to avoid productive agriculture and grazing land to the greatest extent possible. The directional drilling technology allows the Project to reach subsurface targets underneath land potentially occupied by settlements or productive livelihood activities with no surface disturbance.

The **project RAP/LRP(Appendix A)** considers the economic displacement that was caused by land acquisition associated with the Project including the construction of well pads, laydown areas, power plant, pipelines, and access roads. The RAP/LRP preceded by the Non Technical Summary in English and Oromiffa (local language in the project area of influence). The RAP/LRP has been prepared to be fully compliant with national legislation and international best practice, including E&S safeguards requirements of potential financiers.

Kan yaadame ykn karoorfame

TMGO Ltd

Guyyaa

Fulbaana bara 2021

Lakkoofsa piroojeektii

1620010898

RAP/LRP Non-Technical Summary in Oromifa

HOJII

URKA BAASUU

TULLUU MOOYYEE

KAROORA RAAWWII DEEBISANII




BAYYANACHIISUU FI JIREENYA BAKKATTI

DEEBISUU TEEKINIIKAWAA HINTAANE

RAMBOLL

HOJII URKA BAASUU TULLUU MOOYYEETTI KAROORA RAAWWII DEEBISANII
BAYYANACHIIISUU FI JIREENYA BAKKATTI DEEBISUU TEEKINIIKAWAA HINTAANE

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Gabaasni kun Raambooliin kan qophaa'e daaffii maamilli dhiyeesseen kaayyoo as irratti tarreeffamee kaa'ameefi. Gabaasni kunii fi sanadoonni isaan walqabatan faayidaa fi faayidaa maamila qofaaf kan yaadamanii dha. Kanaaf hayyama barreeffamaa Raambooliin alatti guutuu yookaan muraasa isaa namni kamiyyuu ibsuu yookaan itti fayyadamuu hindanda'u. Raambool qaama sadaffaadhaaf siruma dirqama hinqabu yookaan hinfudhatu. Kanaaf odeeffannoo gabaasa kana keessa jiru irratti sababa hundaa'uu isaaniitiin badii, miidhaa yookaan baasii uumamuuf itti gaafatamaa hinta'u.

Gabatee Too'annaa Dhimmichaa

Tartiiba	Guyyaa	Kan qopheesse	Kan madaale	Kan raggaase	Ibsa
1	15/01/21	MW	TD	PS	Keniinsa jalqabaa; maamilaaf
2	11/05/21	TD	PS	PS	Kenniinsa xumuraa; maamilaaf
3	29/09/21	TD	PS	PS	Kenniinsa xumuraa; deebii yaada dhiyaatee waliin.

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1. SEENSA

1.1. Gabaasni kun

Gabaasni kun teekiniikawaa kan hintaanee (NTS) fi Karoora raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) piroojeektii misooma urkaa anniisa meegaa waatii 50 Itoophiyaa, naannoo Oromiyaa, aanaa Hixoosaa ti. Piroojeektichi dhaabbata "Tulu Moya Geothermal Operations PLC (TMGO) jedhamuun raawwatamaa kan jiru yoo ta'u; gara humna meegaa waatii 150tti guddisuuf boqonnaa isa jalqabaa ti. Fooyya'insi karoora raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) (Rev.3) kun karoora jireenya bakkatti deebisuu isa jalqabaa (2019 LRP Rev.1) Onkolooleessa 2019 fooyyessuuf Raambooliin kan qophaa'e dha.

1.2 Waa'ee piroojeekticha

Dhaabbanni dhuunfaa hojii hurka baasuu Tulluu Mooyyee itti gaafatamummaan isaa murtaa'ee (TMGO) Riipubiliika Diimookiraatawaa feederaalawaa Itoophiyaa, mootummaa naannoo Oromiyaa keessatti; Tulluu Mooyyeetti piroojeektii humna hurkaa maddisiisuun sadarkaa gaariidhaan bobba'ee argama. Piroojeektichi humna eleektiriikii qulqulluu gatii madaalamaadhaan dhiyeessuuf kaayyeffateera. Abdiin piroojeektichaa humna hurkaa hanga meegaa waatii 100 maddisiisuus of keessaa qaba.

Piroojeektichi kan of keessatti qabatu buufata anniisaa tarbaayinoota/genereeterootaa wajjin; yaalii qotiinsa boolaa 1 – 4 (kan tokko tokkoon isaanii boolla hurkaa 3-5 qaban); boolla oomisha humnaa 4-5 (baay'inni isaa inni sirriin qotiinsi boollichaa erga xumuramee booda kan mirkanaa'u ta'a); daandii garasitti geessu; hojii dhiyeessii bishaanii fi kuusaa bishaanii ijaaruu; ujummoowwan boolla anniisni itti oomishamuu gara madda anniisaatti geessan; sirna abbaneessuu; sirna wallaansa bishaan balfamaa of keessatti ni qaba. Sararri haaraan anniisni buufata anniisaa irraa gara kuufama anniisaatti ittiin geeffamu addatti humna anniisaa eleektiriikii Itoophiyaatiin (EEP) hojjetama.

Piroojeektichi madaallii dhiibbaa naannoo fi hawaasummaa (ESIA) bara 2018 qulqulleessummaa naannoo sadarkaa biyyaalessaa erga xumuramee boodaa fudhateera.

Piroojeektichi lafti sochiiwwan jireenyaa fi bakka jireenyaatiif oolu akka hinfudhatamneef tarkaanfiiwwan baay'ee fudhateera. Tarkaanfiiwwan kun kan kanaan gadii of keessaa qabu.

- Boollota sakatta'insaa jalqabaatiif tooftaa kallattiin qotuutti fayyadamuudhaan; kunis boollota jalqabaa ofii isaanii keessatti boollota dabalataa qotuudhaan; kanaanis irra-keessi lafaa muraasatu faayidaaf oola.
- Takinooloojiin qotiinsa kallattii piroojeektichi irra-keessa lafaatti gaaga'ama osoo hinuumin keessoo lafaa gadi-fageessanii qotuuf ni dandeessisa.
- Bakkeewwan lafa qonnaa fi dheedichaa gaaga'amni muraasni uumametti; akkasumas bakka daandiin barbaachisetti gaaffiiwwan muraasa dhiyaatanuuf agaaggii boollaa hojjechuu dha.

1.3 Daangeffamaa fi kaayyoo Karoora raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP)

Karoori raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) gaaga'ama buqqaatii dinagdee gaffii lafaa piroojeektichaa hordofuun uumamu yaada keessa galcheera. Sababa kanaan lafti qonnaa hektaarii 9.91; lafti dheedichaa hektaarii 5.61 fi; lafti hektaara 12 (waliigalaan lafti hektaara 15.52) dhaabbata bosonaa fi bineensota bosonaa Oromiyaa biraa fudhatameera.

Karoori raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) gara fuula duraatti lafa piroojeektichaaf fudhatamu kamiinuu yaada keessa hingalchu. Lafti gara fuula-duraatti fudhatamu yoo jiraates akkamiin akka hoogganaman isa hinilaallatu.

Kaayyoon karoora raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) kun kan kanaan gidii ti.

- Jireenya bakkatti deebisuuf ulaagaalee biyyaalessaa fi adunyaa walitti fiduun ibsuu;
- Haala hawaas-dinagdee maatiiwwan miidhamanii walitti-qabaa fi maatiiwwan balaatti saaxilaman bu'ura karoora jireenya bakkatti deebisuu marsaa jalqabaa bara 2019 (2019 LRP Rev.1) keessatti ka'ameen adda baasuu;

- karoorra jireenya bakkatti deebisuu marsaa jalqabaa bara 2019 (2019 LRP Rev.1) keessatti akkaataa ka'amee fi ulaagaa sadarkaa adunyaatti jiruun kasaaraa sababa piroojeektichaatiin qaqqabe hunda baasii isaa ni ibsu;
- Maatiiwwan sababa piroojeektichaatiin qaamaan buqqa'an ilaalchisee tarkaanfiiwwan muraasa of keessatti qaba.
- Maatiiwwan miidhaman jireenya isaanii bakkatti akka deebifatanuu fi akka fooyeffatanuuf gargaarsaa fi tarkaanfiiwwan biraa ni tarreessuu; fi
- Tarkaanfiiwwan murteessaa jireenya bakkatti deebisuuf barbaachisan tarreessuu;

1.4. Haala Amma Jiru

Wayita karoorri raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) marsaa sadaffaa (RAP& LRP Rev. 3) kun barreeffametti dhimma kun oyiruu maatii fi abbootii qabiyyee lafaa 146 irraan miidhaa geessiseera. Kun immoo karoorra jireenya bakkatti deebisuu marsaa jalqabaa bara 2019 (2019 LRP Rev.1) keessatti bal'inaan ibsameera; karoorri jireenya bakkatti deebisuu marsaa jalqabaa bara 2019 (2019 LRP Rev.1) erga qophaa'e asis dhiibbaawwan buqqa'inaan wal-qabatan yoo hinjijjiiramnes. karoorri jireenya bakkatti deebisuu marsaa sadaffaa (LRP Rev.3) labsii lakkoofsa 455/2005 fi ulaagaalee fudhatama qabaniin waa'ee ga'umsaa, moggaasaa (maqaa) fi baasii guutummaan bakka buusuu irratti ibsa dabalataa ni kenna. Dabalataanis bara 2019tti hojii irra kan oolee fi gara fuula duraattis qabiyyee lafaa hunda irratti kan hojjetu labsii haaraa lakkoofsa 1161/2019n itti gaafatamaa taasisuuf qabiyyeewwan seeraa fi dhaabbatummaa ni fooyyessa.

Oyiruun miidhamtootaa 146 bu'ura labsii lakkoofsa 455/2005tiin kan qaqqabaman yoo ta'u; buqqa'insi seerri haaraan utuu hojii irra hinoolin dura kan ta'ee dha.

2. gurmaa'insa Seeraa fi Dhaabbatummaa

2.1. Seera Itoophiyaa

Argannaa lafaa hoogganuuf wantoonni ijoon barbaachisan kan kanaan gadii ti.

- Heera mootummaa Riipubliika Diimookiraatawaa Federaalawaa Itoophiyaa (bara 1995) mirga misoomaa keewwata 43 dabalatee;
- Labsii bulchiinsaa fi itti fayyadama lafa baadiyyaa Riipubliika Diimookiraatawaa Federaalawaa Itoophiyaa lakkoofsa 456/2005;
- Riipubliika Diimookiraatawaa Federaalawaa Itoophiyaatti bara 2019 yookaan bara 2019 dura buqqaatii kayyoo uummataa fi kaffaltii beenyaa labsii lakkoofsa 455/2005;
- Riipubliika Diimookiraatawaa Federaalawaa Itoophiyaatti labsii qabiyyeewwan lafaa; dhimma uummataaf; kaffaltii beenyaa fi deebisanii babal'isuu lakkoofsa 1161/2019; buqqa'iinsa bara 2019 booda uumamu hundaaf;
- Danbii mana maree ministirootaa kaffaltii beenyaa qabiyyee lafaa gara uummataatti naanna'e irra qabeenya jiruuf kaffalamuu; danbii lakkoofsa 135/2007;
- Imaammata eegumsa naannoo Itoophiyaa;
- Heera mootummaa naannoo Oromiyaa bara 2001tti fooyya'ee bahee fi;
- Labsii itti fayyadamaa fi bulchiinsa lafa baadiyyaa Oromiyaa; labsii lakkoofsa 130/2007

2.2. Adeemsa argannaa Lafaa

Adeemsi lafti ittiin argatamu labsii lakkoofsa 455/2005 jalatti kan ibsame yoo ta'u; labsii lakkoofsa 1661/2019n fooyya'ee jira. Adeemsi kun abbaan piroojeektichaa mootummaadhaaf hiyyata akka dhiyeessu gaafata. Hiyyatichi erga fudhatama argatee booda bulchiinsi aanaa yookaan kan bulchiinsa magaalaa itti fayyadamni lafichaa dhimma uummataatiifi moo miti jechuudhaan murtee itti kenna. Yoo dhiimmicha irratti waliigalan koreen madaallii aanaadhaan hundaa'u lafti isaanii akka fudhatamuu fi

qabeenyaan isaanii miidhamu akka lakkaa'amu uummata sanatti beeksisa. Abbootii qabiyyee lafaa sanatti lafti isaanii akka fudhatamu bu'ura labsii 455/2005tiin hanga lafti qophaa'ufitti guyyoota 90 dursee itti beeksifama. Abbootii qabiyyee lafaatiif beenyaan kan kaffalamu utuu lafti isaanii hinfudhataminii fi

hawaasni yookaan abbootiin qabiyyee lafaa sun lafa haaraa kennameef fudhatanii beenyaanis ega kaffalamee fi isaaniis gara lafa haaraa kennameefitti godaananii booda qofa ta'a.

2.3. Ulaagaalee idil-adunyaa

Ulaagaaleen idil-adunyaa kan armaan gadii kana of keessaa qabu.

- Sirna eegumsaa qindaawaa garee baankii misoomaa Afriikaa (2013) fi;
- Sadarkaalee raawwii koorporeeshiinii faayinaansii idil-adunyaa (2012);

Seera Itoophiyaa fi sadarkaalee idil-adunyaa gidduu qaawwaan muraasni ni jiru. Akka waliigalaatti; qaawwaan kun tarkaanfiiwwan dabalataa piroojeektichaan raawwatamanuun furmaata argatu; isaanis:-

- Piroojeektichi hojmaataa fi tooftaa itti dhiyaannaa dhabamsiisuu fi hir'isuu hordofuu isaa;
- Piroojeektichi bara 2015 irraa eegaluun hirmaannaa qaamolee qooda fudhattootaa olaanaa taasiseera. Walga'iin hawaasaas adeemsi laficha fudhachuu ifatti utuu hinjalqabamin dura gandoota miidhaan kun qaqqabe hundatti Gurraandhala bara 2019 fi Ebla 2019tti taasifameera. Irra-deebiinis koreen kaffaltii beenyaa adeemsa madaallii erga xumuree booddee dha.
- Tooftaan dhiyeessii komii piroojeektichaa namoonni kenniinsa lafichaatiin miidhaman akka itti fayyadamaniif dhiyaateera.
- Bitootessa hanga Ebla bara 2019tti maatiiwwan sababa lafa kanaatiin miidhan irratti qorannoon bu'uraa dabalataan kan taasifame yoo ta'u; adeemsi isaas maatiiwwan miidhaman madaaluun taasifame.

- Namoonni miidhaman lafa qabatan yookaan itti fayyadaman yookaan qabeenya irratti mirga seeraan beekamtii qabu yoo hinqabaannes; gahumsi beenyaa fi deeggarsaa diriireera.
- Namoonni miidhaman baasii bittaa kamiifuu (fakkeenyaaf gibiraaf, kaffaltii galmeetiif) ni gahoomu. Ta'us baasiin akkasii kun murtaa'aa akka ta'u ni eegama.
- Namoonni kanatti saaxilaman adda bahanii kan beekaman yoo ta'u; ulaagaa deeggarsichaa akka hubatanuu fi argachuu akka danda'an gargaaruuf kan dandeessisan tarkaanfiiwwan ittiin bulmaataa ni xiyyeeffatamu.
- Jireenya maatiiwwan miidhamanii bakkatti deebisuu gama deeggaruutiin milkaa'uu fi dhiisuu isaa hubachuuf; adeemsi madaallii karoora raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) ni adeemsifama.

3. HIRMAANNA QOODA FUDHATTOOTAA

3.1. waliigala; waa'ee qooda-fudhattootaa

Buqqa'insa qaamaa fi dinagdeetiin wal-qabatee; piroojeektichi qooda fudhattoota ijoo kanaan gadii adda baaseera.

- Piroojeektichi argannaa lafaatiin walqabatee maatiiwwanii fi namoota hubaman miidheera;
- Miseensonni hawaasaa lafa sababa piroojeektichaatiin fudhatame irraa qabeenya fayyadamaa turan miidheera;
- Bulchiinsota gandaa
- Bulchiinsa aanaa Hexoosaa fi waajjiraalee isaan walqabatan;
- OFWE

Hirmaanaan wayita argannaa lafaa kan jalqabu wayita koreen beenyaa aanaatti hundaa'uu dha.

Bara 2015 jalqabee naannoo piroojeektichaatti hirmaanaan qooda-fudhattootaa sochii itti fufaa ta'ee tureera. Argannaa lafaatiin wal-qabatee koreen beenyaa Gurraandhala bara 2019tti adeemsa madaallii isaa erga xumuree booda adeemsi argannaa lafaa ifatti utuu hinjalqabamin dura gandoota miidhaan irra gahe hunda keessatti walga'iin hawaasaa adeemsifameera. Madaalliiwwan koreen beenyaa raawwate keessa deebi'uu fi madaallii sadarkaa beenyaa bal'inaan wal hubachiisuuf walga'iin waliigalaa hawaasaa marsaa lammaffaan ji'a Eblaa bara 2019 adeemsifameera.

3.2. Hirmaannaa tarkaanfii jireenya bakkatti deebisuu

Piroojeektiin hojii hurka baasuu Tulluu Mooyyee sagantaa jireenya bakkatti deebisuu cimsuu irratti hirmaannaa adda addaa taasiseera. Wayita lakkoofsa uummataa fi qu'annoo hawaas-dinagdeetti tokko tokkoon hirmaattotaa sagantaa jireenya bakkatti deebisuu kanaan waan arguu barbaadan gaafatamanii turan. Filannoowwanis debiiwwan isaan kennan kana irratti kan hundaa'anii fi qabeenyaa, beekumsa, dandeettii fi muuxannoo jiraattota naannoo piroojeektichaa wajjin akka wal-simanuuf kan bocaman turan.

Adeemsi jireenya bakkatti deebisuu kun walga'ii hawaasa hirmaachise irratti ni ibsama. Wayita piroojeektichi gara fuula duraatti adeemu filannoowwan jireenya bakkatti deebisuus ogeessota adda addaa fi qooda fudhattotaatiin maryachuudhaan kan qulqulla'an taasifamu. Ogeeyyiin kun itti fufiinsa tarkaanfiiwwan kanaa irratti ni maryatu.

4. BU'UREEFFANNA

4.1. Seensa

Karooa raawwii deebisanii bayyanachiisuu fi jireenya bakkatti deebisuu marsaa sadaffaa (RAP & LRP Rev.3) keessatti sirni bu'uraa hawaas dinagdee mata-dureewwan ijoo kanaan gadii jalatti dhiyaateera.

- Seena (piroofaayila) ijaarsa sirna uummataa (demography)
- Haala koorniyaa
- Barnoota
- Waan ittiin jiraatanu (livelihood) fi itti fayyadama lafaa
- Tajaajila uummataa fi misooma bu'uraalee
- Duraa-duuba misoomaa
- Saaxilamummaa

Qabxiwwan kun kanaan gaditti ibsamaniiru.

4.2. Seena (piroofaayila) ijaarsa sirna uummataa (demography)

Baay'inni waliigalaa ummata gandoota kanaan hinbeekamne; hata'u malee lakkoofsaa fi daawannaa hawaas-dinagdee piroojeektichaan taasifame 126 keessaa akka hubatametti baay'inni namoota buqqa'insatti saaxilamanii 779. Baay'inni miseensota maatii namoota kanaa giddugaleessaan nama jaha. Namoota buqqaatichaan miidhaman harka sadii keessaa lama (%65) umuriin isaanii waggaa 25 gadi.

Namoota miidhaman keessaa garri caalaan amantaan isaanii Islaama; namoonni 663 (%85) qabatamaadhaan Islaamota yoo ta'an; namoonni 82 Kiristaanota ta'uun isaanii galmaa'eera.

Namoota 126 qorannichatti hirmaachifaman keessaa 39 (%31) dubartii tokkoon hoogganaman. Karroo jireenya bakkatti deebisuu marsaa tokkoffaa bara 2019 (LRP Rev1) tiin Itoophiyaa keessatti shoorri dubartoonni ashaakiltii misoomsuudhaan; keessumattuu sochii aramaa dhabamsiisuu keessatti shoorri gumaachan akka gahee qabu ibsameera. Dubartoonni hojjiwwan mana keessaatiif itti gaafatamummaa qabu.

Karoorra jireenya bakkatti deebisuu marsaa jalqabaa bara 2019 (2019 LRP Rev.1) irratti qu'annoon hawaas-dinagdee adeemsifame akka mul'isetti namoota miidhaan isaan qaqqabe keessaa dhibbeentaan 81 ta'an barnoota sadarkaa tokkoffaa caalaa hinbaranne; hata'u malee qorannichi daa'imman umuriin isaanii waggaa torbaa ol ta'es ni dabalata. Hooggantoota maatii keessaa muraasni sadarkaan barnoota isaanii xiqqoo kan wayyu yoo ta'es; 78 (%62) sadarkaa tokkoffaa irra hinceene.

4.3. Haala Koorniyaa

Itoophiyaan tarreeffama walqixxummaa Koorniyaatiin bara 2018tti biyyoota 189 keessaa sadarkaa 173ffaa irratti argamti. Sadarkaa biyyaatti wayita dhiirota baratan % 22 wajjin wal cinatti madaalamu dubartoota dubartoota % 11.5 qofatu amma tokko barnoota sadarkaa lammaffaa baratan. Hata'u malee lakkoofsa gadaanaa kanaa wajjin wayita ilaalamu Itoophiyaa keessatti dubartoonni % 74.2 sochii dinagdee keessatti ni hirmaatu. Hata'u malee dubartoonni kun kaffaltii gadaanaa fi hojii al-idileetiin ibsamu.

Hirmaattota qorannichaa 126 keessaa 39 (%31) dubartootaan hoogganamu. Itoophiyaa keessatti shoorri dubartootaa gara hojiiwwan hortiikaalcheerii; keessumattuu gara fuduraa fi muduraa aramuu gargaaruutti kan duufuu dha. Dubartoonni bal'inaan itti gaafatamtoota hojii mana keessaa ti. Qorannoo kana keessatti lakkoofsi murtaa'aan ka'amu baatus dubartoonni hojii kanaan walfakkaatu akka hojjetan hubatameera. Dubartoonni bishaan waraabuu, qoraan funaanuu, daa'ima eeguu, nyaata barbaaduu fi qopheessuu fi kan kana fakkaatanuuf itti gaafatamotta. Kun jireenya bakka duraatti deebisuuf filannoowwan xiyyeeffannoon kennamuufii dha.

4.4. Barnoota

Namoota mana bulchan keessaa 78 (%62) gama barnootaatiin sadarkaa tokkoffaa ol hinbaranne. Namoota mana bulhan kana keessaa 19 (%15) barnoota sadarkaa giddugaleessaa, sadarkaa lammaffaa yookaan kan sadarkaa sadarkaa xumuraniiru. As keessatti dhimmi hubatamuu qabu hooggantoonni maatii 40 ta'an siruma barnoota hinbaranne. Haala walfakkaatuun; hooggantoonni maatii 43 (%34) barreessuu fi dubbisuu hindanda'an; kana keessaa 27 dubartoota turan.

4.5. Waan ittiin jiraatanuu fi itti fayyadama lafaa

Hirmaattota kanaaf waanti ittiin jiraatan inni ijoon qonnaa yoo ta'u kan itti aanu immoo horsiisa beeladaa ti. Waa'een itti fayyadama qabeenya uumamaa wayita gabaafamu; faayidaan isaa inni jalqabaa ittiin jiraachuudhaafi; mana keessatti itti fayyadamuuf malee galii argamsiisuuf miti. Hooggantoonni maatii afur hojii daldalaa galii ittiin argatan xixiqqaa; kiyookii (hooggantoota maatii lama) fi mana shaayee (hooggantoota maatii lama) akka qaban gabaafameera. Hirmaattonni kun gosa midhaanii jaha; qamadii

(%41); boloqqee (%16); garbuu (%15); xaafii (%14); boqqolloo (7); fi misingaa (6) akka oomishan eerameera. Qorannichatti namoota hirmaatan kana keessaa walakkaa ol (%52) nyaataa isaanii fi galii ittiin argachuudhaaf midhaan kan oomishan ta'uutu mirkanaa;eera. Isaan keessaa %28 kan midhaan oomishan gara caalu gurgurtaaf yoo ta'u; %15.6 immoo gara caalu mana keessatti itti fayyadamuuf oomishu. Isaan qorannichatti hirmaatan kana keessaa hooggantoonni maatii % 4 qofatu guutummaadhaan itti fayyadama mana-keessaa (nyaataaf) oomishu.

Horsiisni beeladaa hirmaattota qorannoo kanaatiif waan ittiin jiraatan kan biraa faayidaa mana keessaa fi galii ittiin argachuuf hojjetanuu dha. Maatiiwwan kun beeladoota; sangaa (qotiyyoo) (%25); s'a dhaltii (%24); harree (%24); re'ee (%13); hoolaa (%7) fi lukkuu (%7) akka horsiisan beekameera. Ammas; hirmaattonni qorannoo kanaa (%82) qabeenya uumamaa jireenyaaf akka itti fayyadaman kan gabaafame yoo ta'u; kunis qoraan; saanqaa fi ijaarsa manaatiif kan itti fayyadamanuu dha. Meeshaaleen kun gara caalu faayidaa mana keessaatiif kan ittiin tajaajilamanuu dha. Qoraan gara caalu galii xiqqaa kan ittiin argatanuu dha. Lafti waliinii (kan hawaasaa) qabeenya uumamaa (%43) kan irraa argatan yoo ta'u; keessumattuu qoraanni lafa dhuunfaa isaanii caalaatti kan lafa waliinii kana irraa argatanuu dha.

Lafti hirmaattota qorannoo kanaatiin qabame lafa qonnaa yookaan lafa dheedichaa jedhamuun bakka lamatti qoodama. Isaan keessaa 28 (%22) mirga oyiruu lama horachuu irra gahaniiru. Lafti giddugaleessaan qaban hektaara 2.3 yoo ta'u; kunis qabiyyee lafa giddugaleessaan sadarkaa

biyyaatti jiru isa xiqqaa kan ta'e hektaara 0.9 dachaa lamaa oliin kan caaluu dha. Qabiyyeen lafa hirmaattota qorannoo kanaa giddugaleessaan gabatee 4.1n dhiyaateera.

Gabatee 4.1: qabiyyee lafaa giddugaleessaan

Garaagarummaa qabiyyee lafaa waliigalaan	Dhibbeentaa; hirmaattota qorannoo
Hektaara tokkoo gadi	39
Hektaara tokkoo fi lama gidduu	23
Hektaara lamaa fi sadii gidduu	29
Hektaara sadii fi afur gidduu	18
Hektaara afurii fi shan gidduu	6
Hektaara shanii ol	11

4.6 Bu'uraalee misoomaa hawaasaa fi gurmaa'ina

Manneen piroojeekticha keessa jiran baay'een isaanii citaa (margaa) fi muka irraa kan ijaaraman yoo ta'u; muraasni isaanii baaxiin isaanii qorqorroon ijaaramaniiru. Keenyanni manneen isaanii waliigalaan dhoqqee irraa kan tolfaman ta'ee; lafti isaaniis akkasuma mukaan kan deeggaramanii dha. Bakka kanatti sirni geejjibaa mootora hinqabne; lukaan adeemuu; farad, harree fi gaangeen naannoo piroojeektichaatti waan baratamaa dha.

Hirmaattonni kun waliigalaan bishaan waraabbachuuf karaa fagoo deemu. Qorannoon bara 2018 akka agarsiisetti namoonni mana bulchan % 12 bishaan waraabbachuuf daqiiqaa 30 – 60 akka deemanuu fi %32 kan ta'an immoo bishaan waraabbachuuf sa'atii tokkoo ol imalu. Wayita roobni jiru gara caalu bishaan bokkaa fi bishaan boollaatti tajaajilamu. Wayita bonaatti immoo bishaan boombaa, bishaan lafa jalaa fi bishaan boollaa bakka baay'ee fagoo ta'e irraa barbaaddatu. Bishaan irratti walitti bu'uun hawaasaa naannoo kana jiraachuun isaa kan gabaafame yoo ta'u; fooyya'insi dhiyeessii bishaan boombaa karoofame aanaadhaan yookaan piroojeektichaan hindhiyaatu taanaan rakkinichi caalaatti hammaachuu ni danda'a. Hawaasa sirnaan hoogganuuf fooyya'insa bishaanii irratti iftoominni jiraachuun baay'ee barbaachisaa dha.

4.7 Dursa misoomaa

Misoomni dursaan hirmaattota qu'annoo kanaatiin adda baafame galtee qonnaa (%46); beelada (%18); fooyya'insa biyyoo (%14); qabeenya bishaanii (%12); deeggarsa fayyaa beeladaa (%6); jal'isii (%3) fi gaaffiwwan addaa gaafataman (%1) of keessaa qaba.

4.8 Maatiiwwan Saaxilaman

Hooggantoonni maatii kun qabeenya muraasa kan qabanuu fi sababa kanaan dandeettiin naasuu dandamachuuf qaban gad-aanaa dha. Kana jechuun lafaa fi qabeenyi baduun maatiiwwan kana irratti dhiibbaa madaalamaa hintaane qabaata.

Qorannoon bu'ureffannaa 'ESIA' bara 2018 qoratame gareewwan baay'een dhiibbaawwan piroojeektichaatti akka saaxilaman ibseera. Kunis maatiiwwan dubartootaan hoogganaman kan of keessaa qabu yoo ta'u; maatiiwwan naannoo dhiibbaa piroojeektichaa jiraatan keessaa dhibbeentaa 25 ta'uu isaaniitu beekameera. Baay'inni maatiiwwan dubartootaan hoogganamanuu gandoota argannaa lafaa kanaan hubaman lama keessatti kan caalu ta'ee argameera; kunis gandoota Aaannolee fi Taroo Mooyyee

yoo ta'an bakka kanatti maatiiwwan %32 – 44 dubartootaan kan bulanuu dha. Qorannoon bu'ureffannaa 'ESIA' bara 2018 qoratame kun dabalataan gareewwan saaxilamoo maanguddootaa, dubartoota, dargaggoota, dardarran, kan dhirsooni irraa du'a, kan hojii hinqabne, miidhamtoota qaamaa fi kan akka malee dhibamanii jiranis adda baaseera. Akkaataa karoorra jireenya bakkatti deebisuu marsaa jalqabaa bara 2019tiin (2019 LRP Rev.1); saaxilamummaa hammaataan maatiiwwan miidhamanii gabatee 4.2 irratti dhiyaateera; innis ragaa lakkoofsa Karoorra raawwii deebisanii bayyanachiisuu (RAP) fi jireenya bakkatti deebisuu (LRP) irratti kan hundaa'ee dha.

Table 4.2: Saaxilamtoota PAPs

Maatii galii gad-aanaa (miseensa 3 fi isaa ol) qabaachuun ibsamu; galiin ji'aa maatii kanaa hundee caasaa galii irra jiraachuun kan gabaafame	Maatiiwwan 20 (%20)
Maatii dubartootaan hoogganamu	Maatiiwwan 39 (%39)
Maatii miseensa qeentee; kan waggaa 65 ykn isaan ol	Maatii 1 (%1)
Maatii ragaa qabiyyee lafaa hinqabne	Maatiiwwan 12 (%10)
Maatii miseensa dhibee qaamaa ykn dhibee qaamaa qabu ykn dubara ulfaa of keessaa qabu	Maatiiwwan 18 (%14)
Maatii miseensonni isaa ga'eessa ta'an hedduun hojii hinqabne	Maatiiwwan 9 (%7)

Waliigalaan; daataan kun maatiiwwan saaxilamoo 69 kan addatti baase yoo ta'u; maatiiwwan sadarkaa sadiin saaxilamoo ta'an sadii; maatiiwwan 18 sadarkaa lamaan saaxilamoo ta'an fi maatiiwwan 48 sadarkaa tokkoon saaxilaman dabalatee maatiiwwan saaxilamoo ta'an 69 adda baasee jira. Haala maatiiwwan kanaa irraa kan ka'e maatiiwwan 16 gareewwan tokko olitti ramadamaniiru. Waliigalaan hirmaattonni 53 tooftaa sassaabbii odeeffannoo saaxilamtootaa bu'uraatiin adda baafamaniiru.

5. Lafa Pirojeektii irratti Dhiibbaa qabu

Piroojeektiin kun lafa oolurratti dhiibbawwan arman gadii tuqaman geesisa ykn geesisu danda'a.

- Walumagalatti lafa heektaaraa 5.60 ykn kan ciitaan uwwifama fi oyiruuf olu danda'u,
- Faayida jiraattootaf tolan, suuqiiwwan sadii fi bakka gabaan itti gaggeeffamu,
- Bakka jireenya tokko,
- Dallaa 42 fi
- Interpreayizi bosona fi bineensoota bosona Oromiyaa irra immo lafa heektaaraa 12. Kuni qabeenya umamaan kan eeggamu ta'us jiraattoota naannichaaf jireenya isaanif kana gargaarudha.

Lafti dhiibbaan irra gahuu kun Aana Hixoosaa, gandoota afur (Anoolee, Daawwii Guutichaa, Teerroo Mooyyee fi Shaakki Shiraaroo) keeyisa argama.

Abbooti warra 146 dhiibbaan kan irratti gahuu hogguu tahu, mana isaani dhabuutiin kan dhiibamu garu abba warra tokko qofadha. Haallii namoota dhiibbaan irra gahuu maal fakkaatu kan jedhu ilaalchise qorannoo taasifameen:

- Lafti kun hojirra olusaatiin walumagalatti gara dhibbantaan lafa 5.4. Abbooti warra dhibbantaa 92 ta'an lafa dhibbeentaa 10 ykn kan sanirras xiqqaate dhaban. Abboti warra lama qoftiin lafa qaban irra dhibbeenta 20 dhabu.
- Namootni dhibbaan irra gahuu keeyisa dhibbeentaan 66 ta'an umriin isaani 25 gadi
- Abbooti warra dhiibbaan irra gahuu keeyisa dhibbeentaan 31 warra dubartootaan bulanidha. Namoota dhiibaman keeyisas dhibbeentaan 62 baruumsa sadarkaa tokko caalaa hinqaban. Dhibbeentaan 34 immo barreysus dubbisuu hindanda'an.

- Namoonni dhiibaman kun dhubbeentaan 43 qonnaan bulu, dhibbentaan 29 mana baruumsa jiru, dhibbeentaan 12 immo hojii dhabeeyidha.
- Namoonni dhiibaman keeysa dhibbeentaan 52 nyaataafis galii argachufish omisha qonnaa fayyadamu. Omishni isaanis Qamadii(41%), Baaqeela (16%), Garbu(15%), Xaafii(15%), Boqqoolloo (7%) fi Bishingaa(6%).
- Beeyladoonnis faayda walfakkatu qabu. Abbootiin warra heedduun Qotiyoo (25%), Looni(24%), Haarroota(24%), Ree’oota(13%), Holoota(7%), fi Lukkuwwan(7%) qabu.
- Sababa piroojektii kanaatiin abbooti warra 68 kan ta’an walumagalatti muka 2,078 dhabu. Mukoonni kun ibiddaaf, ijaarsaaf, meeshaalee oyiru ittiin tolfachuuf, gaaddisaafi dallaa ijaaruf isaan gargaara.

Abbootiin warra galii fi human dubartootaan bulan, maanguddoo fi kophaa isaan jiraatan, abbooti warra miseensa nama qaamni isa irra hir’ate, dhukkubsate ykn ulfa qabu akkasumas miseensa maati keeysa hojii dhabeeyiin yoo heddumaate piroojeektii kanaatiin nimiidhamu. Keeysumaattu maatiiwwan galii xiqqaa qaban guddo miidhamu. Omishni lafa muraasa irra argamu yoo dhaban maatiin sun haanqina nyaataaf galiif nisaaxilama. Qorannoo taasifamenis Abbootii warra 53 galii xiqqaa waan qabaatanif rakkinaaf nisaaxilamu.

6. Ulaagaa fi Beenyyaa

Namoonni lafa piroojeettiin jalaa fudhachuun miidhaman kanneen armaan gadii ni argatu:

- **Lafa Qonnaa ykn Lafa Margaa Dhabeef:**-Abbaan qabeenyaa/fayyadamaan galii waggaa giddu galeessaa waggoota shanan saamamuu duraa keessatti argame, gatii gabaa irratti hundaa'uun shallagamee, dabalataan tarkaaffiiwwan jireenya deebisanii dhaabuu galiin qabannaa lafaa jirutti fayyadamuun bakka buufamuu danda'u mirkaneessuuf gargaaran dachaa kudhan argatu, bakka lafti bakka bu'u hin jirretti.
- **Mukkeen, Biqiltoota fi Midhaan:**-Abbaan lafaa/ fayyadamaan lafaa gatii gabaa muka sassaabbamee fi gatii gabaa midhaanii irratti hundaa'uun beenyaa maallaqaa argata(yoo sassabamuu hin dandeenye), dabalataan tarkaanfiiwwan jireenya deebisanii dhaabuu yeroo fudhatame deeggaruuf mukaa fi biqiltoota bakka buusuu.
- **Caasaa dhabuudhaaf:**-Abbaan lafaa/ fayyadamaan lafaa baasii caasaa haaraa ijaaruuf bahu(gatii hir'isuu malee) fi baasii fooyya'iinsa dhaabbataa lafa irratti ba'uuf beenyaa maallaqaa, beenyaa maallaqaa maallaqa liizii caasaa irratti hafeef liqii qabu uwwisuu fi hayyama uwwisuuf kennamu ni argata akkasumas baasii bakka biraatti jijjiiruuf bahu.
- **Lafa waloo gatii oomishaa qabu dhabuuf:**-Beenyaa qaama mootummaa lafa bulchu(kunis Dhaabbata Bosonaa fi Bineensota Bosonaa oromiyaa)akkaataa dambii ittiin bulmaataa gurmaa'insa fayyadamtootaatiin lafa dhiibbaa irra gaheef kan darbu ta'uu isaati.
- Leenjii bulchiinsa faayinaansii maatii miidhaman hundaaf beenyaa maallaqaa argataniif.
- Baasii daldalaa ykn kaffaltii biro dhiibbaa waliin walqabatu kamiyyuu uwwisuuf deeggarsa kennamu

- Maatii saaxilamoo ta'aniif, tarkaanfiiwwan jireenya deebisaanii dhaabuu, jireenya deebisaanii hundeessuun sagantaa hordoffii fi hordoffii saaxilamummaa keessatti hammatamuu deeggaran.

PAP tokko qofatu pirojektichaan qaamaan dhiibbaa irra gahe jedhamee ramadamuu danda'a, bakka dallaa qabeenya mana jireenyaa isaanii irratti dhiibbaa irra ga'etti.

Akkaataa mirga Karoora Hojii Qubsumaa fi Karoora Jireenya Deebisuuf Keessatti ibsameen qabeenya isaanii guutuuf akkaataa istaandaardii idil-addunyaatiin beenyaa maallaqa baasii malee bakka bu'iinsaa guutuudhaan ni argatu.

7. JIREENYA DEEBISUU/BAYYANACHIISUU

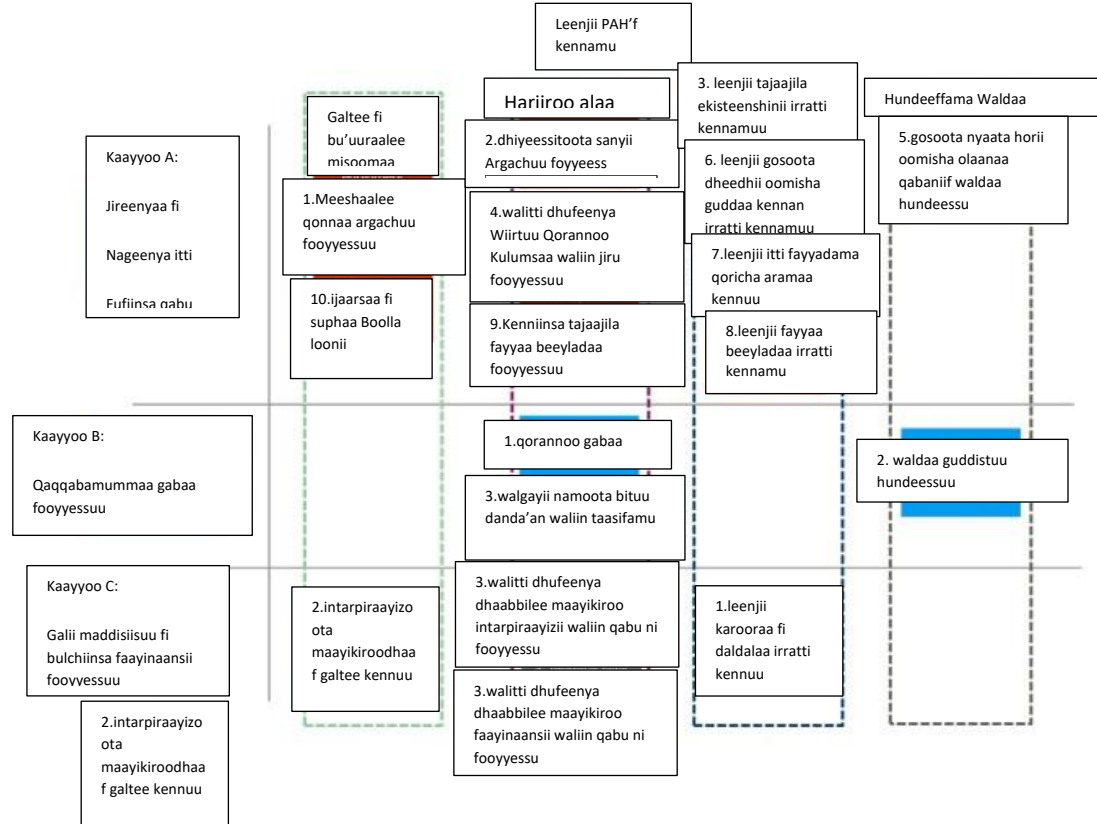
Maatiin dhiibbaa irra gahe hundi lafa qonnaa, lafa margaa fi mukeen yookiin biqiltuu dhaban deeggarsa bifa tokko tokkoon jireenya isaanii deebisanii dhaabuu argachuuf mirga qabu, kunis kaayyoowwan armaan gadii keessaa tokko yookiin isaa ol deeggaruun:-

- ❖ Maatiin jireenya itti fufiinsa qabuu fi nageenya dinagdee isaanii akka fooyyessan dandeessisuu. Kunis tarkaanfiiwwan qaqqabummaa meeshaalee qonnaa fooyyessuuf, qaqqabummaa dhiyeessitoota sanyii fooyyessuuf, leenjii tajaajila ekisteenshinii kennuu, wiirtuu Qorannoo Qulumsaa waliin walitti dhufeenya uumuu, waldaa gosoota midhaan dheedhii oomisha guddaa argamsiisuu hundeessuuf, kunis leenjii nyaata horii baay'ee argamsiisu kennuu kan dabalatu ta'a, gosoota, itti fayyadama qoricha aramaa fi fayyaa beeyladaa fi wal'aansa jiran irratti, ijaarsa dandeettii wiirtuuwwan fayyaa beeyladaa naannoo, fi fooyya'iinsa bishaan loonii itti obaasu.
- ❖ Maatii dhiibbaa irra gaheef qaqqabamummaa gabaa fooyyessuu. Kunis tarkaanfiiwwan midhaan qonnaa fi oomishaalee biroo maatii dhiibbaa irra ga'een oomishaman bitachuu danda'an adda baasuu, waldaa guddistoota alaa hundeessuuf, warren bituu danda'an waliin walgahii qopheessuu ni dabalata.
- ❖ Carraa galii argamsiisuu fi bulchiinsa faayinaansii fooyyessuuf. Kunis tarkaanfiiwwan leenjii karoora fi bulchiinsa daldalaa kennuu, qonnaan bultoonni fedhii qaban dhaabbilee daldalaa akka hundeessan deeggaruun, ejensiiwwan maayikiroo intarpiraayizii fi maayikiroo faayinaansii waliin walitti dhufeenya uumuuf tarkaanfiiwwan fudhataman ni dabalata.

Tokkoon tokkoon kaayyoowwan sadan hojiiwwanii walduraa duubaan mata dureewwan ijoo sagantichaa keessatti kufan:

- galtee fi bu'uuraaalee misoomaa, hariiroo alaa cimsuu,

- leenjii PAH, fi waldaalee qonnaa hundeessuun ni deeggaramu. Kunis akka armaan gadiitti ibsameera. PAH'n kaayyoo tokkoon tokkoon isaanii jalatti hojiilee jireenyaa adda addaa irratti hirmaachuuf filannoo ni kennamaaf.



Namoonni Hojiiwwan Ji'ootermaalii Tulluu Mooyyeef saaxilamoo ta'an fedhii addaa isaanii irratti hundaa'uun deeggarsa haala barbaadamuun ni kenna. Kunis tokkoon tokkoon maatii saaxilamoo ta'anii adda baafaman walgahii gaggeessuu fi yeroo yeroon hordoffii gochuun gama jireenyaa deebisanii dhaabuutiin duubatti akka hin kufne kan of keessatti hamate ta'a. PAH'n saaxilamoo ta'an filannoo sagantaa jireenya deebisanii dhaabuu irratti akka hirmaatan ni jajjabeeffamu. Deeggarsi PAH saaxilamoo ta'aniif akka armaan gadiitti gabaabsuun ni danda'ama:

- PAHn saaxilamoo ta'an sagantaalee leenjii adda addaa PAH'f kennaman irratti akka hirmaatan ni jajjabeeffamu. n jireenya isaanii deeggaruuf faayidaa sagantaalee leenjii kanaa irratti PAH saaxilamoo ta'an waliin addatti ni mari'atu.

- PAHn akkasumas waldaa guddistoota alaa fi / ykn waldaa biqiltuu dheedhii oomisha guddaa qabu oomishuuf gargaarutti akka makaman ni jajjabeeffamu.
- Hojiiwwan Ji'ootermaalii Tulluu Mooyyee(**HJTM**) galteewwan jireenyaa deebisanii dhaabuu tokko tokko kan akka sanyii fi tumaalee biroo karaa sagantichaatiin dhiyaatan cinatti dhiisee PAHn saaxilamoo ta'an carraawwan kana akka hin dabarre ni taasisa.

PAHn saaxilamoo ta'an sagantaa LRP bal'aa PAH hunda irratti xiyyeeffate irratti hirmaachuu ni danda'u. Tarkaanfiiwwan addaa kunniin PAHn saaxilamoo ta'an jireenya isaaniif deeggarsa kallattiin tokko tokko akka argatanii fi hordoffii dhiyeenyaa akka argatan gochuuf kan kaayyeffatedha.

Hojiiwwan Ji'ootermaalii Tulluu Mooyyee(HJTM) ejensiiwwan deeggarsaafi michoota hojiirra oolchan sagantaa jireenya deebisanii dhaabuu adda baasee jira, isaan keessaa: Giddugala Qorannoo Qulumsaa, waajjira qonnaa Woredaa, Waajjiraalee Daldalaa fi Industirii Zoonii Arsii fi Zoonii Shewaa Bahaa, Waajjira Misooma Intarpiraayizii Xixiqqaa fi Maayikiroo, Baankii Hojii Gamtaa Oromiyaa, fi Oromiyaa Waldaa Liqii fi Qusannoo.

8. RAAWWII

8.1 Bu'ura Dhaabbilee

Adeemsi gatii fi beenyaa Koree Beenyaa Aanaatiin kan hoogganamu yoo ta'u, kunis gatii qabeenyaa kan to'atu yoo ta'u, bakka bu'ummaa Aanaa fi Gandaa of keessatti hammatee jira. Hojiiwwan Ji'ootermaalii Tulluu Mooyyee Garee Qindoomina Qubsumaa fi Deebisanii bayyanachiisuu ykn qaama kana fakkaatu kan maatii dhiibbaa irra gahe fi adeemsa jireenya deebisanii dhaabuu gidduutti akka walqunnamtii ta'ee hojjechuu danda'us hundeessuu qaba. RLRCGn miseensota ijoo garee raawwii HJTM bakka bu'oota hawaasaa waliin yeroo yeroon walitti fiduu qaba, kunis qormaanni raawwii waliin jiru saffisaan adda baasuun sirreeffamni barbaachisaan akka taasifamuu danda'u mirkaneessuu qaba. RLRCG ji'oota ja'an jalqabaa sagantaa jireenya deebisanii dhaabuu keessatti yeroo hojiiwwan harki caalaan jalqabaman ji'a ji'aan walga'ee, sana booda kurmaana kurmaanaan adeemsa jiru gamaaggamuuf ni walga'a. Xiyyeeffannaan jalqabaa RLRCG buqqa'iinsi qaamaa kan hin oolle yoo ta'e malee jireenya deebisanii dhaabuu irratti ta'a. Sana booda hojiiwwan buqqa'iinsa qaamaa irratti HJTM waliin walqunnamsiisuun akka qaama itti gaafatamummaa RLRCGtti ni jalqabama. Miseensonni RLRCG bakka bu'oota armaan gadii of keessatti hammachuu danda'u:

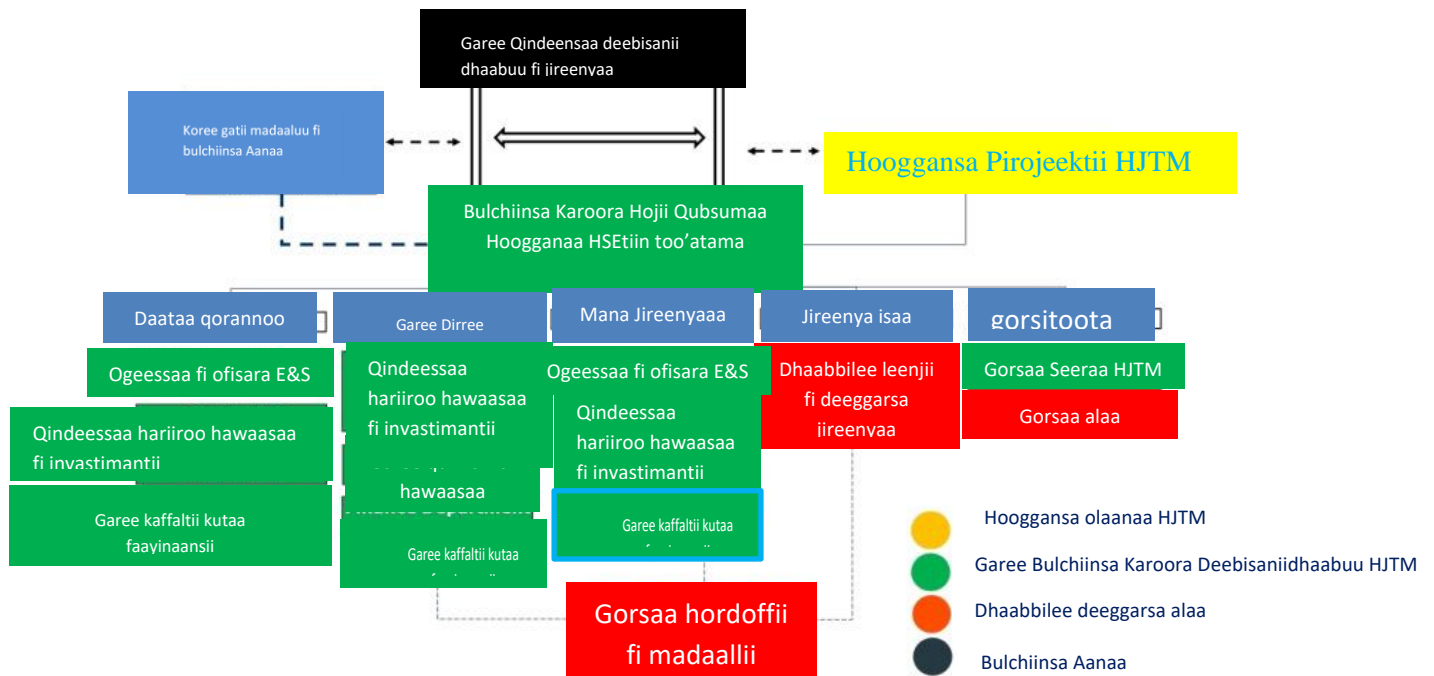
- bakka bu'oota dubartootaa fi dhiirotaa PAH tokkoon tokkoon ganda dhibee kanaan miidhaman irraa;
- Bakka bu'aa Dhaabbata Bosonaa fi Bineensota Bosonaa oromiyaa;
- Bakka bu'oota Hojiiwwan Ji'ootermaalii Tulluu Mooyyee(HJTM);
- Bakka bu'oota ejensii deeggarsaa Hojiiwwan Ji'ootermaalii TM(Wiirtuu Qorannoo Qulumsaa fi / ykn Baankii Hojii Gamtaa Oromiyaa);
- ·Bakka bu'aa waajjira qonnaa Aanaa; fi
- Bakka bu'oota bulchiinsa Gandaa fi Aanaa.
- HJTM, RLRCG fi Aanaan ijaarsa manneen jireenyaa gara fuula duraatti buqqa'iinsa dhiibbaa irra ga'uu danda'aniif kontiraaktaroota alaa dabalatee ejensiiwwan alaatiin hojiirra oolchuuf deeggarsa ni taasifama
- Hojiileen jireenya deebisanii dhaabuu dhaabbilee adda addaatiin kan deeggaramu yoo ta'u isaanis:
- Waajjira qonnaa Aanaa;
- Waajjiraalee Daldalaa fi Industirii Zoonii Arsii fi Zoonii Shawaa Bahaa;
- Waajjira Misooma Intarpiraayizii Xixiqqaa fi Maayikiroo;

- Baankii Hojii Gamtaa Oromiyaa;
- Waldaa Liqii fi Qusannoo Oromiyaa; fi
- Giddugala Qorannoo Qonnaa Qulumsaa.

8.1 Garee Raawwii Pirojektii

Gareen raawwii TMGO's adeemsa beenyaa fi deebisanii dhaabuu jireenyaa kan deeggaru yoo ta'u, Manaajara HSE'n kan hoogganamu yoo ta'u, garee raawwii HJTM ni to'ata.

- Dirree irratti hojiin Qindeessaa Hariiroo Hawaasaa fi Invastimantiitiin kan hoogganamu yoo ta'u, hojiiwwan dirree mana bakka bu'iinsaa, jireenya deebisanii dhaabuu, hirmaannaa qooda fudhattoota, bulchiinsa daataa fi hordoffii fi madaallii wajjin walqabatan hunda ni to'ata. Qindeessaan Hariiroo Hawaasaa fi Invastimantii Ogeessa EHSS, Ofiisara Naannoo fi Hawaasummaa fi Garee Qunnamtii Hawaasaatiin kan deeggaramu yoo ta'u, kunis hojiirra oolmaa tarkaanfiiwwan jireenya deebisanii dhaabuu irratti Pirojektichaa fi namoota miidhaman gidduutti walqunnamtii idilee ta'a.
- Gareen raawwii HJTM qaama ijoo bu'uura dhaabbilee Karoora Hojii Qubsumaa fi Karoora Jireenya Deebisuuf/Bayyanachiisuuf kan uumu yoo ta'u, sagantaa jireenya deebisanii dhaabuuf michoota ta'uu danda'an waliin walitti dhufeenya kan uumuu fi saganticha deeggaruuf michoota baay'ee mijatoo ta'an irratti qorannoo sirrii ni raawwata. Kunis akka armaan gadiitti ibsameera.



Sagantaleen jireenya deebisan bayyanachiisuu bara 2020 hanga 2022tti kan gaggeeffamu ta'a.

8.3 Hojiilee Qubsuma Qaamaa

PAH tokko qaamaan buqqa'e deebisanii qubsiisuun xumuramee waan jiruuf hordoffii keessatti hammatamuu malee hojiin dabalataa hin barbaachisu. Fuulduratti qubsiisuun qaamaan yoo barbaachise, gochoota armaan gadii uwwisuuf sagantaa addaa ni uuma:

- ☀ Adeemsa qubsumaa ibsuuf bobba'uu;
- ☀ Saaxilamummaa mirkaneessuuf qorannoo lakkoofsa ummataa fi hawaas-dinagdee; · Gatii qabeenya dhiibbaa irra gahe;
- ☀ Beenyaa maallaqaa fi deeggarsa jireenya deebisanii dhaabuu dabalatee ulaagaalee fi mirga qaban ibsuu;
- ☀ Mirgoota irratti maatiin dhuunfaa mallatteessuu;
- ☀ Kaffaltii beenyaa maallaqaa;
- ☀ Lafa haaraa mana jireenyaaf oolu argachuu;
- ☀ Deeggarsa ijaarsa mana jireenya haaraa karaa mala of ijaaruu deeggarameen; · Qaamaan bakka biraatti jijjiiruu; fi
- ☀ Hordoffii fi madaallii.

8.4 Hojii Jireenya Deebisuu

Kaayyoowwan ijoo sadii galmaan ga'uuf karoora raawwii kurmaana kurmaanaan qopheessuun jireenya deebisanii dhaabuun ni deeggara:

C3	Ejensiwwan intarpiraayizii maayikiroo waliin walitti dhufeenya uumuu	MOU																	
C4	Dhiyeessitoota faayinaansii maayikiroo waliin walitti dhufeenya uumuu	MOU																	
M: Hordoffii fi madaallii																			
M1	Ji'a ji'aan fi kurmaana kurmaanaan raawwii sagantichaa PAP waliin	Daqiiqaa walga'iiwwanii																	
M2	Gabaasa adeemsa hojii kurmaana kurmaanaan	Baay'ina gabaasaa																	
M3	Hordoffii dhiibbaa keessoo fi odeeffannoo walitti qabuu	Gabaasa hordoffii																	
M4	Madaallii alaa	Gabaasa madaallii																	
Bulchiinsa Pirojektii fi Kenniinsa Kaffaltii tajaajilaa		Kaffaltii tajaajilaa																	
	Hawaasa dhiibbaa irra gahe waliin hojjechuu	Daqiiqaa walga'iiwwanii																	
	Michoota hojiirra oolmaa naannoo waliin hojjechuu	Daqiiqaa walga'iiwwanii																	

8.5 Hirmaannaa Qooda Fudhattootaa

Milkaa'inaan hojiirra oolmaa Karoora Hojii Qubsumaa fi Karoora Jireenya Deebisanii bayyanachiisuu sagantaa hirmaannaa qooda fudhattoota itti fufiinsa qabu barbaada. Hundeeffama sagantaa fi to'annoo waliigalaa karaa RLRCG deeggaruuf hirmaannaan barbaachisaadha. Haa ta'u malee hirmaannaan dabalataa akkuma Boqonnaa 8: Jireenya Deebisuu keessatti ibsametti hojiiwwan sagantaa addaa keessatti ijaarameera. Kunis PAH akkasumas michoota hojiirra oolchan waliin hojjechuu kan of keessatti hammate ta'a. Hojiirra oolmaa deeggaruuf, HJTMn karoorra raawwii isaanii kurmaana kurmaanaan tarkaanfiiwwan Karoora Hojii Qubsumaa fi Karoora Jireenya Deebisanii kana keessatti ibsaman irratti hundaa'uun ulaagaalee hirmaannaa qooda fudhattoota ni hammata, kunis hirmaannaa gareen raawwii HJTM kurmaana kurmaanaan raawwatamuu qabu kan ibsu ta'a.

8.6 Bulchiinsa Komii

HJTM Mala Komii Karoora Hirmaannaa Qooda Fudhattoota Pirojektii keessatti guutummaatti ibsame qaba. PAP fi qooda fudhattoonni biroo karaalee armaan gadiitiin komii HJTMf dhiyeessuu ni danda'u: · Yeroo walgahii idilee / idilee / ummataa hawaasa waliin gaggeeffamu;

- ❖ Waltajjiiwwan marii ogeeyyii Aanaa waliin taasisuun;
- ❖ Yeroo walgahii al-kallatti taasifamu kamiyyuu;
- ❖ Kallattiin hoggansa waliin walqunnamtii gochuudhaan – fakkeenyaaf xalayaa hoggansa iddoo, ykn waajjiraalee hojii biroof barreeffame;
- ❖ Bilbilaan;
- ❖ Waajjiraalee Ofiisara Qunnamtii Hawaasaa Itayyaa, Xeeroo Mooyyee, Aanoole fi Xeeroo Dassitaa keessatti saanduqa yaada hawaasaa keessatti dhiyaachuu; fi / ykn
- ❖ Kallattiin karaa Ofiisara Qunnamtii Hawaasaa.
- ❖ Komii fi yaadni kennamu hundi qoratamee deebiin ni kennamaaf.

8.7 Fuulduratti Lafa Argachuu

Fuulduratti lafa fudhachuun hundi dirree laavaa keessa kan hafu waan ta'eef qonnaan bulootaa naannoo ykn lafa qonnaa fi lafa dheedichaa irratti kallattiin dhiibbaa qabaata jedhamee hin eegamu. Haa ta'u malee, sababa dhiibbaa sagaleetiin buqqa'iinsi qaamaa daangeffame jiraachuu danda'a, kunis yeroo sanatti kan madaalamu ta'a. Qubsuma duraan uumame irraa adda ta'ee, qubsuma gara fuula duraatti taasifamu hundi akkaataa Labsii haaraa 1161/2019 akkasumas Dambii 135/2007 fi ulaagaalee idil-addunyaa hojiirra jiruun kan hoogganamu ta'a.

8.8 Hordoffii raawwachuu Adeemsi hordoffii garee raawwii HJTM fi RLRCG saganticha yeroo isaa eegate akka turu, adeemsa raawwii itti fufiinsaan fooyya'iinsa akka dandeessisu, akkasumas kaayyoon jireenya deebisanii dhaabuu galma ga'aa jiraachuu mirkaneessuuf akka gargaaru yaada ni kenna. Hordoffii fi madaalliin jalqaba irratti hojiiwwan ijoo ta'an yoo ilaalle jireenya deebisanii dhaabuu irratti xiyyeeffata. Hordoffii fi madaalliin yeroo waggaa sadii hojii raawwii KJD fi sana booda waggaa tokkoof deeggarsa dheerina yeroo dheeraa deebisanii dhaabuu jireenyaa hordofuuf itti fufa. Yeroo kana keessatti ciminni adeemsichaa garaagarummaa qabaata. Yeroo hojiirra oolmaa fi battalumatti sana booda hordoffiin fi madaalliin caalaatti idilee fi cimaa kan ta'u yoo ta'u, hojiin hordoffii fi madaallii waggoota dhumaa keessatti hojiin raawwii irra caalaan erga xumuramee booda ni hir'ata. Maatii qaamaan buqqa'e tokko sagantaa hordoffii keessatti kanneen deeggarsa jireenya deebisanii dhaabuu argatan waliin ni hammatama. Qindeessaan Hariiroo Hawaasaa fi Invastimantii Karoora Hordoffii fi Madaallii kan mala:

- Hordoffii keessoo, kunis 'hordoffii raawwii hojii' kan of keessatti hammate yoo ta'u, adeemsa qaamaan mul'atu Pirojektii hojiirra oolmaa Karoora Hojii Qubsumaa (KHQ) fi Karoora Jireenya Deebisuuf (KJD) hundeeffame waliin safaruu fi 'hordoffii dhiibbaa' bu'aa sagantaa jireenya deebisanii dhaabuu itti fufiinsaan safaruun akka... kaayyoo KHQ fi KJD galmaan gahuu irratti guddinni mul'achaa

jira. Agarsiistonni fakkeenya gabatee 8.2 irratti dhiyaataniiru. Gabaasa adeemsa keessoo kurmaana kurmaanaan kan qophaa'u yoo ta'u, sana booda dhuma waggaa hojjiirra oolmaa hunda irratti gabaasa hordoffii bal'aan ni qophaa'a.

- Madaallii alaa hordofoota walaba ta'aniin tarkaanfiiwwan jireenyaa sadarkaa jireenyaa namoota dhibee kanaan miidhaman deebisuuf fudhataman milkaa'uu isaanii madaaluuf. Madaalliin alaa qaama alaatiin kan raawwatamu yoo ta'u, odeeffannoo sadarkaa tokkoffaa fi lammaffaa walitti qabuun kan beeksifamu yoo ta'u, bu'aa hordoffii keessoo kanneen akka gabaasa adeemsa fi hordoffii, daqiiqaa walgahii akkasumas qorannoo fi marii of danda'ee gorsaa hordoffii fi madaallii alaatiin gaggeeffamu irratti kan hirkatu ta'a . Dhuma yeroo raawwii waggaa sadii irratti odiitiin madaallii fi xumuraa alaa karoofameera.

Gabatee 8.2 Agarsiistota Ijoo Fakkeenya galtee / agarsiistota milkaa'ina (ji'a ji'aan hordofamuu fi gabaafamuu qabu) .

- Baasii baajata faallaa ta'een baasuu
- Baay'ina namoota sagantaa jireenya deebisanii dhaabuu irratti hirmaatan . Baay'ina namoota sagantaa deeggarsa of ijaaruu irratti argaman
- Walgahii qondaaltota Aanaa waliin taasifamu
- Dhiyeessii galtee jireenyaa Agarsiistota oomishaa fakkeenya (ji'a ji'aan hordofamuu fi gabaafamuu qabu)
- Baay'ina walgahii Aanaalee fi Gandoota waliin gaggeeffame
- Baay'ina walgahii RLRCG waliin gaggeeffame
- Daqiiqaa walgahii
- Baay'ina komii Karoora Hojii Qubsumaa (KHQ)fi Karoora Jireenya Deebisuuf (KJD)waliin walqabatu gosaan dhiyaate
- Baay'ina komii KHQ ykn KJDn walqabatee furmaata hin argannee fi cufame . Giddugaleessaan yeroo adeemsa komii

- Waliigalteewwan michoota hojiirra oolchuuf jiran
- Raabsa galteewwan jireenya deebisanii dhaabuu Agarsiistota bu'aa fakkeenya (hordoffii fi kurmaana kurmaanaan gabaafamuu qabu)
- % maatii mana jireenya dhaban gara mana haaraatti jijjiirame
- Baay'ina maatii mana haaraa ijaaruu xumuran
- % maatii adeemsa qubsuma qaamaa fi dinagdeetiin quufan
- % maatii oomishtummaa qonnaa deebisuuf hojiiwwan hojiirra oolchaa jiran · % maatii daldala haaraa qaban
- % maatii qaqqabummaa gabaa fooyya'aa ta'uu gabaasan
- % maatii oomisha fooyya'aa gabaasan
- % maatii horsiisa beeyladaa fooyya'aa ta'uu gabaasan
- % maatii adeemsa jireenya deebisanii dhaabuutti quufan Agarsiistota hordoffii dhiibbaa bu'uura hawaas-dinagdee irraa (waggaa waggaan hordofamuu fi gabaafamuu qabu) . · Baay'ina waliigalaa PAHwwan dhiibbaa irra gahe lafaa fi /ykn qabeenya dhaban
- Baay'ina waliigalaa maatii dubartootaan hogganamu
- % maatii mana jireenya dhaban gara mana haaraatti jijjiirame
- Baay'ina maatii mana haaraa ijaaruu xumuran
- % maatii adeemsa qubsuma qaamaa fi dinagdeetiin quufan
- % maatii oomishtummaa qonnaa deebisuuf hojiiwwan hojiirra oolchaa jiran · % maatii daldala haaraa qaban
- % maatii qaqqabummaa gabaa fooyya'aa ta'uu gabaasan
- % maatii oomisha fooyya'aa gabaasan
- % maatii horsiisa beeyladaa fooyya'aa ta'uu gabaasan

- % maatii adeemsa jireenya deebisanii dhaabuutti quufan Agarsiistota hordoffii dhiibbaa bu'ura hawaas-dinagdee irraa (waggaa waggaan hordofamuu fi gabaafamuu qabu)
- Baay'ina waliigalaa PAHwwan dhiibbaa irra gahe lafaa fi /ykn qabeenya dhaban
- Baay'ina waliigalaa maatii dubartootaan hogganamu Agarsiistota Ijoo
- % maatii mataa maatii umuriin isaanii 65 waliin walqixa ykn isaa ol ta'e
- % maatii qaamaan buqqa'an kanneen mana jireenyaa fooyya'aa argatan · % maatii ga'eessota hojii dhabeeyyii qaban
- Galii ji'a ji'aan qonna irratti hundaa'e gidduugaleessaa
- Galii ji'aa mindaa irratti hundaa'e jiddugaleessaa
- Mindaa ji'aa gadi aanaa maddoota galii hunda keessatti
- % maatii qusannoo qaban
- % maatii liqaa qaban
- Waggaa darbe keessa maatii hanqina nyaataa gabaasan keessaa
- % maatii midhaan ofii misoomsan
- % maatii miseensa tokkoo fi isaa ol hojii kaffaltii qabu irratti
- % maatii yeroo guyyaatti bishaan walitti qabuuf dabarsan tokkoon tokkoon gosa yeroo gabaafame keessatti gabaasan
- % maatii meeshaalee qulqullinaa fooyya'aa (flush or pour flush toilet) argachuu danda'an .

8.1 Baajata Hojiirra Oolmaa

Baajata armaan gadii Karoora Jireenya Deebisuuf/Bayyanachiisuuf bara 2019 marsaa duraa ba'ee fi odeeffannoo dabalataa baasii deeggarsa jireenyaa fi beenyaa Hojiiwwan Ji'ootermaalii Tulluu Mooyyeen kenname irraa kan baafamedha. Baajata beenyaa lafa argachuu ETB 14,925,983.73 / 353,255 jedhamee shallagame. Isaan kun gabatee 8.3 irratti dhiyaataniiru. Tilmaamni baasii jireenyaa deebisuuf bahu USD

159,134 dha. Tilmaamni baajata jireenyaa deebisanii dhaabuu kan bara 2019 irraa kan hin jijjiiramne yoo ta'ellee, raabsiin tilmaama baajata barbaachisu kaayyoowwan hunda keessatti jijjiiramee baajata Karoora Hojii Qubsumaa fi Karoora Deebisanii Bayyanachiisuuf ba'e marsaa 3ffaa kana keessatti qabamee jira. Gabatee 8.3: Baasii Lafa Kallattiin Argachuu.

Gabatee 8.3: Baasii Lafa Kallattiin Argachuu

Qaama	Baasii (ETB)	
Beenyaa Lafaa gara PAPs	Lafa Margaa	3,326,666.51
	Lafa Qonnaa	9,248,587.05
Beenyaa Lafaa Dhaabbata Bosonaa fi Bineensota Bosonaa Oromiyaaf		967,810.58
Qabeenya dhaabbataa dhaabameef beenyaa PAPf kaffalamu		664,826.97
Beenyaa PAPf caasaadhaaf kaffalamu	Manneen	392,234
	Dallaawwan	207,058.62
Baasii deeggarsa Koreen Beenyaa		118,800
Waliigala ETB	14,925,983.73	
Waliigala USD	353,255	

Intended for
TMGO Ltd


Date
September 2021



Project Number
1620010898

**TULU MOYE
GEOTHERMAL
OPERATIONS
RESETTLEMENT ACTION
PLAN & LIVELIHOOD
RESTORATION PLAN
NON-TECHNICAL
SUMMARY**

TULU MOYE GEOTHERMAL OPERATIONS RESETTLEMENT ACTION PLAN & LIVELIHOOD RESTORATION PLAN NON-TECHNICAL SUMMARY

Project No. **1620010898**
 Issue No. **3**
 Date **29/09/2021**
 Made by **Mark Westbury**
 Checked by **Tracey Draper**
 Approved by **Phillipa Spence**

Made by: 

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Version Control Log

Revision	Date	Made by	Checked by	Approved by	Description
1	15/01/21	MW	TD	PS	First Issue to Client
2	11/05/21	TD	PS	PS	Final Issue to Client
3	29/09/21	TD	PS	PS	Final Issue in response to comments.

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1. INTRODUCTION

1.1 This Report

This Report is the Non-Technical Summary (NTS) of the Resettlement Action Plan (RAP) and Livelihood Restoration Plan (LRP), for the development of the anticipated 50 megawatt (MW) geothermal power plant (the Project) located in Hitosa Woreda, Oromia Region, Ethiopia. The Project is being developed by Tulu Moye Geothermal Operations PLC (TMGO) and is the first phase of a proposed wider development to a capacity of 150 MW. The RAP & LRP revision (Rev. 3) updates the initial LRP for the Project dated October 2019 (2019 LRP Rev. 1) and has been prepared by Ramboll.

1.2 Project Background

Tulu Moye Geothermal Operations Private Limited Company (TMGO) is at an advanced stage of developing a geothermal power generation opportunity (the Project) at Tulu Moye, in the Oromia Regional State of the Federal Democratic Republic of Ethiopia. The Project aims to provide clean electric power at a cost competitive price. The Project is anticipated to include a geothermal power plant of up to 100 megawatt (MW) capacity.

The Project includes a power station with turbines/generators, exploration drilling at 1-4 well pads (each with between 3-5 geothermal wells), production drilling at 4-5 well pads (exact number to be confirmed after exploration drilling complete), access roads, water supply involving the construction of a reservoir, quarries, collection pipelines from wells to the power station, a cooling system (tower), and wastewater treatment system. A new transmission line from the power station to the grid will be developed separately by Ethiopian Electric Power (EEP).

The Project received national environmental clearance to proceed in 2018 following completion and public disclosure of an Environmental and Social Impact Assessment (ESIA)¹

The Project has employed several measures to minimize the acquisition of land that is used for livelihood activities and residences. These measures include:

- Use of directional drilling for the initial exploration wells, which results in having more wells per well pad and thus a smaller surface footprint;
- Directional drilling technology also allows the Project to drill deep beneath land without creating disturbance of the land surface; and
- Locating well pads in locations where there would be minimal disturbance to productive agriculture and grazing land and where there are lower requirements for new access roads.

1.3 RAP & LRP Scope and Objectives

The RAP & LRP considers the economic displacement that was caused by land acquisition associated with the Project. This resulted in the acquisition of 9.91 ha of farmland, 5.61 ha of grassland (totalling 15.52 ha) and 12 ha was acquired from the Oromia Forest and Wildlife Enterprise (OFWE). The RAP & LRP does not consider any specific land take associated with the development of future developments, although provision is made for how any future land requirements related to the Project will be managed.

The objectives of this revision of the RAP & LRP are to:

- summarise national and international requirements for livelihood restoration;

¹ Tulu Moye Geothermal Development Project - Phase I: Environmental and Social Impact Assessment (VSO Consulting, 2018).

- summarise the socio-economic characteristics of affected households and identify vulnerable households as defined in the 2019 LRP Rev.1;
- define full replacement cost for losses that have resulted from the Project as described in 2019 LRP Rev.1 and international standards;
- include specific measures for Project Affected Households (PAHs) experiencing physical displacement;
- describe other assistance and measures to enable affected households to restore and improve their livelihood; and
- outline the key steps required for implementing livelihood restoration.

1.4 Current Status

At the time of writing the RAP & LRP Rev.3, land acquisition had impacted 146 plots of land and households and landowners and this has been described in more detail in the 2019 LRP Rev.1. While displacement impacts have not changed since the development of the 2019 LRP Rev.1, the RAP & LRP Rev.3 simply provides further clarity on eligibility, entitlement and full replacement cost in accordance with Proclamation 455/2005 and all Applicable Standards. It also revises the legal and institutional framework to account for the new Proclamation 1161/2019, which came into effect in 2019 and will be applied to all future land acquisition. The impacted 146 plots have been addressed in accordance with Proclamation 455/2005 since the displacement took place before the new Proclamation came into effect.

2. LEGAL AND INSTITUTIONAL FRAMEWORK

2.1 Ethiopian Legislation

Key instruments for managing land acquisition include:

- The Constitution of the Federal Democratic Republic of Ethiopia (1995) including Article 43 on the Right to Development;
- Federal Democratic Republic of Ethiopia Rural Land Administration and land Use Proclamation (Proclamation No. 456/2005);
- Federal Democratic Republic of Ethiopia Expropriation of Landholdings for Public Purposes and Payment of Compensation (Proclamation No. 455/2005) for all displacement that occurred in or before 2019;
- Federal Democratic Republic of Ethiopia Expropriation of Landholdings for Public Purpose, Payments of Compensation and Resettlement (Proclamation No. 1161/2019) for all displacement that may occur after 2019;
- Council of Ministers Regulation for Payment of Compensation for Property Situated on Landholding Expropriated for Public Purposes (Regulation No. 135/2007);
- Environment Policy of Ethiopia;
- 2001 Oromia Regional State Revised Constitution; and
- Oromia Rural Land use and Administration Proclamation (Proclamation No. 130/2007).

2.2 Land Acquisition Process

The land acquisition process is described in Proclamation 455/2005 and was revised under Proclamation 1161/2019. The process requires the Project Sponsor to lodge an application with the government. Once the application is received, the Woreda (or urban administration) will make a decision about whether the proposed use of land is for 'Public Purpose'.

If agreed, a Valuation Committee is established by the Woreda to inform communities that their land will be expropriated and impacted assets will be inventoried. Notification will be made to land owners on when land is to be vacated at least 90 days before land is required under Proclamation 455/2005. Compensation is to be paid to the landholder prior to them vacating their land and the expropriation process is only completed once the community or land owners have moved to new land provided by the Woreda and / or when the land holder has received compensation.

2.3 International Standards

International standards include:

- African Development Bank Group's Integrated Safeguards System (2013); and
- International Finance Corporation Performance Standards (2012).

There are some gaps between Ethiopian legislation and international standards. In summary, these gaps will be addressed through additional measures implemented by the Project including:

- The Project has undertaken a comprehensive approach to avoidance and minimization.
- The Project has undertaken significant stakeholder engagement beginning in 2015, and community meetings were held in February 2019 and April 2019 in all affected kebeles prior to the land acquisition process officially beginning, and again after the Compensation Committee had finished the valuation process.

- The Project's grievance redress mechanism is available for use by those affected by land acquisition.
- Additional livelihoods baseline surveys were undertaken with all affected households between March and April 2019, and were also used to engage with households on the valuation process.
- Eligibility for compensation and support is extended to affected persons even if they have no recognizable legal right or claim to the land or assets they occupy or use.
- Affected persons will be eligible for any incurred transaction costs (such as taxes, legal and registration fees), though such transaction costs are expected to be limited.
- Vulnerable households have been identified and will be targeted for livelihood restoration measures to help ensure they understand and can access the support measures.
- Monitoring and evaluation of the RAP & LRP will be undertaken to measure whether it has been successful at supporting livelihood restoration for affected households.

3. STAKEHOLDER ENGAGEMENT

3.1 Summary of Stakeholder Engagement

With respect to the physical and economic displacement, the Project identified the following key stakeholders:

- Project affected households and persons impacted by land acquisition;
- Community members who utilise resources on land affected by land acquisition;
- Kebele Administrations;
- Hitosa Woreda Administration and relevant offices; and
- OFWE.

Engagement during land acquisition commences with the establishment of a Woreda Compensation Committee.

Stakeholder engagement has been an ongoing activity in the Project area since 2015. In terms of the land acquisition, community meetings were held in February 2019 in all affected kebeles prior to the land acquisition process officially beginning and again after the Compensation Committee had finished the valuation process. A second round of general community meetings was held in April 2019 to review the valuations carried out by the Compensation Committee and to share details on the compensation matrix and entitlement criteria.

3.2 Engagement on Livelihood Restoration Measures

TMGO has undertaken several engagements specific to the development of livelihood restoration programme. During the census and socio-economic surveys, each PAH was asked about the support they would like to see in the livelihood restoration programme. Options were based on these responses and were designed to align with existing resources, knowledge, skills and household experiences in the Project area.

The livelihood restoration process is described in every community engagement meeting. As the Project progresses, livelihood restoration options will continue to be refined in consultation with PAHs and sectoral experts, who will be consulted on the sustainability of measures in place.

4. BASELINE

4.1 Introduction

The socio-economic baseline is presented under the following main topic headings in the RAP & LRP Rev.3:

- demographic profile;
- gender context;
- education;
- livelihoods and land use;
- public services and infrastructure;
- development priorities; and
- vulnerability.

These elements are summarised below.

4.2 Demographic Profile

Total population figures for these kebeles are not known, however the known population affected by displacement is 779 based on the census and socio-economic survey of 126 PAHs impacted by the Project. The average household size of impacted PAHs is 6. Almost two thirds of the population affected by displacement (65%) are below the age of 25 years.

The dominant religion amongst PAHs is Islam, with 663 individuals (85%) recorded as practicing Islam. 82 individuals were recorded as Christian.

Of the 126 PAHs surveyed, 39 (31%) were headed by a woman. The 2019 LRP Rev.1 indicated that women's roles in Ethiopia tend to be in the cultivation of horticulture, particularly vegetable crops, while supporting in weeding activities. Women are responsible for household / domestic chores.

The socio-economic survey undertaken for the 2019 LRP Rev.1 found that 81% of Project affected people (PAPs) had not progressed further than primary school, however this sample includes children as young as 7 years old. Amongst heads of households, education levels were slightly higher with 78 (62%) not progressing beyond primary school.

4.3 Gender Context

Ethiopia has a Gender Inequality Index of 173 out of 189 ranked countries (based on 2018 ranking) . Nationally only 11.5% of women have some level of secondary education compared with 22% of men. However, 74.2% of women are economically active in Ethiopia despite this low number, although these women are more likely to be represented in low paid and informal work.

Of the 126 PAHs surveyed, 39 (31%) were headed by a woman. Women's roles in Ethiopia tend to be in the cultivation of horticulture, particularly vegetable crops, while supporting in weeding activities. Women are largely responsible for household / domestic chores. While there is no specific data on PAHs, similar patterns of activity were observed, and women reported to be responsible for fetching water, collecting firewood, caring for children, collecting and preparing food, etc. This is important for the consideration of livelihood restoration options.

4.4 Education

Amongst heads of households, 78 (62%) had not progressed in education beyond primary school, while 19 heads of households (15%) had completed either junior secondary, secondary or tertiary education. It is important to note that 40 heads of households had received no education at all. Similarly, 43 heads of households (34%) have no literacy (cannot read or write), of which 27 were women.

4.5 Livelihoods and Land Use

The predominant livelihood for PAHs is agriculture followed by livestock rearing. While natural resource utilization was reported, it was primarily for subsistence / household consumption and not income generation. Four households reported owning small businesses including a kiosk (two households) and tea house (two households).

PAHs reported producing six main crops including wheat (41%), haricot (16%), barley (15%) teff (14%), maize (7%) and sorghum (6%). Just over half of all PAHs (52%) reported crop production for both subsistence and cash income, 28% of PAHs produce mainly for cash income and 15.6% produce mainly for subsistence. Only 4% of households produced entirely for subsistence.

Livestock is another important livelihood for PAHs for both cash income and subsistence. Most households keep livestock including oxen and plough (25%), cows (24%), donkeys (24%), goats (13%), sheep (7%) and chicken (7%).

Most PAHs (82%) reported using natural resources to support their livelihoods including firewood, timber and thatch. These items are largely used for household consumption with firewood the most common resource used to generate small cash incomes. Communal land provides access to 43% of natural resources used by PAHs and firewood is primarily sourced on land other than the household's own.

Land owned by PAHs is classified as either farmland or grassland (for grazing). 28 PAHs (22%) have access rights to more than one parcel of land. The average landholding is 2.3 ha for PAHs, which is more than double the national average landholding for small farms of 0.9 ha. The average landholding size for PAHs is presented in Table 4.1.

Table 4.1: Average Landholding

Total Land Holding Range	Percent of PAPs
Less than one ha	39
Between 1 and 2 ha	23
Between 2 and 3 ha	29
Between 3 and 4 ha	18
Between 4 and 5 ha	6
Greater than 5 ha	11

4.6 Community Infrastructure and Organisation

The majority of houses in the Project area are made from grass thatch while a few have iron sheet roofing. Walls are generally made with mud and earthen floors though some are constructed of wood. Non-motorised forms of transport are more common in the Project area including walking, horses, donkeys and horse/donkey-drawn carts.

PAHs generally travel long distances to collect potable water. The 2018 ESIA baseline studies found that 12% of households reported taking between 30 – 60 minutes to collect water and

32% of households travel more than one hour to collect water. During the wet season, there is greater reliance on rain collection and ponds, while during the dry season, reliance is on piped water, groundwater and ponds at a greater distance from households. Community conflict over water has been reported in the area and this may be exacerbated if planned water improvement schemes are not managed effectively by the woreda and / or TMGO. Transparency over water improvement schemes will be imperative for managing community concerns over water.

4.7 Development Priorities

Development priorities identified by PAHs include agricultural inputs (46%), livestock (18%), soil improvement (14%), access to water (12%), animal health support (6%), irrigation (3%) and other miscellaneous support requested by 1%.

4.8 Vulnerable Households

Vulnerable households are those with limited assets they can draw upon, and as a result, are less resilient to shocks, which means the loss of land and assets will disproportionately impact these households. The lack of resources available and the precarious nature of their livelihoods means that vulnerable households are less able to adapt or profit from Project related changes.

The 2018 ESIA baseline studies identified several groups considered vulnerable to the Project's impacts. These include female headed households, which make up 25% of all households in the Project Area of Influence. The proportion of female headed households is higher in two of the Kebele's impacted by land acquisition: Anole and Tero Moye, where between 32 – 44% of households are headed by females. The 2018 ESIA baseline studies also identified elderly, women, youth, children, widowed, unemployed, disabled and chronically ill as vulnerable groups.

According to the 2019 LRP Rev.1, the greatest areas of vulnerability for affected households are presented in Table 4.2, based on census data collected for the RAP & LRP.

Table 4.2: Vulnerable PAPs

Vulnerable Criteria	Number and %
Low-income households defined as families (3 or more members) reporting monthly household incomes in the bottom income quintile	20 households (16%)
Female-Headed Households	39 households (31%)
Single member households, aged 65 or older	1 household (1%)
Households with no land certificate	12 households (10%)
Households with a member who has a physical or mental disability, or pregnant female	18 households (14%)
Households where the majority of adult members are unemployed	9 households (7%)

Overall, the data identified 69 households that could be potentially vulnerable including three households with three levels of potential vulnerability, 18 households with two levels of potential vulnerability and 48 households with one level of potential vulnerability. Taking account of households 16 households falling into more than one category, a total of 53 potentially vulnerable PAHs were identified through the baseline data collection. These will be verified through ongoing engagement with individual households.

5. IMPACTS OF PROJECT LAND ACQUISITION

The land acquisition that has been undertaken or is planned has affected or will affect the following:

- A total of 5.60 ha (0.056 km²) of grassland and 9.91 ha (0.099 km²) of farmland, spread across 146 separate land parcels;
- Five structures used for livelihood activities, comprising three shops and two market sheds;
- One residence;
- 42 fences; and
- 12 ha (0.12 km²) of land from the Oromia Forest and Wildlife Enterprise (OFWE) that is categorised as natural forest but in which key livelihood activities such as harvesting trees for timber, collecting fuelwood or charcoal production are not permitted on OFWE land.

The affected grassland and farmland is located across four kebele² (Anole, Dawi Guticha, Tero Moye, Shaki Sheraro) that are within Hitosa woreda³.

The acquisition of the 146 land parcels will affect 146 households or land holders who use this affected grassland or farmland, but only one household will be affected by the loss of their residence. Based on a survey of 126 of the 146 affected households / land holders⁴, 779 individuals were identified as being part of the affected households, referred to below as affected persons. The key characteristics of the affected households and persons that were surveyed are:

- On average, land acquisition will affect approximately 5.4% of the land of each affected household. The impact ranges from a loss of 0.3% of landholding to 29.7% of landholding. 92% of households are losing less than or equal to 10% of their land, while only two affected households will lose greater than 20% of their land.
- Almost two thirds of the affected persons are below the age of 25 years.
- 39 (31%) of the affected households are headed by a woman. Amongst the heads of affected households, 78 (62%) have not had an education beyond primary school level and 43 (34%) cannot read or write.
- The primary occupations of affected persons are farming (43%), still in school (29%), and unemployed (12%).
- Over half of all affected persons (52%) undertake crop production for both subsistence and cash income, and affected persons reported producing six main crops: wheat (41%), haricot (16%), barley (15%) teff (14%), maize (7%) and sorghum (6%). Households were able to harvest all agricultural crops ahead of land acquisition.
- Farming practices are rainfed, with only one affected household actively irrigating crops. Farming is non-mechanised with simple farm tools and use of oxen and plough
- Livestock is another important livelihood for affected households for both cash income and subsistence. Most households keep livestock including oxen and plough (25%), cows (24%), donkeys (24%), goats (13%), sheep (7%) and chicken (7%).
- 68 affected households have or will lose a combined total of 2,078 trees and shrubs as a result of the Project. None produce edible products but do provide important non-timber and

² A kebele is a community level administrative unit.

³ A woreda is a district level administrative unit, comprised multiple kebele.

⁴ The household surveys covered 126 households, with the owners of the other 20 land parcels not included in the survey for a variety of reasons, principally related to absence or refusal to participate in the survey.

timber products including fodder, fuelwood, construction timber, farm tools, shade, beehives and fencing.

Some of the affected households, as identified in the 2018 ESIA, are classed as being vulnerable, meaning that they could be disproportionately impacted by the Project because they are female-headed, are a single member household that is elderly, have a household member who is disabled or pregnant or chronically ill, or where the majority of adult household members are unemployed. However, with respect to land acquisition impacts, impact will be felt more acutely in low income households, where the loss of even a small portion of productive land could result in food and income insecurity. Based on household surveys undertaken for the RAP & LRP, 53 households were identified as being vulnerable due to their low income status and interlocking vulnerabilities as defined in the 2018 ESIA.

6. ELIGIBILITY AND COMPENSATION

People who have been affected by Project land acquisition will be entitled to the following:

- For loss of farmland or grassland - landholder/ user receives 10 times the average annual income generated during the five years preceding expropriation, calculated based on market price, plus livelihood restoration measures to help ensure income can be replaced using existing land holding, where replacement land is not available.
- For loss of trees, shrubs and crops - landholder/ user of the land receives monetary compensation based on the market price for harvested wood and market price of crops (if they could not be harvested), plus livelihood restoration measures to support the time taken to replace new trees and shrubs.
- For loss of structure - landholder/ user of the land receives monetary compensation for the cost of constructing a new structure (without depreciation) and for the cost of permanent improvements on land, monetary compensation to cover the amount owed for the remaining lease on the structure, and allowances to cover cost of relocation.
- For loss of communal land with productive value - compensation determined by the government body managing the land (i.e. OFWE) in accordance with user organisation bylaws, with part of the total compensation passed on to the users of the affected land.
- Financial management training for all affected households that receive cash compensation.
- Allowances to cover transaction costs or any other fees associated with the impact.
- For vulnerable households, livelihood restoration measures to support livelihood reestablishment and inclusion in the vulnerability tracking and monitoring program.

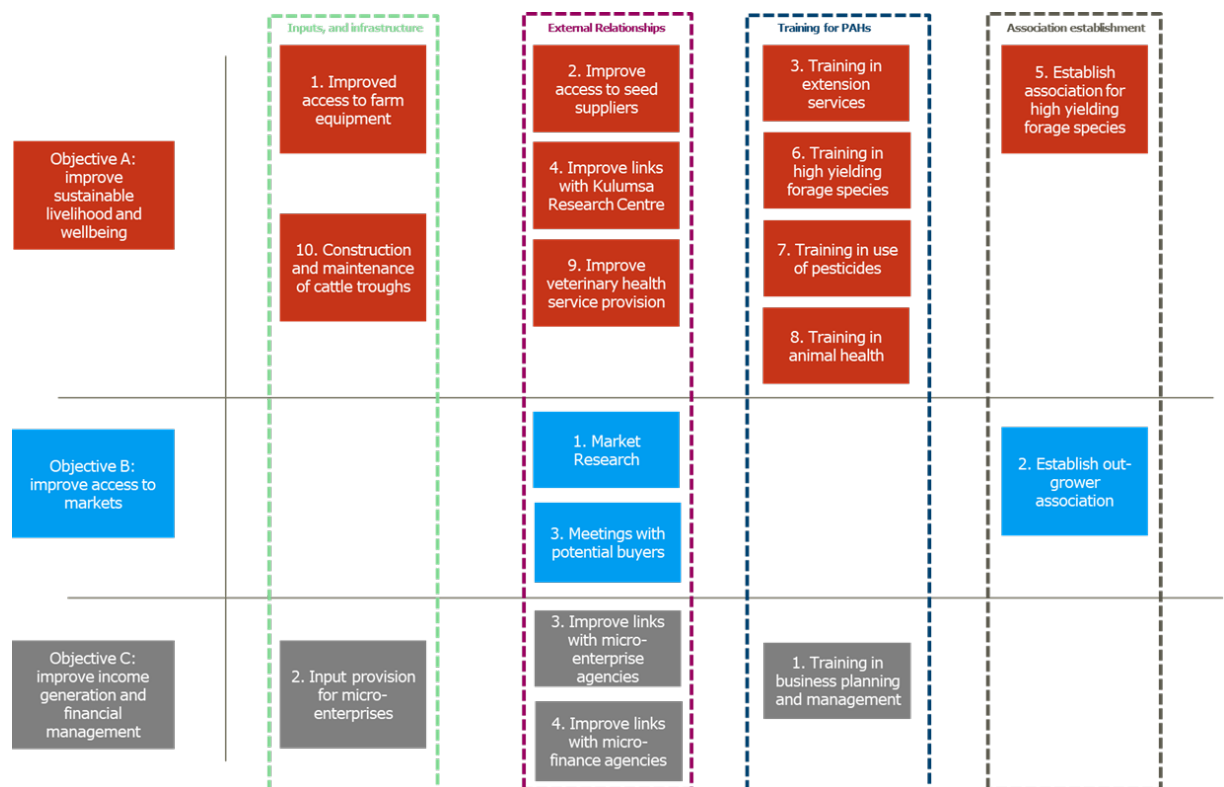
Only one PAP can be classified as physically impacted by the Project, where on wall of their residential property has been impacted. In accordance with the entitlements specified in the RAP & LRP, they will receive monetary compensation at full replacement cost for their entire property in accordance with international standards.

7. LIVELIHOOD RESTORATION

All affected households losing farmland, grassland and trees or shrubs are entitled to some form of livelihood restoration support, supporting one or more of the following objectives:

- To enable households to improve their sustainable livelihood and economic wellbeing. This will include measures to improve access to farm equipment, to improve access to seed suppliers, to provide extension services training, establish links with Kulumsa Research Centre, establish an association for the production of high yielding forage species, provision of training on high yielding forage species, the use of pesticides and on animal health and available treatments, capacity building for the local veterinary centres, and improvement of cattle watering points.
- To improve market access for impacted households. This will include measures to identify potential buyers of agricultural crops and other products produced by affected households, to establish an out-grower association, and to organise meetings with potential buyers.
- To improve income generation opportunities and financial management. This will include measures to provide training on business planning and management, to support interested farmers to establish business enterprises, and to establish links with micro-enterprise agencies and micro-finance.

Each of the three objectives will be supported by a series of activities that fall within fore core themes of the programme: inputs and infrastructure, strengthening external relationships, training for PAHs, and establishment of farm associations. This is illustrated below. PAHs will be offered choices to participate in various livelihood activities under each objective.



TMGO will offer tailored support to vulnerable PAHs based on their specific needs. This will involve holding meetings and regular monitoring of each household identified as vulnerable to ensure they are not falling behind in terms of livelihood restoration. Vulnerable PAHs will be encouraged to participate in livelihood restoration programme options. Support for vulnerable PAHs can be summarised as follows:

TULU MOYE GEOTHERMAL OPERATIONS

- Vulnerable PAHs will be encouraged to attend the various training programmes on offer for PAHs. CLOs will specifically engage with vulnerable PAHs on the benefits of these training programmes to support their livelihoods.
- PAHs will also be encouraged to join the out-grower association and / or the association for the production of high yield forage seedlings.
- TMGO will set aside some livelihood restoration inputs such as seed and other provisions on offer through the programme to ensure vulnerable PAHs do not miss out on these opportunities.

Vulnerable PAHs will be able to participate in the wider LRP programme targeted to all PAHs. These specific measures aim to ensure that vulnerable PAHs do receive some direct support for their livelihoods and close monitoring.

TMGO has identified supporting agencies and implementing partners for the livelihood restoration programme, including: Kulumsa Research Centre, Woreda agriculture office, Trade and Industry Offices of Arsi Zone and East Shewa Zone, Small and Micro Enterprise Development Office, Cooperative Bank of Oromia, and Oromia Credit and Savings Association.

8. IMPLEMENTATION

8.1 Institutional Framework

The valuation and compensation process must be led by the Woreda Compensation Committee, which oversees asset valuation and includes woreda and kebele representation. TMGO must also establish a Resettlement and Livelihood Restoration Coordination Group (RLRCG) or similar body that can act as an interface between affected households and the livelihood restoration process. The RLRCG should bring together key members of TMGO's implementation team with community representatives on a regular basis to ensure challenges with implementation can be identified quickly and necessary adjustments made. The RLRCG will meet monthly in the first six months of the livelihood restoration programme when the majority of activities will be initiated, and then quarterly to review progress.

Initial focus of the RLRCG will be on livelihood restoration unless physical displacement becomes unavoidable. Interfacing with TMGO on physical displacement activities will then commence as part of the RLRCG responsibilities.

Members of the RLRCG can include the following representatives:

- women and men representatives from PAHs of each affected kebele;
- OFWE representative;
- TMGO representatives;
- TMGO supporting agency representatives (Kumulsa Research Centre and / or Cooperative Bank of Oromia);
- Woreda agriculture office representative; and
- Kebele and woreda administration representatives.

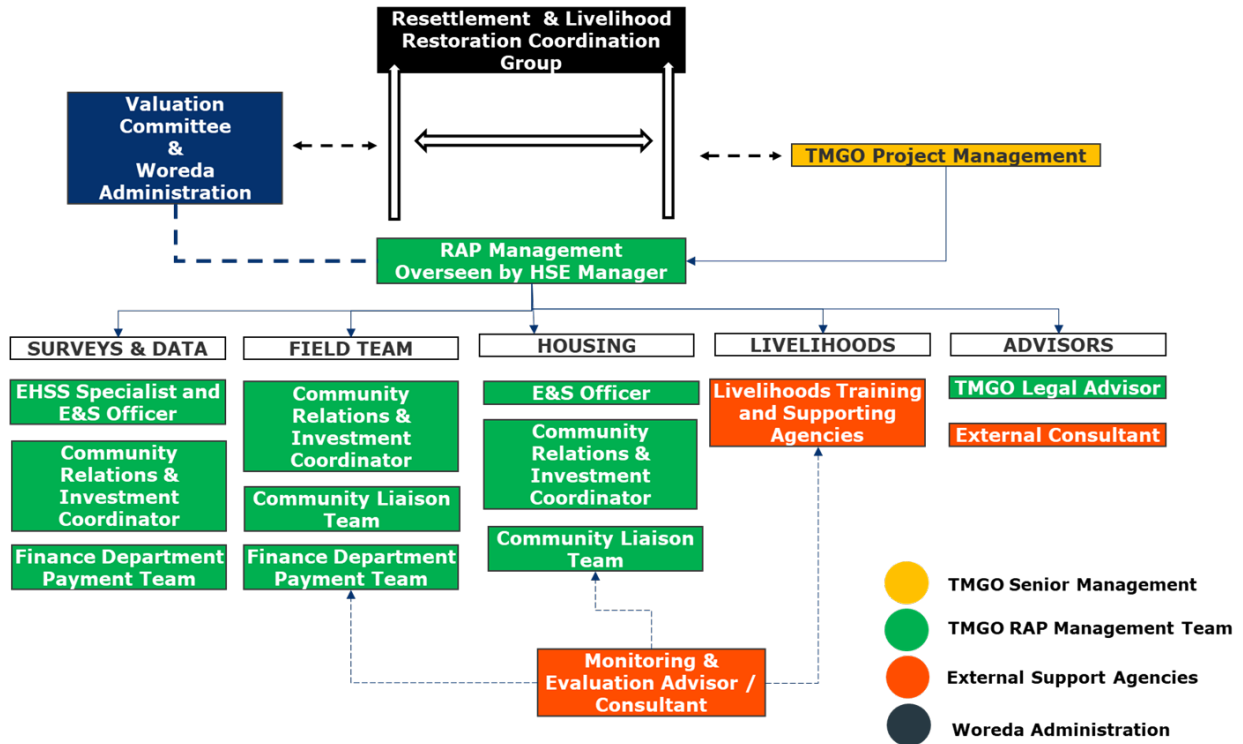
TMGO, the RLRCG and Woreda will be supported in implementation by external agencies including external contractors for the construction of residential houses potentially impacted by future displacement. Livelihood restoration activities will be supported by various agencies that may include:

- Woreda agriculture office;
- Trade and Industry Offices of Arsi Zone and East Shewa Zone;
- Small and Micro Enterprise Development Office;
- Cooperative Bank of Oromia;
- Oromia Credit and Savings Association; and
- Kulumsa Agriculture Research Centre.

8.2 Project Implementation Team

TMGO's implementation team will support the compensation and livelihood restoration process and will be led by the HSE Manager, who will oversee the TMGO implementation team. In the field, work will be led by the Community Relations and Investment Coordinator, who will oversee all field activities related to replacement housing, livelihood restoration, stakeholder engagement, data management and monitoring and evaluation. The Community Relations and Investment Coordinator will be supported by the EHSS Specialist, Environmental and Social Officer and the Community Liaison Team, which will be the regular interface between the Project and affected people on implementation of livelihood restoration measures.

The TMGO implementation team forms the core element of the RAP and LRP institutional framework and will establish links with potential partners for the livelihood restoration programme and will undertake due diligence on the most suitable partners to support the programme. This is illustrated below.



The livelihood restoration programmes will run from 2020 to 2022.

8.3 Physical Resettlement Activities

The resettlement of the one PAH physically displaced is complete and so further work is not required other than inclusion in monitoring. Should future physical resettlement be required, a specific schedule will be created to cover the following actions:

- Engagement to explain the process of resettlement;
- Census and socio-economic surveys to ascertain vulnerability;
- Valuation of impacted assets;
- Disclosure of eligibility and entitlements including cash compensation and livelihood restoration support;
- Individual household sign-off on entitlements;
- Payment of cash compensation;
- Acquisition of new land for housing;
- Support for new housing construction through the supported self-build approach;
- Physical relocation; and
- Monitoring and evaluation.

8.4 Livelihood Restoration Activities

Livelihood restoration will be supported by the preparation of quarterly implementation plans to achieve three key objectives:

- Households improve their sustainable livelihood and economic wellbeing;
- Improved market access for impacted households; and
- Establish or improve income opportunities and financial management.

Activities to support livelihood restoration are presented in Table 8.1 below.

In summary, the livelihood restoration programme will run for up to three years. TMGO will prepare quarterly implementation plans detailing key activities and actions required for each quarter. This will include stakeholder engagement, procurement and input provision required for implementation for the quarter.

Table 8.1 Implementation Schedule

Key Activities Planned		Unit of measurement	Implementation Period											
			2021				2022				2023			
			1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
A: Households improve their sustainable livelihood and economic wellbeing														
A1	Improved access to farm equipment including tractors and combines rental companies	No of linkages												
A2	Facilitate improved access to high yield seed suppliers	No of linkages												
A3	Provision of agriculture extension training for farmers	No of trainings per quarter												
A4	Established farmer links with Kulumsa research center and other input providers	MOU												
A5	Establish association for production of high yielding forage species	No of seeds provided												
A6	Provision of training on high yielding forage species	No of trainings per quarter												
A7	Provision of training on pesticide use and impact	No of trainings per quarter												
A8	Improve access to cattle health packages through building the capacity of two local veterinary centres based on the identified needs (maximum two needs addressed)	No of needs addressed												
A9	Provision of training on animal health and available treatment	No of participants												
A10	Improvement of cattle watering points	No of watering points												
B: Improved market access for impacted households		No link established												
B1	Undertake market research	Report												
B2	Establish out-grower association	No of linkages												
B3	Organise meetings with potential buyers	Meeting minutes												
C: Establish or improve income opportunities and financial management														
C1	Provide training on business planning and management	No of participants / 4 training courses												
C2	Support for business enterprise establishment	No of enterprises - at least 2 formed												
C3	Establish links with micro-enterprise agencies	MOU												
C4	Establish links with micro finance providers	MOU												
Monitoring and evaluation														
M1	Monthly and quarterly the performance of the programme with PAPs	Minutes of the meetings												
M2	Quarterly progress report	No of reports												
M3	Internal impact monitoring and data collection	Monitoring reports												
M4	External evaluation	Evaluation report												
Project Administration and Delivery		Service payment												
	Engagement with impacted communities	Minutes of the meeting												
	Engagement with local implementing partners	Minutes of the meeting												

8.5 Stakeholder Engagement

The successful implementation of the RAP & LRP requires an ongoing stakeholder engagement programme. Engagement is required to support programme establishment and general oversight through the RLRCG. However additional engagement is built into specific programme activities as outlined in Chapter 8: Livelihood Restoration. This will involve engagement with PAHs as well as implementing partners. To support implementation, TMGO will include stakeholder engagement requirements in their quarterly implementation plans based on the measures outlined in this RAP & LRP Rev.3, which will outline the engagement to be undertaken by the TMGO implementation team each quarter.

8.6 Grievance Management

TMGO has a Grievance Mechanism that is fully described in the Project Stakeholder Engagement Plan. PAPs and other stakeholders can submit grievances to TMGO through the following channels:

- During regular / formal / public meetings held with communities;
- Through consultative forums with woreda experts;
- During any informal meetings;
- Through communication directly with management – for example a letter addressed to site management, or other operational offices;
- By telephone;
- Submission in community suggestion boxes at CLO offices in Iteya, Tero Moye, Anole and Tero Desta; and / or
- Directly through the CLO.

All grievances and feedback will be investigated and responded to.

8.7 Future Land Acquisition

All future land acquisition will remain within the lava field and so it is not expected to impact directly on local farmers or farmland and grazing land. However, there may be limited physical displacement due to noise impacts, which will be assessed at the time. Unlike resettlement that has already occurred, all future resettlement will be managed in accordance with the new Proclamation 1161/2019 as well as Regulation 135/2007 and applicable international standards.

8.8 Monitoring

The monitoring process will provide feedback to the TMGO implementation team and RLRCG to keep the programme on schedule, to enable on-going improvement of the implementation process, and to help verify that the objectives of livelihood restoration are being achieved.

Monitoring and evaluation initially focuses on livelihood restoration given these are the main activities. Monitoring and evaluation will continue for the three-year duration of LRP implementation activities and for one year thereafter to monitor long term extension support of livelihood restoration. During this period, the intensity of the process will vary. During implementation and immediately thereafter, monitoring and evaluation will be more regular and intense, while monitoring and evaluation activities will reduce in the final years once most implementation activities are complete. The one physically displaced household will be included in the monitoring programme with those receiving livelihood restoration support.

The Community Relations and Investment Coordinator will develop a Monitoring and Evaluation Plan that provides detail on the approach to:

- Internal monitoring, which will include 'performance monitoring' to measure physical progress against Project milestones established for the implementation of the RAP & LRP and 'impact monitoring' to measure the effects of the livelihood restoration programme on an ongoing basis to help verify that the progress is being made in achieving RAP & LRP objectives. Example indicators are presented in Table 8.2. Internal progress reports will be prepared quarterly, and a more detailed monitoring report will then be prepared at the end of each year of implementation.
- External evaluation by independent monitors to assess whether livelihood measures to restore the living standards of affected people have been successful. External evaluation will be undertaken by an external party and will be informed by primary and secondary data collection and rely on internal monitoring outputs such as progress and monitoring reports, minutes of meetings as well as independent surveys and consultation conducted by the external monitoring and evaluation consultant. An external evaluation and completion audit is planned at the end of the three-year implementation period.

Table 8.2: Example Indicators

Key Indicators
Example input / milestone indicators (to be monitored and reported on monthly)
<ul style="list-style-type: none"> • Spend against budget • Number of people participating in the livelihood restoration programme • Number of people on the self-build support programme • Meetings with Woreda officials • Delivery of livelihood inputs
Example output indicators (to be monitored and reported on monthly)
<ul style="list-style-type: none"> • Number of meetings held with woredas and kebeles • Number of meetings held with RLRCG • Minutes of meetings • Number of RAP or LRP-related grievances received by type • Number of unresolved and closed RAP or LRP-related grievances • Average time for grievance processing • Agreements in place for implementing partners • Distribution of livelihood restoration inputs
Example outcome indicators (to be monitored and reported on quarterly)
<ul style="list-style-type: none"> • % households losing residential homes relocated to a new home • Number of households completed building a new home • % households satisfied with the physical and economic resettlement process • % households that are implementing activities to restore agriculture productivity • % households with new businesses • % households reporting improved market access • % households reporting improved yields • % households reporting improved animal husbandry • % households satisfied with the livelihood restoration process
Impact monitoring indicators from the socio-economic baseline (to be monitored and reported on annually)
<ul style="list-style-type: none"> • Total number of affected PAHs losing either land and / or assets • Total number of female-headed households

Key Indicators
<ul style="list-style-type: none"> • % of households with family head equal to or over the age of 65 • % of physically displaced households with access to improved housing • % of households with adults unemployed • Median monthly farm-based income • Median monthly wage-based income • Lowest monthly wage across all income sources • % of households with savings • % of households with debt • % of households reporting food shortages in the last year • % of households who grow their own crops • % of households with one or more members in paid employment • % of households reporting on the time spent collecting water per day within each reported time category • % of households with access to improved sanitation facilities (flush or pour flush toilet)

8.9 Budget for Implementation

The following budget has been extracted from the 2019 LRP Rev.1 and from additional information provided on livelihood support costs and compensation by TMGO. The budget for land acquisition compensation was calculated as ETB 14,925,983.73 / 353,255. These are presented in Table 8.3.

The estimated cost for livelihood restoration is USD 159,134. While the estimated budget for livelihood restoration has not changed from the 2019 LRP Rev.1, the distribution of estimated budget requirements across the objectives has changed and has been captured in this RAP & LRP Rev.3 budget.

Table 8.3: Direct Land Acquisition Costs

Component	Cost (ETB)	
Land Compensation to PAPs	Grassland	3,326,666.51
	Farmland	9,248,587.05
Land Compensation to OFWE		967,810.58
Compensation to PAPs for fixed planted assets		664,826.97
Compensation to PAPs for structures	Houses	392,234
	Fences	207,058.62
Compensation Committee support costs		118,800
Total ETB	14,925,983.73	
Total USD	353,255	

Appendix A. RAP/LRP

Intended for
TMGO Ltd



Date
September 2021

Project Number
1620010898

**TULU MOYE
GEOHERMAL
OPERATIONS
RESTTLEMENT ACTION
PLAN & LIVELIHOOD
RESTORATION PLAN**

TULU MOYE GEOTHERMAL OPERATIONS RESTTLEMENT ACTION PLAN & LIVELIHOOD RESTORATION PLAN

Project No. **1620010898**
Issue No. **5**
Date **29/09/2021**
Made by **Tracey Draper**
Checked by **Phillipa Spence**
Approved by **Phillipa Spence**

Made by:	
Checked/Approved by:	

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Version Control Log

Revision	Date	Made by	Checked by	Approved by	Description
1	30/11/2020	TD	PS	PS	First draft to Client
2	18/01/21	TD	PS	PS	Second draft to Client following comments
3	27/04/21	TD	PS	PS	Third draft to Client following additional AfDB comments
4	11/05/21	TD	PS	PS	Final document to Client
5	29/09/21	TD	PS	PS	Final document to Client

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INDIVIDUAL AGREEMENT TEMPLATE

1. INTRODUCTION

1.1 This Report

This Report is the Resettlement Action Plan (RAP) and Livelihood Restoration Plan (LRP) Revision 2, for the development of the anticipated geothermal power plant (the Project) of up to 100 megawatt (MW), located in Hitosa Woreda, Oromia Region, Ethiopia. The Project is being developed by Tulu Moyo Geothermal Operations PLC (TMGO). This RAP & LRP revision (Rev. 2) updates the existing LRP for the Project dated October 2019 (2019 LRP Rev. 1) and has been prepared by Ramboll.

This RAP & LRP provides the methodology, entitlements and livelihood restoration measures that apply to 146 households and / or landowners that have already impacted by displacement, and includes the measures to be implemented to support these households to restore their standard of living and livelihoods. The key objective of this document is to address gaps in the 2019 LRP Rev.1, particularly with respect to full replacement cost and implementation activities. It therefore describes the activities that will be undertaken to deliver compensation and other entitlements, and to monitor the effectiveness of the RAP & LRP in delivering the intended outcomes so that necessary adjustments can be made.

Notably, this RAP & LRP Rev.2 also revises the entitlements in accordance with the new Proclamation for the Expropriation of Land Holding for Public Purposes, Payments of Compensation and Resettlement of Displaced People. Therefore, it includes measures to meet the new requirements of this revised Proclamation and that will be applied to all future Project land acquisition.

1.2 Project Background

The Project is located approximately 130 km southeast of Addis Ababa, with Lake Koka to the north and Lake Ziway to the south. The geothermal drilling targets are located beneath largely rocky terrain at a relatively high altitude, resulting from volcanic activity dating from less than 0.8 million years and continuing intermittently into historic times. The surrounding area is rural, characterized by sparse settlements with households primarily engaged in agriculture. Nearby Iteya town is a small population centre, and the administrative seat of the Hitosa Woreda.

1.2.1 Project Objectives

The Government of Ethiopia has set ambitious goals to become a middle-income country by 2025, which includes aggressive power generation and connection targets. In this context, the objective of the Project is to initially provide up to 150MW of clean electric power from a renewable source to Ethiopia at a stable, cost competitive price.

The Project will be developed in four phases, the first phase of 50 MW capacity (Phase I), followed by two phases of 50 MW and a final phase of 100 MW.

The Project entails drilling full-sized geothermal exploration wells to evaluate the feasibility of commercial geothermal development in the Tulu Moyo area. Specifically, the Project includes the following activities and components:

- Civil works and site development at potential drilling areas;
- Drilling up to three exploration wells;
- Well testing; and
- Well abandonment and site reclamation, if applicable.

This RAP & LRP is focused exclusively on the impacts associated with civil works and initial site development, for Phase I of the Project. The civil works include:

- Expansion and upgrading of the existing 15 km all-weather gravel road from Iteya to the Project area;
- Site development at potential drilling areas in the lava field;
- Laydown area; and
- Accommodation camp.

1.2.2 Avoidance and Minimisation of Project Displacement Impacts

The Project has employed several strategies to avoid and minimize possible displacement impacts. These include design considerations such as directional drilling for the initial exploration wells, which results in having more wells per well pad and thus a smaller surface footprint; and location considerations via the selection of the well pad placement where there would be minimal local disturbance and where less civil work is required in terms of road accessibility. Additionally, when the exploration wells are turned into production wells, they can be connected at the well pad and share well testing equipment and therefore decrease further infrastructure works.

The choice to site the well pads for Phase I in the Gnaro lava field was driven by a Project commitment to avoid physical displacement and the attempt to avoid productive agriculture and grazing land to the greatest extent possible. With directional drilling technology, this allows the Project to reach subsurface targets underneath land potentially occupied by settlements or productive livelihood activities with no surface disturbance.

Further detail on the Project can be found in the Supplementary Environmental and Social Technical Assessment (SESTA), Chapter 9: Additional Environmental and Social Assessment on the analysis of alternatives and in the 2019 LRP Rev. 1.

1.3 RAP and LRP Scope and Objectives

This RAP & LRP considers the economic displacement that was caused by land acquisition associated with the Project including the construction of well pads, lay down areas, power plant, pipelines and access roads. This resulted in the acquisition of 9.91 ha of farmland, 5.61 ha or grassland (totalling 15.52 ha) and 12 ha was acquired from the Oromia Forest and Wildlife Enterprise (OFWE). This RAP & LRP does not consider any specific land take associated with the development of future developments, although provision is made for how any future land requirements related to the Project will be managed.

As a result of the work undertaken in this RAP & LRP, it is currently understood that the Project will result in the physical displacement of one household and the economic displacement of 146 households and / or land holders, who utilise either grassland or farmland within the Project footprint. These households or land holders will be losing a total of 146 land parcels. The majority of these households / land holders (approximately 90%) will lose less than 10% of their total land holding.

The objectives of this revision of the RAP & LRP are to:

- summarise national and international requirements for livelihood restoration;
- summarise the socio-economic characteristics of affected households and identify vulnerable households as defined in the 2019 LRP Rev.1;
- define full replacement cost for losses that have resulted from the Project as described in 2019 LRP Rev.1 and international standards;

- include specific measures for PAHs experiencing physical displacement;
- describe other assistance and measures to enable affected households to restore and improve their livelihood; and
- outline the key steps required for implementing livelihood restoration.

1.4 Status Quo at Time of Writing (November 2020)

At the time of writing this RAP & LRP, land acquisition had impacted 146 plots of land and households and landowners and this is described in more detail in the 2019 LRP Rev.1. Therefore, the displacement impacts have not changed since this first Revision. This RAP & LRP simply provides further clarity on eligibility, entitlement and full replacement cost in accordance with Proclamation 455/2005 and all Applicable Standards. This document does not incorporate any new impacts and is based entirely on the baseline data available in the 2019 LRP Rev.1.

This RAP & LRP also revises the legal and institutional framework to account for the new Proclamation 1161/2019, which will be applied to all future displacement. This document also provides additional detail on the implementation of livelihood restoration.

Going forward, procedure outlined in accordance with Proclamation 1161/2019 will be the basis for determining eligibility and entitlement for all future land acquisition and for implementing future livelihood restoration activities.

1.5 Document Structure

The structure of the RAP & LRP is summarised in Table 1.1.

Table 1.1: RAP & LRP Structure

Chapter	Title	Content
1	Introduction	An overview of the Project and objectives of the RAP & LRP.
2	Legal and Institutional Framework	An overview of national environmental and social, legislative, policy and administrative requirements, as well as good international industry practice and guidelines.
3	Stakeholder Engagement	A summary of stakeholder engagement activities undertaken during the RAP & LRP development.
4	Baseline	A brief summary of the socio-economic conditions that would have prevailed in the absence of the Project and the identification of vulnerable households.
5	Assessment of Displacement Impacts	An assessment of significant impacts of displacement.
6	Eligibility and Entitlements	A description of the compensation framework applied and the provisions for vulnerable groups. Eligibility criteria are described, along with the different compensation packages.
7	Physical Displacement	A description of the process for managing physical displacement impacts.
8	Livelihood Restoration	A proposal of measures to be implemented over and above compensation to support households to restore their livelihoods.
9	Implementation	A description of activities to implement the RAP & LRP and the roles and responsibilities of all RAP & LRP stakeholders. This section also outlines a schedule for monitoring and evaluation and a budget.

2. LEGAL AND POLICY FRAMEWORK

2.1 Introduction

This section summarises Ethiopian national policy, the legal and regulatory framework and international requirements related to acquisition of rights to land. The section also includes the requirements of the International Finance Corporation Performance Standard (IFC PS) 5 and an identification of the key differences with national legal requirements.

2.2 Ethiopian Legislation

The 2019 LRP Rev. 1 provides a detailed overview of the national requirement regarding land acquisition. The Constitution of the Federal Democratic Republic of Ethiopia (1995) underpins all laws and policies in Ethiopia and sets out the rights of people with respect to project developments with relevant provisions contained in Article 43 on The Right to Development. Article 43 (1) acknowledges that “the Peoples of Ethiopia as a whole, and each Nation, Nationality and People in Ethiopia in particular have the right to improved living standards and to sustainable development”. Article 43 (2) states that “nationals have the right to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community”.

Other key instruments for managing land acquisition include:

- Federal Democratic Republic of Ethiopia Rural Land Administration and land Use Proclamation (Proclamation No. 456/2005);
- Federal Democratic Republic of Ethiopia Expropriation of Landholdings for Public Purposes and Payment of Compensation (Proclamation No. 455/2005) for all displacement that occurred in or before 2019.
- Federal Democratic Republic of Ethiopia Expropriation of Landholdings for Public Purpose, Payments of Compensation and Resettlement (Proclamation No. 1161/2019) for all displacement that may occur after 2019.
- Council of Ministers Regulation for Payment of Compensation for Property Situated on Landholding Expropriated for Public Purposes (Regulation No. 135/2007);
- Environment Policy of Ethiopia.
- 2001 Oromia Regional State Revised Constitution; and
- Oromia Rural Land use and Administration Proclamation (Proclamation No. 130/2007).

2.3 Land Acquisition Process

To the extent that it is defined in the legislation the legal expropriation process is described in Proclamation 455/2005. This process has been modified under Proclamation 1161/2019. The key elements of the land acquisition process include the following steps:

1. An implementing agency (either a government body or private developer) must first lodge an application to the government requesting the desired land parcel be made available to them. This request will be supported by what is termed ‘detailed data pertaining to the land needed’ (Article 5.1 of Proclamation 455/2005). Note that all future requests for expropriation must also align with existing land use or master plans under Proclamation 1161/2019 (Article 51).
2. Once informed of the request, the woreda (or urban administration) responsible for the land parcel requested must then make a decision as to: whether the implementing agency has the legal right to apply for expropriation; and whether the proposed use of the land is for ‘Public Purpose’.

3. The woreda (or urban administration) must then establish a 'Valuation Committee' to coordinate the expropriation process, and are required to:
 - a. Inform the communities impacted that their land is to be expropriated;
 - b. Identify and make an inventory of affected properties; and
 - c. Ascertain a compensation level for the assets to be lost. This is based upon replacement value of structures and income lost with regard to any producing farmland.
4. The woreda / 'Valuation Committee' must notify the land holder in writing "*indicating the time when the land has to be vacated and the amount of compensation to be paid*". This notice must be served at least 90 days before vacation of the land is required under Proclamation 455/2005. Note that under the revised Proclamation 1161/2019, the Woreda Administration must consult land holders who are to be displaced at least one year before they hand over their holdings. This will apply to all future land acquisition for the Project.
5. The woreda must collect all landholding rights and conduct an inventory of all compensable properties.
6. Compensation payments must be made to the landholder prior to vacating the land.
7. The expropriation process is completed when the community / land holders move to new land (and property as relevant) provided by the woreda and the requested land is transferred to the implementing body. In the case where the land holder remains on their remaining landholding, the expropriation process is completed when the land holder has received compensation.

This process is followed regardless of the intended use of the land and regardless of the size of the land. Therefore, the same process is followed where there may be a road or pipeline constructed, a new well pad or whether Project impacts (such as noise) result in communities losing access to their land or other assets.

In terms of application, Proclamation 455/2005 is applicable to all displacement as defined in the 2019 LRP Rev.1 and specifically the one physically displaced household and the 146 economically displaced households / landowners impacted by the Project as presented in Chapter 5 of this RAP & LRP.

Proclamation 1161/2019 will only be applied to future displacement. Both Proclamations are referenced in this Section while entitlements defined in accordance with these Proclamations are described in Chapter 6.

2.4 International Standards

2.4.1 African Development Bank Group's Integrated Safeguards System (2013)

The African Development Bank's (AfDB) Integrated Safeguards System (ISS) underpins AfDB's strategy for socially inclusive and environmentally sustainable development. The ISS connects previous safeguard policies on Involuntary Resettlement (2003) and Environment (2004) with three cross-cutting policies and strategies on Gender (2001), Climate Risk Management and Adaptation (2009) and the Civil Society Engagement Framework (2012). It also incorporates policies on Health (1996), Integrated Water Resources Management (2000), Agriculture and Rural Development (2000, 2010) and Poverty Reduction (2004). These policies have been consolidated into the ISS framework that has four interrelated components:

- Integrated Safeguard Policy Statement;
- Operational Safeguards (OSs);

- Environmental and Social Assessment Procedures (ESAPs); and
- Integrated Environmental and Social Impact Assessment (IESIA).

Of key relevance to managing Project-related displacement is OS2 on Involuntary Resettlement: land acquisition, population displacement and compensation. OS2 includes the following objectives:

- Avoid involuntary resettlement where feasible, or minimise resettlement impacts where involuntary resettlement is deemed unavoidable after all alternative project designs have been explored;
- Ensure that displaced people are meaningfully consulted and given opportunities to participate in the planning and implementation of resettlement programmes;
- Ensure that displaced people receive significant resettlement assistance under the project, so that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels;
- Provide explicit guidance to borrowers on the conditions that need to be met regarding involuntary resettlement issues in Bank operations to mitigate the negative impacts of displacement and resettlement, actively facilitate social development and establish a sustainable economy and society; and
- Guard against poorly prepared and implemented resettlement plans by setting up a mechanism for monitoring the performance of involuntary resettlement programmes in Bank operations and remedying problems as they arise.

2.4.2 International Finance Corporation Performance Standards (2012)

The International Finance Corporation Performance Standards (IFC PS) include eight standards related to environmental and social performance of projects and are applied in project financing by the IFC as well as other organisations. Of key relevance to managing Project-related displacement, PS5 on Land Acquisition and Involuntary Resettlement specifically addresses project-related land acquisition and restrictions on land use, with objectives to:

- Avoid, and when avoidance is not possible, minimise displacement by exploring alternative project designs;
- Avoid forced eviction;
- Anticipate and avoid, or where avoidance is not possible, minimise adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected;
- Improve, or restore, the livelihoods and standards of living of displaced persons; and
- Improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.

2.5 Gaps Between National and International Requirements

Table 2.1 demonstrates how the applicable international standards correspond with Ethiopian legislation. This analysis is based on the analysis provided in the 2019 LRP Rev.1, incorporated AfDB OSs and with minor updates to reflect Proclamation 1161/2019. Key gaps are referred to in Chapter 6: Eligibility and Entitlements.

Table 2.1: National and International Requirements Comparison

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
Project design	Consider feasible alternative project designs, including re-siting and re-routing, to avoid or minimise physical or economic displacement, while balancing environmental, social and financial costs and benefits. Where impacts are particularly severe, consider downsizing the project or find other alternatives.	Consider feasible alternative project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.	Ethiopian law does not require projects to avoid or minimize displacement through alternative designs.	The Project has undertaken a comprehensive approach to avoidance and minimization.
Stakeholder / community engagement	<p>Broad community support is considered to be a key principle. Borrowers and clients must demonstrate they have used openness, transparency, and inclusiveness in making decisions about the project, and have made genuine efforts to maximise benefits to communities and reduce any harmful impacts.</p> <p>Special attention must be given to consultations that involve vulnerable groups. In the context of gender vulnerability, for example, actively facilitate consultation with, and participation by, both women and men in ways that are sensitive to the social and political constraints and barriers that women and men may face. Particular attention should be paid to the location and scheduling of consultation activities to ensure that people of all ages and social groupings can attend and participate with confidence and ease.</p> <p>The ways in which information is</p>	Disclosure of relevant information and participation of Affected Communities and persons will continue during planning, implementation, monitoring and evaluation of compensations payments, livelihood restoration activities and resettlement.	<p>Ethiopian law does not specify requirements regarding public consultation; it only mentions the issuance of notice (expropriation order) from the relevant authority.</p> <p>Note that for all future land acquisition, Proclamation 1161/2019 does require that landholders be consulted at least one year before they handover their landholding.</p>	<p>The Project has undertaken significant stakeholder engagement beginning in 2015. Land-related impacts have always been a centrepiece of the discussions and stakeholder engagement around these issues has been ramped up as the land acquisition planning began in 2018.</p> <p>The Project has made a commitment to ongoing engagement on the LRP.</p> <p>All future land acquisition will comply with Proclamation 1161/2019 and align with international standards through update and implementation of the Stakeholder Engagement Plan SEP.</p>

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
	<p>disseminated must also carefully considered, as levels of literacy and networking may differ according to age, gender, economic status and other lines of social hierarchy/ discrimination.</p>			
<p>Grievance mechanism</p>	<p>The borrower or client must establish a credible, independent and empowered local grievance and redress mechanism to receive, facilitate and follow up on the resolution of the affected people's grievances and concerns regarding the environmental and social performance of the project. The local grievance mechanism needs to be culturally appropriate and accessible to the stakeholders at all times to resolve, in an impartial and timely manner, any disputes arising from the resettlement process and compensation procedures.</p>	<p>A grievance mechanism will be established as early as possible, which will allow the Project to receive and address affected persons' specific concerns about compensation and relocation, including a recourse mechanism designed to resolve disputes in an impartial manner.</p>	<p>Ethiopian law does not require grievance redress mechanisms to be established. Complaints associated with land expropriation processes are referred to the formal administrative organs or courts, and the related appeals processes as relevant.</p>	<p>The Project's grievance redress mechanism was formalized through its Stakeholder Engagement Plan (from November 2017). In practice, Project Affected People (PAPs) can report grievances through a Community Liaison Officer (CLO) or in person in the TMGO office in nearby Iteya town. The CLO has taken part in relevant parts of the land acquisition process, thus gaining visibility with PAPs. Additionally, the team applying the socio-economic survey shared information on the grievance mechanism with each affected household.</p>
<p>Census and asset inventory, and socioeconomic baseline</p>	<p>The borrower or client carries out a comprehensive socioeconomic survey, including a population census and an inventory of assets (including natural assets upon which the affected people may depend for a portion of their livelihoods). This survey identifies people who will be displaced by the project; all the relevant characteristics of those people, including conditions of vulnerability; and the magnitude of the expected physical and economic displacement.</p>	<p>A census and asset inventory should be carried out in order to collect appropriate socio-economic baseline data to identify the persons who will be displaced by the project, determine who will be eligible for compensation and assistance, and prevent ineligible persons, such as opportunistic settlers, from claiming benefits.</p>	<p>In the case of expropriations in rural areas, Ethiopian law requires that assets be inventoried and a valuation to be established by valuation committees designated by the relevant woreda administration.</p>	<p>Ethiopian requirements are consistent in the sense of carrying out surveys to document affected assets; however, AfDB and IFC require more comprehensive baseline data collection. To bridge this gap the Project commissioned additional socio-economic/ livelihoods baseline surveys that were applied to all affected households.</p>

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
Cut-off date	<p>In addition to, or in the absence of host government procedures, the borrower or client must establish a cut-off date for eligibility that is acceptable to AfDB. The borrower or client must document the cut-off date and disseminate information about it throughout the project area of influence in a culturally appropriate and accessible manner, before taking any action on clearing land or restricting local community access to land.</p>	<p>A cut-off date should be established to set eligibility for compensation and assistance. Information regarding the cut-off date will be well documented and disseminated throughout the Project area. Compensation and assistance are not required for opportunistic settlers who encroach on the Project area after the cut-off date for eligibility.</p>	<p>Ethiopian law stipulates that compensation cannot be paid with respect to any construction or improvement of a building, any crops sown, perennial crops planted or any permanent improvement on land, where such activity is done after the possessor of the land is served with the expropriation order.</p>	<p>No notable gap is found, as all requirements imply a 'freeze' point however the AfDB OS and IFC PS require a much earlier time for cut-off date to enable thorough asset evaluation and resettlement planning prior to issuance of any notice to move. This was communicated in multiple stages as part of the land acquisition process (during the initial community meetings, during the inventory and valuation process and by letter through each of the kebele's administrators).</p>
Eligibility criteria	<p>Three groups of displaced people displaced people are entitled to compensation or resettlement assistance for loss of land or other assets taken for project purposes: (i) those who have formal legal rights to land or other assets recognised under the laws of the country concerned; (ii) those who may not have formal legal rights to land or other assets at the time of the census/evaluation but can prove that they have a claim that would be recognised under customary laws of the country. This category may include those who may not be physically residing at the project site or persons who may not have any assets or direct sources of livelihood derived from the project site, but who have spiritual and/or ancestral ties with the land and are locally recognised by communities as customary</p>	<p>Displaced persons may be classified as persons who: (i) have formal legal rights to the land or assets they occupy or use; (ii) do not have formal legal rights to land or assets, but have a claim to land that is recognized or recognizable under national law; or (iii) have no recognizable legal right or claim to the land or assets they occupy or use.</p>	<p>Ethiopian law does not recognize or require compensation for anyone who does not have a proof of legitimate possession of the expropriated landholding and ownership of the property entitling him or her to compensation.</p>	<p>As relevant, the Project will still compensate displaced persons belonging to the third categories established by AfDB OS2 and IFC PS5.</p>

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
	<p>inheritors; and (iii) those who have no recognisable right or claim to the land they are occupying in the project area of influence and who do not fall into either of the two categories describe above, if they themselves or witnesses can demonstrate that they occupied the project area of influence for at least six months prior to a cut-off date established by the borrower or client and acceptable to the Bank.</p>			
<p>Livelihood restoration plan</p>	<p>Displaced people are provided with targeted resettlement assistance with the aim of ensuring that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels. A comprehensive livelihood improvement programme is formulated and implemented as part of the RAP. Strategies to improve livelihoods are to consider livelihood improvement options and may involve providing access to training through appropriate technologies.</p> <p>Options for administering these measures at different levels (e.g., family, household and individual) must be considered, as well as options for which the affected persons themselves are given the opportunity to express their preferences.</p>	<p>When a project results in economic displacement only an LRP should be developed to compensate affected persons and/or communities and offer other assistance.</p>	<p>The new Proclamation 1161/2019 now requires that the woreda provide support and ensure the improvement of livelihoods of displaced farmers and pastoralists. It does not specify the need for a LRP.</p>	<p>The Project has prepared this RAP & LRP to address the AfDB and IFC requirements for economic displacement impacts as well as Ethiopian Law.</p>

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
Economic displacement compensation approach	<p>Criteria for assessing the value of land and assets are to be standardised and transparent and the benefits of the resettlement are to be clearly established.</p> <p>The project is required to establish quality control and monitoring systems to guarantee that affected people receive the promised compensation packages before project implementation on the ground – including clearing of right-of-way – begins.</p>	<p>Entitlements will be established and provided in a transparent, consistent and equitable manner. Possession of acquired land and related assets may only take place after compensation has been made available.</p>	<p>The legally required valuation process establishes standard rates for various assets.</p> <p>Ethiopian law permits government expropriation of private property subject to payment in advance of compensation commensurate to the value of the property.</p>	<p>No notable gap is found. The Compensation Committee derives standard rates and applied consistently to PAPs (as described in Section 6). No works took place until compensations were paid.</p>
Full replacement cost	<p>Affected people are to be compensated for all their losses at full replacement cost before their actual move. Full replacement cost considers the loss of livelihood and earning potential among affected communities. The calculation also considers the social, health, environmental and psychological impacts of the project and displacement.</p>	<p>Displaced communities and persons should be offered compensation for lost assets at full replacement cost. Replacement cost is defined as the market value of the assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Market value is defined as the value required to allow Affected Communities and persons to replace lost assets with assets of similar value.</p>	<p>Ethiopian law requires compensation for lost assets based on current market value and does not include depreciation; while there are provisions for compensating for relocation costs in the case of property that can be moved, there are no clear requirements to cover transaction costs. Ethiopian law provides for compensation for lost assets except for the land, since land is a public property in Ethiopia and is allocated to citizens free of charge.</p>	<p>Ethiopian law is fairly aligned with AfDB OS2 and IFC PS5 in the valuation approach based on current market values, including labour costs, relocation where relevant, etc. Transaction costs are the only element not expressly covered. Transaction costs, such as taxes, legal and registration fees, etc., will be covered by TMGO when relevant, however, it is noteworthy that since there has only been one physical relocation thus far, transaction costs are expected to be limited.</p>
Replacement land	<p>In rural areas, the resettlement programme is to give priority to land-for-land compensation options for affected people whose livelihoods are</p>	<p>Where livelihoods of displaced persons are land-based or where land is collectively owned, land-based compensation should be offered where</p>	<p>Ethiopian law is primarily focused on monetary compensation, though it does permit compensation</p>	<p>While replacement land is a possibility per local law, due to lack of available land in the Project area, TMGO was informed by local authorities that</p>

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
	<p>based on land. Displaced people are to be provided with land for which a combination of productive potential, locational advantages and other factors is equivalent to, or better than, the land taken. The land provided should also provide access to safe drinking water and irrigation facilities. For rural resettlements, provisions may also include access to agricultural equipment and other agricultural inputs.</p> <p>When land is not the preferred option of the displaced people whose livelihoods are land-based, on-land-based options – build around creating employment opportunity or self-employment – are to be considered.</p>	<p>feasible. If circumstances do not allow the provision of replacement land, alternative income earning opportunities may be provided, such as credit facilities, training, cash, or employment opportunities.</p>	<p>to take the form of replacement land as well.</p> <p>Under Proclamation 455/2005, a landholder is entitled to compensation equivalent to ten times the average annual income secured in the last five years preceding expropriation of the land in a situation where the Woreda Administration cannot find alternative land.</p> <p>Under Proclamation 1161/2019, where someone is economically displaced and replacement land cannot be provided, displacement compensation takes the form of 15 times the highest average yields derived from the land over the previous three years.</p>	<p>replacement land will not be allocated for economically displaced PAPs in the context of the Project. Given this, the Project is providing other programming to support enhanced income earning opportunities (as described in the next row).</p> <p>Compensation provided for impacted PAHs presented in Chapter 5 followed the process established in Proclamation 455/2005.</p> <p>All future land acquisition will follow the process established in Proclamation 1161/2019.</p>
<p>Assistance to restore or improve livelihoods</p>	<p>Displaced people are provided with targeted resettlement assistance with the aim of ensuring that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels. A comprehensive livelihood improvement programme is to be formulated and implemented as part of the RAP. Strategies to improve livelihoods are to consider livelihood</p>	<p>In addition to compensation for lost assets, economically displaced persons whose livelihoods or income levels are adversely affected will also be provided opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living.</p>	<p>Proclamation 455/2005 was silent on assistance to restore or improve livelihoods.</p> <p>The new Proclamation 1161/2019 now requires that the woreda provide support and ensure the improvement of livelihoods</p>	<p>PAPS will be provided with additional assistance to improve (or as a minimum restore) their livelihoods as described in Section 7.</p>

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
	improvement options and may involve providing access to training through appropriate technologies.		of displaced farmers and pastoralists.	
Transitional support	The affected populations and host communities are provided with support before, during, and after relocation, for a transition period that covers a reasonable period of time necessary for them to re-establish themselves and improve their standards of living, income-earning capacity, production levels and overall means of livelihood.	Transitional support should be provided as necessary to all economically displaced persons, based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living.	There are no explicit requirements for transitional support to be provided to economically displaced persons.	Given that only one PAP experienced physical displacement, and land acquisition was, in the majority cases only a small percentage of total lands held by PAPs, transitional support will be minimal.
Vulnerable groups	Social structures and community networks among the affected persons should be maintained. Support and advice are to be made available to help the affected persons cope with, and benefit from, the resettlement process. Particular attention must be given to ensuring that the interests of both women and men and of the elderly and the handicapped are taken into account when formulating and implementing compensation packages, resettlement assistance measures and livelihood improvement measures. In assessing the potential impacts of Bank operations on affected communities, the borrower or client shall make use of adequate and	Particular attention must be paid to the needs of the poor and the vulnerable.	Ethiopian law related to land acquisition does not have requirements to specifically assist or support the needs of vulnerable or poor groups.	Vulnerable households have been identified based on vulnerability criteria that has been developed through analysis of the baseline and consultation (see Section 4.7) Vulnerable households will be targeted for outreach around the livelihood restoration measures to ensure they understand and can access these benefits and will be monitored separately to ensure that they are accessing the livelihood support programs without issue and that the assistance is meeting their needs.

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
	<p>qualified expertise to identify people and groups that may be directly, indirectly and/or disproportionately affected or marginalized by the project because of their recognized vulnerable status.</p> <p>Where groups are identified as vulnerable, the borrower or client shall implement appropriate differentiated measures so that unavoidable adverse impacts do not fall disproportionately on these vulnerable groups, and so that they are not disadvantaged in sharing development benefits and opportunities (such as roads, schools, healthcare facilities etc.).</p> <p>Gender issues should be assessed in the context of vulnerability. A gender assessment shall be made for every project and shall form the basis for project design and compensation plans that lead to enhanced gender balance.</p>			
Monitoring and evaluation	<p>The borrower or client is responsible for the implementation, monitoring and evaluation of the activities set out in the RAP, and it keeps the Bank informed of progress. An independent third party monitors the implementation of large-scale or complicated RAPs with regular feedback from affected people. Monitoring activities will include review of the grievance and redress</p>	<p>Procedures must be put into place to monitor and evaluate the implementation of an LRP and take corrective actions where necessary. The extent of monitoring activities should be commensurate with the Project's risks and impacts. Mitigation will be considered complete when affected persons or communities have received compensation according to the LRP and PS 5 and are deemed to</p>	<p>There is no requirement for an LRP in Ethiopian law, and likewise there are no requirements for monitoring and evaluation of livelihood restoration.</p>	<p>Implementation of this RAP & LRP will require monitoring and evaluation to measure whether it has been successful at implementing the stated mitigation measures to support livelihood restoration for affected households. Section 9.6 of this RAP & LRP includes details on monitoring and evaluation.</p>

Topic	AfDB OS2	IFC PS5	Ethiopian Requirements	Variance and Approach/Measures to Address any Gap
	mechanism and of the physical progress and impact of the RAP.	have been provided with adequate opportunity to re-establish their livelihoods.		

3. STAKEHOLDER ENGAGEMENT

3.1 Summary of Stakeholder Engagement

Stakeholder engagement is described in 2019 LRP Rev.1 and the ESIA Stakeholder Engagement Plan (2020 SEP Revision 3). With respect to the physical and economic displacement, the Project identified the following key stakeholders:

- Project affected households and persons impacted by land acquisition;
- Community members who utilise resources on land affected by land acquisition;
- Kebele Administrations;
- Hitosa Woreda Administration and relevant offices; and
- OFWE.

Engagement during land acquisition commences with the establishment of a Woreda Compensation Committee as described below.

3.1.1 Compensation Committee

Engagement with woreda and kebele officials began early in the process, particularly on the need to form the Compensation Committee in compliance with requirements contained in the Expropriation of Land Holdings for Public Purposes and Payment of Compensation (Proclamation No. 455/2005). In accordance with local legislation, a compensation (sometimes referred to as a valuation) committee is responsible for carrying out the inventories of affected properties and valuations. During these early meetings, the number and arrangement of the committee, issues concerning assessment methods, the duration of assessment, asset classes to be enumerated, and the asset valuation approach were discussed and agreed upon. The Compensation Committee was established in September 2018 with six members from the Woreda Administration as required by law, and one rotating member from each kebele to participate with the committee.

3.1.2 Community Engagements

Stakeholder engagement has been an ongoing activity in the Project area since 2015. In terms of the land acquisition, community meetings were held in February 2019 in all affected kebeles prior to the land acquisition process officially beginning and again after the Compensation Committee had finished the valuation process.

The objective of the first general meetings was to share Project updates, in particular those related to the road construction and water drilling works, to engage in a focused discussion regarding the land acquisition plans, the valuation process, cut-off date, and to introduce the Compensation Committee members. The concept of a cut-off date was explained and participants understood and agreed that the date of the asset inventory would be the effective cut-off date. Finally, TMGO's grievance procedure was introduced and participants were informed about where and how they could register grievances related to land valuation and related matters. Time was then allotted for questions and concerns from participants, which were addressed by TMGO representatives or the Compensation Committee members, as relevant.

A second round of general community meetings was held in April 2019 to review the valuations carried out by the Compensation Committee and to share details on the compensation matrix and entitlement criteria. The calculation methodology, based on national laws and the data secured from the Compensation Committee, was also explained along with practical information on payment terms and terms of the agreement between the land users and TMGO. Finally, TMGO's grievance procedure was reiterated and participants were informed about where and how they

could register grievances related to land valuation and related matters. Time was then allotted for questions and concerns from participants which were addressed by TMGO representatives or the Compensation Committee members, as relevant.

These community engagement meetings are listed in Appendix 3 and summarized in 2019 LRP Rev.1 and TMGO has kept records of meeting minutes including participant registries.

3.1.3 Socio-Economic Baseline

Household surveys were undertaken between March and April 2019 by the TMGO Community Liaison Team. This was also taken as an opportunity to engage with households on the valuation process and Project progress.

3.1.4 Key Issues

Key issues identified include those related to potential construction noise and dust, job opportunities, level of compensation, and questions on the choice of the Gnaro lava field. Issues summarised in the 2019 LRP Rev.1 and listed in Appendix 3. Detailed minutes for each meeting are embedded in the list and available upon request.

TMGO responses can be summarised as follows:

- All efforts will be made to reduce dust and noise and mitigation measures from the ESIA were presented.
- Job opportunities would be advertised through the Woreda and in Kebeles for all positions.
- Compensation process was explained including the role of the Valuation Committee and additional measures such as livelihood restoration measures. TMGO also worked with the Valuation Committee to improve on statutory rates. Payment processes were also explained.
- The lava field is preferred by the Project to avoid physical displacement and the surface study conducted also indicates the high potential in accessing the geothermal resource.
- The grievance mechanism is available for PAPs to raise further concerns and issues.

3.1.5 Engagement on Livelihood Restoration Measures

TMGO has undertaken several engagements specific to the development of livelihood restoration programme. Livelihood restoration options presented in Chapter 8 were based on trends identified in the socio-economic baseline and through engagement with relevant stakeholders, including PAPs and PAHs. During the census and socio-economic surveys, each PAH was asked about the support they would like to see in the livelihood restoration programme. Options were based on these responses and were designed to align with existing resources, knowledge, skills and household experiences in the Project area. The livelihood restoration process was also described in every meeting during the valuation and post-valuation period.

As described in the 2019 LRP Rev.1, PAHs will have the opportunity to choose from the options presented in Chapter 8. It is acknowledged that some PAHs may choose not to participate, however TMGO will make every effort to ensure PAPs understand the options on offer and will give adequate opportunity to participate, with particular care, consideration and additional support to vulnerable groups.

TMGO began facilitating meetings on March 25th March between Kulumsa Agriculture Research Centre and Kebele representatives on livelihood restoration. The aims of this meeting was to confirm that the livelihood restoration programme will be commencing, to discuss specific challenges experienced by PAHs, and to discuss the support PAHs need from Kulumsa Research Centre. TMGO has also commenced the first engagements with all PAPs on how the RAP & LRP will be implemented and will discuss other partner support throughout these engagements.

Following on from the meeting with Kulumsa Research Centre, TMGO held meetings with PAPs in each impacted Kebele on 13th and 16th April to inform them about the livelihood restoration implementation plan, proposed schedules and progress regarding the collaboration with Kulumsa Agriculture Research Centre.

The livelihood restoration process is described in every community engagement meeting. As the Project progresses, livelihood restoration options will continue to be refined in consultation with PAHs and sectoral experts, who will be consulted on the sustainability of measures in place. This consultation will be open and inclusive and will be ongoing throughout implementation, as described in Chapter 9.

3.2 Ongoing Engagement

Ongoing engagement is described in Chapter 9: Implementation. Engagement is also required to set up the institutional architecture to implement livelihood restoration. Additional engagement is required for TMGO to continue their explanation of the livelihood restoration programme and to confirm participation. Ongoing engagement will also be required to monitor vulnerable PAPs.

Finally, will continue with supporting partners and implementing agencies to identify the most appropriate partners and monitor their progress.

4. BASELINE

4.1 Introduction

This chapter summarises the socio-economic context of the area impacted by displacement. In particular, the baseline below provides a summary of the existing conditions described in the 2019 LRP Rev.1 with a focus on the local area rather than regional and national baseline data. A focus on the local area is essential for understanding vulnerability and for the development of livelihood restoration measures. There has been no additional fieldwork in the development of this RAP & LRP revision. All information contained in this summary baseline is based on studies that have informed the 2019 LRP Rev.1 and no further analysis has been undertaken other than a review of vulnerable PAPs. This includes household surveys with 126 Project affected households (PAHs).

It should be noted that not all owners of the 146 impacted parcels of land were included in the socio-economic survey. The owners of 20 land parcels were omitted from the survey for the following reasons:

- One land owner was a community association and not an individual household;
- Two parcels of land were owned by a mosque where only a compound fence was impacted;
- One parcel of land was on communal land;
- Two PAHs only lost a few trees and not their land; and
- 14 PAHs who lost between 30 – 1,000 m² of grassland were either not resident in the area and / or were not willing or interested in participating in the survey.

This is considered further in Chapters 7, 8 and 9.

The socio-economic baseline is presented under the following main topic headings:

- demographic profile;
- gender context;
- education;
- livelihoods and land use;
- public services and infrastructure;
- development priorities; and
- vulnerability.

4.2 Demographic Profile

4.2.1 Population

Land acquisition will directly impact Hitosa Woreda, and in particular, the following kebeles:

- Anole;
- Dawi Guitcha;
- Tero Moye; and
- Shaki Sheraro.

Total population figures for these kebeles are not known, however the known population affected by displacement is 779 based on the census and socio-economic survey of 126 PAHs impacted by the Project. The average household size of impacted PAHs is 6, with household size ranging from

1 to 20, with 20% of households having a household size of 9 or more members. The age breakdown of the affected population is presented in Table 4.1: below. Almost two thirds of the population affected by displacement (65%) are below the age of 25 years. It is notable that the data shows particularly high percentages of men in the 15 – 24 and 55 – 64 year age groups, however no explanation is provided for these figures in the 2019 LRP Rev.1. These figures may require further interrogation.

Table 4.1: Age and Sex Distribution of PAHs

Age Group	% of Total	% Male	% Female
0 – 14 years	37%	51%	49%
15 – 24 years	28%	59%	41%
25 – 54 years	28%	46%	54%
55 – 64 years	3%	52%	48%
65 years and over	4%	61%	39%
Total	-	53%	47%

4.2.2 Marital Status

Polygamy is not common amongst the PAHs however nine households (7%) reported to have two or more wives. Out of the total affected population, 238 individuals were married, four were separated or divorced, 28 were widowed and the remaining population (508) single / unmarried or children.

4.2.3 Ethnicity, Religion and Language

The dominant religion amongst PAHs is Islam, with 663 individuals (85%) recorded as practicing Islam. 82 individuals were recorded as Christian while no religion was assigned to 33 individuals, the majority of whom were children. Oromo is the dominant ethnic group of PAHs. All affected individuals were classified as Oromo (750) apart from 28 individuals (predominantly children), who did not specify an ethnicity. Although Amharic is the official language of Ethiopia, the dominant language of the PAHs is Afan-Oromo (also known as Oromiffa) with 743 individuals registering this as their primary language. Only two individuals registered Amharic as their primary language while 33 individuals (predominantly children) did not register a primary language.

4.3 Gender Context

Ethiopia has a Gender Inequality Index of 173 out of 189 ranked countries (based on 2018 ranking)¹. Nationally only 11.5% of women have some level of secondary education compared with 22% of men. However, 74.2% of women are economically active despite this low number. While these figures are national, they provide some context to potential vulnerability, where women in the Project area have lower levels of education in general and are likely to be highly represented in low paid and informal work.

Of the 126 PAHs surveyed, 39 (31%) were headed by a woman. 25 of these women were widowed while four were either single or separated / divorced. Ten of these households were headed by married women. The 2019 LRP Rev.1 indicated that women’s roles in Ethiopia tend to be in the cultivation of horticulture, particularly vegetable crops, while supporting in weeding activities. Women are responsible for household / domestic chores. While there is no specific data on PAHs, similar patterns of activity were observed, and women reported to be responsible

¹ UNDP (2018) Human Development Reports: Gender Equality Index (GII) Tables viewed on 24 November 2020 at <http://hdr.undp.org/en/composite/GII>

for fetching water, collecting firewood, caring for children, collecting and preparing food, etc. This is important for the consideration of livelihood restoration options.

4.4 Education

The socio-economic survey undertaken for the 2019 LRP Rev.1 found that 81% of Project affected people (PAPs) had not progressed further than primary school, however this sample includes children as young as 7 years old. Amongst heads of households, education levels were slightly higher with 78 (62%) not progressing beyond primary school. 19 heads of households (15%) had completed either junior secondary, secondary or tertiary education. It is important to note that 40 heads of households have received no education at all.

Similarly, 43 heads of households (34%) have no literacy (cannot read or write), of which 27 were women. Amongst all affected individuals however, literacy levels were higher than the national average, with 91% of males and 68% of females aged over 15 reporting being literate.

4.5 Livelihoods and Land Use

The predominant livelihood for PAHs is agriculture followed by livestock rearing. While natural resource utilization was reported, it was primarily for subsistence / household consumption and not income generation. Four households reported owning small businesses including a kiosk (two households) and tea house (two households). Additional information on livelihoods is summarised below.

4.5.1 Income and Expenditure

The household surveys conducted for 2019 LRP Rev.1 found that the median monthly income for PAHs is 6,944 Ethiopian Birr (ETB) (USD 239.45) and the modal income was 5,000 ETB (USD 172.41). Incomes were also broken down into quintiles as illustrated in Table 4.2. All income bands compare favourably to the global poverty line of USD 1.90 per day (approximately USD 58 / 1,682 ETB per month). However, those in the bottom quintile may still experience income insecurity. Indeed 70 PAHs (56%) reported that their incomes made it difficult to pay all their necessary expenses.

Table 4.2: PAH Monthly Income

Quintile	Quintile Mean (ETB)	Share of Total Household Incomes
Bottom Quintile	2,796	8%
Second Quintile	4,617	13%
Middle Quintile	6,188	18%
Fourth Quintile	7,742	22%
Top Quintile	13,120	39%

Surveys found that the largest expense items are food (47% of monthly income), farming inputs (11%), clothing (8%), education fees (6%), transport (5%) and charcoal (5%). Therefore 59% of monthly income is used to directly support livelihood and subsistence.

4.5.2 Access to Credit

Environmental and Social Impact studies undertaken in 2017 found that approximately 16% of all households in the Project area had bank accounts. Amongst PAHs, approximately 71% of households reported that a member of the household had savings, although these were general held as cash savings. Access to credit was uncommon, with 96% of households reporting that they had not had access to credit or borrowed in the last 12 months.

4.5.3 Livelihood Activities

Amongst affected households total of 444 PAPs (57%) fall within the working age of 15 – 59 years. The primary occupation is farming (43%), 29% were still in school while 12% were unemployed. Other key livelihood activities include trading (4%), artisans (3%), driver (2%) and 9% classified as other miscellaneous occupations.

Agriculture

PAHs reported producing six main crops including wheat (41%), haricot (16%), barley (15%) teff (14%), maize (7%) and sorghum (6%). A range of other miscellaneous crops make up the other 1% grown in the area.

Just over half of all PAHs (52%) reported crop production for both subsistence and cash income, 28% of PAHs produce mainly for cash income and 15.6% produce mainly for subsistence. Only 4% of households produced entirely for subsistence. Crops such as wheat and sorghum are more likely to be produced for cash, while barley and maize are more likely used for household consumption. Only three households reported suffering from food shortage during the 12 months preceding the household survey. Wheat is the most valuable cash crop, generating higher revenues than other crops. PAHs producing wheat earned more than 25,000 ETB per season on average.

Farming practices are rainfed, with only one household actively irrigating crops. Farming is non-mechanised with simple farm tools and use of oxen and plough. Many PAHs reported using fertilizers, improved seed varieties and crop rotation to improve yields.

Livestock

Livestock is another important livelihood for PAHs for both cash income and subsistence. Most households keep livestock including oxen and plough (25%), cows (24%), donkeys (24%), goats (13%), sheep (7%) and chicken (7%). On average, households keeping livestock reported owning on average 2.1 oxen, 2.8 cows, 7.8 goats, 1.8 donkeys, 4.2 sheep, and 7.8 chickens.

Natural Resources

Most PAHs (82%) reported using natural resources to support their livelihoods including firewood, timber and thatch. These items are largely used for household consumption with firewood the most common resource used to generate small cash incomes. Communal land provides access to 43% of natural resources used by PAHs and firewood is primarily sourced on land other than the household's own.

4.5.4 Land Holdings

Land owned by PAHs is classified as either farmland or grassland (for grazing). 28 PAHs (22%) have access rights to more than one parcel of land. The average landholding is 2.3 ha for PAHs, which is more than double the national average landholding for small farms of 0.9 ha. The average landholding size for PAHs is presented in Table 4.3.

Table 4.3: Average Landholding

Total Land Holding Range	Percent of PAPs
Less than one ha	39
Between 1 and 2 ha	23
Between 2 and 3 ha	29
Between 3 and 4 ha	18
Between 4 and 5 ha	6

Total Land Holding Range	Percent of PAPs
Greater than 5 ha	11

4.6 Community Infrastructure and Organisation

4.6.1 Housing

The majority of houses in the Project area are made from grass thatch while a few have iron sheet roofing. Walls are generally made with mud and earthen floors though some are constructed of wood.

4.6.2 Transport

Non-motorised forms of transport are more common in the Project area including walking, horses, donkeys and horse/donkey-drawn carts. Very few households make use of motorised transport. The main town, Iteya, is accessed by a graded earth road on good condition however smaller earth roads in the area produce dust and can become difficult to traverse in the rainy season.

4.6.3 Water

PAHs generally travel long distances to collect potable water. The 2018 ESIA baseline studies found that 12% of households reported taking between 30 – 60 minutes to collect water and 32% of households travel more than one hour to collect water. Availability varies between wet and dry season. During the wet season, there is greater reliance on rain collection and ponds, while during the dry season, reliance is on piped water, groundwater and ponds at a greater distance from households.

Community conflict over water has been reported in the area and this may be exacerbated if planned water improvement schemes are not managed effectively by the woreda and / or TMGO. Transparency over water improvement schemes will be imperative for managing community concerns over water.

4.6.4 Development Priorities

Development priorities identified by PAHs include agricultural inputs (46%), livestock (18%), soil improvement (14%), access to water (12%), animal health support (6%), irrigation (3%) and other miscellaneous support requested by 1%.

4.7 Vulnerable Households

Vulnerable households are those with limited assets they can draw upon, and as a result, are less resilient to shocks, which means the loss of land and assets will disproportionately impact these households. The lack of resources available and the precarious nature of their livelihoods means that vulnerable households are less able to adapt or profit from Project related changes.

The 2018 ESIA baseline studies identified several groups considered vulnerable to the Project’s impacts. These include female headed households, which make up 25% of all households in the Project Area of Influence. The proportion of female headed households is higher in two of the Kebele’s impacted by land acquisition: Anole and Tero Moye, where between 32 – 44% of households are headed by females. The 2018 ESIA baseline studies also identified elderly, women, youth, children, widowed, unemployed, disabled and chronically ill as vulnerable groups.

The vulnerable groups identified during the 2018 ESIA were considered with respect to their vulnerability to specific economic and physical displacement activities. The asset inventory identified specific land, tree and physical assets of households. The socio-economic data

supplemented this information and together providing an insight into the potential vulnerability of PAHs, building on the information provided in the 2018 ESIA. According to the 2019 LRP Rev.1, the greatest areas of vulnerability for affected households are presented in Table 4.4.

Table 4.4: Vulnerable PAPs

Vulnerable Criteria	Number and %
Low-income households defined as families (3 or more members) reporting monthly household incomes in the bottom income quintile	20 households (16%)
Female-Headed Households	39 households (31%)
Single member households, aged 65 or older	1 household (1%)
Households with no land certificate	12 households (10%)
Households with a member who has a physical or mental disability, or pregnant female	18 households (14%)
Households where the majority of adult members are unemployed	9 households (7%)

The asset surveys show that the majority of PAHs will be losing an average of 5.37% of their land holding, with 92% losing less than 10% (see Chapter 5.3.1). With respect to land acquisition impacts, this was considered to be a relatively minor impact to PAHs. However, the impact would be felt more acutely in low income households, where even a small loss in productive land could result in food and income insecurity. When interlocked with other forms of vulnerability, as identified in the 2018 ESIA, these PAHs were considered to be highly vulnerable to land loss of a small magnitude.

Analysis of the census data show that of the female headed households identified, 15 are within the top two income quintiles (earning more than 7,000 ETB per month) although one of these households has a majority of adults unemployed, indicating potential future insecurity. The other 14 households are not considered vulnerable to the land acquisition impacts due to their more secure income status. Five of these households did have other elements of disability including one unemployed dependent and in three households, a disabled family member. However even with these other vulnerable household members, the high-income status of the household reduces the vulnerability of these 14 households to land acquisition impacts specifically.

Two additional households fall within a vulnerability group but have incomes higher than 7,000 ETB. These households are male headed but also have one disabled family member. Again, these households are also not considered vulnerable to land acquisition impacts due to their income status.

Overall, the data calculated 69 vulnerable households including three households with three levels of vulnerability, 18 households with two levels of vulnerability and 48 households with one level of vulnerability. However, 16 households have been removed from this category due as described above, leaving a total of 53 vulnerable PAHs affected by land acquisition.

Note that while the data show potential vulnerability, this will be verified through ongoing engagement with individual households to understand their livelihood activities, key land-based dependencies, and to understand how the land acquisition will impact their food security and earnings. As described in Section 3.1.5 and Chapter 9, meetings will aim to agree on the most appropriate livelihood measures to support each impacted household, including those identified as most vulnerable. Thus, meeting the objectives of the 2018 ESIA to identify the most appropriate support to be offered to uplift their living standards.

5. ASSESSMENT OF DISPLACEMENT IMPACTS

5.1 Introduction

This chapter addresses the identified displacement impacts caused by acquisition of land for the Project, including classifying the types and extent of displacement and livelihood impacts. The Asset Inventory was conducted by Hitosa woreda between February and April Date, 2019 and identified that 161 assets within 146 land parcels in four kebeles will be directly impacted by land clearance for the Project right of way. Socio-economic surveys conducted by ERM in March and April 2019 sought to complement this data through the collection of quantitative data for 126 affected households. Over 20% of the PAHs have more than one landholding, therefore the number of land parcels and assets is greater than the number of PAHs. This section is based on data provided in the 2019 LRP Rev.1, which in turn, was informed by the asset inventories conducted by the Woreda Compensation Committee. This section summarises:

- impacts to physical resources including loss of assets such as housing and non-residential structures;
- impacts to natural resources including loss of access to livelihood resources such as agricultural plots, grassland and trees; and
- impacts to communal resources including loss of access to community land.

5.2 Impact to Physical Resources

Physical displacement related to the Project land acquisition affects six structures. These include three shops, two market sheds and one residence. Three of these structures were not within the Project land acquisition footprint and were compensated due to concerns by PAHs that they would not withstand the construction impacts and nearby movement of heavy machinery.

Only one PAH is considered to be physically displaced. The Project is only affecting one wall of the impacted residence, however, Project compensation has considered the impact to the full residential structure and not just the affected wall.

In addition to these structures, 42 fences (ancillary structures) have also been affected by land acquisition.

5.3 Impact to Natural Resources

5.3.1 Loss of Farmland and Grassland

Land in the Project area has been classified as either agricultural (farmland), grassland or communal land. Farmland and grassland are typically assigned to individual households, who have recognised rights to land. All agricultural and grazing land acquired for the Project will be permanently lost. The total area of land lost has been recorded as 15.51 ha, including 5.60 ha of grassland and 9.91 ha of farmland and spread across 146 separate land parcels. This land is distributed across the four kebeles as listed in Table 5.1.

Table 5.1: Economic Displacement Related to Loss of Farmland and Grassland

Kebele	Land Type	Total Land Acquired (ha)	Percent of Total Land Acquired by the Project
Anole	Grassland	2.29	15%
	Farmland	1.95	13%
Dawi Guticha	Grassland	0.53	3%
	Farmland	4.36	28%

Kebele	Land Type	Total Land Acquired (ha)	Percent of Total Land Acquired by the Project
Tero Moye	Grassland	2.78	18%
	Farmland	2.32	15%
Shaki Sheraro	Grassland	0.00	0%
	Farmland	1.28	8%
Total	Total Grassland	5.60	36%
	Total Farmland	9.91	64%
	Total Land	15.51	100%

Table 5.1 shows the percentage of land take in each kebele, with the greatest area of farmland being lost in Tero Moye. On average, PAHs are losing approximately 5.37% of their land. The impact ranges from a loss of 0.29% of landholding to 29.69% of landholding. 92% of households are losing less than or equal to 10% of their land, while only two PAHs will lose greater than 20% of their land.

5.3.2 Loss of Crops and Trees

Households were able to harvest all agricultural crops ahead of land acquisition and therefore, crops were not directly impacted by the Project and have been considered under the loss of farmland. 68 PAHs will be losing a combined total of 2,078 trees and shrubs as a result of the Project. None produce edible products but do provide important non-timber and timber products including fodder, fuelwood, construction timber, farm tools, shade, beehives and fencing. The majority of these trees are owned by individual households, however, 71 trees / shrubs are also owned by the Tulu Moye Nyaro Association. Further details on the impacted species are provided the 2019 LRP Rev.1.

5.3.3 Loss of Access to Community Land

In addition to the 15.51 ha of farmland and grassland impacted by the Project, an additional 12 ha of land was acquired from the OFWE concession area. The OFWE is responsible for administering forest and wildlife resources in a concession of approximately 3.4 million ha in Oromia Regional State. Within this concession, 10,241 ha is categorised as natural forest and 12 ha of this land category overlaps with the Project land requirements.

OFWE land is used by community members and a local organisation with a membership of 450. However, land is used in a limited way and OFWE only permits activities compatible with forest conservation. Key livelihood activities such as harvesting trees for timber, collecting fuelwood or charcoal production are not permitted on OFWE land.

5.4 Level of Displacement Impact

Each affected household will have an individual set of circumstances that will determine the level of impact experienced from economic displacement. The level of displacement impact experienced at a household level will differ depending on a number of variables. These include:

- whether the household is being physically and economically displaced or only economically displaced;
- the level of reliance on livelihood activities that will be affected by the land acquisition based on existing livelihoods and vulnerabilities;
- the proportion of land lost compared to the household's overall land holding; and
- the level of potential vulnerability of the household.

On the basis of the information available, the following characterisations can be made:

- Highly impacted households due to proportion of land take: two PAHs losing between 20 – 30% of their land holding are considered to be the most significantly impacted;
- Highly impacted households due to vulnerability: at least 53 households are considered vulnerable, including 18 PAHs with two levels of vulnerability and three households with three levels of vulnerability;
- Highly impacted households due to loss of livelihood resources: it should be noted that 70 PAHs reported that they struggled to cover all their expenses in the year preceding the survey; and
- Moderately to low impacted households: include those not falling in one of the categories above.

Implementation of appropriate livelihood restoration measures will be supported through continued household-level engagement with each impacted household to:

- Agree livelihood restoration options for that households;
- Confirm the additional support required for those identified as potentially vulnerably; and
- Confirm whether those identified as not potentially vulnerable will be able to restore their livelihoods through the measures proposed.

Where further vulnerability or additional livelihood support is identified through engagement with each household, these households will be included in programmes for vulnerable PAHs.

6. ELIGIBILITY AND ENTITLEMENTS

6.1 Overview

This chapter presents an overview of the eligibility criteria for compensation and a description of the types of entitlements proposed through the woreda-led land acquisition process as provided for in Ethiopian legislation. This chapter also provides a resulting entitlement matrix and proposes additional compensation measures as required to align with international standards and meet full replacement cost. It covers eligibility and entitlements outlined in the 2019 LRP Rev.1 in accordance with Proclamation 455/2005 and Regulation 135/2007 and outlines additional measures to achieve full replacement cost.

It also summarises additional measures to align with the new Proclamation 1161/2019 in the event of any future land acquisition. If future land acquisition is required, a new RAP & LRP will be developed in accordance with Proclamation 1161/2019.

6.2 Defining Eligibility and Entitlement

This Section is based on the requirements of Proclamation 455/2005 and considers eligibility and entitlement for land acquisition affecting the 161 assets that occurred while this Proclamation remained in effect. Eligibility and entitlement for all future land acquisition is considered in Section 6.4.

6.2.1 Eligibility and Entitlement under Ethiopian Law

The primary evidence of eligibility in Ethiopia is a valuation number created by the Woreda Compensation Committee and provided during the inventory of assets. National legislative requirements recognise eligibility at an individual level, with compensation provided to each individual asset owner or user.

The 2019 LRP Rev.1 identified the following eligible groups:

- Formal, legal land holders with a land certificate;
- Those who do not have a land certificate but whose use of the land can be validated by the local administration;
- Users of communal land; and
- Those who had rental agreement with government.

The total number of eligible groups are summarised in Table 6.1 below with respect to the impacts already experienced by the 126 PAHs.

Table 6.1: Eligible Groups

Type of Impact	Description of Impact and Eligible Groups
Loss of Land	126 PAHs were impacted by loss of land. The area of land lost included 5.60 ha of grassland and 9.91 ha of farmland.
Loss of Residential Structures	One PAH was affected by physical displacement, with a portion of their structure affected.
Loss of Trees and Shrubs	68 PAHs will be losing 2,007 trees and shrubs while one community institution will be losing 71 trees and shrubs.
Loss of Business Structures	Five business structures will be impacted by the Project including three shops and two market sheds.
Loss of Communal Land	The OWFE has lost 12 ha of forest land.

6.2.2 Entitlement for Loss of Land

The entitlements for loss of land already experienced have been defined in accordance with Proclamation 455/2005 on Expropriation of Land Holdings. Under this Proclamation, a landholder is entitled to compensation equivalent to ten times the average annual income secured in the last five years preceding expropriation of the land in a situation where the Woreda Administration cannot find alternative land. In this case, the Woreda did try to identify alternative land for PAPs but suitable alternative land was not available.

6.2.3 Entitlement for loss of Trees and Shrubs

Landholders are entitled to compensation for assets on expropriated land based on the cost of replacing the assets in accordance with Proclamation 455/2005 on Expropriation of Land Holdings. With respect to trees and shrubs, Proclamation 455/2005 also requires that compensation for permanent improvement to land shall be equal to the value of capital and labour expended on the land.

Regulation 135/2007 stipulates that compensation for trees is determined based on the level of growth of the trees and current price per square metre and tree owners may also harvest trees within a fixed period.

6.2.4 Entitlement for loss of Structures

Proclamation 455/2005 Expropriation of Land Holdings requires that compensation for property situated on land shall be determined based on replacement cost of the property. In addition, for property that can be relocated, compensation must include the cost of removal, transportation, and erection if this property can continue its service as before.

Regulation 135/2007 states that compensation for a building shall be determined based on the current cost per square meter or unit for constructing a comparable building, and compensation shall be paid only for the demolished part of a building where the owner prefers to use the remaining parts of the building not impacted by land acquisition. This preference is only acceptable where the condition of the partly demolished building conforms with building requirements.

6.2.5 Entitlements for Communal Land

Proclamation 455/2005 on Expropriation of Land Holdings is silent on the expropriation of communal land.

6.3 Gaps to International Standards

As described in Chapter 2, the Ethiopian legal requirements for eligibility and entitlement applied to the 146 PAHs and landowners already impacted are aligned in many respects with international standards. However, there are some areas where there is a gap to AfDB OS2 and IFC PS5 on Involuntary Resettlement. These gaps are considered below for the 146 parcels of land already impacted.

- Eligibility: there is no gap in eligibility for those with formal rights or validated access rights to land. Informal dwellers are not recognised under Ethiopian law, however in this case, all 146 impacted land users have certificates or have been verified by the woreda.
- Preference for in-kind compensation: Ethiopian legislation makes no explicit requirements for the identification or investigation of differentiated measures for vulnerable groups.
- Livelihood Restoration: Proclamation 455/2005 on Expropriation of Land Holdings does not make any provision for livelihood restoration, which is a gap that must be addressed with respect to the 146 households and landowners identified as already impacted by the Project.

- Full replacement cost: Ethiopian legislation considers property or asset values as well as machinery, material and labour costs and working the land. It does not explicitly cover transaction costs associated with replacing assets.
- Preference for in-kind compensation: Proclamation 455/2005 is silent on in-kind compensation, therefore a gap exists between this Proclamation applied to the 146 households or landowners identified as already impacted by the Project.

6.4 Defining Eligibility and Entitlement for all Future Land Acquisition

In accordance with Ethiopian legislation, all future land acquisition associated with the Project will follow Proclamation 1161/2019 rather than Proclamation 455/2005. Regulation 135/2007 will still be applicable. The process described in Section 6.2 remains the same with some modifications as outlined below:

- *Entitlement for Loss of Land:* Proclamation 1161/2019 now stipulates that where equivalent alternative land is not available, then the land holder shall be paid compensation which is equivalent to fifteen times the highest annual income generated during the three years preceding expropriation (as opposed to ten times the average annual income over five years).
- *Entitlement for Loss of Trees and Shrubs:* Proclamation 1161/2019 does not stipulate any changes from Proclamation 455/2005, therefore the requirements described in Section 6.2.3 remain in place.
- *Entitlement for Loss of Structures:* all compensation for property on land shall now cover the cost of replacing property as new, and the minimum compensation payable cannot be less than the current cost of constructing a new house in accordance with the required standards of each Regional State.
- *Entitlements for Loss of Community Land:* Proclamation 1161/2019 requires that compensation for loss of access to communal land be based on the use of the land and the lost benefits and livelihoods associated with lost access. It also stipulates that the valuation method is to be determined by Regional administration and requires that users be clearly identified.

Changes introduced in Proclamation 1161/2019 means that the Woreda will now need to consider the replacement of property as new and also consider communal lands for all future land acquisition. However, gaps between Ethiopian legislation and international standards will remain once Proclamation 1161/2019 is applied to future land acquisition.

The following must also be considered for all future land acquisition:

- Informal dwellers are still not recognised under Proclamation 1161/2019 and therefore measures for informal dwellers must be included if they are identified in future land acquisition for the Project.
- With respect to livelihood restoration, Proclamation 1611/2019 now makes provisions for supporting and ensuring the improvement of livelihoods of displaced farmers and pastoralists. By law this must therefore be considered for, and applied to, all future Project land acquisition. Compensation for all future land acquisition must consider opportunities for livelihood improvement, or at least restoration, in accordance with AfdB OS2 and IFC PS5.
- Ethiopian legislation will now recognise in-kind compensation through Proclamation 1161/2019 however in practice, cash compensation is still likely to be provided.

These amendments will be captured in a new LRP and RAP for all future land acquisition, if required to ensure that eligibility and entitlements comply the revised Ethiopian Legislation and align with the standards of AfDB OS2 and IFC PS5.

6.5 Cut-Off Date

The Ethiopian legislation is unclear on the implementation of a cut-off date, stating that the cut-off date is the date of issuance of notice. In terms of managing the risk associated with encroachment, this poses a risk as the date of notice comes only after the completion of counting and calculation of valuation. The AfDB OS2 and IFC PS5 require a much earlier time for cut-off date to enable thorough asset evaluation and displacement planning prior to issuance of any notice to move.

As explained in the 2019 LRP Rev.1, this gap was addressed through stakeholder engagement. The concept of a cut-off date was explained during stakeholder engagement meetings and it was agreed that for this Project, the completion of the asset survey (in April 2019) would be the effective cut-off date. This approach would also be applied to all future land acquisition.

6.6 Valuation of Entitlement

6.6.1 Valuation Process

The valuation process undertaken for the Project land acquisition followed the process prescribed in in Proclamation 455/2005 and Regulation 135/2007 (summarised in Section 2.3). Following Project notification to Hitosa woreda, the woreda established a Compensation Committee in 2018. Members included six representatives of the Woreda and one rotating member from each affected kebele administration.

Prior to commencing the valuation process, meetings were held with communities in all affected kebele's to explain the valuation process. Additional meetings were held with affected kebeles after the valuation process was completed, as summarised in Section 3.

In summary, compensation for all assets was calculated based on the production and market price provided by members of the Compensation Committee, representing Woreda-level sectoral offices including the following: Agriculture, Environment, Forest and Climate Change, Livestock and Fishery, and Land Administration and Planning. The valuation process was controlled entirely by the Woreda, however the payment of cash compensation was made directly by the Project proponent. The company is also fully in charge of livelihood restoration. This is described further in Chapter 9.

In accordance with legal requirements, compensation for affected assets was calculated as described in the Sections below. All valuations were based on current market price. All production levels for crops and grass were the result of an average taken of the volume produced over the past five years.

6.6.2 Valuation of Assets

This section provides an overview of the valuation of assets and the rates applied are either presented below or in the Appendices. TMGO will review these rates annually for all future land acquisition.

Valuation of Farmland and Grassland

In accordance with Proclamation 455/2005, compensation was based on the average productivity of the land. The national average yield for land at the time of the asset survey was 30 quintals / ha. The Woreda Agriculture Department and TMGO looked at the processes of similar land acquisition in the region and found an average yield of 53 quintals / ha. In order to ensure

adequate compensation, TMGO negotiated a higher yield rate with the woreda of 67 quintals / ha, adding over 25% to the woreda average yields. This figure was used to generate average income for all acquired land based on current market values for the crops (ETB 1,350 per quintal), which was multiplied by 10 years to obtain compensation in accordance with Proclamation 455/2005.

A similar process was used for the valuation of grassland compensation. In the case of grassland, the woreda classifies grassland into three grades, depending on productivity. At the time of the valuation, grade 1 was classified as producing 158 ton/ha, grade 2 producing 130.6 ton/ha and grade 3 producing 101.2 ton/ha. Once grassland was classified in accordance with its productivity, compensation was determined based on the current market value of grasses (ETB 338 per ton), which was multiplied by 10 years to obtain compensation in accordance with Proclamation 455/2005. Rates for land are summarised in Table 6.2: Land Rates below.

Table 6.2: Land Rates

Land Type	Average Yield / ha	Market Value (ETB)	Market Value of Crops (USD)
Farmland: national average	30 quintals	1,350 / quintal	35.1
Farmland: woreda average	53 quintals		
Farmland: Project rate	67 quintals		
Grassland: Grade 1	158 ton	338 / ton	8.8
Grassland: Grade 2	130.6 ton		
Grassland: Grade 3	101.2 ton		

In the event that PAPs would be purchasing additional farmland to replace their lost land, the additional 25% income would be considered enough to cover full replacement cost for the land including compensation for disturbance, labour and input costs, and any transaction costs. It cannot be confirmed that the valuation for grassland would cover any transaction costs associated with the purchase of replacement grassland. However, it has already been confirmed by the woreda / local administration that replacement land (farmland and grassland) is not available for these PAPs. Therefore, while the cash compensation does meet full replacement cost (for farmland at least), additional measures will be required to enable land holders to restore their yields to pre-displacement level on their remaining land holding. Most households (92%) are losing less than or equal to 10% of their land (farmland and grassland combined), which may result in some yield and livelihood loss. However, eight households have lost between 10 – 20% of their land holding and two households have lost between 20 – 30%. While these lands will remain productive (i.e. they are not unworkable due to the amount of land lost), a loss of up to 30% of land could result in a significant yield reduction and a significant loss in livelihood security. This potential loss must be addressed through in-kind livelihood restoration measures in accordance with International Standards.

It should also be noted that while the valuation was implemented in accordance with Proclamation 455/2005, compensation was paid at the time that Proclamation 1161/2019 was under development by the Ethiopian government and discussion with relevant stakeholders, therefore raising expectations amongst PAHs. However, if livelihood restoration meets International Standards, this expectations should be met through in-kind livelihood restoration measures.

Valuation of Structures

Compensation for structures was based on the cost of construction of a new structure and the cost of replacing any permanent improvements on the land. This aligned with Proclamation

1161/2019, going beyond the requirement of Proclamation 455/2005, and requiring requires compensation to be paid as new. The valuation process followed Regulation 135/2007. The rates used for structures is presented in Appendix 1.

It was determined that full replacement cost has been achieved for structures. One residential property was impacted. The PAH has remained in this residence as only one wall was impacted. However, the Project has compensated the PAH for the full structure as new, and not just the wall as stipulated in Ethiopian regulations. This PAH chose to remain resident in the current house and use the compensation to construct a new residence and shops in Iteya, where they operate one shop and rent out the other two to generate additional income.

Five other structures were impacted by the Project, including two market sheds and three shops. 42 fences were also impacted by the Project. All structures were compensated based on their replacement and construction as new. Compensation also covered the amount outstanding on any lease on the property. These have since been relocated and are operational.

Valuation of Trees and Shrubs

Market prices were agreed by the Woreda Office for Environment, Forest and Climate Change in accordance with Proclamations 455/2005 and Regulation 135/2007. Compensation also takes in to account the age and size of the tree or shrub. However, it is not clear whether compensation accounts for the time taken to replace these assets. To address this gap, it is necessary that additional in-kind livelihood restoration measures are provided to land holders losing trees and shrubs. The rates paid for compensation of trees and shrubs are provided in Appendix 2.

Valuation of Communal Land

Given the affected communal land belongs to the OFWE, the OFWE is responsible for performing its own valuation of the land based on the volume of trees and other plant resources on the affected portion of the land. In accordance with the bylaws of the local organisation using the land, 45% of the compensation is paid to the community organisation who are users/protectors of the resource, 5% is paid to the kebele administration and the remaining 50% is paid to the OFWE. There are no gaps with regards full replacement cost in compensation for communal land.

Residual Land

Ethiopian law does not have provisions for compensation for the loss of agriculture or residential lands that become unworkable as a consequence of land acquisition. No land parcel already acquired by the Project was left unworkable as a result of the land acquisition. For all future land acquisition, it is good practice that where land becomes unworkable due to parts of it being acquired, the total land parcels must be fully compensated for.

6.6.3 Compensation Processing

As described in the 2019 LRP Rev. 1, cash compensation for all 161 assets has been paid to PAPs. In support of this process, all PAHs were eligible and encouraged to participate in a one-day financial literacy training offered by the Project in advance of the compensation payments. The training focused on savings and credit and investment opportunities within the area. The Cooperative Bank of Oromia facilitated the training, which was held on April 23, 2019 in Iteya town. The event was well attended by PAPs from Dawi Guticha, Tero Moye and Shaki Sheraro. Unfortunately, PAPs from Annole Keble were unable to attend as an older and respected member of the community passed away and PAPs needed to attend the funeral however they have been offered additional opportunities to receive financial management training.

Once the valuation process was complete and PAP assets had been valued accordingly, meetings were held in each affected Kebele between TMGO representatives, the Compensation Committee and the PAPs to clarify the methodology for the valuation and the calculation for the inventoried

assets over the four established categories (farmland, grassland, fixed planted assets and structures). PAPs were given time to consider their individual agreements and to ask any questions in advance of signing. The agreement (see Appendix 4) was provided in the locally spoken language and read to all PAPs before and during signing.

Compensation payments were made via bank transfer to an account chosen by each PAP in accordance with the agreement signed. As noted in the 2019 LRP Rev.1, most PAPs already used bank accounts prior to compensation process. This was considered a positive sign that there would not be major risks associated with monetary compensation since PAPs already had some financial literacy and a culture of banking, thus making the safe keeping of their compensation payments more likely. Where PAPs did not have a bank account prior to this process, they were offered assistance to set one up with a branch in nearby Iteya town to facilitate their receipt of payment.

6.7 Entitlements for Compensation

6.7.1 Entitlements Matrix

Table 6.3 presents the entitlement matrix summarising the compensation (cash and in-kind) that will be provided to displaced households for all Project displacement as per Ethiopian law (Proclamation 455/2005 for current land take, Proclamation 1161/2019 for all future land take, and Regulation 135/2007), and required top-ups to meet international standards.

Table 6.3: Entitlements Matrix

Type of Loss	Entitled Party	Compensation Entitlement	Additional Measures to Address Gaps
Loss of farmland	Landholder/ user of the land as identified in the asset survey (with land certificate or as validated by local administration).	129 PAPs (for farmland and grassland) identified in Chapter 5 are entitled to the equivalent of 10 times average annual income secured in the last five years. Note that all future land acquisition will apply 15 times the highest annual income generated during the three years preceding expropriation, calculated on market price.	Additional percentage added to average yield to cover transaction costs, labour and disturbance. Livelihood restoration measures to ensure income can be replaced using existing land holding, where replacement land is not available. Financial management training for PAPs receiving cash compensation.
Loss of grassland	Landholder/ user of the land identified as in the asset survey (with land certificate or as validated by local administration).	17PAHs identified in Chapter 5 are entitled to the equivalent of 10 times average annual income secured in the last five years. <i>Note that all future land acquisition will apply 15 times the highest annual income generated during the three years preceding expropriation, calculated on market price.</i>	Additional percentage added to average yield to cover transaction costs, labour and disturbance. Livelihood restoration measures to ensure income can be replaced using existing land holding, where replacement land is not available. Financial management training for PAPs receiving cash compensation.
Loss of trees, shrubs crops	Landholder/ user of the land on which the tree was located, as identified in the asset survey.	Monetary compensation based on the market price for harvested wood and market price of crops (in the event that land acquisition occurs prior to harvesting of crops). No compensation for crops if crops have been harvested.	Livelihood restoration measures to support the time taken replace new trees and shrubs. Financial management training for PAPs receiving cash compensation.
Loss of structure	Landholder/ user of the land on which the structure was located, as identified in the asset survey.	PAHs and landowners identified in Chapter 5 are entitled to monetary compensation for the cost of property replacement. Monetary compensation for the cost of permanent improvements on land. Monetary compensation to cover the amount owed for the remaining lease on the structure.	Allowances to cover transaction costs or any other fees associated purchasing or constructing a new structure. Allowances to cover cost of relocation. Financial management training for PAPs receiving cash compensation.

		<i>Note that all future land acquisition must provide monetary compensation for constructing a new structure without depreciation.</i>	
Loss of communal land with productive value	Identified users of the communal land according to local user committee and kebele officials.	Compensation will be determined by the government body managing the land (i.e. OFWE) and in accordance with user organisation bylaws. Bylaws currently stipulate 45% of the total compensation is passed on to the identified users.	No additional measures.
Impacts to vulnerable households	PAHs meeting at least one of the vulnerability criteria established by TMGO.	-	Livelihood restoration measures to support livelihood reestablishment. Inclusion in the vulnerability tracking and monitoring program.

6.7.2 Additional Measures

Measures to Address Existing Gaps

Table 6.3 provides entitlements to be applied. In order to address gaps and achieve full replacement cost for completed land acquisition affecting 126 PAHs, it is necessary that the following be implemented:

- Support all 146 PAHs and landowners that have lost land with livelihood restoration interventions as described in Chapter 8: Livelihood Restoration. This is to address the loss of potential livelihood associated with farming a smaller land holding.
- Support all PAPs that have lost trees and shrubs through livelihood restoration interventions as described in Chapter 8: Livelihood Restoration to address the loss of potential livelihood associated with the time taken to grow / replace lost trees and shrubs.
- Financial management training to all PAHs receiving cash compensation. This was delivered by the Cooperative Bank of Oromia on 23rd April 2020 in Iteya.

Support to Vulnerable Households

There is no requirement under Ethiopian Law to implement livelihood restoration in addition to cash compensation or to support vulnerable households. However, in accordance with international good practice, those households identified as vulnerable will be entitled to livelihood restoration support to assist them in restoring livelihoods following land acquisition. A total of 53 vulnerable PAHs were identified through household surveys while households identified as being highly impacted may also require support. Livelihood restoration is described further in Chapter 8.

7. PHYSICAL DISPLACEMENT

7.1 Overview

This Chapter outlines how the replacement of residential buildings that form part of the compensation entitlements has been delivered. The goal is to ensure all physically displaced PAPs are able to replace their physical assets and to deliver adequate replacement structures that provide an improved standard of living for all eligible PAHs.

Land acquisition has only impacted on one PAH, however this Chapter also outlines measures to support physically displaced PAPs for all future land acquisition.

7.2 Compensation Process

As described in Section 5.2, only one PAP has been physically displaced by the Project to date. This PAP is entitled to:

- Monetary compensation for full replacement cost of their property in accordance with international standards;
- Allowances to cover transaction costs or any other fees associated with purchasing or constructing a new structure; and
- Allowances to cover the cost of relocation.

International best practice requires a process that will allow households to establish or secure replacement housing that meet or exceed minimum national residential building requirements and improve the quality of residential assets.

Due to the nature of impact to one PAH, the compensation process was discussed and agreed in detail with the affected PAP. As outlined in Section 6.2.4, only one wall of the affected property would be impacted by the Project. The PAP preferred to remain in their existing structure and renovate / modify their house rather than move to new premises. Compensation was provided not just for the wall, but for the full structure as new, more than meeting full replacement cost for the PAP. However, while remaining on the property, the PAP used the compensation to also construct shop in Iteya to generate additional income.

7.3 Future Land Acquisition

7.3.1 Compensation Process

Thus far there has been minimal physical displacement impact caused by the Project. All future land acquisition will remain within the lava field and so it is not expected to impact directly on farmers. However, there may be limited physical displacement due to noise impacts. Under a scenario of additional noise-induced physical impact, the compensation process will align with Proclamation 1161/2019. All future compensation must provide monetary compensation for constructing a new structure without depreciation in accordance with the Entitlements Matrix in Section 6.7.1 as well as allowances to cover relocation and transaction costs, and financial management training.

It is also proposed that impacted PAPs be supported in replacing their homes through an assisted self-build programme, as described below.

7.3.2 Assisted Self-Build

The aim of an assisted self-build approach to replacement housing is to ensure PAPs can use their compensation to build or purchase a new home in a way that is supported by the Project. This approach is considered to be suitable given physical displacement impacts are predicted to be minimal, allowing individual PAPs to be supported on a one-to-one basis. It acknowledges that

while the Woreda is responsible for paying compensation, monitoring support should be provided by the Project.

The assisted self-build process will entitle all physically displaced households to be assisted by the Project to find suitable replacement land within their Kebele to build a new house, or to find a suitable existing house to purchase and renovate to achieve acceptable standards for a basic structure.

Replacement Plot

For those seeking to choose or purchase a new plot of land to build a new house, plots must be chosen within the following guidelines:

- the location must be within their existing village or on land that they already own;
- the location must comply with any Kebele or Woreda planning requirements;
- the location must be accessible to a building contractor; and
- the soil and terrain must be suitable for the building.

The PAP will be responsible for paying for replacement land using the cash compensation that is included in the compensation for landed properties.

Self-Build Support Package

Self-build support from the Project will include:

- assistance for any impacted vulnerable PAPs with planning, scheduling and budgeting for self-build or renovation;
- vetting contractors to ensure they comply with local building standards and requirements;
- technical oversight during implementation / construction;
- monitoring progress.

Each PAP will receive cash compensation sufficient for households to rebuild “basic structures” of a similar or preferred structure that offers improved living conditions. Due to the risk in compensation funds being diverted to other pressing needs, PAPs, and particularly vulnerable PAPs, will be closely monitored to ensure their compensation is utilised to replace their house.

The compensation will be calculated based on the rate of a “basic structure” as new, regardless of the eligible structure’s existing quality. All households losing residential dwelling will additionally receive allowances in accordance with the Entitlements presented in Chapter 6.

All PAPs will be entitled to financial management training to support them in managing their compensation as presented in Chapter 8.

8. LIVELIHOOD RESTORATION

8.1 Introduction

This livelihood restoration chapter outlines measures to support livelihood restoration outcomes for households affected by the Project. Unlike the asset valuation process, livelihood restoration will be the sole responsibility of TMGO. The measures presented aim to complement the compensation measures provided within the entitlements matrix in Table 6.3. The desired outcome is for households to restore their livelihoods to pre-displacement levels, and where feasible, promote improved sustainable livelihoods. A sustainable livelihood is one that can withstand challenges and recover swiftly from shocks and stresses, such as those associated with displacement impacts.

The livelihood restoration programme is designed to respond to anticipated economic impacts from the Project land take and the difficulties that households may face in restoring their livelihoods with the cash and in-kind compensation that will be provided. The objectives of livelihood restoration and the key principles underpinning a sustainable livelihood are described below. The remainder of this Chapter sets out the livelihood restoration programme elements.

8.2 Rationale

In devising a livelihood restoration programme, it is important to consider the context and nature of displacement and the opportunities open to affected households. It is recognised that the majority of households are losing a small percentage of their agricultural land (less than 10%). However, farming is the primary livelihood activity for affected households, and agriculture and livestock rearing are the main sources of food and income security for affected households. Consequently, the focus of the livelihood restoration plan is to support households to quickly re-establish improved agricultural (both crop and livestock) activities.

As described in Section 3.1.5, the livelihood restoration measures outlined below were developed in close consultation with all 146 PAHs. This commenced during census and socio-economic surveys, when each PAH was asked about the type of support they would like to receive. Ongoing consultations have helped the Project to finalise a suite of options for livelihood restoration presented below in Section 8.4. Going forward, TMGO will be conducting catered livelihood assessments during LRP implementation and monitoring to ensure options adequately match PAH needs. This will feed in to monitoring and adjustments will be made based on revised survey and monitoring results.

Beyond the main agricultural support program, certain households may require additional tailored assistance. These will include vulnerable households and households that are losing between 20% to 30% of their land holding.

8.3 Eligibility

All affected households losing farmland, grassland and trees or shrubs are entitled to some form of livelihood restoration support. Households classified as vulnerable will benefit from additional "ring-fenced" support.

8.4 Livelihood Restoration Programme

8.4.1 Programme Objectives

TMGO has devised a livelihood restoration programme with specific objectives that include:

- To enable households to improve their sustainable livelihood and economic wellbeing;
- To improve market access for impacted households; and

- To improve income generation opportunities and financial management.

The programme focuses on capacity building but also includes the provision of some inputs for PAHs to support their livelihoods. Each objective will be met by a series of activities that fall within the four core themes of the programme: inputs, equipment access and infrastructure, strengthening external relationships, training for PAHs, and the establishment of farm associations. Programme objectives, activities and themes are illustrated in Figure 8.1. Activities are summarised in the rest of this Chapter. An implementation schedule is presented in Chapter 9.

TMGO has included a programme of monitoring and evaluation for the RAP & LRP. This is described further in Chapter 9 and includes provisions for internal and external monitoring.

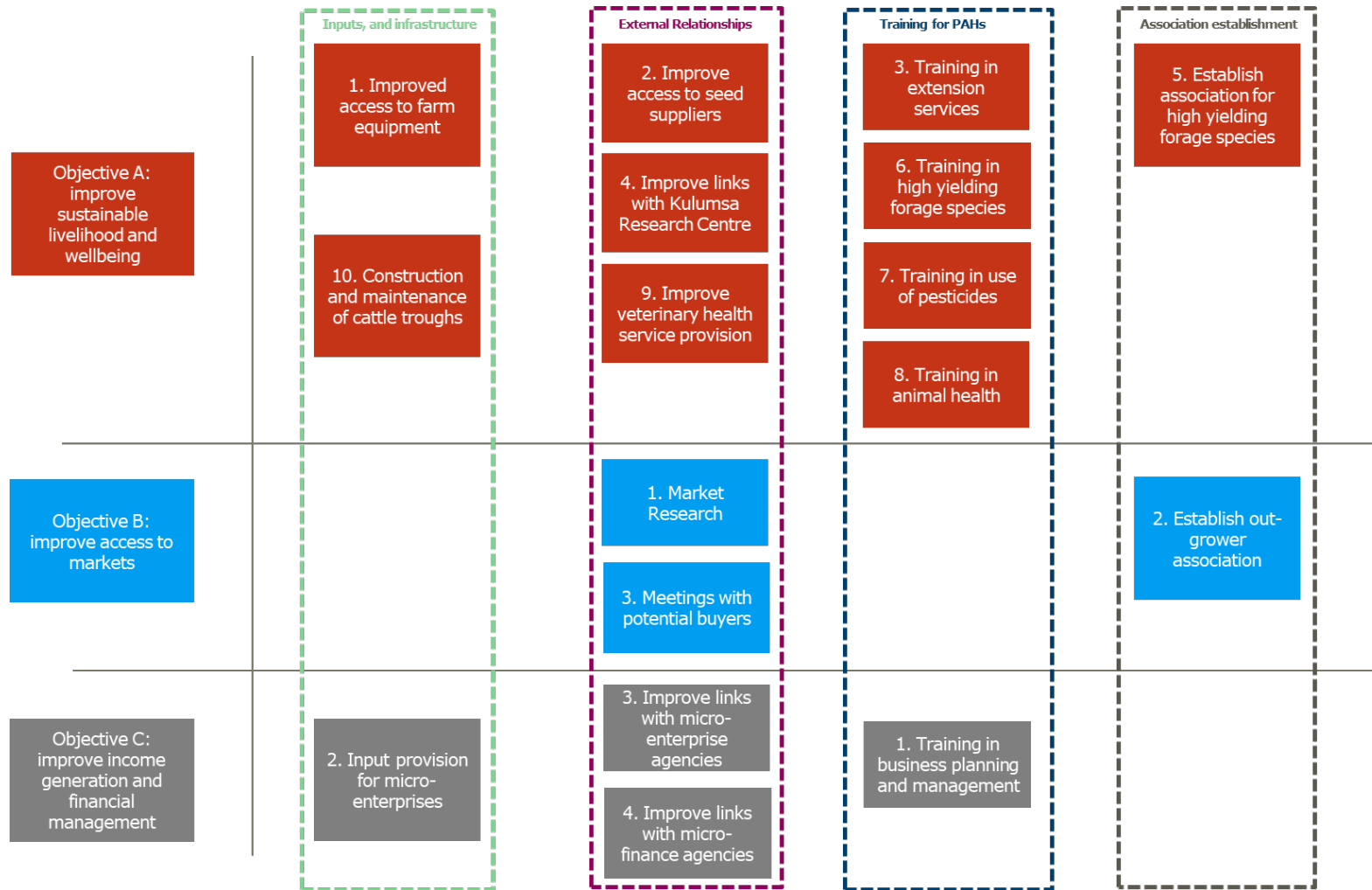


Figure 8.1 Livelihood Restoration Programme

8.4.2 Objective A: Households improve their sustainable livelihood and economic wellbeing

The baseline indicates the importance of crop production amongst PAHs, where the many challenges faced by PAHs were sited as crop disease, sufficient water availability, struggles to purchase inputs, and pests and weeds. The baseline also indicates the importance of livestock keeping as an important source of capital that can provide cash income in times of household shock or hardship, or where urgent cash may be needed. Households sited their livestock management challenges including a lack of grazing land, inadequate water supply for livestock and poor animal health.

Conflict over water is a risk identified by the Project and this will partly be resolved through a separate programme and the implementation of the Project Sustainable Water Monitoring Plan. However additional measures for cattle watering points have been included within the Objective A programme.

Following consultation with PAHs, TMGO has designed a programme of activities to support the economic wellbeing of affected households, which is summarised below.

1. Improved access to farm equipment

Local farmers in the Project area typically rent large machinery and equipment such as tractors and combines to support their harvest. The LRP aims to reduce waiting times for PAHs by facilitating direct access to businesses renting equipment. TMGO will arrange meetings with at least three renting companies to identify how access to equipment can be expedited. PAHs will be given the opportunity to participate in meetings so that they also have direct contact with renting companies and can agree on arrangements for improving their access to equipment. TMGO will facilitate and continue to monitor and liaise with renting companies as required.

Key activity: TMGO will arrange separate meetings with three equipment rental businesses. Rental businesses had not been identified at the time of writing this LRP and will be identified by TMGO as the LRP is being implemented.

Timeframe: initial support will be provided during the first quarter of the programme with ongoing support in years 2 and 3.

Key inputs: TMGO will arrange all logistics for the meetings. This will be provided as part of TMGO administration costs.

Vulnerable households: TMGO will pay close attention to vulnerable PAHs requiring specific support with renting equipment. They will work with these PAHs to facilitate direct communication with the renting companies.

2. Facilitate improved access to seed suppliers

TMGO will organise at least eight meetings and three visits to the Project area by suppliers of improved / high yielding seeds. Wheat and barley are the most popular seeds in the Project area and so these crops will be the focus of the programme. Suppliers will include agricultural research centres, seed enterprises, farmers unions and seed producing farmers. All PAHs can participate to strengthen access to these companies and enhance their opportunity to purchase improved seeds.

Key activity:

- TMGO will choose the best seed producers able to supply PAHs in consultation with PAHs and will include Kulumsa Research Centre as well as seed enterprises, farmers unions and seed producing farmers.

- TMGO will arrange three separate visits to the Project area by these seed producers to meet with PAHs. During these visits, a minimum of eight meetings will be held with groups of farmers to ensure smaller groups have direct access to seed producers to discuss their needs.

Timeframe: This activity will be undertaken in Quarter 2 and 3 of programme implementation.

Key inputs: TMGO will cover the cost of meetings to the Project area. This activity will be covered under the LRP administrative budget. The main purpose of this activity is to ensure PAHs have direct links with seed producers, which was a priority for PAHs.

Vulnerable PAHs: TMGO will ensure that vulnerable PAHs can participate in at least one of the eight meetings being held to ensure they have access to suppliers of improved seed varieties. Meetings will be held in within impacted Kebeles to ensure ease of access.

3. Provision of extension services training

TMGO will facilitate extension services and training for all PAHs. Extension providers will include Kulumsa Research Centre and the woreda agriculture office. TMGO will arrange an initial planning meeting with Kulumsa Research Centre and an initial training document will be prepared. It is assumed that eight extension staff will provide training in the four affected Kebeles. One training session will be run in each affected Kebele and targeted to all PAHs. Training will be led by Kulumsa Research Centre while PAHs will also receive ongoing support from the woreda agriculture office monitored by TMGO.

Key activity: TMGO will set dates with Kulumsa Research Centre in consultation with PAHs for training to be delivered. PAHs will be notified of the agreed dates and requested to sign up for one of the dates. Kulumsa Research Centre will be required to prepare a bespoke 4-day training programme for PAHs and deliver this training in each of the Kebeles.

Timeframe: Training will be spread across the three-year LRP programme.

Key inputs:

- TMGO will cover the costs for two experts to prepare the training documentation.
- TMGO will cover the costs for 8 extension workers to deliver the programme in each affected Kebele.
- TMGO will cover the costs for refreshments for participants.
- TMGO will arrange a venue with the woreda.

Vulnerable PAHs: TMGO will ensure that vulnerable PAHs have the opportunity to attend at least one extension training session. Training will be located in Kebeles to ensure they are accessible to vulnerable PAHs.

4. Established link with Kulumsa Research Centre

TMGO will also facilitate a wider one-day conference with Kulumsa Research Centre for up to 25 PAHs. The purpose is to strengthen direct dialogue between PAHs and Kulumsa Research Centre. This will be an opportunity for farmers to have a wide-ranging discussion / workshop on how to strengthen their overall farming practice.

Key activity: TMGO will arrange a one-day conference / workshop at Kulumsa Research Centre facilities. A maximum of 25 participants will be invited to attend based on interest and need. Participants will be chosen in consultation with PAHs.

Timeframe: Engagement with Kulumsa Research Centre and other potential seed providers will commence immediately and will be followed up in year 2 of the programme.

Key inputs: TMGO will cover the cost of 25 participants to attend the session at Kulumsa Research Centre including per diems for participants, lunch and refreshments and transport.

5. *Establishment of an association for the production of high yielding forage species*

TMGO will convene a group of farmers from PAHs interested in producing high yielding forage seed to support livestock rearing. This group will be provided with high yielding seedlings, to be purchased by TMGO, enabling them to specialise in seedling production to sell to local farmers and the wider market. This newly established association will also benefit from training in forage production (see activity 6 below). The objective is to ensure a supply of high yield forage seed for the Project area while generating additional income for interested farmers.

Key activity:

- TMGO will consult with PAHs to identify those interested in joining an association for the production of forage seed to the local area and potentially the wider market. Community Liaison Officers (CLOs) will provide ongoing support to the association. The association will also benefit from training offered in activity 6 below as well as from training offered under Objective C.
- TMGO will purchase high yielding seedlings to help the association to start their business.

Timeframe: Facilitation will commence in the third quarter of programme implementation and ongoing support provided throughout the LRP programme.

Key inputs: TMGO will purchase 25 quintals (2,500 kg) of high yield seedlings for the farming association to support their establishment.

Vulnerable PAHs: TMGO will allocate 2 quintals of high yield seedlings purchased to distribute to vulnerable PAHs whose grassland has been impacted by the Project.

6. *Provision of training in high yielding forage species*

In addition to the association established to produce high yielding forage seed within the Project area, TMGO will also facilitate training to all PAHs within the four affected Kebeles. As with extension training, it is assumed that eight staff will provide training in the four affected Kebeles. One training session will be run in each affected Kebele and targeted to all PAHs. Training will be conducted by Kulumsa Research Centre and each training will be conducted over a four-day period. These training sessions will be targeted to all PAHs and PAHs will receive ongoing support from the woreda agriculture office monitored by TMGO.

Key activity: TMGO will set dates with Kulumsa Research Centre in consultation with PAHs for training to be delivered. PAHs will be notified of the agreed dates and requested to sign up for one of the dates. Kulumsa Research Centre will be required to prepare bespoke 4-day training programme for PAHs and deliver this training on four separate occasions in each of the Kebeles.

Timeframe: Training will be spread across the three year LRP programme.

Key inputs:

- TMGO will cover the costs for two experts to prepare the training documentation.
- TMGO will cover the costs for 8 extension workers to deliver the programme in each affected Kebele.
- TMGO will cover the costs for refreshments for participants.
- TMGO will arrange a venue with the woreda.

Vulnerable PAHs: TMGO will ensure that vulnerable PAHs have the opportunity to attend at least one training session. Training will be located in Kebeles to ensure they are accessible to vulnerable PAHs.

7. Provision of training in the use of pesticides

TMGO will also contract Kulmusa Research Centre to deliver training on the safe use of pesticides, including information on their environmental and health impacts. Training provision will follow the same format as the extension training and training in high yielding forage species. One training session will be run in each affected Kebele and targeted to all PAHs and PAHs will receive ongoing support from the woreda agriculture office monitored by TMGO.

Key activity: TMGO will set dates with Kulumsa Research Centre in consultation with PAHs for training to be delivered. PAHs will be notified of the agreed dates and requested to sign up for one of the dates. Kulumsa Research Centre will be required to prepare a bespoke 4-day training programme for PAHs and deliver this training on four separate occasions in each of the Kebeles.

Timeframe: Training will be spread across the three-year LRP programme.

Key inputs:

- TMGO will cover the costs for two experts to prepare the training documentation.
- TMGO will cover the costs for eight extension workers to deliver the programme in each affected Kebele.
- TMGO will cover the costs for refreshments for participants.
- TMGO will arrange a venue with the woreda.

Vulnerable PAHs: TMGO will ensure that vulnerable PAHs have the opportunity to attend at least one training session. Training will be located in Kebeles to ensure they are accessible to vulnerable PAHs.

8. Capacity building for the local veterinary centres

Animal health service provision was a critical issue identified by PAHs. Therefore, TMGO will provide support to two local veterinary centres / clinics to improve the service they offer to PAHs and others in the Project area. TMGO will seek feedback from PAHs and will work with the two local veterinary centres / clinics to identify their two key priorities / needs for capacity support. Support will be restricted to capacity training and skills development within the two priority areas identified and will not include inputs such as medicines, vaccines or equipment.

Key activity: TMGO will organise meetings with two local veterinary centres to discuss their priorities for capacity development. TMGO is still in the process of confirming the participating veterinary centres. Discussions will be informed by the needs of PAHs and the types of services they believe are limiting in the Project area. TMGO will then fund training for the centres to develop their capacity in the chosen area.

Timeframe: Engagement with local veterinary centres will commence in the second quarter of programme implementation and training provided in year 1 and year 2 of the LRP programme.

Key inputs: TMGO will cover the cost of training / development up to a ceiling of USD 5,000 per clinic.

9. Provision of training on animal health and available treatments

TMGO will facilitate training targeted to all PAHs on animal health and treatment. The training will be conducted over a four-day period and include one day for practical application. Training will be provided in each of the four affected Kebeles. As with other training sessions, one training session will be run in each affected Kebele and targeted to all PAHs. Training will be provided by local veterinary clinics.

Key activity: TMGO will set dates with a chosen local veterinary clinic (final choice had not been made at the time of writing this RAP & LRP (Rev 2) in consultation with PAHs for training to be

delivered. PAHs will be notified of the agreed dates and requested to sign up for one of the dates. The veterinary clinic will be required to prepare a four-day training programme for PAHs and deliver this training in each of the Kebeles.

Timeframe: Training will be spread across the first two years LRP programme.

Key inputs:

- TMGO will cover the costs for two experts to prepare the training documentation.
- TMGO will cover the costs for the local veterinary clinic to deliver the programme in each affected Kebele.
- TMGO will cover the costs for refreshments for participants.
- TMGO will arrange a venue with the woreda.

Vulnerable PAHs: TMGO will ensure that vulnerable PAHs have the opportunity to attend at least one training session. Training will be located in Kebeles to ensure they are accessible to vulnerable PAHs.

10. Improvement of cattle watering points

Access to water for households and livestock is another critical issue cited by local PAHs. TMGO will construct three new watering troughs for livestock to expand water access. Construction of watering troughs will be undertaken nearby existing water points, where water can be piped direct to the trough. TMGO will also repair / maintain up to two existing watering points and troughs.

Key activity: TMGO will procure the services of a contractor to construct three new watering troughs and to repair two existing troughs. TMGO will consult with PAHs on the best locations for the new troughs and to identify priorities for repairs.

Timeframe: Works will commence in the second quarter of the LRP programme and will continue for up to 18 months.

Key inputs: TMGO will cover all costs for construction of new troughs and repair / maintenance of existing troughs.

8.4.3 Objective B: Improved market access for impacted households.

The baseline indicates that many households would like to improve their farm incomes and identify buyers for their products. This objective will support farmers in linking with potential buyers. One of the challenges for smaller farmers is delivering the quality and quantity of produce required by larger buyers. TMGO will facilitate an association to enable farmers to provide quantity, while quality will be supported by the capacity building provided under Objective 1.

1. Undertake market research

TMGO will undertake research on potential buyers within a 50 to 100 km radius of the Project area to identify potential buyers of agricultural crops and other products produced by PAHs. These include food processing companies on the outskirts of Adama, who are identified as key potential buyers. TMGO will be supported by the woreda agriculture departments and by the Trade and Industry Offices of both Arsi Zone and East Shewa Zone. A list of potential buyers will be generated. This research will underpin other activities supporting Objective B.

Key activity: TMGO will meet with the woreda and zone officials to identify potential buyers, particularly in and around Adama. TMGO will also contact each potential buyer to confirm their activity, capacity and willingness to visit the Project area.

Timeframe: This will be undertaken in the first quarter of programme implementation.

Key inputs: no additional input is required by TMGO other than administrative time to undertake this task by the TMGO team and covered under the administration budget.

2. Establish an out-grower association

TMGO will facilitate the establishment of an out-grower association to be able to meet the volume of produce required by buyers identified in activity 1. TMGO will also liaise with buyers to understand their needs. Based on discussions with buyers, TMGO will shortlist three buyers to work with the out-grower association to establish the quantity and quality of produce that could be purchased from the association. Once shortlisted, TMGO will visit these buyers to establish a link between buyers and the Project area.

Key activity:

- TMGO will identify farmers who wish to join an out-grower association for the production of key crops to be sold on to identified buyers.
- The association will benefit from training provided under Objective A and Objective C and will receive ongoing support from CLOs as well as the woreda agriculture office, monitored by TMGO.
- TMGO will short list buyers based on the outcomes of Activity 1 above. TMGO will then arrange meetings with three short listed buyers and visit their sites / locations.

Timeframe: Facilitation of an out-grower association will commence in quarter 3 of the programme with support and monitoring continuing for two years.

Key inputs: no additional input is required by TMGO other than administration time and costs to visit the three shortlisted buyers. Ongoing CLO costs are also considered administration costs. These costs will not be part of the LRP programme.

Vulnerable PAHs: TMGO will work with vulnerable PAHs and enable them to join the association to improve their opportunities for selling to identified buyers and to reduce risk associated with their farm-based livelihood.

3. Organise meetings with potential buyers

Once potential buyers have been identified and meetings held, TMGO will arrange for 25 participants to visit buyers. Participants will include members of the newly formed out-grower association. Separate meetings will be held with each of the three shortlisted buyers. It is expected that quantity and quality of produce will be discussed. Extension and other training provided as part of Objective A will support the capacity building of PAH and the association in providing the quality required by potential buyers. TMGO will monitor progress and identify work with buyers and farmers to address any challenges faced by farmers in providing the necessary produce.

Key activities: TMGO will confirm dates for PAHs to visit the three shortlisted buyers. Dates will be arranged in consultation with PAHs and the out-grower association.

Timeframe: Meetings with potential buyers will commence in quarter 2 of the programme and continue for two years.

Key inputs: TMGO will cover the cost of per diems, refreshments, logistics and accommodation for buyers to visit and for farmers to participate in the conference / meetings.

8.4.4 Objective C: Establish or improve income opportunities and financial management

The baseline indicates that PAHs aspire to diversify their livelihoods through alternative income generating activities. Support for small business shall, where feasible, focus on existing livelihoods, where value-added training compatible with the local economy can be offered.

TMGO will work with agencies including the Small and Micro Enterprise Development Office, the Cooperative Bank of Oromia and the Oromia Credit and Saving Association to deliver training within this Objective.

1. Provide training on business planning and management

TMGO will facilitate two 1-day training sessions on business planning and management with a focus on agricultural processing and seed multiplication. This will be targeted to all PAHs who wish to establish a micro-enterprise but also to the associations established for high yield seed provision / multiplication (established under Objective A) and the out-grower association (established under Objective B). Training will be provided in a central location in the Project area. The first training will focus entirely on business planning and management for up to 30 participants, while the second training will focus on business management for agricultural processing and seed multiplication for up to 60 participants, building on training provided under Objective A. Each training will be conducted twice.

Key activities:

- TMGO will complete due diligence of potential service providers for training delivery and procure their services.
- Dates for training will be set in consultation with PAHs and the two associations established as part of Objectives A and B.
- The service provider will submit a programme for training to be reviewed by TMGO and representatives of the two farming associations.
- The service provider will deliver two separate training programmes lasting one day each. Each training will be delivered twice. They will provide participants with relevant materials for the training.

Timeframe: Training will be run in quarter 2 of year 1 and year 2 of the programme.

Key inputs: TMGO will cover the cost of the service provider to run the training sessions as well as per diems for up to 60 participants for the agricultural processing training and up to 30 participants for the business planning training.

Vulnerable PAHs: TMGO will encourage vulnerable PAHs to attend training sessions, either as individuals or preferably, as part of an association that they have joined. Vulnerable PAH costs for attendance where this is outside their village will be covered along with all other PAHs who attend.

2. Support for business enterprise establishment

TMGO will support interested farmers to establish business enterprises that link directly with agricultural processing and high yield seed multiplication. For the out-grower association and individual enterprises, TMGO will provide inputs including operational support, wheat seed (for 15 ha) and forage seedling (for 15 ha). For cattle or poultry farming, TMGO will offer operational support as well as inputs such as chickens and other inputs. There will be an upper ceiling of USD 58,000 for input provision.

Key activities:

- TMGO will meet with individual PAHs or groups of PAHs as relevant to identify those interested in establishing small businesses or those with small businesses that need additional support. Discussions will commence with individual PAHs as soon as LRP implementation commences to discuss the LRP programme and opportunities for each PAH within that programme. At this stage, those PAHs interested in establishing small enterprises (and those wishing to join one of the two associations) will be identified.
- Discussion with interested PAHs will be ongoing to confirm their interest level following the delivery of training programmes provided through Objective A. Discussions with those interested in joining an association will also be ongoing while the associations are being established..
- Interested PAHs will be given the opportunity to specify their needs to support their enterprise (whether new or existing). Support will be prioritised for micro enterprises that link directly with the wider programme.
- TMGO will monitor the use of inputs by micro-enterprises.

Timeframe: This activity will commence in quarter 4 of the LRP programme.

Key inputs: TMGO will procure inputs to support micro-enterprises such as seed and other inputs to support livestock.

Vulnerable PAHs: TMGO will allocate at least USD 6,000 for support directly to vulnerable PAHs to support them with additional inputs such as seed, equipment and livestock. The support provided will be based on individual discussions with vulnerable PAHs and will be determined by their individual needs and priorities.

3. Establish links with micro-enterprise agencies

TMGO will facilitate links between farmers and micro-enterprise agencies to support established and existing enterprises in their value adding activities.

Key activity: TMGO will arrange meetings between micro-enterprises and agencies to ensure local micro-enterprises have access to additional support beyond the LRP.

Timeframe: This activity will commence in quarter 4 of the LRP programme.

Key inputs: TMGO will share contact details and facilitate meetings / dialogue. This will be covered as an administration cost.

4. Establish links with micro-finance

TMGO will facilitate links between farmers and micro-finance agencies to support established and existing enterprises in accessing finance to support their businesses.

Key activity: TMGO will arrange meetings between micro-enterprises and micro-finance to ensure local micro-enterprises have access to additional credit beyond the LRP.

Timeframe: This activity will commence in quarter 4 of the LRP programme.

Key inputs: TMGO will share contact details and facilitate meetings / dialogue. This will be covered as an administration cost.

8.5 Support for Vulnerable Households

TMGO will offer tailored support to vulnerable PAHs based on their specific needs. This will involve holding meetings and regular monitoring of each household identified as vulnerable to ensure they are not falling behind in terms of livelihood restoration. To support monitoring, TMGO will maintain a record of all households identified as vulnerable. It should be noted that while the data indicates up to 53 vulnerable households have been impacted by the Project,

further one-to-one meetings are still required to ascertain the extent of vulnerability and the challenges these PAHs may or may not have in restoring their livelihood to pre-impact levels. These meetings will confirm which households need additional support and monitoring. Engagement will commence when TMGO commences engagement on livelihood restoration options.

TMGO will also provide specific inputs to those households identified as vulnerable as described above in Section 7.4. TMGO has provisionally set aside or reserved funds within the budget for high yielding seedlings and micro-enterprise support to ensure vulnerable PAHs have the opportunity to benefit. However, these households will only receive preferential / targeted support if meetings and close monitoring indicate they will struggle to restore their livelihoods. Support can be summarised as follows:

- Vulnerable PAHs will be encouraged to attend the various training programmes on offer for PAHs. CLOs will specifically engage with vulnerable PAHs on the benefits of these training programmes to support their livelihoods.
- PAHs will also be encouraged to join the out-grower association and / or the association for the production of high yield forage seedlings.
- TMGO will set aside up to 2 quintals of high yield forage species to specifically target vulnerable PAHs to plant on their remaining grassland.
- TMGO will set aside up to USD 6,000 from the total budget to directly support PAHs with the purchase of inputs such as seed, equipment and livestock, particularly to support them in establishing micro-enterprises.

Vulnerable PAHs will be able to participate in the wider LRP programme targeted to all PAHs. These specific measures aim to ensure that vulnerable PAHs do receive some direct support for their livelihoods and close monitoring.

8.6 Transition Support

The current benchmark in Ethiopia is to provide transition support to all PAPs losing more than 25% of their land. The majority of PAHs (92%) impacted by the Project lost less than or equal to 10% of their land holding. None of the 146 PAPs fell within this threshold although two PAHs have lost greater than 20% of their landholding. TMGO has engaged with these households (as with other households considered to be vulnerable) to discuss livelihood restoration measures and to ensure they are not struggling as a result of the loss of their land. This engagement is ongoing.

Transition support will be offered to all PAPs affected by future land acquisition, where land take is greater than 25% of their land holding, aligned with current practice in Ethiopia. All PAPs will receive targeted livelihood restoration support regardless of whether they are entitled to transition support.

8.7 Supporting Agencies

TMGO has already identified supporting agencies and implementing partners as described in Section 7.4. These agencies include:

- Kulumsa Research Centre;
- Woreda agriculture office;
- Trade and Industry Offices of Arsi Zone and East Shewa Zone;
- Small and Micro Enterprise Development Office;
- Cooperative Bank of Oromia; and

- Oromia Credit and Savings Association.

More detail on supporting agencies is provided in Chapter 9.

TMGO is still liaising with other agencies and institutions to confirm potential buyers and providers of key inputs and services. These include:

- Additional seed enterprises, farmers unions and seed producing farmers to source additional high yielding seed.
- Two veterinary clinics / centres to participate in the capacity building programme are still to be chosen by TMGO
- Potential buyers of farm produce are to be shortlisted as part of the programme.

The roles of these agencies and institutions is included in the summary of activities in Section 7.4.

9. IMPLEMENTATION

9.1 Introduction

Implementation of the RAP & LRP will focus primarily on livelihood restoration, which is the responsibility of TMGO, however TMGO will also be responsible for supporting and monitoring physically displaced PAHs. Chapter 7: Physical Displacement and Chapter 8: Livelihood Restoration provide an overview of the Project's support programme. This Chapter describes additional steps required to implement the RAP & LRP. In particular, it sets out the institutional framework required for implementation, stakeholder engagement requirements, grievance management, schedule and budget.

9.2 Institutional Framework

9.2.1 Resettlement and Livelihood Restoration Coordination Group

The valuation and compensation process must be led by the Woreda Compensation Committee, which oversees asset valuation and payment of compensation, and includes woreda and kebele representation. However, TMGO must also establish a Resettlement and Livelihood Restoration Coordination Group (RLRCG) or similar body that can act as an interface between affected households and the implementation of the livelihood restoration process. The RLRCG should bring together key members of TMGO's implementation team with community representatives on a regular basis to ensure challenges with implementation can be identified quickly and necessary adjustments made. It is expected that the RLRCG responsibilities include the following:

- coordinating and overseeing livelihood restoration implementation and all those participating in it;
- interfacing with TMGO in relation to livelihood restoration programme options;
- interfacing with TMGO in relation to self-build support offered to physically displaced PAHs;
- acting as an interface for receiving grievances and feeding grievances to TMGO;
- conflict resolution and alerting TMGO and Woreda officials if there are issues that cannot be resolved or emerging issues and trends; and
- discussing the results of monitoring and evaluation activities and agreeing modification as required.

Initial focus of the RLRCG will be on livelihood restoration unless physical displacement becomes unavoidable. Interfacing with TMGO on physical displacement activities will then commence as part of the RLRCG responsibilities.

Members of the RLRCG can include the following representatives:

- women and men representatives from PAHs of each affected kebele;
- OFWE representative;
- TMGO representatives;
- TMGO supporting agency representatives (Kumulsa Research Centre and / or Cooperative Bank of Oromia);
- Woreda agriculture office representative; and
- Kebele and woreda administration representatives.

Kebele and Woreda officials will be requested to participate to keep them informed of the livelihood restoration process and to seek support as required (ie through the provision of extension services). The RLRCG will meet monthly in the first six months of the livelihood

restoration programme, when the majority of activities will be initiated, and then quarterly to review progress.

Should there be plans for physical displacement, the RLRCG will organise specific meetings to review the approach with TMGO and initiate monthly meetings to focus entirely on physical displacement. This will also include the procurement of a third party, including consultant / NGO services to lead on resettlement planning and support implementation if this support is required.

9.2.2 Supporting Agencies

Physical Resettlement

Houses for PAHs will be constructed by an external contractor. For all future physical displacement, TMGO will vet all bidding contractors to ensure they comply with local building standards. TMGO will also provide technical oversight during implementation / construction.

Further details on the self-build support package is provided in Chapter 7.

Livelihood Restoration

Livelihood restoration implementation will be supported by various agencies. These are briefly outlined below.

- Woreda agriculture office;
- Trade and Industry Offices of Arsi Zone and East Shewa Zone;
- Small and Micro Enterprise Development Office;
- Cooperative Bank of Oromia; and
- Oromia Credit and Savings Association.

Kulumsa Agriculture Research Centre

Kulumsa Agriculture Research Centre will be a key partner in the implementation of livelihood restoration, providing support to TMGO and PAPs in the following activities:

- facilitating access to improved seed supply;
- provision of extension services;
- provision of training in high yielding crop and fodder ; and
- provision of training in the use of pesticides.

The Centre was established in 1966 by the government of Ethiopia and the Swedish International Development Agency (SIDA) and collaborates with a wide range of development agencies, including German Development Cooperation (GIZ), which supported upgrading their training centre recently. The Centre is the body mandated to undertake research in wheat, malt barley and highland pule crops and serves as the Wheat Centre of Excellence for East Africa covering Ethiopia, Kenya, Uganda and Tanzania. The Centre has extensive experience in supporting rural communities and the livelihood restoration programme implemented by TMGO aims specifically to establish links between impacted PAPs and the Kulumsa Research Centre, providing PAPs access to the extensive knowledge and support base available.

Cooperative Bank of Oromia

The Cooperative Bank of Oromia has already supported the project in financial management training. This was held in April, 2019 as part of the compensation payment process. TMGO will maintain links with the Cooperative Bank, which was established in 2004 and started operating in March 2005. The Bank now has branches spread across all zones in Oromia Region, making it accessible to PAPs. They have a range of account options (including single women and youth

savings accounts) and have experienced personnel able to support PAPs in financial management and SME management.

Oromia Credit and Savings Association

The Oromia Credit and Savings Association is a micro finance institution, and as an alternative to the Cooperative Bank of Oromia, it is equally well placed to provide financial management and SME business support to PAPs. It emerged in 1996 as a rural project scheme to provide micro finance support to farmers in Oromia Region. The Savings Association provides a range of loan projects for agribusiness financing, SME loans, women entrepreneur loans as well as a range of savings services. It was inspired by the success of the Grameen Bank and set up specifically to support training and capacity building in the financial management of rural households. As with the Cooperative Bank of Oromia, this institution has the necessary capacity to support the Project's livelihood restoration programme.

Government Support

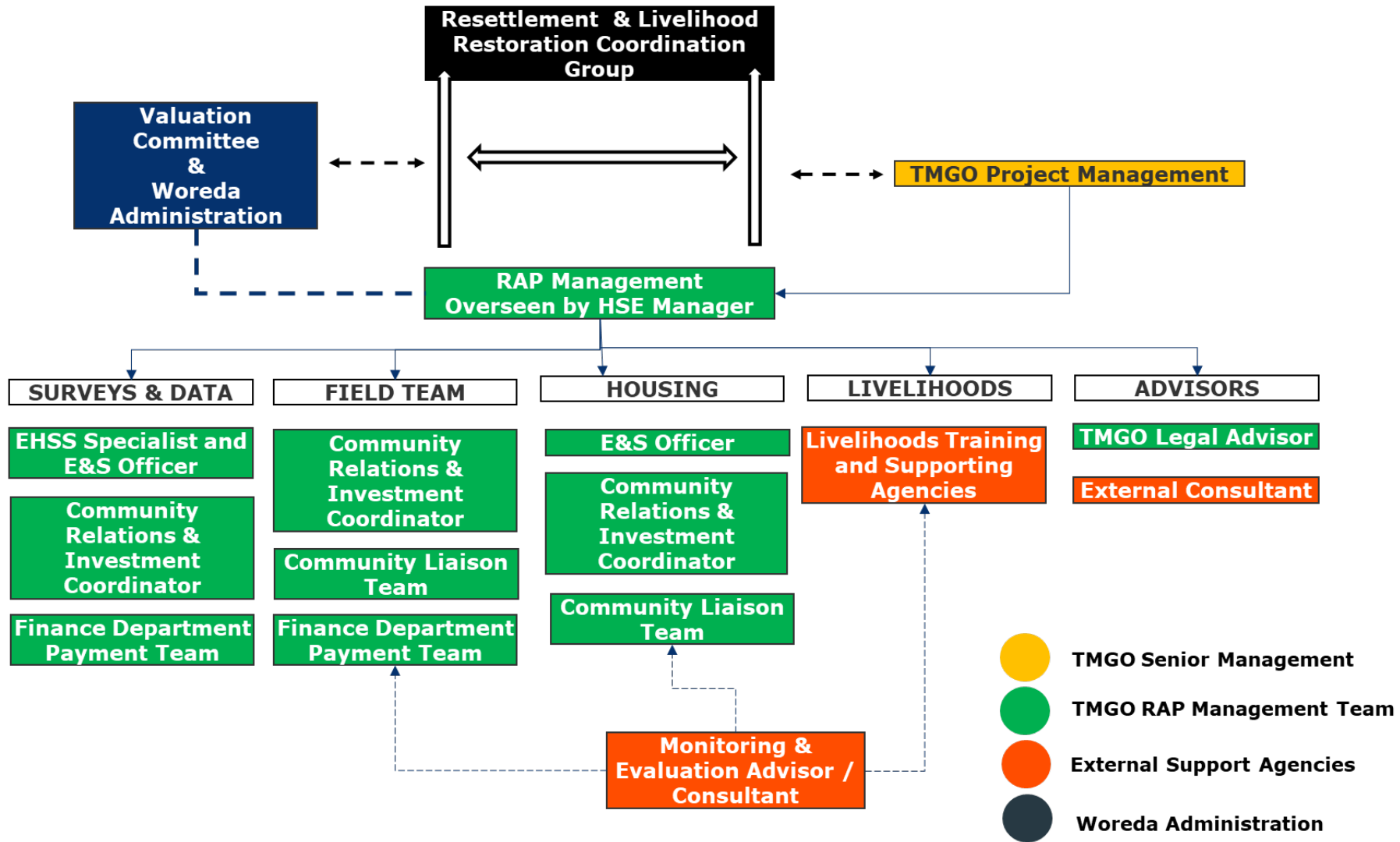
While TMGO will work closely with external partners, TMGO will continue to liaise with the Woreda offices and the Trade and Industry Offices of both Arsi and East Shewa Zones. Capacity in these departments will be constrained however TMGO will work with them to ensure access to regular extension services and in identifying potential buyers of key agricultural products. These offices do have the capacity to enhance / build on the technical support provided by Kulumsa Agriculture Research Centre.

9.2.3 Capacity Building

Capacity building may be required for the community representatives and other representatives on the RLRCG, in order to ensure that the Group understands its role. This may be completed through a simple half-day workshop facilitated by TMGO Community Liaison staff with support from their supporting agencies. Supporting agencies have extensive experience in capacity building and institutional development for both financial and project management.

9.3 Project Implementation Team

The Project implementation team is made up entirely of TMGO personnel. The Project Implementation Team forms the core part of the RAP and LRP institutional framework, interacting directly with the Woreda Administration and the RLRCG. This Structure is illustrated below and incorporates both physical resettlement and livelihood restoration requirements.



The Implementation Team includes the following roles / functions listed below. These roles and functions will be performed by the personnel of the existing TMGO HSE team.

- Resettlement and Livelihood Restoration Management: this role will oversee the implementation of the RAP & LRP and ensure it meets its objectives, outlining a plan for livelihood restoration and facilitating the involvement of external parties, including extension services, training facilities, procurement of inputs, etc. This role will be performed by the HSE Manager.
- Data Management the success of the RAP & LRP will be measured against the existing baseline data to ensure PAHs have restored (or improved) their livelihoods and successfully relocated to a new home. Data management is important for maintaining accurate data on household living standards, livelihoods and income to monitor against baseline conditions and support the monitoring and evaluation process. This will be managed by the EHSS Specialist, supported by the Environmental and Social Officer, Community Relations and Investment Coordinator with support from the Finance Department Payment Team.
- Field Team: The Field Team will consist of the Community Relations & Investment Coordinator and CLOs. These will be a regular interface with PAHs on the implementation of livelihood restoration measures and in monitoring PAH replacement of residential structures through the assisted self-build programme. Their role will include following up on the use of inputs, use of training and facilitating necessary access to support and training. With respect to replacement housing, their role may be to support PAPs to identify suitable contractors or secure alternative land plots.
- Replacement Housing: The field team will be supported by the E&S Officer, who will oversee replacement housing.
- Livelihood Restoration: The field team will be supported by external agencies. External agencies will be required to report to the E&S Manager directly and interact closely with the field team.
- Monitoring and Evaluation: as with other roles and functions, the Community Relations and Investment Coordinator will oversee the monitoring and evaluation process, and work with the management team to keep records, incorporate into the data management system and will organise scheduled monitoring and external evaluations by external monitoring and evaluation consultant.

Note that internal roles may not need specific recruitment, however it is important that TMGO assigns these roles to personnel to ensure that there are accountable staff implementing the RAP/LRP. It is expected that the costs associated with their work in implementing the LRP will be covered by the administration budget presented in Section 9.7.

The TMGO implementation team will require support from external agencies and institutions including NGOs, Woreda and Oromia officials and training institutions and local contractors. The implementation team will be responsible for liaising with these agencies, leveraging their expertise and monitoring their deliverables through a procurement process when applicable. External RAP consultancy support may also be required to support future land acquisition activities.

The implementation team will interact with the RLRCG, Valuation Committee and Woreda Administration throughout implementation.

9.4 Implementation Activities

9.4.1 Overview and Schedule for Livelihood Restoration

LRP implementation will require the delivery of the three key objectives and activities presented in Chapter 8: Livelihood Restoration as planned by TMGO. The LRP programme is presented in the high-level schedule in Table 9.1. Additional activities to support LRP implementation are described below. TMGO will prepare quarterly implementation plans detailing key activities and actions required for the quarter. This will include stakeholder engagement, procurement and input provision required for implementation for the quarter. Additional factors to consider are outlined below.

9.4.2 Physical Resettlement Schedule

The schedule outlined in Table 9.1 focuses on livelihood restoration. The resettlement of the one PAH physically displaced is complete and so further work is not required other than inclusion in monitoring. Should future physical resettlement be required, a specific schedule will be created to cover the following actions:

- Engagement to explain the process of resettlement;
- Census and socio-economic surveys to ascertain vulnerability;
- Valuation of impacted assets;
- Disclosure of eligibility and entitlements including cash compensation and livelihood restoration support;
- Individual household sign-off on entitlements;
- Payment of cash compensation;
- Acquisition of new land for housing;
- Support for new housing construction through the supported self-build approach;
- Physical relocation; and
- Monitoring and evaluation.

Table 9.1 Implementation Schedule

Key Activities Planned		Unit of measurement	Implementation Period											
			2021				2022				2023			
			1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
A: Households improve their sustainable livelihood and economic wellbeing														
A1	Improved access to farm equipment including tractors and combines rental companies	No of linkages												
A2	Facilitate improved access to high yield seed suppliers	No of linkages												
A3	Provision of agriculture extension training for farmers	No of trainings per quarter												
A4	Established farmer links with Kulumsa research center and other input providers	MOU												
A5	Establish association for production of high yielding forage species	No of seeds provided												
A6	Provision of training on high yielding forage species	No of trainings per quarter												
A7	Provision of training on pesticide use and impact	No of trainings per quarter												
A8	Improve access to cattle health packages through building the capacity of two local veterinary centres based on the identified needs (maximum two needs addressed)	No of needs addressed												
A9	Provision of training on animal health and available treatment	No of participants												
A10	Improvement of cattle watering points	No of watering points												
B: Improved market access for impacted households		No link established												
B1	Undertake market research	Report												
B2	Establish out-grower association	No of linkages												
B3	Organise meetings with potential buyers	Meeting minutes												
C: Establish or improve income opportunities and financial management														
C1	Provide training on business planning and management	No of participants / 4 training courses												
C2	Support for business enterprise establishment	No of enterprises - at least 2 formed												
C3	Establish links with micro-enterprise agencies	MOU												
C4	Establish links with micro finance providers	MOU												
Monitoring and evaluation														
M1	Monthly and quarterly the performance of the programme with PAPs	Minutes of the meetings												
M2	Quarterly progress report	No of reports												
M3	Internal impact monitoring and data collection	Monitoring reports												
M4	External evaluation	Evaluation report												
Project Administration and Delivery		Service payment												
	Engagement with impacted communities	Minutes of the meeting												
	Engagement with local implementing partners	Minutes of the meeting												

9.4.3 Stakeholder Engagement

The successful implementation of the RAP & LRP requires an ongoing stakeholder engagement programme. Engagement is required to support programme establishment and general oversight through the RLRCG. However additional engagement is built into specific programme activities as outlined in Chapter 8: Livelihood Restoration. This will involve engagement with PAHs as well as implementing partners. To support implementation, TMGO will include stakeholder engagement requirements in their quarterly implementation plans based on the measures outlined in this RAP & LRP Rev. 2, which will outline the engagement to be undertaken by the TMGO implementation team each quarter.

Engagement with RLRCG

Stakeholder Engagement will be required to establish the RLRCG and to implement the grievance mechanism (see below). Engagement to establish the RLRCG will require meetings with kebele and woreda officials as well as with PAHs to explain the purpose of the Group and identify / select members. Once all key members have been identified, a briefing will be provided on the standards underpinning livelihood restoration and the key roles and responsibilities of the group. This will be led by TMGO CLOs through a half-day workshop.

Engagement on LRP activities

Engagement on LRP activities commenced with the census and socio-economic surveys, when PAPs were asked about their initial livelihood restoration preferences. Meetings have also commenced with Kulumsa Agriculture Research Centre. Information on engagement already undertaken with PAPs on livelihood options and choices is provided in Section 3.1.5.

TMGO is now undertaking additional engagement with PAPs to ascertain interest in participation in the various proposed activities. These meetings have been used to inform PAPs about the implementation plan for livelihood restoration, the proposed schedule and collaboration with Kulumsa Agriculture Research Centre. This engagement will be ongoing for the first three months of the programme to ensure PAPs understand the options and to provide PAPs with an opportunity to participate at a later stage, dependent on the activity. While the programme is targeted to all PAPs, some PAPs may choose not to participate. However, TMGO will still be responsible for monitoring the progress of these households, to ensure they are not falling behind or struggling compared to their pre-land take situation. TMGO will encourage all PAPs to participate in some elements of the programme.

PAPs will also be consulted as the programme progresses. For example, participating PAPs will be consulted on dates and venues for training and conferences / meetings being arranged with implementing partners. Engagement with PAPs will also be undertaken in support of monitoring and evaluation activities. In summary, TMGO will hold regular monthly meetings in Kebeles to discuss the LRP and quarterly meetings ongoing throughout the programme to provide updates on livelihood restoration. These will be in addition to targeted meetings on livelihood restoration options activities.

Finally, the TMGO LRP management team will be responsible for engaging with supporting partners and undertaking due diligence on partners still to be identified. TMGO will also undertake engagement with potential buyers, equipment providers and other stakeholders who can support the LRP. This engagement is captured under the specific activities of the LRP programme in Chapter 8: Livelihood Restoration.

General engagement on the RAP & LRP will be held at least quarterly to monitor progress.

Engagement on Physical Displacement

Should physical resettlement be required in the future, engagement must commence as soon as this is confirmed with impacted households. They must be informed of the approach TMGO will

take on resettlement and the provisions of this RAP & LRP. Affected households will also be informed of the grievance mechanism and census / valuation of assets approach. This engagement would be supported by the RLRCG. RAP planning will be undertaken in accordance with this document.

Grievance Mechanism

The grievance mechanism is described in detail in the SEP for the Project (2020 SEP Rev. 4) and incorporates six clearly defined steps commencing with submitting a grievance to TMGO through the following channels:

- During regular /formal /public meetings held with the communities;
- Through consultative forums with woreda experts;
- During any informal meetings;
- Through communication directly with management – for example a letter addressed to site management, or other operational offices;
- By telephone;
- Submission in the community suggestion boxes at the CLO's office(s) in Iteya or in three kebeles (Tero Moye, Anole, Tero Desta); or
- Through the CLO.

The management of grievances related to land acquisition and displacement follows the same process established in the 2020 SEP Rev.4, where once received, grievances are logged, acknowledged and investigated. However, the investigation process for displacement-related grievances is modified. Subject to its complexity and need for external input, the investigation of the grievance may include participation by the RLRCG to provide information and to help verify the information provided by the grievant. Any involvement of the RLRCG at this step will be in line with the preference of the complainant and respecting confidentiality and appropriate sharing of personal data.

If the grievant wishes to appeal the findings of the investigation or the proposed remedy the appeal will be reviewed by the RLRCG. During this appeal process the non-TMGO members of the RLRCG will provide their conclusion of the investigation and propose a remedy. TMGO will take this conclusion and proposed remedy on an advisory basis from the RLRCG and will use it to revise the investigation report and proposed remedy as appropriate.

9.4.4 Livelihood Restoration Programme Activities

Quarterly Implementation Plans

TMGO livelihood restoration activities have been defined into three key objectives. The TMGO implementation team will carry out robust preparation to ensure successful implementation. To support implementation, TMGO will prepare quarterly implementation plans that provide the following details:

- TMGO staffing resources to provide coordination and oversight;
- Stakeholder engagement requirements including internal and external interfaces and CLO commitments;
- Data management requirements;
- Allocated budget for the quarter and key budget assumptions; and
- Scheduling for key activities and key events.

Implementation plans will also capture the key outputs and outcomes expected for the quarter, based on the activities being planned for. Implementation plans will feed in to internal performance and impact monitoring. Implementing Partners

All measures and activities will require the support of implementing partners identified in Chapter 8: Livelihood Restoration. Several implementation partners have already been chosen. However the TMGO implementation team will continue to establish links with potential partners and undertake due diligence on the most suitable partners to support the programme. The assessment of potential partners should:

- Confirm their suitable experience and expertise, particularly in Oromia Region;
- Confirm their development / strategic priorities match the needs of the livelihood restoration programme;
- Assess their organisational capacity for partnering and supporting the programme; and
- Seek additional input and solutions based on their experience that may enhance the livelihood restoration programme.

The Community Relations and Investment Coordinator and CLOs will be responsible for facilitating support to meet the LRP objectives and facilitate involvement of key implementing partners.

9.4.5 Physical Displacement Activities

The key steps for supporting physical relocation are summarised in Chapter 7. These will be expanded in the event of future physical displacement by TMGO and added as an addendum to this RAP & LRP. TMGO will prepare a Standard Operating Procedure (SOP) for replacement housing that outlines the timeframe for physical relocation, the minimum standards for construction, and the identification of suitable contractors. The SOP will consider:

- Process for PAP moving to an existing house they already own (Option 1);
- Purchase and renovation of an existing house (Option 2); or
- Construction of a new house on an empty parcel (Option 3).

9.4.6 Vulnerable Households

Vulnerable households will be closely monitored. The adequacy of measures provided will be discussed with vulnerable households and where there is concern that livelihoods will not be restored, additional tailored support may be required. This will be confirmed and reported on through regular monitoring and additional targeted interventions for vulnerable households will be identified.

9.4.7 Financial Management Training

The 146 impacted PAHs have already received financial management training, conducted by the Cooperative Bank of Oromia in April 2019. Going forward, all PAPs impacted by economic and / or physical displacement and receiving cash compensation will be provided with financial management training to ensure they have the skills to manage a large injection of cash into the household in a sustainable manner.

This cash will be monitored to ensure it has been invested back into the household as much as possible.

9.5 Management of Future Land Acquisition

All future land acquisition shall be implemented in alignment with Proclamation 1161/2019 and Regulation 135/2007. The measures set out in Table 6.3 will be applied, including livelihood restoration measures to achieve full replacement cost and livelihood restoration.

Future land acquisition is predicted to be minimal and within the existing lava field. However, there may be some displacement due to noise impacts. The extent of noise-induced impacts will be assessed at the time and a new RAP & LRP will be prepared in accordance with Proclamation 1161/2019 to reflect those additional impacts.

9.6 Monitoring and Evaluation

9.6.1 Overview

Monitoring and evaluation are crucial for the success of any livelihood restoration project as they verify the implementation and success of livelihood restoration. The monitoring process will provide feedback to the TMGO implementation team and RLRCG to keep the programme on schedule. This Chapter provides an overview of the monitoring and evaluation procedures required to enable TMGO and other stakeholders to determine if the RAP & LRP activities are undertaken and objectives are met, in accordance with international standards and to put in place corrective measures as necessary. The plan presented here will be updated by the TMGO implementation team in agreement with the RLRCG to include any further indicators identified as the programme progresses. In particular, TMGO will be undertaking livelihood assessments during routine monitoring to confirm livelihood restoration measures and to strengthen monitoring indicators. A timeframe for this is included in the schedule overview (Section 9.4.1).

9.6.2 Monitoring and Evaluation Objectives

Regular monitoring and evaluation is undertaken to provide information on the impact and effectiveness of the RAP & LRP. It enables adjustments to be made in a timely manner where required. Monitoring and evaluation of the RAP & LRP is undertaken to:

- Enable on-going improvement of the implementation process.
- Monitor key milestones for the LRP deliverables.
- Verify that funds for RAP and LRP implementation are provided for by the Project in a timely manner and in amounts sufficient for their purposes, and that such funds are utilized in accordance with the provisions of the RAP and LRP.
- Audit compliance of the RAP and / or LRP's implementation schedule and budget with the objectives of the RAP & LRP, and to enable the Project to demonstrate that physical resettlement and / or the livelihood restoration process is being managed in line with the Project's objectives and desired outcomes.
- Evaluate emergent, mid-term and long-term impacts of the Project on the standard of housing, quality of life, and livelihoods of affected households.

Monitoring and evaluation initially focuses on livelihood restoration given these are the main activities. Monitoring and evaluation will continue for the three-year duration of LRP implementation activities and for one year thereafter to monitor long term extension support of livelihood restoration. During this period, the intensity of the process will vary. During implementation and immediately thereafter, monitoring and evaluation will be more regular and intense, while monitoring and evaluation activities will reduce in the final years once most implementation activities are complete. The one physically displaced household will be included in the monitoring programme with those receiving livelihood restoration support.

The Community Relations and Investment Coordinator will develop the Monitoring and Evaluation Plan. There will be two key components to the Plan; namely: (i) internal monitoring; and (ii) external evaluation. These are summarised below.

9.6.3 Internal Monitoring

The socio-economic baseline identifies key indicators for monitoring improvements to livelihoods and to monitor vulnerable households. These will be incorporated into the Monitoring and Evaluation Plan for the RAP & LRP. All monitoring will be undertaken in accordance with the schedule proposed in Table 9.1. The Plan will also incorporate key indicators for the following:

- Performance monitoring: assessing key implementation activities against work plans and budgets with implementing partners. Indicators will include those measuring inputs / activities and outputs. Examples are presented in Table 9.2.
- Impact monitoring: assessing the effectiveness of the RAP & LRP in meeting the stated objectives and goals. These will include indicators proposed to measure objectives and outcomes. Examples are presented in Table 9.2.

The overall objectives of internal monitoring processes are to:

- set up a system that will regularly respond to monitoring findings on an ongoing basis, by adapting existing TMGO management measures or by modifying implementation processes of the RAP & LRP; and
- create a mechanism to capture and analyse data in a consistent and structured fashion against the pre-displacement baseline at appropriate intervals and by means of suitable indicators.

Performance and impact monitoring are both internal project management functions. Performance monitoring measures physical progress against Project milestones established for the implementation of the RAP & LRP while impact monitoring assesses the effects of the livelihood restoration programme.

Internal progress reports will be prepared quarterly, and a more detailed monitoring report will then be prepared at the end of each year of implementation.

During monitoring, TMGO will collect additional information from PAPs that can strengthen existing baseline data. Additional information collection for monitoring is presented in the implementation schedule.

Table 9.2: Example Indicators

Key Indicators
Example input / milestone indicators (to be monitored and reported on monthly)
<ul style="list-style-type: none"> • Spend against budget • Number of people participating in the livelihood restoration programme • Number of people on the self-build support programme • Meetings with Woreda officials • Delivery of livelihood inputs
Example output indicators (to be monitored and reported on monthly)
<ul style="list-style-type: none"> • Number of meetings held with woredas and kebeles • Number of meetings held with RLRCG • Minutes of meetings • Number of RAP or LRP-related grievances received by type • Number of unresolved and closed RAP or LRP-related grievances

Key Indicators
<ul style="list-style-type: none"> • Average time for grievance processing • Agreements in place for implementing partners • Distribution of livelihood restoration inputs
Example outcome indicators (to be monitored and reported on quarterly)
<ul style="list-style-type: none"> • % households losing residential homes relocated to a new home • Number of households completed building a new home • % households satisfied with the physical and economic resettlement process • % households that are implementing activities to restore agriculture productivity • % households with new businesses • % households reporting improved market access • % households reporting improved yields • % households reporting improved animal husbandry • % households satisfied with the livelihood restoration process
Impact monitoring indicators from the socio-economic baseline (to be monitored and reported on annually)
<ul style="list-style-type: none"> • Total number of affected PAHs losing either land and / or assets • Total number of female-headed households • % of households with family head equal to or over the age of 65 • % of physically displaced households with access to improved housing • % of households with adults unemployed • Median monthly farm-based income • Median monthly wage-based income • Lowest monthly wage across all income sources • % of households with savings • % of households with debt • % of households reporting food shortages in the last year • % of households who grow their own crops • % of households with one or more members in paid employment • % of households reporting on the time spent collecting water per day within each reported time category • % of households with access to improved sanitation facilities (flush or pour flush toilet)

9.6.4 External Monitoring

External evaluation by independent monitors will assess whether livelihood measures to restore the living standards of PAHs have been properly designed and carried out and will verify performance of the LRP implementation team and implementing partners.

External evaluation will be undertaken by an external party and will be informed by primary and secondary data collection and rely on internal monitoring outputs such as progress and monitoring reports, minutes of meetings as well as independent surveys and consultation conducted by the external monitoring and evaluation consultant directly. The Evaluator will recommend corrective measures if so required.

An external evaluation and completion audit is planned at the end of the three-year implementation period however it is also recommended that an external evaluation also be undertaken mid-way through the LRP programme to ensure the programme is working towards meeting its objectives. The completion audit will be undertaken to determine whether standards

of living and livelihoods have been successfully restored. Should the completion audit confirm this, then the RAP & LRP will be considered closed.

9.7 Budget

The following budget has been extracted from the 2019 LRP Rev.1 and from additional information provided on livelihood support costs and compensation by TMGO. The budget for land acquisition compensation was calculated as ETB 14,925,983.73 / 353,255. The estimated cost for livelihood restoration is USD 159,134. While the estimated budget for livelihood restoration has not changed from the 2019 LRP Rev.1, the distribution of estimated budget requirements across the objectives has changed and has been captured in this RAP & LRP budget.

Table 9.3: Direct Land Acquisition Costs

Component	Cost (ETB)	
	Land Compensation to PAPs	Grassland
Farmland		9,248,587.05
Land Compensation to OFWE		967,810.58
Compensation to PAPs for fixed planted assets		664,826.97
Compensation to PAPs for structures	Houses	392,234
	Fences	207,058.62
Compensation Committee support costs		118,800
Total ETB	14,925,983.73	
Total USD	353,255	

Table 9.4: Livelihood Restoration Support

Activity	Cost Estimate (USD)	Cost Notes
Objective A: Improvement of Livelihoods and Economic Wellbeing		
A1: Improved access to farm equipment	Administration cost ²	Covered under LRP administration
A2: Improved access to seed suppliers	Administration cost	Covered under LRP administration
A3: Training in extension services	5,000	Includes cost of preparation, per diems for experts, refreshments for participants and logistics
A4: Improve links with Kulumsa Research Centre	550	Includes cost for per diems, lunch and refreshments for 25 participants and transport
A5: Establish association for high yielding forage species	20,000	Based on purchase of 25 quintals of seed at a cost of USD 800 per quintal
A6: Training in high yield forage species	5,000	Includes cost of preparation, per diems for experts, refreshments for participants and logistics

² Note all administrative costs do not require additional budget as these activities are included as part of salary costs of key personnel and existing office expenses.

Activity	Cost Estimate (USD)	Cost Notes
A7: Training in use of pesticides	5,000	Includes cost of preparation, per diems for experts, refreshments for participants and logistics
A8: Training in animal health	5,000	Includes cost of preparation, per diems for experts, refreshments for participants and logistics
A9: Improve veterinary health service provision	10,000	Lump sum of USD 5,000 per centre
A10: Construction and maintenance of cattle troughs	10,000	Costs include USD 3,000 per new trough and USD 500 each for trough maintenance
Sub-Total	60,550	
Objective B: Improved market access		
B1: Market research	Administration cost	Covered under LRP administration
B2: Establish out-grower association	Administration cost	Covered under LRP administration
B3: Meetings with potential buyers	6,336	Includes cost of per diems, refreshments, logistics and accommodation for visits
Sub-Total	6,336	
Objective C: Improved off-farm incomes		
C1: Training in business planning and management	4,248	Includes cost of preparation, per diems for experts, refreshments for participants and logistics
C2: Input provision for micro-enterprises	58,000	Includes cost of inputs including seeds / seedlings, operational support and inputs for cattle and poultry farming
C3: Improve links with micro-enterprise agencies	Administration cost	Covered under LRP administration
Sub-Total	62,249	
Monitoring and Evaluation		
Quarterly performance review with PAHs	2,500	Lump sum
Quarterly progress reports	Administration cost	Covered under LRP administration
Internal impact monitoring	2,500	Lump sum
External evaluation	5,000	Lump sum
Sub-Total	10,000	
Sub-total Livelihood Support Direct Costs	139,134	
Program delivery team administration	\$20,000	Includes engagement with impacted communities and PAHs as well as partners and buyers
Total	\$159,134	

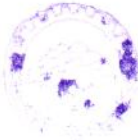
10. LIST OF ACRONYMS AND GLOSSARY

Table 10.1: List of Acronyms	
CLO	Community Liaison Officer
EIB	European Investment Bank
ESIA	Environmental and Social Impact Assessment
ETB	Ethiopian Birr
ha	hectares
IFC	International Finance Corporation
LRP	Livelihood Restoration Plan
MW	megawatt
NGO	Non-governmental Organisation
OFWE	Oromia Forest and Wildlife Enterprise
PAH	Project Affected Households
PAP	Project Affected People
PS	Performance Standard
RAP	Resettlement Action Plan
RLRCG	Resettlement and Livelihood Restoration Coordination Group
SEP	Stakeholder Engagement Plan
TMGO	Tulu Moye Geothermal Operations

Table 10.2: Glossary	
Term	Definition
Affected area	The area which is being acquired through the expropriation process.
Affected person / household / community	Any person / household/community who, as a result of the implementation of the Project, loses the right to own, use or otherwise benefit from an asset or a resource, either in full or in part and either permanently or temporarily.
Compensation	Payment in cash or in kind for an asset or a resource that is acquired or affected by a Project at the time the asset needs to be replaced.
Compensation committee	The term used by the Project for the Woreda Valuation Committee (see below).
Cut-off date	Date of completion of the asset inventory. Persons occupying the Project area after the cut-off date are not eligible for compensation and/or livelihood restoration assistance. Similarly, fixed assets (such as built structures, crops, and economic trees) established after the cut-date will not be compensated.
Economic displacement	Loss of income sources or means of livelihood from land acquisition or obstructed access to resources (land, water, or forest) resulting from the construction or operation of a Project or its associated facilities.
Eligibility criteria	Criteria used to determine displaced peoples eligibility for compensation and other resettlement assistance, including relevant cut-off dates.
Entitlements Matrix	Matrix showing all categories of affected persons and what options (entitlements) they were/are being offered, to compensate them for their losses and restore livelihoods.

Grievance mechanism	A mechanism to receive and facilitate resolution of affected communities' concerns and grievances.
Full replacement cost	Full replacement cost is the market value of the land / assets plus transaction costs. It should be adhered to when assessing losses and providing compensation measures in livelihoods restoration procedures.
Land Expropriation	Process whereby a public authority, usually in return for compensation, requires a person, household, or community to relinquish rights to land that it occupies or otherwise uses.
Livelihood	The full range of means that individuals, families, and communities utilise to make a living, such as wage-based income, agriculture, fishing, foraging and petty trade.
Livelihood restoration	The provision to economically displaced persons whose livelihoods or income levels are adversely affected, of opportunities to improve, or at least restore, their means of income-earning capacity, production levels, and standards of living.
Livelihood Restoration Plan	Plan to establish the entitlements of affected persons and/or communities and to ensure that these are provided in a transparent, consistent, and equitable manner.
Living Standards	The economic conditions and social well-being of affected people and communities including factors such as housing, incomes, material goods and level of comfort.
The Project	The features and activities that are a necessary part of the Project Proponent's development, including all associated facilities without which the Project cannot proceed.
Replacement Cost	<p>The rate of compensation for lost assets must be calculated at full replacement cost, that is, the market value of the assets plus transaction costs. With regard to land and structures, IFC defines "replacement costs" as follows:</p> <ul style="list-style-type: none"> • agricultural land—the market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of preparation to levels similar to or better than those of the affected land, plus the cost of any registration and transfer taxes; • household and public structures—the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labour and contractors' fees and any registration and transfer taxes. <p>In determining the replacement cost, depreciation of the assets 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.</p>
Stakeholders	Any and all individuals, groups, organisations and institutions interested in and potentially affected by a Project or having the ability to influence a Project.
Transaction Costs	Costs associated with the acquisition of replacement land or assets including titling, registration and transfer fees, customary fees, taxes and permits.
Valuation Committee	A Valuation Committee is established by the woreda as soon as an expropriation process is initiated. The Valuation Committee is tasked with coordinating the resettlement process and is composed of a wide group of local department heads, etc, and may also include external persons with some specialist knowledge to guide the process.
Vulnerable Groups	Individuals or groups who could experience adverse impacts more severely than others based on their vulnerable or disadvantaged status. This vulnerability may be due to ethnicity, gender, language, religion, political views, dependence on natural resources, sickness or disability or other factors.

APPENDIX 1 COMPENSATION RATES FOR STRUCTURES



Labbe KL/IB/12/1336/2011

Guyyoo 26/07/2011

Mootumma Naannoo Oromiyaa
Bulchiinsa Qaxaa Waajjira Bulchiinsa
Magaalaa Itayyaa

Labbe tilmaama beenyaa A/Haaxaa

Haaxaa

Dhimmi :- Gatū tilmaama Ijaarsaa (unita) erguu ta'a.

Akkuma asmaan olitti ibsuuf gaalametti dhaabatu
TMOGO gatū tilmaama Ijaarsaa keeraa teero mooyee fidhatuuf
gatū tilmaama keeroo amma irra jiru akka kenninuuf nu gaafatama.

kanneen nuuf gaafate baani kana irratti hundaa'uun, itn
nutis gatū tilmaama biya kanaan nuuf dhufe kan ibneef ergi-
ne ta'uu xalayaa gaggeessituu fuula — 5 — jaba kan erginee ta'uu
kabajaan esen beeksifna.



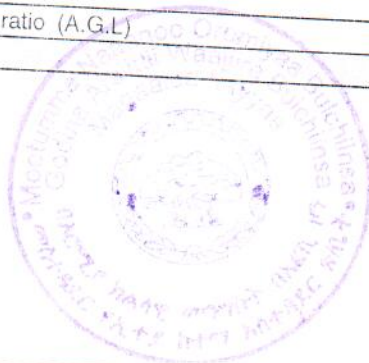
Waga Kallajjoo

26/07/2011

Item No.	DESCRIPTION	UNIT	UNIT PRICE
A	<i>Demolishing Work of different structures N.B. price include clearing the working area & dispose debri as indicated the supervisour</i>		
A.1	Demolishing work on Ground floor		
1	Masonry Structures		
2	Reinforced Concrete Structures	m ³	102.00
4	10cm thick of HCB both side plastered	m ³	450.00
5	15cm thick of HCB both side plastered	m ²	10.00
6	20cm thick of HCB both side plastered	m ²	12.50
7	Terrazzo Floor	m ²	17.00
8	Cement screed floor	m ²	24.50
9	30x120x3cm Marble tread	m ²	12.50
10	15x120x3cm Marble riser	pc	73.38
11	Steel Structures	pc	73.38
		kg	4.46
A.2	Demolishing work from 1st -3rd floor		
1	Concrete Structures	m ³	557.06
2	10cm thick of HCB both side plastered	m ²	10.40
3	15cm thick of HCB both side plastered	m ²	13.37
4	20cm thick of HCB both side plastered	m ²	18.72
5	Terrazzo Floor	m ²	20.80
6	Cement screed floor	m ²	13.37
7	30x120x3cm Marble tread	pc	93.60
8	15x120x3cm Marble riser	pc	93.60
9	Steel Structures	kg	5.67
B	Excavation and earth work (Hojii Biyyoo fi Lafaa Sirressuu)		
1	ቦታ የማሰዳት ስራ-(Clearing of 20 cm thick top organic soil)(with machine)	m ²	15.50
2	ቦታ የማሰዳት ስራ-(Clearing of 20 cm thick top organic soil)(manual)	m ²	15.50
1.2	Bulk excavation in loose soil (manual)		
1	To the depth of not exceeding 150 cm	m ³	150.50
2	To the depth of 150 < x < 300 cm	m ³	195.08
1.3	Bulk excavation in soft rock (manual)		
1	To the depth of not exceeding 150 cm	m ³	193.79
2	To the depth of 150 < x < 300 cm	m ³	223.92
1.4	Bulk excavation in hard rock (manual)		
1	To the depth of not exceeding 150 cm	m ³	276.93
2	To the depth of 150 < x < 300 cm	m ³	332.51
1.5	Trench and pit excavation in ordinary soil (manual)		
1	To the depth of not exceeding 150 cm	m ³	89.02
2	To the depth of 150 < x < 300 cm	m ³	120.00
1.7	Trench and Pit Excavation in soft soil (Manual)		
1	To the depth of not exceeding 150 cm	m ³	245.00
2	To the depth of 150 < x < 300 cm	m ³	275.00
1.80	Trench excavation in hard soil (manual)		
1	To the depth of not exceeding 150 cm	m ³	290.00
2	To the depth of 150 < x < 300 cm	m ³	325.00
1.9	Bulk excavation in ordinary soil		
1	To the depth of not exceeding 150 cm	m ³	89.02



2	To the depth of 150 < x < 300 cm		
1.10	Bulk excavation in boulder/drilled & blated rock	m ³	120.00
1	To the depth of not exceeding 150 cm		
2	To the depth of 150 < x < 300 cm	m ³	122.99
1.13	Back fill by hand	m ³	166.20
1	Back fill from 0-5		
2	Back fill 5-10	m ³	135.95
3	Back fill 10-15	m ³	167.24
4	Back fill under hard core from site	m ³	245.21
1.14	Spread & compact in 150mm layer	m ³	71.93
1	Hand tamper 1.44m ³ /hr		
2	Roller compaction 6.25m ³ /hr	m ³	61.28
1.15	Hauling surplus excavated materia dump truck (Cart away)	m ³	133.36
1	Ditto but (0-5km) away		
2	Ditto but (5-10 km) away	m ³	92.59
3	Ditto but (10-15km) away	m ³	109.13
4	Ditto but (15-20 km away	m ³	140.42
5	Hand loading from stock pile, clay	m ³	171.71
6	25cm thick balastic hard core.	m ³	205.43
7	30-50 mm thick blinding.	m ²	109.05
2A	CONCRETE WORK	m ²	82.82
1	Lean concrete, C-5		
2	Lean concrete, C-7	m ²	63.71
3	Light weight pumice concrete	m ²	78.24
4	C-15 Concrete (mass concrete)	m ³	971.26
5	C-20 Concrete (mass concrete)	m ³	1761.90
2.1	R.C, C-20, 320kg of cement per m3	m ³	2279.15
1	C25		
2	C30	m ³	2711.36
3	STEEL REINFORCEMENT	m ²	2832.29
1	Diameter 6 mm plain bar		
2	Diameter 8 mm deformed bar	Kg	73.75
3	Diameter 10 mm deformed bar	Kg	65.83
4	Diameter 12 mm deformed bar	Kg	72.70
5	Diameter 14 mm deformed bar	Kg	65.54
4	FORM WORK	Kg	62.41
A-	SUB STRUCTURE		
1	To footing and mat foundation		
2	To sub grade beam	m ²	210.81
3	To foundation column and Elevation Column	m ²	204.02
4	To shear wall, lift shaft and stair case	m ²	328.74
5	MASONRY WORK	m ²	359.68
5.1	Stone foundation		
1	masonry (1:4) cement sand ratio (B.G.L)		
2	masonry (1:4) cement sand ratio (A.G.L)(Plinth Masonary)	m ³	1322.44
5.2	Semi dressed stone	m ³	1421.92
1	stone masonry (A.G.L) (K.L.P 77:41)		
2	masonry foundaion wall (1:4) cement sand ratio (A.G.L)	m ²	168.44
6.2	H.C.B elev. Wall	m ²	1194.84



1	10 cm. thick class-A H.C.B		m^3	199.94
2	10 cm. thick class-B HCB		m^3	189.31
7	15 cm. thick class-A H.C.B		m^2	244.08
8	15 cm. thick class-B H.C.B		m^2	201.54
13	20 cm. thick class-A H.C.B		m^2	306.47
14	20 cm. thick class-B HCB		m^2	303.98
6.3	Different type of Wall			
16	Wire mesh wall		m^2	166.47
17	Barbed wire fence		m^2	113.90
18	Wire fence		m^2	482.33
19	Fence with grill		m^2	591.89
7	Roofing			
7.1	Different type of roof cover			
1	G-35 C.I.S roof cover		m^2	280.64
2	G-32 C.I.S roof cover		m^2	490.33
3	G-28 C.I.S roof cover		m^2	635.06
8	CARPENTRY AND JOINERY			
8.1	Ceiling			
1	8mm thick chip wood ceiling		m^2	872.86
2	Abujedy ceiling		m^2	305.92
3	Fyzit ceiling		m^2	550.00
4	PVC ceiling		m^2	590.00
5	Plastic Ceiling		m^2	509.54
6	Timber celing		m^2	310.47
7	Purline ceiling/	/ጣውላ ኮርኒስ /	m^2	482.23
8.2	Fascia board	/ከፈፍ /		
1	2.5x15cm wooden fascia board		ml	172.44
2	2.5x18cm wooden fascia board		ml	219.33
3	2.5x20cm wooden fascia board		ml	366.93
8.3	Wooden Truss Members			
1	Diam. 10-12 cm thick eucalyptus truss upper and lower chord		ml	65.29
2	Diam. 8-10 cm thick eucalyptus truss diagonal and vertical member		ml	60.90
3	Diam. 6 cm thick eucalyptus purline		ml	113.57
4	Diam. 5x7 cm thick local machine sawn pine purline		m^2	598.55
8.4	Wooden door			
1	Mahogany ply wood smooth finish flush wooden door /ታምቡራታ በር /		m^2	3243.21
2	Woyra ply wood smooth finish flush wooden door /ታምቡራታ በር /		m^2	3244.34
3	Smooth MDF board made imported wooden door		m^2	4053.26
4	Antique MDF board wooden door (best quality)		m^2	4615.46
5	Solide wooden door (best quality)		m^2	6653.36
6	1cm thick timber door	/መናኛ ፕሮግራም ጣውላ በር መስተወት የሌለው /	m^2	651.37
7	3cm thick timber door	/ፕሮግራም ጣውላ በር መስተወት የሌለው /	m^2	2177.58
8	1cm thick timber window	/መናኛ ፕሮግራም ጣውላ መስተት መስተወት የሌለው /	m^2	310.47
9	3cm thick timber window	/ፕሮግራም ጣውላ መስተት መስተወት የሌለው /	m^2	628.98
10	3cm thick timber window	/ፕሮግራም ጣውላ መስተት መስተወት ያለው /	m^2	1002.44
11	G-32 CIS door with all wood work	/የቆይታ በር /	m^2	334.73
12	G-32 CIS window with all wood work	/የቆይታ መስተት /	m^2	282.73
13	Timber /Tsid/ door	/የጽድ ጣውላ በር /	m^2	606.30
14	Timber /Tsid/ window	/የጽድ ጣውላ መስተት /	m^2	393.09
8.5	Cupboard			
1	Woyra ply wood flush wooden built in cupboard (standard version)		m^2	2449.41
2	Antique built incupboard (best quality)		m^2	3027.21



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10 METAL WORK AND STEEL STRUCTURE		
10.1	38mm LTZ Door & Window	
1	38 mm LTZ metal window with 4mm clear glass with grill /100x150cm/	ps 2977.12
2	38 mm LTZ metal profile window with grill	m ² 1372.53
3	38 mm LTZ metal window with 4mm clear glass with out grill /100x150cm/	ps 2380.82
4	38 mm LTZ metal profile window with out grill	m ² 1264.67
5	38 mm LTZ metal profile half glazed door with 5mm figured glass with grill	ps 2983.37
6	38 mm LTZ metal profile half glazed door with grill	m ² 1642.36
7	38 mm LTZ metal profile half glazed door with 5mm figured glass with out grill	ps 2826.60
8	38 mm LTZ metal profile half glazed door with out grill	m ² 1564.16
9	38 mm LTZ metal profile door fully covered with glass	ps 2717.74
10	28 mm LTZ metal profile window with 4mm clear glass with grill	ps 2381.21
11	28 mm LTZ metal profile window with 4mm clear glass with out grill	m ² 2301.70
12	28 mm LTZ metal profile window fully covered with sheet metal	m ² 2278.59
13	28mm LTZ partially glazed metal door with grill and 4mm Figured glass	m ² 2690.48
14	RHS door fully covered with glass /ተባላራ ሙሉ መስታወት በር /	pcs 2575.14
15	RHS window fully covered with glass /ተባላራ ሙሉ መስታወት መስኮት /	pcs 2144.07
16	RHS door half covered with glass & half covered with sheet metal /ተባላራ ግማሽ መስታወት እና ግማሽ ሳሜራ በር /	
17	Sheet metal wall partition	pcs 2177.58
18	Imitation door	m ² 607.51
19	Imitation window	m ² 1746.17
20	Shutter Door & Window	m ² 1593.30
21	Main gate door / ሞና የጊዜ በር ባለ ጌሃ /	m ² 1386.72
22	Alluminium Door and window with 6mm clear glass and necessary accessories with installation	m ² 1514.79
10.3	Steel structure	
A	RHS Truss Members	
1	50x50x3mm RHS Truss upper & lower chord	ml 966.82
2	60x60x3mm RHS Truss diagonal & vertical member	ml 1111.38
5	80 x80 x 3mm RHS Purlin	ml 1381.65
B	RHS Truss Members	
1	Mounting & fixing light structure steel truss	kg 85.00
2	Mounting & fixing medium structure steel truss	kg 65.00
3	Mounting & fixing steel purline	kg 56.00
4	Supply & fixing Angle iron	ml 102.00
5	Supply & fixing Metal plate with four J-bolt	pc 200.00
6	Supply & fixing Metal plate	pc 190.00
11	FINISHING	
11.1	Plaster to vertical surfaces	
1	First coat of cement plaster to vertical surfaces (1:3)	m ² 48.97
2	Second coat of cement plaster to vertical surfaces (1:3)	m ² 107.65
3	Final coat of cement plaster to vertical surfaces (1:3)	m ² 82.63
4	Two coat of cement plaster to vertical surfaces (1:3)	m ² 123.73
5	Three coat of cement plaster to vertical surfaces (1:3)	m ² 150.59
11.2	Plaster to ceiling surfaces	
1	First coat of cement plaster to ceiling surfaces (1:3)	m ² 48.97
2	Second coat of cement plaster to ceiling surfaces (1:3)	m ² 107.65
3	Final coat of cement plaster to ceiling surfaces (1:3)	m ² 82.63
4	Two coat of cement plaster to ceiling surfaces (1:3)	m ² 123.73
5	Three coat of cement plaster to ceiling surfaces (1:3)	m ² 150.59
11.3	Flooring	



APPENDIX 2 COMPENSATION RATES FOR TREES AND SHRUBS

5.8
4.2 2 15.96 50/10

Unkaa Tilmaama Kaffaltii beynaa mukaa gosaa adda addaa

Maqaa gandaa	Gosaa mukka	Sadarkaa tilmaama mukichaa	Bayyina	Tilmaama gata tokko	Tilmaama wali galaa	Ibsaa
sh/ shararaa	laftoo	Gindii Gudaa	1	2000	2000	
	Baargamoo	Gindii Gudaa	1	2000	2000	
	Baargamoo	Gindii Gudaa	2	2000	4000	
D/Guutichaa	Baargamoo	Gindii Gudaa	6	2000	12000	
D/Guutichaa	Baargamoo	Gindii Gudaa	8	2000	16000	
	Baargamoo	G/jiduu Galeesa	12	1500	18000	
	Baargamoo	G/Xiiqa	9	1000	9000	
D/Guutichaa	kooshimoo	Biiqiltuu	5	6	30	
	Gaatirra	G/jiduu Galeesa	1	1700	1700	
	Gaatirra	G/Xiiqa	2	1000	2000	
	Gaatirra	Baataa	3	150	450	
	Waadeesa	Dhabba	1	120	120	
D/Guutichaa	Baargamoo	Dhabba	1	100	100	
	Baargamoo	Waraajii	1	90	90	
	Baargamoo	Magaaraa	4	55	220	
	Baargamoo	Caffaqa	7	23	161	
	Makaannissa	Dhaabaa	1	40	40	
	Makaannissa	Magaaraa	1	20	20	
	Niimii	Biiqiltuu	1	6	6	
D/Guutichaa	Dhumuugaa	Dalaawaa	37.9			
D/Guutichaa	Baargamoo	Dhabbaa	1	100	100	
	Sasbaniyaa	Dhabbaa	1	100	100	
	Ceekataa	Magaaraa	1	23	23	
	Dhumuugaa	Dalaawaa	45.6			
D/Guutichaa	Makaannissa	G/jiduu Galeesa	1	600	600	
D/Guutichaa	Baargamoo	G/jiduu Galeesa	1	1500	1500	
	Ejeersa	Biiqiltuu	2	6	12	
	Waadeesa	Biiqiltuu	2	6	12	
D/Guutichaa	Baargamoo	Waraajii	9	90	810	
	Baargamoo	Magaaraa	13	55	715	
	Baargamoo	Caffaqa	2	23	46	
	kooshimoo	Biiqiltuu	138	6	828	
D/Guutichaa	kooshimoo	Biiqiltuu	20	6	120	
D/Guutichaa	Makaannissa	Baataa	4	60	240	
	Makaannissa	Dhaabaa	1	40	40	
	Baargamoo	G/jiduu Galeesa	3	1500	4500	
	Baargamoo	G/xiqqa	6	1000	6000	
	Baargamoo	Dhaabaa	15	100	1500	
	kooshimoo	Biiqiltuu	5	6	30	
	Giraawwaa	Magaaraa	1	10	10	
D/Guutichaa	Makaannissa	Gindii Gudaa	1	800	800	
	Makaannissa	Dhaabaa	4	40	160	
	Waadeesa	Magaaraa	1	70	70	
	laftoo	Gindii Gudaa	2	2000	4000	
	laftoo	Dhaabaa	2	100	200	
	Baargamoo	gindii/galeessa	15	1500	22500	
	Baargamoo	Baataa	2	170	340	
	Baargamoo	Dhaabaa	3	100	300	
D/Guutichaa	Makaannissa	Dhaabaa	1	40	40	
	Makaannissa	Baataa	1	60	60	
	Baargamoo	Baataa	1	170	170	
D/Guutichaa	laftoo	Caffaqa	3	25	75	
	Makaannissa	Baataa	1	60	60	
	Makaannissa	Baataa	1	60	60	
	Makaannissa	Dhaabaa	1	40	40	
D/Guutichaa	Makaannissa	Baataa	3	60	180	
	Makaannissa	Magaaraa	1	20	20	
	laftoo	Gindii Gudaa	1	2000	2000	
D/Guutichaa	Makaannissa	Baataa	1	60	60	
	Makaannissa	Magaaraa	7	20	140	
D/Guutichaa	Baargamoo	gindi/galeessa	5	1500	7500	
	Baargamoo	gindii xiqqaa	2	1000	2000	
	Makaannissa	Gindii Gudaa	1	800	800	
Anolee	Makaannissa	Baataa	1	60	60	
	Makaannissa	Dhaabaa	5	40	200	
	Makaannissa	Magaaraa	5	20	100	
	Ceekataa	Dhaabaa	8	23	184	
	kooshimoo	Magaaraa	2	140	280	
	waaccuu	Dhaabaa	2	15	30	
Anolee	Gaatirra	gindii xiqqaa	2	1000	2000	
	Makaannissa	Dhaabaa	1	40	40	
Anolee	Makaannissa	Dhaabaa	1	40	40	
Anolee	Makaannissa	Baataa	1	60	60	
	Makaannissa	Magaaraa	6	20	120	
Anolee	Makaannissa	Baataa	2	60	120	
	kooshimoo	Magaaraa	14	15	210	
Anolee	Makaannissa	Baataa	5	60	300	
	Makaannissa	Dhaabaa	9	40	360	
	Makaannissa	Magaaraa	12	20	240	
	qixuu	gindii guddaa	1	2300	2300	
	danbii	gindii guddaa	1	800	800	

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25	Anolec	Makannisaa	Baataa	1	60	60
		Makannisaa	Magaaraa	1	20	60
		laftoo	gindii g/galeessa	2	1500	3000
		laftoo	Magaaraa	1	50	50
26	Anolec	Makannisaa	Baataa	6	60	360
		Makannisaa	Dhaabaa	1	40	40
		Makannisaa	Magaaraa	7	20	140
		qixuu	gindii guddaa	1	2100	2100
		Ceekataa	Magaaraa	8	24	184
		mata qomaa	Gindii Guddaa	1	2000	2000
27	Anolec	Makannisaa	Baataa	1	60	60
		Makannisaa	Magaaraa	5	20	60
		Makannisaa	Dhaabaa	3	40	120
28	Anolec	Ejeersa	Dhaabaa	4	150	450
		Ejeersa	Baataa	1	170	170
		laftoo	gindii guddaa	3	2000	6000
		laftoo	Baataa	3	60	180
		Makannisaa	Baataa	7	60	420
		Makannisaa	Dhaabaa	4	40	160
		Makannisaa	Magaaraa	8	20	720
		qixuu	Gindii Guddaa	1	2100	2300
		laftoo	Baataa	1	60	60
		laftoo	Magaaraa	3	50	150
		laftoo	Dhaabaa	1	100	100
29	Anolec	Makannisaa	Dhaabaa	1	40	40
		Makannisaa	Magaaraa	7	20	140
30	anole	laftoo	gindii guddaa	1	2000	2000
		laftoo	Magaaraa	5	50	250
		Makannisaa	Baataa	2	60	120
		Makannisaa	Magaaraa	3	20	60
31	Aanolec	laftoo	Dhaabaa	1	100	100
		Makannisaa	Dhaabaa	1	40	40
32	Aanolec	laftoo	Dhaabaa	2	100	200
		Gaatiirra	Dhaabaa	1	120	120
		doddootii	Dhaabaa	3	150	450
		Ejeersa	Magaaraa	9	150	1350
		Makannisaa	Caffaqa	3	10	30
		qixuu	gindii guddaa	1	2300	2300
		Makannisaa	Magaaraa	11	25	275
		Ceekataa	Magaaraa	11	23	253
		danbii	gindii guddaa	1	800	800
33	anole	qixuu	gindii guddaa	1	2300	2300
		danbii	gindii guddaa	1	800	800
		laftoo	Dhaabaa	7	100	700
		Makannisaa	Magaaraa	22	20	440
		doddootii	Dhaabaa	1	150	150
34	Anolec	Makannisaa	Magaaraa	11	20	220
		Makannisaa	Dhaabaa	3	40	120
		Ceekataa	Magaaraa	7	23	161
35	anolec	Makannisaa	Dhaabaa	1	40	40
		Ceekataa	Dhaabaa	22	35	770
36	Anolec	Makannisaa	Dhaabaa	5	40	200
		Makannisaa	Magaaraa	1	20	20
		Ceekataa	Magaaraa	1	23	23
37	Teroo Mooyyee	Ceekataa	Magaaraa	17	23	391
		Ceekataa	Caffaqa	33	10	330
		Makannisaa	Dhaabaa	2	40	80
		Makannisaa	Caffaqa	2	10	20
38	Teroo Mooyyee	Makannisaa	Dhaabaa	1	40	40
		Ceekataa	Dhaabaa	41	35	1435
		Ceekataa	Caffaqa	33	10	330
		Ceekataa	Magaaraa	114	23	2622
		Makannisaa	Dhaabaa	4	40	160
		Ejeersa	Baataa	1	170	170
		Baargamoo	gindii g/galeessa	4	1500	6000
		Baargamoo	Dhaabaa	3	100	300
39	Teroo Mooyyee	Ceekataa	Dhaabaa	9	35	315
		Ceekataa	Magaaraa	14	23	322
		Ceekataa	Caffaqa	8	10	80
		Makannisaa	Dhaabaa	2	40	80
		Makannisaa	Baataa	1	60	60
		Makannisaa	Magaaraa	15	20	300
		Gaatiirra	Baataa	4	150	600
		Ejeersa	gindii gudda	1	2100	2100
		laftoo	gindii g/galeessa	1	1500	1500
41	Teroo Mooyyee	makannisaa	Dhaabaa	5	40	200
		makannisaa	Baataa	1	60	60
		makannisaa	Magaaraa	8	20	160
		makannisaa	Caffaqa	13	10	130
		Ceekataa	Magaaraa	50	23	1288
		Ceekataa	Caffaqa	39	10	390
		Ceekataa	Dhaabaa	12	35	420

		Ceekataa	Caffaqaa	1	40	50
50	eroo Mooyyee	gaattiraa	gindii g/galeessa	1	1700	1700
		Ceekataa	Magaaraa	14	23	299
		Ejeersa	Dhaabaa	1	150	450
		Makkanniisaa	Dhaabaa	3	40	120
50	eroo Mooyyee	gaattiraa	Dhaabaa	4	120	360
		gaattiraa	gindii g/galeessa	9	1700	15300
		gaattiraa	Baataa	4	150	600
		gaattiraa	Dhaabaa	2	120	240
		gaattiraa	Magaaraa	7	20	490
		gaattiraa	Caffaqaa	4	40	120
		hawaasee	gindii guddaa	2	1000	2000
		Konbolcha	gindii g/galeessa	1	600	600
		Konbolcha	Magaaraa	11	23	253
		Ejeersa	Magaaraa	19	100	1500
		Ejeersa	Dhaabaa	4	150	600
		Ejeersa	gindii xiqqaa	1	1000	1000
		Ejeersa	Baataa	1	120	120
		Makkanniisaa	gindii xiqqaa	3	400	1200
		Ceekataa	Dhaabaa	1	40	40
		Ceekataa	Caffaqaa	14	10	140
		laftoo	Dhaabaa	1	100	100
		araa	gindii guddaa	1	800	800
		agamsa	Magaaraa	18	15	270
50	eroo Mooyyee	Makkanniisaa	Caffaqaa	3	10	30
		Makkanniisaa	Dhaabaa	3	40	120
		Makkanniisaa	gindii g/galeessa	1	600	600
		Makkanniisaa	Baataa	1	60	60
50	eroo Mooyyee	Makkanniisaa	Dhaabaa	3	40	120
		Makkanniisaa	Baataa	1	60	60
50	eroo Mooyyee	Makkanniisaa	Magaaraa	22	20	440
		Makkanniisaa	Dhaabaa	4	40	160
		Makkanniisaa	gindii guddaa	6	800	4800
		Makkanniisaa	gindii g/galeessa	5	600	3000
		Makkanniisaa	Caffaqaa	5	10	50
50	eroo Mooyyee	Makkanniisaa	gindii g/galeessa	5	600	3000
		Makkanniisaa	gindii guddaa	2	800	1600
		Makkanniisaa	gindii xiqqaa	2	400	800
		Makkanniisaa	Baataa	4	60	240
		Makkanniisaa	Dhaabaa	9	40	360
		Makkanniisaa	Magaaraa	10	20	200
		Makkanniisaa	Caffaqaa	13	10	1300
		gaattiraa	gindii g/galeessa	3	1700	5100
		Turu maanturii	gindii guddaa	2	800	1600
		danbii	Caffaqaa	1	15	15
		danbii	Dhaabaa	1	40	40
		laftoo	Magaaraa	2	50	100
		laftoo	Dhaabaa	4	100	400
		laftoo	Caffaqaa	12	25	300
		Ejeersa	Magaaraa	1	100	100
50	eroo Mooyyee	Makkanniisaa	Dhaabaa	5	40	200
		Makkanniisaa	Magaaraa	3	20	60
		Makkanniisaa	Caffaqaa	2	10	20
50	eroo Mooyyee	Makkanniisaa	Magaaraa	2	25	50
		Makkanniisaa	Dhaabaa	5	40	200
		Makkanniisaa	Caffaqaa	4	10	40
		Ejeersa	gindii guddaa	1	2000	2000
50	eroo Mooyyee	doddootii	gindii guddaa	1	2000	2000
		garbii	gindii guddaa	1	2000	2000
		Makkanniisaa	gindii guddaa	5	800	4000
		Makkanniisaa	gindii xiqqaa	1	400	400
		Makkanniisaa	Dhaabaa	6	40	240
		Makkanniisaa	Baataa	8	60	480
		Makkanniisaa	Magaaraa	13	20	260
		Ejeersa	gindii xiqqaa	1	1000	1000
		Ejeersa	gindii g/galeessa	1	1500	1500
		laftoo	Dhaabaa	1	100	100
		agamsa	Magaaraa	8	15	120
		hawaasee	gindii guddaa	1	1000	1000
		gaalloo	gindii xiqqaa	1	600	600
		Ceekataa	Dhaabaa	12	35	420
		Ceekataa	Magaaraa	2	23	46
		Ceekataa	Baataa	2	46	92
50	eroo Mooyyee	laftoo	Magaaraa	1	50	50
		Makkanniisaa	Dhaabaa	9	40	360
		Makkanniisaa	Magaaraa	18	20	360
		Makkanniisaa	Caffaqaa	11	10	110
		Makkanniisaa	Baataa	1	60	60
		Ceekataa	Magaaraa	3	23	69
		Ceekataa	Caffaqaa	4	60	240
		gaattiraa	Dhaabaa	3	120	360
		Hadheessaa	Caffaqaa	21	35	735

	qilxuu	Gindii Guddaa	1	2000	2000
	daabii	Dhaabaa	1	40	40
	laftoo	Dhaabaa	6	100	600
	Ejeersa	Dhaabaa	1	150	150
	Ejeersa	Magaaraa	1	100	100
	Gaattirra	Magaaraa	2	70	140
	laftoo	Dhaabaa	2	100	200
	Ceekataa	Magaaraa	22	23	506
	Ceekataa	Dhaabaa	1	5	5
	Ceekataa	Caffaqa	13	10	130
	mata qomaa	Dhaabaa	8	140	1120
	gaalloo	Dhaabaa	1	90	90
	Makkanniisaa	Dhaabaa	88	40	1520
	Makkanniisaa	Magaaraa	7	20	140
	Makkanniisaa	Waraaji	5	40	200
	Makkanniisaa	Baataa	6	60	360
	laftoo	Dhaabaa	6	100	600
	laftoo	Baataa	1	160	160
	doddootii	gindii g/galeessaa	1	1500	1500
	Ejeersa	Dhaabaa	10	150	1500
	Ejeersa	gindii guddaa	3	2000	6000
	Gaattirra	Dhaabaa	4	120	480
	Makkanniisaa	Magaaraa	8	20	160
	Makkanniisaa	Dhaabaa	7	40	280
	Makkanniisaa	gindii guddaa	1	800	800
	Ceekataa	Magaaraa	7	23	161
	Ejeersa	gindii guddaa	3	2000	6000
	Makkanniisaa	Caffaqa	6	10	60
	Makkanniisaa	Dhaabaa	8	40	320
	Makkanniisaa	Waraaji	4	40	160
	Makkanniisaa	Magaaraa	10	20	200
	laftoo	Baataa	1	160	160
	Ceekataa	Magaaraa	6	23	138
	Ceekataa	Magaaraa	20	23	460
	Ceekataa	Dhaabaa	2	35	70
	Ejeersa	gindii guddaa	5	2000	10000
	Ejeersa	gindii xiqqaa	2	1000	2000
	Ejeersa	Baataa	1	170	170
	Ejeersa	gindii g/galeessaa	2	1500	3000
	laftoo	Magaaraa	2	50	100
	qilxuu	gindii g/galeessaa	1	1800	1800
	Makkanniisaa	Dhaabaa	26	40	1040
	Makkanniisaa	Magaaraa	13	20	260
	Makkanniisaa	Caffaqa	2	10	20
	Makkanniisaa	gindii guddaa	5	800	4000
	gattirraa	Dhaabaa	9	120	1080
	gaattirraa	Baataa		150	
	gaalloo	Baataa	4	70	280
	galloo	Magaaraa	6	50	300
	garrii	gindii guddaa	1	2200	2200
	laftoo	Magaaraa	8	50	400
	Ceekataa	Dhaabaa	13	35	455
	Ceekataa	Magaaraa	12	23	276
	araa	gindii guddaa	1	800	800
	araa	Dhaabaa	1	100	100
	laftoo	Magaaraa	2	50	100
	Ceekataa	Magaaraa	10	23	230
	Ceekataa	Dhaabaa	2	35	70
	Ceekataa	Caffaqa	2	10	20
	Ceekataa	Dhaabaa	5	15	75
	Makkanniisaa	Baataa	8	60	480
	Makkanniisaa	gindii xiqqaa	2	400	800
	laftoo	Caffaqa	1	25	25
	Ceekataa	Dhaabaa	1	35	35
	Ceekataa	Caffaqa	3	10	30
	Ceekataa	Magaaraa	8	23	184
	Makkanniisaa	Caffaqa	2	10	20
	Makkanniisaa	Magaaraa	11	20	220
	hawaasee	Magaaraa	6	100	600
	gaattirraa	Gindii Guddaa	1	2200	2200
	gaattirraa	Dhaabaa	4	120	480
	gaattirraa	gindii g/galeessa	5	1700	8500
	gaattirraa	Baataa	8	150	1200
	gaattirraa	Magaaraa	11	70	770
	Ejeersa	gindii guddaa	5	2000	10000
	Ejeersa	Baataa	5	170	850
	Ejeersa	Dhaabaa	8	150	1200
	Ejeersa	Caffaqa	15	60	900
	Ejeersa	Magaaraa	16	100	1600
	laftoo	Caffaqa	12	25	300
	doddootii	gindii g/galeessa	1	1600	1600
	Makkanniisaa	Dhaabaa	2	40	80
	Makkanniisaa	Caffaqa	8	10	80
	garbii	gindii g/galeessa	1	1500	1500



Terro Monyyee	laftoo	Callaqa	1	25	100
	Makkamisa	gindii soppaa	2	400	800
	Makkamisa	Baataa	2	60	120
	Makkamisa	Dhaabaa	10	40	400
	Makkamisa	Magaaraa		0	
	Makkamisa	Callaqa	2	10	20
	ceekataa	Magaaraa	2	23	46
	ceekataa	Dhaabaa	1	35	35
	Ijeersa	gindii guddaa	1	2000	12000
	Ijeersa	Magaaraa	1	100	300
	Rombolcha	Baataa	2	60	120
	Hadheessaa	Dhaabaa	4	30	120
	hawaasee	gindii guddaa	1	1000	1000
	gaaffiraa	gindii guddaa	2	2200	4400
	gaaffiraa	Baataa	1	150	150
	xaaxessaa	Baataa	4	130	520
	xaaxessaa	Magaaraa	2	50	10
	doddootii	gindii g/galeessa	1	1500	1500
	laftoo	Dhaabaa	4	100	400
	agamsa	Dhaabaa	1	25	75
	agamsa	Magaaraa	11	15	165

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APPENDIX 3

2019 LRP REV.1 STAKEHOLDER ENGAGEMENT MEETINGS AND ISSUES

Stakeholder Engagement Meetings

Date	Location	Main Topics	Summary of main questions and concerns raised
General Community Meetings in Advance of the Land Acquisition Activities			
February 20, 2019	Dawi-Guticha	General Project information, planned work, land compensation process and grievance management mechanisms	Dust during construction. Who makes the payment and how it will be paid? We lost agricultural land for the existing road five years ago and no payment was made at the time and we are glad that the situation is different at this time.
February 20, 2019	Tero Moye	General Project information, planned work, land compensation process and grievance management mechanisms	We lost agricultural land for the existing road five years ago and no payment was made at the time and we are glad that the situation is different at this time. Why did the road not extend to our village, why does it stop at the lava field? Where do we go if we do not agree on the compensation estimate? There will be noise and dust disturbance during the construction – how do you plan to address these issues?
February 19 and 20, 2019	Anole	General Project information, planned work, land compensation process and grievance management mechanisms	---
February 25, 2019	Iteya 01/02	General Project information, planned work, land compensation process and grievance management mechanisms	Who makes the payment and how it will be paid? There will be noise and dust disturbance during the construction how do you plan to address these issues? We are expecting the road to be an asphalt road with 15m width, why don't you build it as such?
February 20, 2019	Shaki Sheraro	General Project information, planned work, land compensation process and grievance management mechanisms	There will be noise and dust disturbance during the construction – how do you plan to address these issues?
Post Valuation Community Meetings			

Date	Location	Main Topics	Summary of main questions and concerns raised
April 10, 2019	Anole	Entitlement, Compensation calculation and payment transfer	Why are 10 years of average income/yield used for the compensations? Will there be job opportunities for affected households?
April 16, 2019	Shaki Sheraro	Entitlement, Compensation calculation and payment transfer	Why are 10 years of average income/yield used for the compensations? The estimates for trees are very low and under the market price.
April 9, 2019	Shaki Sheraro	Entitlement, Compensation calculation and payment transfer for water well drilling activity	As much as we want water in the area, we do not want to sell our land for it, our life is dependent on the land.
April 18, 2019	Tero Moye	Entitlement, Compensation calculation and payment transfer	Why are 10 years of average income/yield used for the compensations? Will there be job opportunities for affected households?
April 11, 2019	Dawi Guticha	Entitlement, Compensation calculation and payment transfer	Why are 10 years of average income/yield used for the compensations? Will there be job opportunities for affected households? Dust disturbance especially for inhabitants along the road.
April 10, 2019	Iteya Town 01/02	Entitlement, Compensation calculation and payment transfer	Dust prevention plan. Kebele/local administration should take the compensation payment rather than dwellers. Will we be compensated for trees and fences?

Stakeholder Engagement Issues and Responses

Key Stakeholder Issue	Response
<p>Negative impacts associated with construction such as noise and dust</p>	<p>TMGO explained that well-known and easily implementable dust control measures would be implemented by the construction contractors, including spraying as necessary. It was emphasized that once the road was complete, dust that has been a source of complaint for the communities would be lessened.</p> <p>Noise impacts can be managed through embedded controls associated with the machinery; impacts to communities can be reduced by only carrying out construction during daytime hours and avoiding construction noise during periods of religious observance.</p>
<p>Job opportunities</p>	<p>TMGO emphasized that all unskilled labor to the extent possible would be recruited from the local area, so participants could expect that job opportunities will be created through the Project though most of these would be short-term opportunities during the construction period.</p>
<p>Sufficiency of the compensation</p>	<p>Participants were largely satisfied with the valuation derived by the compensation committee for farmland but were uncertain of the sufficiency of paying just 10 years of yield. It was explained that this is the requirement per national law and was not created by the Project. TMGO emphasized in all cases that it would provide livelihood restoration support to PAPs to help them with other means of restoring or ideally improving their livelihoods, in addition to plans to support general development in the local communities.</p>
<p>Why was the Gnaro lava field chosen instead of other areas where a household could receive that compensation?</p>	<p>TMGO relayed Project development and key decision points related to the choosing of the well pad site and it was emphasized that the lava field was chosen to avoid resettlement and other impacts to productive farm or grazing land.</p>

APPENDIX 4 INDIVIDUAL AGREEMENT TEMPLATE

Compensation Agreement

I the undersigned agree to _____ m² farmland, _____ m² grazing land, _____ number of trees, _____ m² of house and , _____ m² fence (here in after the "Property") for the access road upgrade work that Tulu Moye Geothermal company planned to undertake for geothermal exploration and development.

I hereby agree on the measurement and calculation of the Property made by the property valuation committee and hereby request the company to transfer Birr _____ as final payment in to my account at _____ Bank, Iteya Branch, Account No. _____ in my favor.

I hereby confirm that I do not and will not raise any further claim concerning the Property. I further agree to relinquish the Property with immediate effect.
