

Annex 3c:
Estimated Leverage Impact

Leverage Component	Sub-Project 1, Phase 1 Leverage (Euro)	Description
FCPF Carbon Fund REDD+ results-based payments	23 million	<p>Sub-Project 1, Phase 1 will help to unlock FCPF REDD+ results-based payments in the first accounting period (anticipated mid-term payment in 2023 and final payment in 2025). The GCF programme is explicitly designed to support the national Emission Reductions Programme (ER-P) to unlock these payments. The Emission Reductions Payment Agreement (ERPA) between the FCPF and the Government of Lao PDR is currently under negotiation and is expected to be signed in March 2020. Assuming a (conservative) carbon price of Euro 4/tCO₂e will be paid for the emission reductions, and assuming one FCPF payment (the mid-term payment in 2023) is forthcoming during Phase 1 of Sub-Project 1, the revenue from FCPF results-based payments is expected to be approximately Euro 23 million.</p> <p><i>Estimated GCF programme leverage¹: Euro 36 million</i></p>
Additional REDD+ carbon payments	120 million	<p>Sub-Project 1, Phase 2 is expected to achieve GHG emission reductions (through avoided emissions and enhanced sequestration) of approximately 30m tCO₂e over its 5.5-year implementation period. Using Phase 2 as a proxy for the leverage impact of Phase 1 of Sub-Project 1, and assuming a (conservative) market price of Euro 4 will be paid for these emission reductions (e.g. through an extended FCPF purchase programme or through an alternative channel such as a future UNFCCC scheme or the voluntary carbon market), the estimated additional carbon revenue is Euro 120 million.</p> <p><i>Estimated GCF programme leverage: Euro 432 million</i></p>
Deforestation-free agriculture green credit line	6 million	<p>To augment the GCF programme, throughout 2019 GIZ is investing in the development of a green credit line (Activity 1.1) that will be linked to the deforestation-free business models identified under Activity 2.2 – that boost agricultural productivity and reduce pressure on existing forests. The green credit line will be specifically targeted at the small and medium enterprises in the six GCF programme target provinces that are supported in structuring business plans and investment proposals. The green credit line will mobilise concessional international climate finance of (initially and approximately) Euro 13 million (potentially from the NAMA Facility and private sector impact investment funds). The GCF programme will not capitalise the green credit line but it will play a central role (under Action 1.1.4) in supporting fund-raising efforts. A Euro 6 million leverage figure is considered to be conservative estimate of the financing from the green credit line that flows to Sub-Project 1 (as opposed to Sub-Project 2) beneficiaries.</p> <p><i>Estimated GCF programme leverage: Euro 10 million</i></p>
Agricultural production	77 million	<p>GCF Sub-Project 1, Phase 1 will support a variety of interventions to increase agricultural productivity – e.g. irrigation, better land management practices, agroforestry, reduced soil erosion, etc. The impacts on productivity will vary from intervention to intervention and place to place, but, on average, they can be conservatively estimated to have a financial rate of return (FRR) of 20% (see the FRR calculations in Chapter 8 of the Feasibility Study; Activity 2.1, for example, is estimated to have an FRR of 45%).² Since some GCF expenditures are devoted to enabling conditions</p>

¹ Includes Sub-Project 1, Phases 1 and 2, and Sub-Project 2. Leverage estimated over the programme ‘influence period’ of 20 years.

² The incremental FRR impacts of the GCF programme are calculated using two scenarios: a without-project (business-as-usual) scenario and a GCF programme scenario. In the without-programme scenario, two agricultural 1 ha models were developed: one that reflects upland shifting cultivation land use and one that reflects lowland subsistence combined with cash-

		<p>(and not directly to agricultural investment), not all GCF expenditures can be expected to have a financial rate of return – at least, not one that is immediate and has clear causality. Accordingly, if government staff contributions and GIZ co-finance are removed entirely from consideration, and 15% of the other co-finance is removed (while retaining 100% of beneficiaries' (mainly farmers') investment, a total investment of Euro 31 million in time zero with an FRR of 20% would result, over the course of Phase 2 of Sub-Project 1 (as a proxy for the leverage impact of Phase 1), in benefits of approximately Euro 77 million (in nominal terms).</p> <p>Estimated GCF programme leverage: Euro 260 million</p>
Protected Area fees	86,600	<p>Protected Area (PA) fees are currently KIP 10,000/person (Euro 1/person). Building on the work done by the KfW Integrated Conservation of Biodiversity and Forests (ICBF) project, the government is considering increasing the PA fee. With GCF Sub-Project 1 support to protecting and restoring the forests in the 3 PAs in the Sub-Project 1 region, the rationale for increasing the visitor fee for improved PAs is strengthened. Nam Ha PA in Luang Namtha Province receives approximately 7,000 visitors/year. Nam Kan PA in Bokeo Province receives approximately 3,500 visitors per year. Taking the average (5,250 visitors/year) and extrapolating across 3 PAs, total annual PA visitor numbers are estimated to be 15,750. If the visitor fee were doubled to Euro 2/person (the range of increase under consideration by the government), the incremental revenue facilitated by Sub-Project 1 would amount to Euro 15,750/year. Using Phase 2 of Sub-Project 1 as a proxy for the leverage impact of Phase 1, over the 5.5-year duration of Phase 2 this incremental revenue equates to Euro 86,600.</p> <p>Estimated GCF programme leverage: Euro 630,000</p>
FFRDF forest fees and taxes	825,000	<p>The FFRDF has an annual budget of approximately Euro 300,000, sourced from a variety of sources (e.g. timber harvesting taxes, fees charged to hydroelectric power plants, etc.). Due to low internal FFRDF capacity and complex (overlapping) institutional mandates, it is estimated that the FFRDF collects only approximately 50% of its potential income stream. This represents a substantial amount of foregone income that could otherwise be recycled into further community forest investments. With GCF support, the technical capacity, the internal processes, and the fiduciary and environmental/social safeguards of FFRDF will be strengthened and brought up to international standards. As a result, the revenue-collection capabilities of the FFRDF will be improved. Conservatively assuming a 50% increase in baseline revenue collection and excluding increased fee revenues associated with timber production in production forests (accounted for separately, below), the incremental leverage of GCF support will be approximately Euro 150,000/year. Using Phase 2 of Sub-Project 1 as a proxy for the leverage impact of Phase 1, this equates to Euro 825,000.</p> <p>Estimated GCF programme leverage: Euro 3 million</p>
Timber revenues	374,000	<p>Sub-Project 1, Phase 1 will leverage timber revenues for Lao PDR in 2 principal ways: (i) through support to sustainable forestry, governed by village forest management plans (VFMPs), in village use forests (Activity 3.1); and (ii) to work with the government to amend existing regulations (PMO 31) to allow sustainable commercial logging in suitable production forests (Activity 3.2).</p> <p>In theory, Sub-Project 1, Phase 1 could support sustainable village forestry in all 200 villages addressed by the sub-project. However, assuming (conservatively) that only 15% of the 77,000 ha of land allocated to the village use forest category in the sub-project area is suitable for</p>

crop land use. These representative models reflect the current deforestation and forest degradation driving scenarios described in Section B.1.4. In the programme scenario, a representative model reflects the implementation of good agricultural practices and conversion of shifting cultivation towards permanent agriculture. In the lowland cash-crop scenario, two representative good agricultural practice implementation models were developed. All with-programme models reflect the higher material and labour inputs, and higher production levels, relative to the without-programme models.

		<p>timber harvesting (e.g. because of topography and soil degradation, villagers' other priorities, the inability to satisfy customary needs on other land, etc.), a conservative estimate of 12,000 ha of supported village forestry is used.³ Assuming 0.17 m³/ha/year of harvestable timber is produced and net income (revenue minus harvesting costs) of Euro 50/m³ is generated, total annual net income of approximately Euro 102,000 can be expected. Using Phase 2 of Sub-Project 1 as a proxy for the leverage impact of Phase 1, aggregated over 5.5 years this equates to approximately Euro 561,000.</p> <p>In 3 districts in the Sub-Project 1 area (Sayabouri: Phiang, Sayabouri and Hongsa districts), there is a commercial potential for sustainable logging in production forests. Assuming (conservatively) that 8,000 ha are suitable for timber harvesting, that 0.17 m³/ha/year of harvestable timber is produced and net income (revenue minus harvesting costs) of Euro 50/m³ is generated, total annual net income of Euro 68,000 can be expected. Using Phase 2 of Sub-Project 1 as a proxy for the leverage impact of Phase 1, aggregated over 5.5 years this equates to approximately Euro 374,000.</p> <p><i>Estimated GCF programme leverage: Euro 5.2million</i></p>
TOTAL	<p>Sub-Project 1, Phase 1 leverage: Euro 227 million</p> <p>GCF programme leverage: Euro 747 million</p>	

³ This mirrors the assumption that the World Bank SUFORD project uses for estimating timber yields from production forests: see MAF (2018), *Funding of PFA Management – Projections on Revenue and Costs*, provided in Annex 22w.