

ラオス人民民主共和国
水道事業運営管理能力向上プロジェクト
(MaWaSU2)
業務完了報告書

2023 年 12 月

独立行政法人
国際協力機構 (JICA)

事業完了報告書

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＜技術協力プロジェクト基本情報＞

1. プロジェクト名：
（和）水道事業運営管理能力向上プロジェクト（MaWaSU 2） （英）The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)
2. 対象国名：ラオス
3. 署名日（実施合意）：2017 年 12 月 26 日
4. 協力期間：2018 年 5 月 21 日から 2023 年 12 月 20 日
5. 相手国機関名：
（1）責任機関：公共事業運輸省・水道局（DWS/MPWT: Department of Water Supply, Ministry of Public Works and Transport） （2）実施機関：DWS/MPWT、首都ビエンチャン水道公社、ルアンパバーン県水道公社、カムアン県水道公社（パイロット水道公社）、首都ビエンチャン、ルアンパバーン県、カムアン県公共事業運輸局および各県公共事業運輸局
6. 目標（アウトカム）：
上位目標： 国家目標を達成するための水道セクター管理体制と水道公社の能力が強化される。 プロジェクト目標： 水道セクター管理体制と水道公社の能力を強化するために必要な基盤が整備される。
7. 成果：
1 水道行政の改善を通じて、水道セクターの透明性、アカウンタビリティ、ガバナンス（TAG）が強化される。 2. 施設整備事業における水道公社の計画・実施能力、公共事業省運輸省（MPWT）、県公共事業運輸局（DPWT）の審査・モニタリング・評価能力が強化される。 3. 水道事業に必要な技術基準が作成される。 4. 水道公社の水道事業に関する計画実施能力が強化される。
8. 活動および達成状況：
【成果 1 にかかる活動および達成状況】 成果 1 では、ラオス水道セクターを監督管理する DWS を対象に、法制度整備や水道開発基金設立に向けた検討、水道戦略の策定、全国の水道データを取りまとめた年報作成等を支援した。 (1) 包括的制度改革戦略（OIDS: Overall Institutional Development Strategy）／優先課題改善戦略（PDCDS: Priority Domain Capacity Development Strategy）： OIDS では、水道セクターの改善すべき要素を洗い出し、特に重要と考える課題をまとめ、その重要課題に対する戦略を下記のとおり 7 つの戦略に整理した上で、水道セクターの制度改革

善及び DWS の能力向上に向けた OJT に取り組んだ。OIDS で整理された 7 つの戦略、重要課題の優先順位は以下のとおり。

戦略 1：国水道行政における水道法制度整備部門の設置（重要課題 2）

戦略 2：必要水道関係法制度の整備（重要課題 3）

戦略 3：水道料金改定システムの改善（重要課題 5）

戦略 4：ラオス水道協会の設立（重要課題 7）

戦略 5：都県水道行政における役割分担の最適化（重要課題 4）

戦略 6：水道施設整備における制度改善（補助金制度、水道開発基金制度の創設）（重要課題 1）

戦略 7：全国水道水質管理システムの構築（水質管理フレームワーク策定）（重要課題 6）

その後、OIDS で整理された上記戦略 1 と 2 について優先的に PDCDS として取り組むこととした。コンサルタントの調査結果を参考に DWS が主体的になれるよう OJT を中心に推進した。法整備部門の設置については、法令等の整備は DWS 内で体制を整え、策定していることを確認。現状では法令等の専門の課や係、担当の設置は必要なくても、法令等の策定をある程度進められていることが確認できた。

OIDS/PDCDS は、当初上位目標及びプロジェクト目標の指標において大臣承認と記載されていたが、PDCDS の内容はプロジェクト期間中に大臣承認された水道衛生戦略（2022-2030）に反映されているため、終了時評価の際に PDM を変更し、OIDS/PDCDS は DWS 局長承認までとなった。2023 年 12 月現在、OIDS/PDCDS は DWS 内で最終化中であり、プロジェクト終了時までの DWS 局長承認は間に合わない見込み。今後も OIDS/PDCDS の実施を通じて DWS の組織や個々の能力向上に取り組むことが重要。DWS は水道セクターのリーダーとして組織的、主体的、総合的に課題に対して取り組むことが求められる。

(2) 水道セクター開発基金（WSSDF: Water Supply Sector Development Fund）：

コンサルタント調査部分をもとに将来的に事務局側になる DWS が主体的になれるよう OJT を中心に取り組んだ。シミュレーションにより Output2 での実践を参考にした一定の条件下での財政的な基金運営の可否を判断した。資金源は複数考えられ、水道料金サーチャージが基金の特性に一番合っており、これ以外にもラオス政府予算、他ドナー等考えられているが政府予算は脆弱で不安定なことやドナー支援は条件に左右される等の理由があるため補助的な資金源と設定した。DWS は、基金の重要性や有用性の認識はあるが、運用開始がまだ先のためイメージがつきづらいのか DWS が主体的に進めることは困難だった。

国内の既存基金ヒアリングを実施し WSSDF 計画書のドラフト作成に活用したことと、加えて課題整理シートを作成し MaWaSU2 終了後、ラオス側が主体的に取り組めるようにした。2023 年 12 月現在、WSSDF 計画書は DWS 内で最終化中。

(3) 政府版水道戦略（WSS: Water Supply Strategy）／県水道戦略（PWSS: Provincial Water Supply Strategy）：

WSS 承認に伴い PWSS の策定支援を実施した。順番に承認後の全国 WSS 説明会、地域別

PWSS 策定説明会、各県 PWSS 策定支援 OJT を実施した。これまでに旧バージョンでウドムサイ県、ボケーオ県、ルアンパバーン県が PWSS を策定済みだが、新バージョンでの WSS 策定に伴い、PWSS も改訂することになった。PWSS 策定に並行し、各県 DPWT にアンケート調査を実施したほか、OJT 等県 DPWT との協議の記録の他、各県の施設整備や水道公社との関係性の現状を取りまとめた。上記 3 県は改訂、残り 15 県は新規作成になる。PWSS ドラフトの提出はポンサリー県、ウドムサイ県、サイニャブリー県、ボケーオ県、ファパン県、カムアン県、サワンナケート県、サラワン県、チャンパサック県、アタプー県、ボリカムサイ県、シェンクアン県の 12 県となっている。最終版の提出、県知事の承認は 2024 年 3 月までを目標としている。

(4) 水道セクター年報（WSSAR: Water Supply Sector Annual Report）：

WSSAR 作成は、以前は ADB の支援のもと DWS が実施してきたが、近年は DWS 独自により発行を続けている。スケジュールについては相変わらず遅延しているが、内容については徐々に向上してきている。遅延の原因は、データ提供を依頼する DWS と回答する水道公社の言葉の定義や認識に違いによるものである。これらのやり取りと DWS 内の修正、局長承認に時間を要している。今後は、スピードと内容のバランスをテーマに新しく策定される年報作成ガイドラインに則った策定が期待される。2023 年 12 月時点では 2022 年度版の水道セクター年報は未承認である。

【成果 2 にかかる活動および達成状況】

パイロットプロジェクト活動（総額 6,000 万円程度（3 件×2 サイクル、合計 6 件））および新型コロナウイルス時の「本邦企業の技術・資機材の JICA 事業での積極的活用」によって資金提供を受けた活動を通じて合計 9 件実施し、施設整備事業の計画・審査・実施・モニタリング・評価の一連のプロセスを、カウンターパート（C/P）が実際に実施・経験することで、施設整備事業の提案・実施主体である水道公社の計画立案・実施能力を高めるとともに、監督主体である公共事業運輸省・水道局（DWS/MPWT）の事業のモニタリング・評価を行う能力を高めることを目的として実施した。

(1) パイロットプロジェクト第 1 バッチ（2019 年、施設整備事業対象の条件なし）

- ・水道公社による計画立案（プロポーザル提出）：全 18 都県
- ・パイロットプロジェクト実施県
 1. ポンサリー県：管路更新事業
 2. サラワン県：管路拡張事業
 3. ボリカムサイ県：新規水道施設整備事業
- ・事後評価（パイロットプロジェクト完了約 1 年後に実施）
 1. ポンサリー県ポンサリー郡：2023 年 1 月
 2. サラワン県ワピー郡：2022 年 2 月
 3. ボリカムサイ県パクサン郡：2023 年 1 月

(2) パイロットプロジェクト 1.5 バッチ（2021 年、本邦企業の技術・資機材（自動薬注装置））

- ・水道公社による計画立案（プロポーザル提出）：15 県
- ・パイロットプロジェクト実施県
 4. サラワン県ラコンペン郡：自動薬注装置
 5. サワンナケート県セボン郡デンサワン給水区域：自動薬注装置
 6. シェンクアン県クーン郡：自動薬注装置
- ・事後評価（パイロットプロジェクト完了約 1 年後に実施）
 4. サラワン県ラコンペン郡：2023 年 7 月（サラワン県で 3 県合同）
 5. サワンナケート県セボン郡デンサワン給水区域：2023 年 7 月（サラワン県で 3 県合同）
 6. シェンクアン県クーン郡：2023 年 7 月（サラワン県で 3 県合同）

(3) パイロットプロジェクト第 2 バッチ（2022 年、管路拡張事業）

- ・水道公社による計画立案（プロポーザル提出）：15 県
- ・パイロットプロジェクト実施県
 7. ポンサリー県マイ郡：管路拡張事業
 8. サイニャブリー県サイニャブリー郡：管路拡張事業
 9. シェンクアン県クーン郡：管路拡張事業
- ・事後評価（プロジェクト実施期間中に実施なし）

パイロットプロジェクト第 1 バッチの経験を踏まえ、1.5 バッチおよび第 2 バッチでは、主たる活動（自動薬注装置設置：1.5 バッチ、管路拡張工事：第 2 バッチ）に加えて、水道教室の実施、水圧・水質管理体制の構築をパイロットプロジェクト活動に加えた。そのことにより、工事完成が目標達成ではなく、施設整備後の維持管理や施設整備事業を行うことにより水道利用者（住民）への衛生・生活向上という水道事業本来の目的を浸透させることを試みた。

パイロットプロジェクト第 1 バッチの施工監理ガイドライン類は、コンサルタント専門家が日本のものをラオス語に翻訳したのみで、ラオス側の能力を超えたものであり実質的に機能しなかった。第 2 バッチでは、長期（技術）専門家がラオスの現状に合わせたものを以下のとおり準備し、C/P の能力向上に大きく寄与した。

1. 施工計画作成ガイドライン
2. 設計・完成図作成ガイドライン
3. 工事写真アルバム作成ガイドライン

また、後述するさいたま市草の根プロジェクトとの連携により以下のガイドラインを整備しパイロットプロジェクト第 2 バッチで活用した。

4. 管路布設ガイドライン
5. 給水装置設置ガイドライン
6. 資機材管理ガイドライン

MPWT の事業のモニタリング・評価においては、パイロットプロジェクト第 1 バッチの経験から第 2 バッチでは DWS/MPWT の監査課全員および水道課数名からパイロットプロジェクト・タスクチーム（PPTT: Pilot Project Task Team）が構成され、よりまとまりのある組織・活動となり、プロポーザル評価・パイロットプロジェクト実施県選定・パイロットプロジェクトモニタリング

を行った。

【成果 3 にかかる活動および達成状況】

水道法第 15 条（水道施設の設計建設基準）に記述されている MPWT が定めるべき技術基準を作成する活動である。活動体制は、「省令」作成チームとして MTT（Ministerial ordinance Task Team）を、「指針」作成チームとして STT（Standard Task Team）を設置し、公的承認委員会として TSC（Technical Standard Committee）を設置した。「省令」「指針」のドラフトを TSC が承認後、2020 年 12 月 22・23 日に全国説明会を開催した。会議にて技術基準を「省令」と「指針」に分類せず、統一した形で策定する方針に変更された。その後、MPWT 大臣の決裁手続きを DWS が担う形で OJT を実施しながら最終化を進めた。DWS 内会議では、個人コンサルタントも参加し、技術基準に使用されている外国語や専門用語のラオス語への変換することや、ラオスの事例を紹介した図面や写真を採用する指示を受けて修正作業を進めた。

また、定期的に PMM（Project Management Meeting）を実施し進捗を確認し、DWS 内の担当者、決裁手続きまでの手順、スケジュール、内容理解が足りない事項を毎回確認しながら活動を進めた。予定より決裁手続きに多くの時間を要したため、複数回スケジュールを変更しながら、修正作業を繰り返し実施した。

3 回に亘る JCC 会議でも技術基準の重要性をリマインドし、2023 年 7 月 3 日に技術基準の MPWT 大臣の承認を受けた。承認後校正に約 4 ヶ月要し、同年 11 月 3 日に印刷製本された。

技術基準の決裁手続き中は、STT メンバーと OJT を開催し、技術基準の内容理解、全国説明会の準備を進めた。技術基準の解説は短期専門家が中心に作成し、全国説明会の準備をした。

技術基準の MPWT 大臣の承認を受けて、同年 10 月 4 日に全国説明会を実施し、全国の DPWT 及び水道公社に対して、技術基準が承認されたことを周知した。また、11 月に全国の DPWT 及び水道公社の技術担当者を対象に全国説明会を実施した。講師は STT メンバーが担い、技術基準の活用方法及び、9 章で構成される技術基準の解説を行なった。会議の詳細は以下のとおり

全国説明会	2023 年 10 月 4 日	首都ビエンチャン（Online 会議）
全国展開説明会	2023 年 11 月 29-30 日	首都ビエンチャン（Online 会議）

【成果 4 にかかる活動および達成状況】

カウンターパートの能力向上を目指した OJT による技術移転を中心に実施した。活動は 6 分野（データ管理、お客様サービス、計画、財政、水質、水道協会）の Sub-committee（SC）を対象に、OJT を中心とした活動を行い、各分野でテーマを与えて、各活動の成果を Mini-Workshop 及び全国セミナー等で全国の水道公社に周知・説明する流れで全国展開を実施した。また SC6 では 2021 年 1 月にラオス水道協会が設立されたことから、水道協会事務局及びチナイモ研修所職員を C/P に追加し、事務局組織運営を支援した。

分科会は、3 パイロット水道公社において活動内容の共通化を図るため、2 か月に 1 回の頻度で首都ビエンチャン、ルアンパバーン、カムアンの持ち回りで開催した。2018 年 10 月から 2021 年 3 月の間に 12 回開催した。2021 年 4 月以降は、新型コロナウイルスの感染拡大により、対面型の

会議である分科会活動を中止し、3 水道公社参加型の Online による OJT 会議に変更した。

全国展開活動は 3 つの地域（北部 7 県、中部 1 都 4 県、南部 6 県）に分けた Mini-Workshop あるいは全国を対象にした全国セミナーにより実施した。

Mini-Workshop は、開催頻度は半年に 1 度、開催に当たる費用は開催都市負担（地域によっては各県でシェアする方針）、参加する水道公社の費用は自己負担、開催都市は地域の中で持ち回る方針とし、2021 年度以降は、ラオス水道協会の研修事業への移管を見据え、水道協会事務局も参加した。Mini-Workshop は、3 地域で各 6 回（計 18 回）実施し、各 SC メンバーと協議・決定した内容について全国の水道公社に対して講義を行い、全国の水道公社の能力向上を図った。各回のテーマは以下のとおり。

- ・ 第 1 回：テーマ『データ管理』 & 『お客様サービス』（内容理解・活用方法）
- ・ 第 2 回：テーマ『データ管理』 & 『お客様サービス』（精度向上・実践練習）
- ・ 第 3 回：テーマ『計画』 & 『財政』 & 『水質』（内容理解・活用方法）
- ・ 第 4 回：テーマ『水質』（供与資機材を使用した実践練習）
- ・ 第 5 回：テーマ『計画』 & 『財政』（精度向上・実践練習）
- ・ 第 6 回：テーマ『お客様サービス』 & 『テストメーター』（内容理解・活用方法）

また、全国セミナーは、全国に適用するルールの周知や、全国を対象にした水質検査機器供与する際に開催した。実績は以下のとおり。

- ・ データ管理全国説明会

水道事業ガイドラインの改正に伴う、改正の周知、改正したポイント（水道普及率の定義の追加、計算例・図表の追加）、水道事業ガイドラインの指標結果の分析方法、及びデータ管理マニュアルの活用の周知

- ・ 第 1 回全国水質管理セミナー

水質検査マニュアルの紹介とともに、全国水道公社の水質管理体制に関わる現状と課題について意見交換。特に供与機器の使用が継続されるよう試薬の購入のための予算確保について水道公社の幹部に必要性を説明した。吸光光度計(DR1900)と試薬のほか、濁度、残留塩素、pH、Na、電気伝導率測定機器を供与

- ・ 第 2 回全国水質管理セミナー

全国の水道公社の地方（郡単位）の浄水場での具体的な水質検査体制（水質ラボ、人員・機器・備品の配置）への意見交換。また、大腸菌及びヒ素用の検査機器と試薬の供与と研修

日本側の指導内容に齟齬や重複が生じないよう指導内容を記録した OJT カルテを作成して連携を図った。水道公社とは 3 パイロット水道公社へ訪問した際に、幹部を含めた全体会議を開催し、活動の目標、各活動の進捗、達成状況を確認しながら情報共有した。各 SC の活動および達成状況は以下のとおり。

(1) SC1（データ管理）

- ・従来の水道事業ガイドラインについて、PI 計算方法が水道公社ごとに異なっていることや用語が統一されてない等の状況が判明したため、丁寧な説明・計算例の追記・用語の統一等を目指して改訂作業を行った。2021 年 12 月に水道事業ガイドラインが改正された。
- ・水道事業年報は、全国で作成されるようになり業務として定着された。
- ・2022 年データを活用して、2024 年版 MaWaSU2 ノートブックに 18 県水道公社の基礎情報を掲載。
- ・データ管理マニュアルの用語等を修正し、DWS にドラフトを情報共有した。
- ・2 回の Mini-Workshop 及び全国説明会を開催し、全国展開活動が実施された。

(2) SC2（お客様サービス）

- ・小中学校、未普及地域での水道教室（3 パイロット水道公社で実施済）が実施され、業務として定着した。
- ・検針・集金業務に関する手順を示したマニュアルを作成し、通常業務に活用されている。
- ・行政機関等の未収対策など水道公社内の組織を通じて、改善にむけた取り組みがなされている。
- ・水道教室の実施とともに新型コロナウイルス対策の一環として手洗いキャンペーンを実施した。JICA から供与されたせっけんやパンフレットを参加者に配布した。
- ・水道教室時にお客様アンケートを実施し、水使用状況やニーズを調査している。また首都ビエンチャンとルアンパバーン県では現場で請求書を発行できるモバイルを用いて、検針業務の効率化を図っている。また、携帯電話で銀行のアプリケーションで水道料金を支払う方法が構築されている。
- ・全国展開活動として Mini-Workshop を実施した。

(3) SC3(計画)

- ・既存給水区域の拡張など水道公社が所管している給水区域の設定ができている。
- ・水道・公衆衛生戦略における 2030 年までの水道施設整備・拡張計画の地域を図示した。
- ・人口の統計データを用いて、将来の人口予測に基づく水需要予測の方法は理解されている。
- ・2030 年までに必要な事業を整理し、長期計画ドラフトを作成しており、長期的視点をもった計画策定手順は理解されている。水道料金改定を前提としている計画である一方で、料金改定が政治、社会情勢的にできないため、計画の見直しを繰り返し替えている現状である。
- ・Mini-Workshop により全国展開活動を実施した。
- ・2023 年 6・7 月に本邦研修を実施。

(4) SC4（財政）

- ・ 財政 5 表の内容を理解し、通常業務として定着した。
- ・ APIS による財務管理を実施し、通常業務として定着した。
- ・ 決算概要書について、内容を簡潔に図表を用いた概要表に改め、通常業務として定着した。
- ・ 固定資産管理の重要性を理解し、管理方法の改善やシステム改良などが図られている。
- ・ 適正な減価償却費を計上するため、水道施設に見合った耐用年数を定める必要性が認識されている。
- ・ Mini-Workshop により全国展開活動を実施した。
- ・ 2023 年 6・7 月に本邦研修を実施した。

(5) SC5（水質）

- ・ 水質検査の手順を示した水質検査マニュアルを作成した。マニュアルはラオス語で作成され、一連の作業を写真も掲載し、試薬の取扱いなど注意事項も各項目に記載されている。全国の水質検査担当者に共有され活用されている。
- ・ 供与された水質検査機器は主要浄水場で使用され、主要浄水場では水銀を除く 22 項目の（水銀機器を供与した水道公社は 23 項目）水質項目が検査されている。
- ・ 水銀の検査研修について、手順の難易度が高いことからラオス国立大学の協力のもと、首都ビエンチャン、ルアンパバーン県、カムアン県、ボリカムサイ県水道公社を対象に実施した。
- ・ 水質検査結果は、水質年報として記録され、浄水場ごとの水質検査結果とともに PI 指標の計算根拠等も記載されている。通常業務として定着した。
- ・ 2 回の全国セミナー、Mini-Workshop の開催。
- ・ 2023 年 1・2 月に本邦研修を実施した。
- ・ OBE（教授法）研修、水質管理に関する研修計画策定研修を実施した。
- ・ 水道協会に水質部会を立ち上げ、SC5 の活動を協会活動へシフトし、全国の水質管理に関する課題把握、今後の調査・検討事項を議題とした水質部会が開催された。
- ・ 全国の水質管理が適正に実施できるように、国（DWS/MPWT、MOH）、県、水道公社と連携して水質管理フレームワークを作成に取り組んだ。国の水質管理に対する方針、現在水質検査が実施できていない現状に対する改善するためのステップ、行政によるモニタリング体制等を示し、全国の適正な水質管理の確実な実行を目指し、ドラフトを作成した。

(6) SC6（水道協会）

- ・ 規約案の作成

SC6 の活動を通じて、ラオス水道協会規約（案）を作成した。規約（案）には、組織目標・事業内容・組織体制・会員構成等が記されている。本規約（案）を含む必要書類

が、協会設立を所管する内務省（MoHA）へ提出され、内務省から設立準備委員会の設置が認められた。

- ・ 設立準備委員会の開催（全国の水道公社への説明）

内務省からの設立準備委員会の設置許可を受け、全国の水道公社総裁等を委員とする設立準備委員会を設置し、2 回開催した。この 2 度の設立準備委員会及び 3 度の全国展開活動（Mini- Workshop）の機会において、DWS 幹部級及び全国の水道公社の総裁級に規約（案）を説明し、意見交換を行いながら共通認識を構築した。

- ・ 日本水道協会のラオス招聘

参考情報の提供及び顔の見える交流のスタートとして、2019 年 2 月及び 2020 年 1 月にラオスで開催した全国カンファレンスに日本水道協会を招聘した。日本水道協会から事業内容や実施体制、ラオス周辺国の水道協会の状況等が紹介された。

- ・ 本邦研修の実施

日本水道協会の役割や実際の業務内容について理解を深めてもらうとともに、今後の支援・連携に向けて両水道協会間の関係強化を図ることを目指し、日本水道協会での本邦研修を実施した。

- ・ 事業計画（素案）の作成

本邦研修の最終日にアクションプランとして、研修で学んだことを参考にラオス水道協会の具体的な実働作業及び実施体制を記した事業計画（素案）を作成した。

- ・ ラオス水道協会の設立

2020 年 12 月 7 日、ラオス水道協会の設立セレモニーが開催された。設立セレモニーの開催に当たっては、SC6 メンバーと次第・構成等の調整を行い、JICA ラオス事務所の祝辞及び日本水道協会からのビデオメッセージを準備した。また、当日は水道協会の運営委員会メンバー（運営委員（5 名）と監査員（3 名））を、正会員 31 名による投票により選出後、第 1 回目の運営委員会が開催された。第 1 回運営委員会では、委員長（首都ビエンチャン水道公社総裁）及び副委員長（ルアンパバーン県水道公社総裁）が選出された。

- ・ MaWaSU2 の全国展開活動の事務局連携

MaWaSU2 の活動をシフトするため、Mini-Workshop など MaWaSU2 で実施している会議を開催までの企画立案、日程調整、レター発行など水道協会事務局と連携し、ノウハウを共有しつつ会議を開催した。

- ・ 理事会の開催

協会規約に則り、毎年 2 回理事会を開催する。理事会では当年度の活動報告及び、来期の活動計画を事務局から報告し、理事会の承認をとって活動を実施する。また水道協会内の組織編成も理事会で決定し、プロジェクト期間中には 3 地区（北部：ルアンパバーン県、中部：ボリカムサイ県、南部：カムアン県）に事務局のコーディネーターを設けたほか、研修・調査事業を実施するため、理事会の下に技術委員会、技術委員会の下に水質及び施工監理部会を設置した。

・技術委員会、水質・施工監理部会の設立

2023年8月24日に技術委員会、8月28日に水質・施工監理部会を設立した。設立に至るに技術委員会及び部会の役割を示した規約及びメンバー選定案の作成をした。これを理事会に提出し、委員会と部会が設立された。今後、事業委員会の設立及び他のテーマの部会を設立する予定。

・水質・施工監理部会の開催

水道協会主催の水質及び施工監理部会を開催した。水質部会では全国の水質検査体制の確認、水質検査報告書の確認、今後水質管理体制を強化するための活動について意見交換がなされた。また施工監理部会では MaWaSU2 成果である 7 つのガイドライン（施工計画、工事写真アルバム、設計・完成図、配水管布設、給水装置、資機材管理、テストメーター）を周知した。

部会は 2023 年 9 月に 3 地区で開催した。

・技術委員会の開催

2023 年 12 月 7 日に技術委員会を開催した。部会の報告書を審査し、理事会への部会編成案、次年度活動報告資料を作成した。

【その他ラオス水道セクターに質する活動】

新型コロナウイルス対策特別枠

2020 年 2 月から世界的に流行した新型コロナウイルス感染症にかかる追加予算を活用して、①無償資金協力案件「タケク上水道拡張計画」のスコープカット分を含む管路布設や②サイソンブン県アヌウォン郡管路拡張事業（成果 2 パイロットプロジェクト第 1 バッチで選定されたものの JICA 安全措置のため実施が見送られた案件）、③ルアンパバーン県ルアンパバーン郡管路拡張事業（同パイロットプロジェクト第 1 バッチで落選した案件）、及び④取水施設に問題が発生しているファパン県エット郡・シェンコー郡浄水場への重機提供が検討された。

これらの中から、カムアン県タケク郡とサイソンブン県アヌウォン郡管路拡張事業が選定され、MaWaSU2 活動の一環として実施された。

・新型コロナウイルス対策特別枠・カムアン県（約 1.2 億円）

供与機材：重機（ショベルカー、バックホーローダー、クレーン付きトラック、ショベルカー運搬用トラック、トラック、ローラー、プレートコンパクター、ラマーなど）、管路布設資機材（HDPE 融着器、小型発電機、埋め戻し用砂利・砂など）、管路付属品（マスターメーター、DMA 用メーターなど）、管材約 65Km

カムアン県水道公社への支援内容として、資機材供与をするための管路拡張工事の設計・積算の審査及び検算、設計図作成、供与重機の選定、資機材納品時の調達品目の確認、工場での事前検品、現地での一部検品を行った。また、資機材供与後は、施工計画書の作成支援、

月間の進捗報告書により工事進捗を確認した。

工事ボリュームが膨大であったため、設計図の構成（目次や区間設定）を明確にし、配管のタイプを整理し、タイプごとの材料表を詳細図に記載するとともに平面図に詳細図のナンバーリングをすることを指導したことで図面と BOQ との照合作業の効率化を図った。

また、調達品の納品時には、事前に資機材置場を確保するため配置計画を作成し、計画に基づいて納品が実施した。納品時の注意として、管材が傷つかないように枕木を用意したほか、数日を要した荷下ろしも作業員を常時監督するように職員を配置した。また、屋外に置いた管材は、直射日光を避けるように黒いビニールシートで覆う工夫をした。

2023 年 12 月に全ての施工を完了し、拡張された地域では、給水装置工事の申請と工事を随時実施されている。

・新型コロナウイルス特別枠・サイソンブン県（約 1,000 万円）

供与機材：管路布設資機材（埋め戻し用砂利・砂など）、管路付属品（仕切弁、空気弁など）、管材約 11Km

サイソンブン県水道公社への支援内容として、施設のレイアウトを含んだ基本設計の見直し、工事の設計・積算の審査及び検算、設計図作成、調達先と品目の確認を行った。

また、資機材供与後は、施工計画書の作成支援、月間の進捗報告を受け、パイロットプロジェクト第 1 バッチでプロジェクトに携わったボリカムサイ県水道公社の C/P を工事施工監理支援員としてサイソンブン県へ派遣し、定期的にオンライン会議により工事進捗や施工指導を実施した。

設計図作成時では、全体工事の概要を説明するための工事案内図、積算根拠となる BOQ と整合がとれる詳細図作成などは Online-OJT を複数回実施することで、大きな改善となった。また、工事施工監理支援員の派遣により、現場確認をプロジェクトの代行することが可能であり、施工上の注意点、試運転時の検査も実施された。工事によって配水管延長約 11.4km、2 つの配水池、ポンプ設備が設置され、拡張地域に対して給水されている。

その他、新型コロナウイルス感染症にかかる追加予算をテストメーター「Portable Water Meter Test Kit」に配置した。MaWaSU2 前半チーフアドバイザーがさいたま市草の根プロジェクト（首都ビエンチャン、ルアンパバーン県、カムアン県が対象）を通じてテストメーターの有用性を認識しており、全国の水道公社へ提供することが望ましいと考えられていた。アジア開発銀行（ADB）による無収水対策の一環として ADB プロジェクト対象県へテストメーター「Portable Water Meter Test Kit」を含む資機材が供与されることから、MaWaSU2 では ADB プロジェクト対象外の各県へテストメーター「Portable Water Meter Test Kit」を提供し、全国の水道公社がテストメーターを活用できる環境を整備した。後述するさいたま市草の根連携でテストメーター活用マニュアルを作成し、2023 年 2 月、3 月に 3 地域に分かれて全国展開活動を行った。

さいたま市草の根連携

さいたま市水道局による草の根技術協力事業「水道公社における上水道管路維持管理能力向上支援事業」は、MaWaSU2 と同じ 3 パイロット水道公社（首都ビエンチャン、ルアンパバーン県、カムアン県の各水道公社）を対象に「給水管を主なターゲットにした無収水削減」をテーマとした事業であり、管路布設、給水装置、資材管理の各マニュアルが作成された。3 パイロット水道公社ごとに作成された各マニュアルをパイロットプロジェクト第 2 バッチで活用することを念頭とした全国普及版ガイドラインを作成するために、さいたま市草の根プロジェクトのプロジェクトマネージャー（MaWaSU2 前半チーフアドバイザー）と協力し MaWaSU2 施工監理支援員及びさいたま市草の根プロジェクトメンバーによる連携体制を構築した。作成されたガイドラインは【成果 2 にかかる活動および達成状況】で上述されている 4. 管路布設ガイドライン、5. 給水装置設置ガイドライン、6. 資機材管理ガイドラインに該当する。また、上述されているテストメーター活用マニュアルも連携体制を通じて作成された。

課題別研修 Knowledge Co-Creation Program (KCCP)

毎年、ラオス水道セクターの関係者が合計 4 コース程度の課題別研修 Knowledge Co-Creation Program (KCCP)に参加している。これらの研修は、2022 年 3 月に策定された水道・衛生戦略にある「(2022-2030) 9 ヶ年水道・公衆衛生セクター開発における期待成果と集中的実施計画、戦略 1、期待成果 3 および記載成果 4（人材育成・研修受講）」に該当・寄与し、MaWaSU2 活動進捗・動機付けにとっても有効であった。しかしながら、JICA 国内センターからラオス事務所を経てラオス政府窓口機関を経由して案内が届き、申請締め切りまでに時間的な余裕がないため人選に十分な配慮がなされず、概して公共事業運輸省・水道局（DWS/MPWT）や首都ビエンチャン水道公社など限られた範囲からの参加が多かった。そのため、DWS/MPWT へ全国水道公社および県公共事業運輸局を対象に KCCP に興味を示す職員を募る事前登録制度（Pre-registration system）を 2020 年度に提案し、2021 年度から実施された。本制度によりこれまで限定的であった情報が全国へ浸透することになり、より幅広い人選が行われた。2023 年度の KCCP 人選は、4 コースのうち 3 コースにおいて地方の水道公社職員が選定された。

9. 具体的成果品リスト：

別添①

<活動実施スケジュール（実績）>

- ・活動実施スケジュール（実績）：別添②

<投入実績>

- ・専門家派遣実績：別添③
- ・研修員受入れ実績：別添④
- ・供与機材実績：別添⑤
- ・在外事業強化費実績：別添⑥
 - 2018 年（平成 30 年）度：120,732.73USD
MaWaSU2 全国セミナー、第 1 回 JCC 会議、第 1 回全国展開活動（1. データ管理、2. お客様サービス）、The Lao-Japan Waterworks & MaWaSU2 Conference 2019、OJT 活動など
 - 2019 年（令和元年）度：336,659.47USD
パイロットプロジェクト全国説明会、第 2 回全国展開活動（1. データ管理、2. お客様サービス）、第 3 回全国展開活動（3. 計画、4. 財政、5. 水質）、The Lao-Japan Waterworks & MaWaSU2 Conference 2020、プロジェクト間会議（P2P：Project to Project）、OJT 活動など
 - 2020 年（令和 2 年）度：12,932.84USD（4～5 月）、105,026.99USD（9～2021 年 3 月）5～9 月新型コロナウイルス感染症のため避難一時帰国
ラオス水道協会設立総会、水道技術基準全国説明会、MaWaSU2 全国セミナー、OJT 活動など
 - 2021 年（令和 3 年）度：254,245.95USD
パイロットプロジェクト 1.5 バッチ実施説明会、第 1 回水質管理全国セミナー、第 3 回 JCC 会議、全国展開活動（5. 水質）、MaWaSU2・さいたま市草の根事業連携会議、Project MaWaSU2 Annual Report 2021、水道・衛生戦略北部地域展開会議、第 2 回水質管理全国セミナー、OJT 活動など
 - 2022 年（令和 4 年）度：223,255.68USD
パイロットプロジェクト第 2 バッチ実施要項説明会、パイロットプロジェクト 1.5 バッチ 3 県合同報告会、MaWaSU2・さいたま市草の根事業連携報告会、全国データ管理セミナー、第 4 回 JCC 会議、水道・公衆衛生戦略中・南部展開会議、第 5 回全国展開活動（3. 計画、4. 財政）、MaWaSU2 年次報告会 2022、パイロットプロジェクト第 1 バッチ事後評価、第 6 回全国展開活動（2. お客様サービス、テストメーター）、都県水道戦略説明会の開催（中部地域）、OJT 活動など
 - 2023 年（令和 5 年）度：147,269.32USD
都県水道戦略策定支援、パイロットプロジェクト振り返り報告会、パイロットプロジェクト 1.5 バッチ事後評価、LWWA 施工監理 & 水質部会、技術基準全国説明会、

MaWaSU2 Closing Seminar、OJT 活動など

<プロジェクトの実施運営上の課題とそれを克服するための工夫、教訓など>

1. 受け入れ機関の状況と問題点：

受け入れ機関である公共事業運輸省/水道局（MPWT/DWS）は、水道局長と3名の副局長の下に6つの課（総務人事計画課、水道課、公衆衛生課、規制課、監査課、プロジェクト管理課）で組織されている。

問題点として、国と県の役割は水道法にも記載されているものの、条文では具体的な役割や運用方法が不明確で、事案ごとに対応が異なる。また、国からの通知といった関係機関への情報の周知や、手続きルールなどが確立されておらず、行政の事務処理が統一したルール（文書管理、連絡体制）ではなく、トップの裁量に委ねられていることが慣習化されている。

人材・リソースの面にも課題があり、業務内容に応じた職種の人事採用ではなく、縁故採用が優先される事例も多く、適材適所となる人事配置ができていない。また業務量も有能な職員に偏る一方で、評価制度も上層部との関係性を重視することから、適正な人事評価ができておらず、職員のモチベーション低下も生じる傾向にある。人材育成プランも実務上の成果よりも家柄を重視するため、実務的経験が不足した職員が幹部となる事案もある。

それらの原因として、行政機関の序列のほか、党内の序列も関連しており、行政機関のトップの素質、人間関係により、プロジェクトとの関わり方が左右されるほか、行政手続き、人事異動・昇進、研修への参加する機会などもトップの意思決定に委ねられる。

また、MaWaSU2 後半の間に2人の定年退職、2人の自己都合退職があり、さらに2人が海外留学中であり、DWS内の職員が減っているが、公務員削減の国の方針により局長判断で新規採用を含め職員の補充は当面考えていない。

ラオスの習慣をすぐに変えることは困難であるが、長期的な視点でいえば、本プロジェクト以外にも、日本での留学プログラムや課題別研修などを継続していることが挙げられる。上記に参加した中堅職員も多く、日本の文化、習慣に触れた機会のある次世代職員がいることで、将来、日本と友好的な職員が幹部になれば、徐々に改善されていくことが期待できる。

MaWaSU2 では幹部及び担当職員を含めた月例会議を設け、プロジェクト進捗の情報共有のほか、担当者の意識改革、説明能力向上を目的とし、担当者から報告する機会を与え、上司からの指示待ちの状態を改めて、担当者が物事を思案し説明する習慣をつけることに心掛けた。

2. 事業関連分野の現状と課題：

施工監理能力強化の活動を通じて、材料の調達方法と品質が課題。ラオス国の場合、水道に限らず材料の品質、調達、流通に多くの課題がある。具体的には他国からの輸入品が多く、調達先が限定的で、交通アクセスが悪く、品質も不安定である。また為替変動も大きい時期と重なったため見積有効期限を定め、発注から調達されるまでの期間を十分考慮し、メーカー工場

等に訪問し、現地での検品に心掛けた。今後は、ラオス水道協会を通じて、材料手配管材料、計測機器、水質検査薬品の品質基準など水道協会の賛助会員である民間企業も交えて、品質向上に向けた取組みをする方針を協会と共通認識をもっている。

2030 年都市部の水道普及率 90%の国家目標があり、DWS を中心に目標達成に向けて推進しているが、限られた国家予算や水道公社の慢性的な赤字により達成されるかどうかは不透明にある。そのため、DWS は水道衛生戦略に記載されているように民間事業者を活用することを奨励している。現在でも国内にはいくつかの民間水道事業者が運営しているが、行政側のモニタリング、管理もほぼ実施されていない状況にあり、民間水道事業者の運営能力や財政能力等はかなり不透明である。契約が 30 年間となっており、30 年後の取り扱いについては何も決まっていない。目の前の目標達成も重要だが、安易な民間水道事業者の参入は時として危険であり、将来の水道事業も考えた行政側の適切な対応が求められる。

3. 各種課題を踏まえ、プロジェクトの効率性・目標達成度・インパクト・妥当性、自立発展性を高めるために実際に行った工夫：

【情報発信と共有】

MaWaSU2 では全国のカウンターパートに対して、プロジェクト活動への期待・関心を維持すること、プロジェクト活動が停滞することなく常に実施されている状況を周知することを目的に MaWaSU2 UPDATES（ラオス語）の発行・配信をした。

個別には、DWS とは定期的に PMM（プロジェクトマネジメントミーティング）を開催し、活動の方針、プロジェクト活動の目的、スケジュールを共有した。

また、水道公社とは 3 パイロット水道公社へ訪問した際に、幹部を含めた全体会議を開催し、活動の目標、各活動の進捗、達成状況を確認しながら情報共有した。

【プロジェクトへの参加意識の維持】

プロジェクトメンバーが一体感をもつように MaWaSU2 ロゴ・ユニフォームを制作した。年次報告会、本邦研修、Mini-Workshop 等で集合写真を撮ることが通例となっている。また、毎年 MaWaSU2 Notebook やトートバックを配布し、MaWaSU2 の知名度・プレゼンス向上を図った。

【水道協会への MaWaSU2 活動のシフト】

2020 年 1 月にラオス水道協会が設立された。ラオス水道協会は、人材育成、技術力向上、公社間の互助など役割があり、全国を対象にした水道セクターの発展のための組織になることが期待できる。プロジェクト成果を持続的にラオス側が自立的に活用させるために、水道協会内に技術委員会や部会を構築し、事務局とともに会議を準備しながら、プロジェクトで組織した一部の活動を協会活動へシフトした。

MaWaSU、MaWaSU2 の活動を通じて水道協会が設立された経緯があり、日本の水道協会（JWWA）が存在し、お手本となるリソースがあること、また本邦研修での交流実績もあり、

水道協会の役割に国際事業も含まれているため、水道協会を介した国際的な活動の幅が広がることが大いに期待できる。

また、これまでの活動で全国の水道公社は、抱えている課題に対する改善意識も強く、特に中心的に活動をともした3パイロット水道公社のカウンターパートにおいては、OJT等を通じて役割、責任感、目標を自覚している。さらに、水道協会事業として研修や調査活動を実施する上で、研修の教材づくりやMini-Workshop等で講師を担った人材がいること、プロジェクトの活動目的・目標を熟知しており、信頼関係が構築されている。

【IT活用による活動の効率化】

本プロジェクトでは、SNS（WhatsApp）を活用して、活動グループごとにセットすることで情報共有、各種調整業務の効率化が図られた。また、新型コロナウイルス対策で在宅勤務期間中の会議ツールと導入したOnline会議機器を活用し、在勤からの会議開催のほか、通常時も遠方のカウンターパートと必要に応じて会議を開催することが可能となり、不可欠なツールとなった。

【DWSの意識改革への取り組み】

DWSに対して政策方針やルールを策定するだけでなく、全国水道関係者へ内容を周知させる重要性を常に意識させるよう、全国説明会、Mini-Workshop、OJTなどの際にDWSが周知する役割であることを諭し、DWSの説明機会をつくりながら周知する習慣づけを促した。

【自立発展性を高めるためのMaWaSU2のアプローチ】

専門家が成果を作成するのではなく、カウンターパート（C/P）が主体的に活動し成果をつくるアプローチを常に心掛けた。具体的には方針・様式は専門家とC/Pが協議しながら決めて、成果の作成はC/Pの業務であることを自覚させ、その行動を習慣づけさせることに留意した。出来映えはC/Pの能力によりマチマチであり、個別にOJTを実施し指導・助言することで各C/Pの能力や業務に対する姿勢を把握することにもつながった。また、必ずしも日本の仕組みやルールが、ラオス国で適切であり実行可能であるとは限らず、C/Pの意見を傾聴するように心掛けた。このアプローチには時間を要するが、自立発展性を高めるには不可欠であり、成果を生み出すまでの過程で失敗や間違いを経験し、その経験が次の教訓・学びとして活かし、自信をもつことができるよう粘り強く活動を行なった。

4. プロジェクトの自立発展性向上のために、今後受入国が取り組む必要のある事項：

【行政の財政状況を考慮した無理のない水道開発】

ラオス国は通貨安が続く厳しい財政状況であり、各省庁とも予算不足である。一方で有償のプロジェクトが進んでおり、今後返済期間を迎える水道公社も多い。水道整備には多額の初期投資が必要なものの、現在のラオスの財政状況では行政からの補助金等の予算配分も限定的であり、水道公社にとって借款を返済するには、必然的に水道料金改正により料金収入を確保せ

ざるを得ない状況にある。特に大規模な水道開発については水道公社の負担も大きく、行政と水道公社が連携し、水道整備後の事業採算性をしっかりと認識し、現在計画している借款のあるプロジェクトの採算性を考慮した優先順位の設定、プロジェクト完了後の水道の財政収支を計画段階から熟考し、予算規模に適応した財政的に無理のない水道開発が求められる。

【能力採用による人事】

ラオスの体制として縁故関係などが絡み合っ行政機関の組織編成もされており、そうした環境が汚職などの不正の温床となる印象をもつ。抜本的に行政管理の能力強化を図るには、縁故関係でなく、専門性や技術、能力などを重視した職員採用システムにすべきと考える。

【継続的な研修プログラムの実施】

プロジェクト期間だけの活動となることを避けるために、プロジェクト成果を持続的に理解し活用することが重要である。プロジェクト成果である基準、ガイドライン等を今後もラオス側が持続的に活用できる仕組みづくりとして、研修機関のプラットフォームとしてラオス水道協会を想定しており、プロジェクト活動を通じて講師となる人材も育成された。従来は首都ビエンチャン水道公社が中心に、チナイモ研修センターの講師を担っていたが、全国からの参加率や講師の持続性に課題がある。この課題への対策として水道協会の事務局を担う 3 パイロット水道公社が協働し、北部・中部・南部で分散することで、研修事業の運営に対する負担を軽減し、研修への参加率の向上、ラオス国内全体での講師育成をすることが期待できる。

【水道戦略の詳細化】

水道・衛生戦略は 2022 年 3 月に大臣承認されたが、活動内容についてどの組織が、どのようなスケジュールで実施していく等の詳細化ができていない。DWS 内では詳細化の検討を進めているが、具体的発表は今のところされていない。そのため、県水道戦略策定時の落とし込みも難しくなっている。それぞれの活動を着実に実施していくには、これらの詳細化は必要であり、早期の設定が求められるが、少なくとも中間評価や 2031 年以降の改訂に向けた取り組み時にはまとめられている必要がある。また、前述の 1. 受け入れ機関の状況と問題点にある「国からの通知といった関係機関への情報の周知・・・」の問題については、それぞれの法令等の説明内容や周知スケジュール、説明対象者等を予め整理しプロジェクト側へ通知しておくことと同時に、これらの活動が水道・衛生戦略のどこに位置付けられているのかを明確にしておくで水道セクター内で理解が進むことが期待できる。

5. 類似プロジェクト、類似分野への今後の協力実施にあたっての教訓、提言等：

【プロジェクト継続による信頼関係の構築】

MaWaSU、MaWaSU2 で 10 年強、それ以前にもさいたま市水道局のラオスへの支援活動の継続されている。専門家との対面での OJT 活動から本邦研修などすべての活動を通じて、現在のラオス水道セクターとの良好な関係が構築されている。MaWaSU2 の活動に何かしら参加

した水道公社の職員数は、時間とともに増加し、全国の職員数の 10%以上を占める。この友好関係がプロジェクトの成果にも大きく影響あり、活動推進の原動力となっている。

また、成果 2 の施工監理支援を通じて、地方の水道の実態やニーズを把握でき、単なる施設の建設だけでなく職員の水道運営を考慮した能力向上プロジェクトであったことが、相手国のニーズに合致し、日本からの支援として期待されている。

【行政機関の決裁手続き】

本プロジェクトでは、技術基準の省令及び各分野のガイドラインなど行政機関管轄の、成果物作成活動をしたが、いずれの場合もトップの意向、理解度、判断に委ねられることで、ドラフト案作成後から決裁までの手続きに時間を要し、正式文書に基づく全国展開活動を想定していた当初スケジュールに遅延が生じた。

行政上の業務所管、文書の決裁区分、手続きルールが不明確であることから、日本では水道事業体が所管・作成すべき、ガイドラインや実務上のマニュアルさえも行政が管理しなければならないとする考えもあり、決裁手続きの遅延の原因の一つでもある。

大臣決裁までの手続きがルール化されている場合は別として、プロジェクトの意図に反したトップの個人的な判断で実施されるケースは、プロジェクトによる支援が困難であり、決裁手続きの調整が難航することを実感した。プロジェクト成果として、決裁文書ができることが望ましいが、本来の目的であるカウンターパートの能力向上に重きを置き、成果ドラフトが作成されるまでのプロセスや、ドラフトの内容理解に時間をかけるとともに、可能な範囲で決裁手続きをクリティカルパスにしないスケジュールによる活動が有効であると考ええる。

【人事異動時の対応】

党会議後の組織改編に伴う人事異動、あるいは職員の誕生日で迎える不定期な定年退職により、カウンターパート（C/P）の変更が余儀なくされ、一時的に活動が停滞する。また行政機関は慢性的な職員不足のほか、業務及びデータの引継ぎもしっかり実施されずに、個人の知識で、組織的に情報共有がなされないため、活動内容、経緯を知らない職員が C/P となるケースが多く見受けられる。水道公社も人事異動により担当が入れ替わる場合があるが、C/P に複数参加してもらうことで活動には支障がないが、プロジェクト活動と通常業務の職責が異なるケースが発生するため、人事異動の際は、プロジェクトでの役割を C/P と再確認することが肝心である。。

【地方自治体（水道事業体）との長期的な連携・協力体制の構築】

水道分野においては日本でもラオス（おそらく他国でも）職員が多分野へ異動になることが少ない（ラオスではほぼないと言える）。水道行政や水道公社に就職した職員は退職するまで水道分野で働くことになり、カウンターパートとの人間関係は時間とともに蓄積され、プロジェクト活動進捗への強固な原動力となる。

MaWaSU2 の前後半両名のチーフアドバイザーは先行案件において短期専門家として複数回派遣されており、前後半両名のサブチーフアドバイザー／水道技術専門家も同じく先行案件

において短期専門家として複数回派遣されている。また、後半チーフアドバイザーは先行案件および MaWaSU2 前半において短期専門家として派遣されていることに加え、2009～2010 年にかけて個別専門家としてラオスに派遣されている。チーフアドバイザーの両名はさいたま市水道局からの派遣で、さいたま市水道局とラオス水道セクターとの協力は 30 年を迎えた。その間、さいたま市水道局は JICA 技術協力案件への専門家派遣、草の根事業実施、個別専門家派遣や単独での首都ビエンチャン水道公社への技術協力など継続してラオス水道分野へ関わってきている。MaWaSU2 開始当初に人間関係ができていたため、他プロジェクトでは見られないほどに人間関係構築の時間を圧縮でき、プロジェクト活動を開始、推進することができた。

このような人間関係は一朝一夕には構築できない。そのため、将来への先行投資と捉えて目的意識を持って人間関係の構築を継続すべきである。例えば、先行案件のカウンターパート（C/P）の多くは課長や係長級で水道公社内でも将来の幹部候補が選出されており、MaWaSU2 期間中に副総裁に任命された C/P もいる（首都ビエンチャン水道公社、ルアンパバーン県水道公社）。MaWaSU2 で C/P として配置された若手職員も 10 年、20 年後には幹部層になっている職員が多いと考えられる。このような考えに賛同する日本の水道事業体へ JICA は様々な支援スキームを提案・提供し、水道事業体間の人間関係構築を促進するとともに、JICA 事業への協力体制を水道事業体に構築してもらうことが望ましいと考える。これらは、上記 4. の「日本の優位性は何か、日本に十分なリソースが存在するか」に関連する事項であり、長期的な視点で水道事業体と連携することが望まれる。

【相手国政府への合同評価についての理解促進】

近年は新興国と呼ばれる国々の協力が増加している。ラオスにおいても中国による大型援助案件が多くなってきており、それらの事業規模や債務を政府ですら正確に把握できていないと懸念されている。そのため、債務を返済できず「債務の罠」に陥る可能性は否定できない。概してこれらの事業評価が公表されているものは少なく、評価方法も不透明と言える。

対して、JICA による合同評価（中間レビューや終了時評価）は OECD 開発委員会の評価 6 項目に基づく国際基準で行っており透明性がある。相手国政府が評価 6 項目を含む評価手法を十分に理解することができれば、評価方法が不透明な新興国の支援に何らかの自衛方法を施す可能性を提示できる。しかしながら、相手国政府カウンターパート（C/P）の JICA による合同評価手法の理解は十分でない。MaWaSU2 終了時評価においても、ラオス側 C/P の評価者配置は施されたものの評価手法を理解しないまま参加していた。今後は、合同評価を開始する前に日本側（コンサルタント）から評価 6 項目を含む評価手法について相手国政府合同評価者へ教授した後に評価業務を進めるべきである。そのために、評価コンサルタント業務の TOR を修正し作業工程も考慮することが望まれる。

<合同調整委員会（JCC）開催記録・PDM の変遷>

- 第 1 回 JCC 会議：2018 年 11 月 22 日開催
プロジェクト紹介、2018 年（5～11 月）活動報告、2018 年 12 月、2019 年 APO 承認、その他
- 第 2 回 JCC 会議：2019 年 11 月 21 日開催
2019 年活動報告、2020 年活動計画承認、PDM ver.1 承認、その他
- 第 3 回 JCC 会議：2021 年 7 月 27 日開催
2020-21 年活動報告、2021-22 年活動計画承認、PDM ver.2 承認、その他
- 第 4 回 JCC 会議：2022 年 6 月 15 日開催
2021-22 年活動報告、2022-23 年活動計画承認、次期案件申請手順、その他
- 第 5 回 JCC 会議：2023 年 6 月 8 日開催
終了時評価報告、2022-23 年活動報告、2023 年活動計画承認、PDM Ver. 3 承認、その他

- PDM Ver. 1：PDM Ver. 0 から修正なく第 2 回 JCC（2019 年 11 月 21 日）会議にて Ver. 1 承認
- PDM Ver. 2：第 3 回 JCC 会議（2021 年 7 月 27 日）にて承認
 1. 新型コロナウイルス感染症の影響のためプロジェクト期間延長（2023 年 5 月から 2023 年 12 月へ延長）
 2. 上位目標指標変更（基金およびラオス水道協会にかかる箇所）
 3. プロジェクト目標指標変更（基金および水道公社予算・決算にかかる箇所）
 4. 成果 1 指標変更（基金の箇所）
 5. 成果 2 指標変更（審査・評価および会計は他省管轄のため）
 6. 成果 4 指標変更（水道公社全国展開活動はラオス水道協会活動へ移行のため）
 7. 成果 1 にかかる活動変更（DWS/MPWT 主体の活動を強調するため）
 8. 成果 1 にかかる活動変更（水道統計から実際活動の水道セクター年報に合わせるため、県公共事業運輸局による県水道戦略作成追加）
 9. 成果 2 にかかる活動変更（パイロットプロジェクト第 1 バッチ実施後の修正および新型コロナウイルス感染症対策活動（本邦技術・製品活用活動（パイロットプロジェクト 1.5 バッチ実施）および新型コロナウイルス特別枠（カムアン県、サイソンブン県）実施）
 10. 成果 3 にかかる活動変更（技術基準作成体制の現状に合わせるため 2 つの Task Team を追加）
 11. 成果 3 にかかる活動変更（作成過程の技術基準が「省令」（強制力あり）と「ガイドライン」（強制力なし）の 2 種類に分かれるため）
 12. 成果 3 にかかる活動変更（全国展開活動の追加）
 13. 成果 3 にかかる活動変更（作成過程の技術基準（設計・施工）とは別の基準（資機

材基準を想定)を検討するため)

- 14.成果 4 にかかる活動変更(表現の修正)
 - 15.成果 4 にかかる活動変更(MaWaSU1 で作成された全国展開計画がラオスの現状では水道公社間のみで実施が難しいため MaWaSU2 の活動とする)
 - 16.成果 4 にかかる活動変更(活動内容が重複しているため削除)
 - 17.成果 4 にかかる活動変更(MaWaSU1 で設置した 9 つの分科会を MaWaSU2 では 6 つの分科会に集約したため)
 - 18.成果 4 にかかる活動変更(水質分科会の表現がなかったため追加)
 - 19.成果 4 にかかる活動変更(ラオス水道協会が設立されたため具体的活動を追加)
 - 20.供与機材(プロジェクト形成時では明確でなかったため、実際に供与された水質検査機器および新型コロナウイルスにかかる本邦技術・製品活用で採用された自動薬注装置を明記)
 - 21.本邦研修(実施テーマの確定および参加人数の明記)
- PDM Ver. 3: 第 5 回 JCC 会議(2023 年 6 月 8 日)にて承認
 1. 上位目標およびプロジェクト目標指標変更(PDCDS の内容が大臣承認された水道衛生戦略(2022-2030)に反映されているため)
 - JCC 会議議事録: 別添⑦
 - PDM Ver. 1~Ver. 3: 別添⑧

Plan of Operation (Result from May 2018 to December 2023, & Total Schedule)

Project title: The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)

	Calendar year	2018				2019				2020				2021				2022				2023										
Inputs	Year	1st Year				2nd Year				3rd Year				4th Year				5th Year				Extension										
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II									
		2018				2019				2020				2021				2022				2023										
Experts		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	Plan																															
	Actual	1																														
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Output 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.

1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains.

[illegible]

1-2. By initiative of DWS undertake the following activities to review current government ability of the prioritized issues identified in 1-1-6 in cooperation with concerned organization including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments.

[illegible]

[illegible]

	Calendar year	2018				2019				2020				2021				2022				2023			
Activities	Year	1st Year				2nd Year				3rd Year				4th Year				5th Year							
Sub-activities		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV				
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
1-7. Water Supply Strategy(WSS), Provincial Water Supply Strategy(PWSS), Water Supply Guidelines(WSG), and Water Supply Annual Report(WSAR) supported by MaWaSU are finalized and/or revised to be utilized.																									
1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated.	Plan																								
	Actual																								
1-7-2. WSG is revised.	Plan																								
	Actual																								
1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR.	Plan																								
	Actual																								
1-7-4. DWS updates WSAR.	Plan																								
	Actual																								
1-7-5. DWS revises WSS.	Plan																								
	Actual																								
1-7-6. DPWTs make PWSS based on revised WSS.	Plan																								
	Actual																								
Output 2.Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.																									
2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects.																									
2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs.	Plan																								
	Actual																								
2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects.	Plan																								
	Actual																								
2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation.	Plan																								
	Actual																								
2-1-4. PPTT prepares procedures for developing proposals.	Plan																								
	Actual																								
2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure.	Plan																								
	Actual																								
2-2. Implement the pilot projects.																									
2-2-1 DWS holds briefing sessions for alll WSSEs for application.	Plan																								
	Actual																								
2-2-2 WSSEs in consultation with DPWTs prepare and submit proposals to DWS	Plan																								
	Actual																								

[illegible]

Output 3. Technical standards necessary for water supply projects are developed.

3-1. Necessary Task Team for Technical Standard is formed at DWS, DPWT and WSSEs and the priority and the scope of the standard are determined.

[illegible]

3-1-2. Priority for technical standards is determined.

3-1-3. Based on the priority order, STT discusses and determines the scope of standards.

3-2 Necessary committees/taskteams for official approval are organized to develop the determined priority technical standards.

[illegible]

3-2-2. Establish Ministerial Ordinance Taskteam (MTT) consisting of
DWS

3-3 Develop and submit the priority technical standards.

[illegible]

3-3-2. ISC reviews the draft technical standard (Ministerial Ordinance).

3-3-3. TSC submits the draft technical standard (Ministerial Ordinance) to MPWT.

3-3-4. STT develop a draft technical standard (Criteria).

3-3-5. TSC reviews the draft technical standard (Criteria).

3-3-6 STT submits the draft technical standard (Criteria).

3-4 Technical Standard is disseminated.

[illegible]

3-4-2. Implement the dissemination methods of the technical standard

3-5. Discuss and decide next priority scope of technical standard

	Calendar year	2018				2019				2020				2021				2022				2023										
Activities	Year	1st Year				2nd Year				3rd Year				4th Year				5th Year				Extra										
Sub-activities		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II									
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12

Output 4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.

4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved.

4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development.	Plan																															
	Actual																															
4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project.	Plan																															
	Actual																															
4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and assessed their capacity.	Plan																															
	Actual																															
4-1-4. JICA Experts provide guidance to those trainers.	Plan																															
	Actual																															
4-1-5. Re-evaluate the capacity of the trainers of the pilot WSSEs.	Plan																															
	Actual																															

4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented.

4-2-1. DP is reviewed.	Plan																															
	Actual																															
4-2-2. Based on the review, DP is implemented.	Plan																															
	Actual																															
4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated.	Plan																															
	Actual																															
4-2-4. Activities are carried out based on the DP of the latter half of the project.	Plan																															
	Actual																															
4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWVA activities.	Plan																															
	Actual																															

4-3. Activities of MaWaSU Sub-Committee are promoted.

[illegible]

4-4. National Framework of Water Quality Management is strengthened.

[illegible]

4-5. WSSes establish the Lao Water Works Association (LWWA) and implement activities.

4-5-1. WSSEs prepare establishment of LWWA.	Plan	[Black]												[White]											
	Actual	[Green]												[White]											
4-5-2. WSSEs establish LWWA.	Plan	[Black]												[White]											
	Actual	[White]												[Green]											
4-5-3. LWWA implements activities.	Plan	[Black]												[White]											
	Actual	[White]												[Green]											
4-5-4. LWWA discusses continuation of MaWaSU2 activities after the end of the project.	Plan	[Black]												[White]											
	Actual	[Green]												[Green]											
4-5-5. LWWA takes over some activities from the project.	Plan	[White]												[Black]											
	Actual	[White]												[Green]											
4-6. WSSEs implement handwashing promotion activities for COVID-19 prevention through waterworks education class.	Plan	[Black]												[White]											
	Actual	[Green]												[Green]											

Duration / Phasing																															
		2018					2019					2020					2021					2022					2023				
Monitoring Plan	Calendar year	1st Year					2nd Year					3rd Year					4th Year					5th Year					Extra				
	Year	I	II	III	IV		I	II	III	IV		I	II	III	IV		I	II	III	IV		I	II	III	IV		I	II			
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Monitoring																															
Joint Coordinating Committee	Plan																														
	Actual																														
Set-up the Detailed Plan of Operation	Plan																														
	Actual																														
Submission of Monitoring Sheet	Plan																														
	Actual																														
Monitoring Mission from Japan	Plan																														
	Actual																														
Joint Monitoring	Plan																														
	Actual																														
Post Monitoring	Plan																														
	Actual																														
Reports/Documents																															
Project Completion Report	Plan																														
	Actual																														
Public Relations																															
	Plan																														
	Actual																														

投入実績（専門家派遣実績）

Duration: May 2018 - Dec. 2023

Long Term Experts

No.	Name 氏名	Designation 担当分野	Period 派遣期間	Organization 本邦所属先	Period (from)	Period (to)	Duration 派遣日数 (MM)
1	Mr. Keisuke Sonoda 園田 圭佑	Chief Adviser チーフアドバイザー	21 May 2018 ~ 28 May 2021	さいたま市水道局	21-May-18	28-May-21	36.2 Month(s)
2	Mr. Tomokazu Ishikawa 石川 智一	Chief Adviser チーフアドバイザー	09 May 2021 ~ 20 Dec. 2023	さいたま市水道局	09-May-21	20-Dec-23	31.4 Month(s)
3	Mr. Daisuke Masugata 升潟 大介	Sub-chief Advisor/Water Supply Technique サブチーフアドバイザー／水道技術	21 May 2018 ~ 27 Dec. 2020	川崎市上下水道局	21-May-18	27-Dec-20	31.2 Month(s)
4	Mr. Atsushi Nozawa 野澤 敦司	Sub-chief Advisor/Water Supply Technique サブチーフアドバイザー／水道技術	14 Nov. 2020 ~ 20 Dec. 2023	川崎市上下水道局	14-Nov-20	20-Dec-23	37.2 Month(s)
5	Mr. Nobutaka Maruyama 丸山 伸孝	Water Supply Technique / Construction Supervision 水道技術／施工監理	01 Aug. 2021 ~ 28 Jan. 2022	なし	01-Aug-21	28-Jan-22	5.9 Month(s)
6	Mr. Yusuke Kinoshita 木下 雄介	Project Coordinator 業務調整	14 Oct. 2018 ~ 20 Dec. 2023	なし	14-Oct-18	20-Dec-23	62.2 Month(s)

Short Term Japanese Experts

No.	Name(氏名)	Designation(担当分野)	Period(派遣期間)	Organization 本邦所属先	Period (from)	Period (to)	Duration(派遣期間:MM)
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FY 2018

1	Mr. Tomokazu Ishikawa 石川 智一	Civil Engineering 土木	15 Oct. 2018 ~ 14 Dec. 2018	さいたま市水道局	15-Oct-18	14-Dec-18	2.0 Month(s)
2	Mr. Takashi Niwa 丹羽 隆	Finance 財政	15 Oct. 2018 ~ 30 Nov. 2018	横浜市水道局	15-Oct-18	30-Nov-18	1.5 Month(s)
3	Mr. Takaaki Kusakabe 日下部 貴章	Civil Engineering 土木	14 Jan. 2019 ~ 16 Mar. 2019	川崎市上下水道局	14-Jan-19	16-Mar-19	2.1 Month(s)
4	Mr. Hisayoshi Utsugi 宇津木 久芳	Water Quality 水質	21 Jan. 2019 ~ 20 Feb. 2019	埼玉県企業局	21-Jan-19	20-Feb-19	1.0 Month(s)

FY 2019

5	Dr. Daiki Fujise 藤瀬 大輝	Water Quality 水質	10 Jun. 2019 ~ 07 Sep. 2019	川崎市上下水道局	10-Jun-19	07-Sep-19	2.9 Month(s)
6	Mr. Akihisa Noguchi 野口 明久	Civil Engineering 土木	17 Jun. 2019 ~ 14 Sep. 2019	さいたま市水道局	17-Jun-19	14-Sep-19	2.9 Month(s)
7	Mr. Takashi Tokunaga 徳永 隆	Finance 財政	05 Aug. 2019 ~ 04 Oct. 2019	横浜市水道局	05-Aug-19	04-Oct-19	2.0 Month(s)
8	Mr. Yasumasa Yamauchi 山内 康正	Facility 設備	05 Aug. 2019 ~ 14 Sep. 2019	埼玉県企業局	05-Aug-19	14-Sep-19	1.3 Month(s)
9	Mr. Akihiro Takeda 竹田 明弘	Facility 設備	09 Sep. 2019 ~ 19 Oct. 2019	埼玉県企業局	09-Sep-19	19-Oct-19	1.3 Month(s)
10	Mr. Akihisa Ueda 上田 晶久	Civil Engineering 土木	16 Sep. 2019 ~ 14 Dec. 2019	川崎市上下水道局	16-Sep-19	14-Dec-19	2.9 Month(s)
11	Mr. Akiyoshi Fujimura 藤村 明良	Water Quality 水質	04 Nov. 2019 ~ 14 Dec. 2019	埼玉県企業局	04-Nov-19	14-Dec-19	1.3 Month(s)
12	Mr. Kiyotaka Suzuki 鈴木 清貴	Finance 財政	07 Dec. 2019 ~ 05 Mar. 2020	横浜市水道局	07-Dec-19	05-Mar-20	2.9 Month(s)
13	Mr. Koji Nakamura 中村 浩二	Water Quality 水質	06 Jan. 2020 ~ 21 Mar. 2020	さいたま市水道局	06-Jan-20	21-Mar-20	2.5 Month(s)

FY 2022

14	Mr. Ryuta Ochi 越智 龍太	Water Supply Technique / Construction Supervision 水道技術／施工監理	01 May 2022 ~ 02 Jun. 2022	川崎市上下水道局	01-May-22	02-Jun-22	1.0 Month(s)
15	Mr. Takaaki Kusakabe 日下部 貴章	Water Supply Technique / Construction Supervision 水道技術／施工監理	29 May 2022 ~ 15 Jul. 2022	川崎市上下水道局	29-May-22	15-Jul-22	1.5 Month(s)
16	Mr. Hiroaki Nakamura 中村 宏明	Water Supply Technique / Construction Supervision 水道技術／施工監理	09 Jul. 2022 ~ 26 Aug. 2022	川崎市上下水道局	09-Jul-22	26-Aug-22	1.6 Month(s)
17	Mr. Koki Hamaguchi 浜口 浩気	Finance 財政	06 Aug. 2022 ~ 23 Sep. 2022	横浜市水道局	06-Aug-22	23-Sep-22	1.6 Month(s)
18	Mr. Yuki Hayashi 林 佑樹	Water Supply Technique / Construction Supervision 水道技術／施工監理	18 Aug. 2022 ~ 07 Oct. 2022	さいたま市水道局	18-Aug-22	07-Oct-22	1.6 Month(s)
19	Mr. Takashi Saiki 佐伯 孝志	Water Supply Technical Standards 水道技術基準	15 Nov. 2022 ~ 15 Mar. 2023	なし	15-Nov-22	15-Mar-23	4.0 Month(s)
20	Mr. Kiyotaka Suzuki 鈴木 清貴	Finance 財政	05 Jan. 2023 ~ 25 Mar. 2023	横浜市水道局	05-Jan-23	25-Mar-23	2.7 Month(s)
21	Mr. Naofumi Imasaka 今坂 直史	Water Supply Technique / Construction Supervision 水道技術／施工監理	05 Jan. 2023 ~ 19 Feb. 2023	川崎市上下水道局	05-Jan-23	19-Feb-23	1.5 Month(s)
22	Mr. Naoki Hamano 濱野 直樹	Water Supply Technique / Construction Supervision 水道技術／施工監理	06 Feb. 2023 ~ 25 Mar. 2023	さいたま市水道局	06-Feb-23	25-Mar-23	1.6 Month(s)

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23	Mr. Naoki Hamano 濱野 直樹	Water Supply Technique / Construction Supervision 水道技術／施工監理	02 Aug. 2023 ~ 16 Sep. 2023	さいたま市水道局	02-Aug-23	16-Sep-23	1.5 Month(s)
SHORT TERM EXPERTS: TOTAL DURATION							45.2 Month(s)
SHORT TERM EXPERTS: TOTAL NUMBER of EXPERTS							23 Persons

Experts dispatched under the consultant contracts

No.	Name 氏名	Designation 担当分野	Contract Period 契約期間	Organization 本邦所属先	Assignment in Lao PDR (M/M)	Assignment in Japan (M/M)	Number of visit to Lao PDR
1	Mr. Toru Toyota 豊田 徹	Design, Supervising, Institution Building support (Output 2)	13 Mar 2019 ~ 15 Mar 2022	横浜ウォーター（株）	5.03	12.0	3 times
2	Mr. Hiroyuki Morita 森田 裕之	設計・施工監理・制度構築支援（Output2）		横浜ウォーター（株）			
3	Mr. Hiroshi Nishimaki 西牧 宏	Team Leader/Institutional Expert (Output1) 総括／制度改善 (Output 1)	Phase I: 27 Sept 2018 ~ 31 July 2020	有限会社エクシディア	5.30	1.85	8 times
4	Mr. Keita Inoue 井上 慶太	Water Sector Development Fund (Output1) 水道セクター開発基金 (Output1)		A. I. ネットワーク 株式会社	4.20	0.35	9 times
5	Mr. Hiroshi Nishimaki 西牧 宏	Team Leader/Institutional Expert (Output1) 総括／制度改善 (Output 1)	Phase II: 16 Nov 2020 ~ 28 Feb 2022	有限会社エクシディア	1.87	1.45	3 times
6	Mr. Keita Inoue 井上 慶太	Water Sector Development Fund (Output1) 水道セクター開発基金 (Output1)		A. I. ネットワーク 株式会社	1.83	1.25	3 times
Experts assigned under the consultant contracts TOTAL (in Months)					18.23	16.90	35.1 M/M

投入実績（研修員受入れ実績）

No.	研修員氏名	所属先	研修分野	研修期間	主な研修先
FY2019: Waterworks Administration/Division of Roles in Water Supply Sector 水道行政のあり方／水道セクターの役割分担					
1	Mr. Phomma Veoravanh	DWS/MPWT	水道行政	17-24 August 2019	厚生労働省 日本水道協会 埼玉県企業局 さいたま市水道局 川崎市上下水道局 横浜市水道局
2	Mr. Khanthone Vorachith	DWS/MPWT			
3	Mr. Saleumsak Sayamoungkhoun	DWS/MPWT			
4	Mr. Fasanah Thammavong	DPWT-LP			
5	Mr. Khampheuy Vongsakhamphoui	NPNL			
6	Mr. Soulith Chindamany	NPLP			
FY2019: Roles and activities of Water Works Association 水道協会の役割と活動					
1	Mr. Khanthone Vorachith	DWS/MPWT	水道協会	02-11 February 2020	日本水道協会
2	Mr. Viengthouay Vannarath	NPNL			
3	Mr. Chanthone Sanaphay	NPLP			
4	Mr. Khanngoun Sengiem	NPKM			
5	Mr. Bounpasong Phonhalath	NPNL			
6	Mr. Amphayvanh Visayalath	NPLP			
FY2022: Water Quality Management 水質管理					
1	Ms. Vilaphone Kattiyasack	DWS/MPWT	水質管理	27 January -10 February 2022	厚生労働省 日本水道協会 埼玉県企業局 さいたま市水道局 川崎市上下水道局
2	Ms. Khonesavanh Keomanyvong	NPNL			
3	Ms. Chanmany Philavanh	NPNL			
4	Ms. Mutthoulatda Thongsavanh	NPNL			
5	Mr. Yhoy Mounmeuangxam	NPLP			
6	Ms. Lany Vue	NPLP			
7	Ms. Vongvilay Panivong	NPKM			
8	Mr. Anucha Kaikangvongh	NPKM			
FY2023: Planning and Finance in Waterworks Operation 水道事業における計画・財政					
1	Ms. Soukphaivanh Saiyavanh	DWS/MPWT	計画・財政	24 June -07 July 2023	川崎市上下水道局 横浜市水道局
2	Mr. Somboun Saysomboun	DWS/MPWT			
3	Mr. Bounpasong Phonhalath	NPNL			
4	Ms. Nouanenapha Vorasarn	NPNL			
5	Ms. Thippachanh Sengchanthala	NPNL			
6	Mr. Anousack Vannasy	NPLP			
7	Mr. Chakkavin Inphithak	NPLP			
8	Mr. Khampasith Sinthepphavong	NPKM			
9	Ms. Sy Bounthavong	NPKM			

DWS/MPWT: Department of Water Supply/Ministry of Public Works and Transport

DPWT-LP: Department of Public Works and Transport - Luang Prabang Province

NPNL: Vientiane Capital Water Supply State Enterprise

NPLP: Luang Prabang Province Water Supply State Enterprise

NPKM: Khammouane Province Water Supply State Enterprise

投入実績（供与機材実績）

No.	NAME (Specification)	Model	Maker	Qty	Total Price (US\$)	Date of Arrival	Installed at:
1	Vehicle	HIACE	TOYOTA	1	\$31,000.00	May. 2020	Ministry of Public Works and Transport
2	Walking measure	B-20S	TOKYO RASONIC	3	US\$445.50	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
3	Measure	SGR12-50	MURATEC-KDS	3	US\$264.00	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
4	Aluminum staff	M-33FZ	TAIHEI-SANGYO	3	US\$297.00	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
5	Water pressure tester	T-50K-P	KYOWA	3	US\$759.00	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
6	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	-	US\$4,551.39	Mar. 2020	NP-SLN
7	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	-	US\$1,708.97	Mar. 2020	NP-PSY
9	Pipe and fittings for Pilot Project 1st batch	-	TOYO, Fish	-	Mar. 2019	Mar. 2020	Vapi District, Salavan Province
10	Construction materials (sand, etc.) for Pilot Project 1st batch	-	-	-		Mar. 2020 Jul. 2020	Vapi District, Salavan Province
11	Pipe and fittings for Pilot Project 1st batch	-	-	-	US\$60,767.28	Feb. 2020	Phongsaly Dist. Phongsaly Province
12	Construction materials (sand, etc.) for Pilot Project 1st batch	-	-	-	US\$28,130.29	Feb. 2020	Phongsaly Dist. Phongsaly Province
13	uPVC pipe for Pilot Project 1st batch	-	-	1,338m	US\$7,236.03	Oct. 2020	Vapi District, Salavan Province
14	Portable spectrophotometer Power module for HACH 1900	DR1900 LZV813	HACH	18	US\$99,990.00	Mar. 2021	18 WSSEs
15	Turbidity (EPA) Portable Meter	HI98703-02	HANNA	18	US\$30,024.00	Jun.2021	18 WSSEs
16	Color of water portable Photometer	HI97727C	HANNA	18	US\$13,014.00	Jun.2021	18 WSSEs
17	pH meter	LAQUAtwin pH-11	HORIBA	18	US\$4,914.00	Jun.2021	18 WSSEs
18	Conductivity meter	LAQUAtwin EC-11	HORIBA	18	US\$4,914.00	Jun.2021	18 WSSEs
19	Sodium Ion meter	LAQUAtwin Na-11	HORIBA	18	US\$12,474.00	Jun.2021	18 WSSEs
20	Reagent for DR1900	-	HACH	14 kinds	US\$49,990.60	Jun.2021	18 WSSEs

21	Sentino Microbiology Pump for E. coli test equipment	No.13186	PALL	18	US\$50,400.00	Jun.2021	18 WSSEs
22	Sentino Magnetic Filter Funnel, 150ml, 47mm for E. coli test equipment	No.4271	PALL	18	US\$2,628.00	Jun.2021	18 WSSEs
23	Sentino Pump Magnetic Funnel Adapter for E. coli test equipment	No.4283	PALL	18	US\$6,300.00	Jun.2021	18 WSSEs
24	GN-6 Metrical MCE Membrane Disc Filters for E. coli test equipment	No.66265	PALL	18	US\$7,506.00	Jun.2021	18 WSSEs
25	Petri Dishes for E. coli test equipment	No.7245	PALL	18	US\$3,006.00	Jun.2021	18 WSSEs
26	2ml Plastic Ampules for E. coli test equipment	No.4302	PALL	18	US\$4,104.00	Jun.2021	18 WSSEs
27	Membrane tweezers for E. coli test equipment	No.4690	PALL	36	US\$5,796.00	Jun.2021	18 WSSEs
28	Incubator	No. IN30	Memmert	18	US\$29,340.00	Jun.2021	18 WSSEs
28	Arsenic Test Kit	-	-	18	US\$9,360.00	Jun.2021	18 WSSEs
30	Cold Vapor Mercury analysis apparatus set	No.2674400	HACH	3	US\$12,000.00	Jun.2021	NPNL, NPLP, NPKM
31	Laboratory vacuum pump for Cold Vapor Mercury analysis	-	HACH	3	US\$3,855.00	Jun.2021	NPNL, NPLP, NPKM
32	Digestion apparatus for Hg analysis (Hot plate with stirrer)	-	HACH	3	US\$3,855.00	Jun.2021	NPNL, NPLP, NPKM
33	Digestion reagent for Hg analysis	-	HACH	3	US\$1,665.00	Jun.2021	NPNL, NPLP, NPKM
34	Draft Chamber	No. MS-70 50H	Yamato Scientific	1	US\$10,000.00	Jun.2021	NPLP
35	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	-	US\$1,033.42	Jul. 2021	NP-BKX
36	On-line Meeting Equipment	BCC950	Logitech	12	US\$3,944.23	Jul.2021	DWS/MPWT
37	Video conferencing equipment for mid- to large-sized meeting rooms	Group	Logitech	1	US\$1,864.19	Aug.2021	DWS/MPWT
38	Portable Water Turbidity and Color Meter	WA-PT-4S	Kyoritsu Chemical-Check Lab.,	3	\$3,135.00	Sep. 2021	NP-SLN, NP-XKH, NP-SVK
39	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	Sibata scientific technology ltd.	3	\$1,287.00	Sep. 2021	NP-SLN, NP-XKH, NP-SVK
40	Generator for COVID-19 Special Activity	EG6500CX	HONDA	1	US\$1,872.32	Sep. 2021	NPKM
41	Cutter for COVID-19 Special Activity	5007NF (185mm)	MAKITA	2	US\$413.85	Sep. 2021	NPKM

42	Concrete cutter for COVID-19 Special Activity	16"	MARTON	2	US\$2,474.71	Sep. 2021	NPKM
43	Pump for COVID-19 Special Activity	Platinum V220F75mm	MINKEPUM P	2	US\$393.37	Sep. 2021	NPKM
44	Hose for COVID-19 Special Activity	3", 100m	Thairubber	1	US\$126.27	Sep. 2021	NPKM
45	Blade for concrete cutter for COVID-19 Special Activity	16"	MARTON	1	US\$884.56	Oct. 2021	NPKM
46	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$11,944.87	Nov.2021	NPKM
48	Notebook PC for Pipeline maintenanc	VICTUS 16-d0105TX	HP	1	\$1,614.73	Nov. 2021	NP-BKX
49	GPS for Pipeline maintenance	LT700H Rugged GNSS RTK Tablet	CHC Navigation	1	\$3,500.00	Dec. 2021	NP-BKX
50	Surveying Camera for Pipeline maintenanc	Label NA322	Leica	1	\$850.00	Dec. 2021	NP-BKX
51	Unmanned Aerial Vehicle (Drone) for Pipeline maintenanc	AIR 2 Fly More Combo	MAVIC	1	\$1,300.00	Dec. 2021	NP-BKX
52	Backhoe loader	3DS Super 4x4	JCB	1	US\$99,950.00	Dec. 2021	NPKM
53	Excavator	KX080-3	KUBOTA	1	US\$91,741.10	Dec. 2021	NPKM
54	Dump Truck	NMR71L-EH5AYN	ISUZU	2	US\$84,000.00	Dec. 2021	NPKM
55	Plate Compactor	PC100	SAKAI	2	US\$7,000.00	Dec. 2021	NPKM
56	Walk-behind Roller	HS67ST	SAKAI	2	US\$43,000.00	Dec. 2021	NPKM
57	Rammer	RS45	SAKAI	2	US\$5,800.00	Dec. 2021	NPKM
58	Generator	DG15LDE/T	ROWEL	1	US\$5,172.04	Dec. 2021	NPKM
59	Pipe and fittings for COVID-19 Special Activity	-	-	1	US\$416,981.65	Dec. 2021	Thakhek Dist., Khammouane Province
60	Cement, Rebar, Floor Tiles, White Cement for COVID-19 Special Activity	50kg / bag 10m / bar 11pcs of tiles = 1 m2/box 1 kg / bag	SCG TATA STEEL CAMPANA CHALAWAN	1,923bags 835bars 530boxes 132bags	US\$13,493.79	Dec. 2021	Thakhek Dist., Khammouane Province
61	Gravel and Sand for COVID-19 Special Activity	-	-	306m3 10,285m3	US\$47,589.98	Dec. 2021	Thakhek Dist., Khammouane Province
62	Hydraulic butt-welding machine for COVID-19 Special Activity	-	Xaignavong Group Sole Co., Ltd.	2	US\$3,930.00	Dec. 2021	NPKM

63	Backfilling sand for COVID-19 Special Activity	-	-	1,989m3	US\$5,171.33	Dec. 2021	Thakhek Dist., Khammouane Province
64	Wood for COVID-19 Special Activity	2.5x20x400mm	-	18m3	US\$4,796.03	Dec. 2021	Thakhek Dist., Khammouane Province
65	Laterite compaction, Asphalt for COVID-19 Special Activity	-	-	75m3 180m2	US\$6,546.31	Dec. 2021	Thakhek Dist., Khammouane Province
66	Wire bundles and nails for COVID-19 Special Activity	-	-	107Kg 124Kg	US\$328.97	Dec. 2021	Thakhek Dist., Khammouane Province
67	Fittings for DMA in COVID-19 Special Activity	-	-	1	US\$8,543.80	Dec. 2021	Thakhek Dist., Khammouane Province
68	Electromagnetic Water Meter	SU080-KF-N	Aichi Tokei Denki	1	US\$2,312.00	Jan. 2022	Thakhek Dist., Khammouane Province
69	Electromagnetic Water Meter	SU100-KF-N	Aichi Tokei Denki	3	US\$7,620.00	Jan. 2022	Thakhek Dist., Khammouane Province
70	Electromagnetic Water Meter	SU150-KF-N	Aichi Tokei Denki	4	US\$13,520.00	Jan. 2022	Thakhek Dist., Khammouane Province
71	Electromagnetic Water Meter	SU200-KF-N	Aichi Tokei Denki	4	US\$15,028.00	Jan. 2022	Thakhek Dist., Khammouane Province
72	Wood for DMA in COVID-19 Special Activity	2.5x20x400	-	6m3	US\$1,547.91	Jan. 2022	Thakhek Dist., Khammouane Province
73	Cement, Rebar, Wire bundles, etc. for DMA in COVID-19 Special Activity	-	-	1	US\$2,324.17	Jan. 2022	Thakhek Dist., Khammouane Province
74	Pipe and fittings for COVID-19 Special Activity	-	-	1	US\$33,734.68	Jan. 2022	Anousone Dist., Xaysomboun Province
75	Electromagnetic Water meter for COVID-19 Special Activity	SU100-KF-N	Aichi Tokei Denki	1	US\$2,794.00	Jan. 2022	Anousone Dist., Xaysomboun Province
76	Electricity installation for COVID-19 Special Activity	-	-	1	US\$6,692.49	Jan. 2022	Anousone Dist., Xaysomboun Province
77	Transfer Pump for COVID-19 Special Activity	IR15-200B	SAER	2	US\$6,692.49	Jan. 2022	Anousone Dist., Xaysomboun Province
78	Gravel for COVID-19 Special Activity	-	-	60m3	US\$813.93	Jan. 2022	Anousone Dist., Xaysomboun Province
79	Walking measure for COVID-19 Special Activity	B-20S	TOKYO RASONIC	1	US\$209.00	Jan. 2022	Anousone Dist., Xaysomboun Province
80	Measure for COVID-19 Special Activity	SGR12-50	MURATEC- KDS	1	US\$121.00	Jan. 2022	Anousone Dist., Xaysomboun Province
81	Aluminum staff for COVID-19 Special Activity	M-33FZ	TAIHEI- SANGYO	1	US\$132.00	Jan. 2022	Anousone Dist., Xaysomboun Province
82	Water pressure tester for COVID-19 Special Activity	T-50K-P	KYOWA	1	US\$385.00	Jan. 2022	Anousone Dist., Xaysomboun Province
83	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	Sibata scientific technology ltd.	1 2	\$583.00	Jan. 2022	NP-BKX

84	pH Meter	LAQUAtwin pH-11	HORIBA	2	\$836.00	Jan. 2022	NP-BKX
85	Turbidity (EPA) Portable Meter	HI98703-02	HANNA	3	\$4,983.00	Jan. 2022	NP-BKX
86	Maintenance equipment and Control Panel material reserves of WTP	-	-	1	\$1,051.41	Jan. 2022	NP-BKX
87	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	Sibata scientific technology ltd.	3	\$1,287.00	Jan. 2022	NP-SLN, NP-BKX, NP-PSY
88	Automatic Chemical Feeding Turbidity and Chlorine Control	750m3/d (1) 1,500m3/d (2)	Tohkemy	3	\$432,500.00	Jan. 2022	NP-SLN, NP-XKH, NP-SVK
89	Control panel and related electrical equipment for COVID-19 Special Activity	-	-	1	US\$5,753.83	Feb. 2022	Anousone Dist., Xaysomboun Province
90	Wood for structure deformed, Wood related materials for COVID-19 Special Activity	26m3	-	19	US\$6,093.68	Feb. 2022	Anousone Dist., Xaysomboun Province
91	Construction safety items for COVID-19 Special Activity (Helmet, globe, vest, sign, etc.) for COVID-19 Special Activity	-	-	1	US\$1,582.77	Feb. 2022	Anousone Dist., Xaysomboun Province
92	Vehicle	HIACE	TOYOTA	1	\$34,200.00	Feb. 2022	Ministry of Public Works and Transport
93	Projector	EB-1795F	EPSON	17	\$22,100.00	Feb. 2022	DWS/MPWT, 15 Provinces, LWVA
94	Truck with crane (5t)	FVR34UL-PDN	ISUZU	2	US\$280,000.00	Mar.2022	NPKM
95	Excavator carrier truck	FVR34UL-PDN	ISUZU	1	US\$88,500.00	Mar.2022	NPKM
96	Electromagnetic Water Meter	SU300-KF-N	Aichi Tokei Denki	1	US\$6,550.00	Mar.2022	Thakhek Dist., Khammouane Province
97	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	Sibata scientific technology ltd.	18 18	US\$7,722.00	Mar.2022	18 WSSEs
98	Portable Water Pressure Recorder	FJN-501 (1.0MPa, A type)	Fujitecom	2	US\$3,252.00	Mar.2022	NP-PSY, NP-XKH
99	Protable water test meter kit	TR-IV	Aichi Tokei Denki	18	US\$53,100.00	Mar.2022	10 Provinces/Capital
100	Walking measure	B-20S	TOKYO RASONIC	3	US\$609.90	Aug. 2022	NP-XKH, NP-PSY, NP-XYB
101	Measure	SGR12-50	MURATEC-KDS	3	US\$353.10	Aug. 2023	NP-XKH, NP-PSY, NP-XYB
102	Aluminum staff	M-33FZ	TAIHEI-SANGYO	3	US\$385.20	Aug. 2023	NP-XKH, NP-PSY, NP-XYB
103	Water pressure tester	T-50K-P	KYOWA	3	US\$1,123.50	Aug. 2023	NP-XKH, NP-PSY, NP-XYB

104	Portable Water Pressure Recorder	FJN-501 (1.0MPa, A type)	Fujitecom	3	US\$4,878.00	Sep. 2023	NP-PSY, NP-XKH
105	Walking measure	B-20S	TOKYO RASONIC	3	US\$609.90	Oct. 2022	LWWA
106	Measure	SGR12-50	MURATEC- KDS	3	US\$353.10	Oct. 2022	LWWA
107	Aluminum staff	M-33FZ	TAIHEI- SANGYO	3	US\$385.20	Oct. 2022	LWWA
108	Water pressure tester	T-50K-P	KYOWA	3	US\$1,123.50	Oct. 2022	LWWA
109	Reagent for DR1900	-	HACH	9 kinds	US\$22,985.12	Dec. 2022	18 WSSEs
110	Reagent for E coli	-	PALL	2 kinds	US\$10,033.20	Dec. 2022	18 WSSEs
111	Cold asphalt and Asphalt	PREMIX MC70	-	656bags 1can	US\$4,526.02	Dec. 2022	NP-XKH
112	Construction safety items for Pilot Project 2nd batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$1,924.26	Dec. 2022	NP-XKH
113	Construction safety items for Pilot Project 2nd batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$1,362.51	Dec. 2022	NP-XYB
114	Construction safety items for Pilot Project 2nd batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$1,706.20	Dec. 2022	NP-PSY
115	Electric iron cutter	14"	BERALA	1	US\$72.00	Dec. 2022	NP-PSY
116	Open-end wrench and Socket wrench set	-	-	1 each	US\$52.00	Dec. 2022	NP-PSY
117	Generator	6500 (5KVA)	-	1	US\$715.00	Dec. 2022	NP-PSY
118	Concrete cutter	-	HONDA	1	US\$885.00	Dec. 2022	NP-PSY
119	Rammer	RS75	SAKAI	1	US\$3,500.00	Dec. 2022	NP-PSY
120	Concrete breaker	-	HITACHI	2	US\$800.00	Dec. 2022	NP-PSY
121	Threading machine for GSP	15mm-75mm	-	1	US\$1,450.00	Dec. 2022	NP-PSY
122	Welding machine for GSP	-	-	1	US\$129.00	Dec. 2022	NP-PSY
123	Iron bar for opening iron tab, Pick, Hoe, Scoop, Small hammer, Hammer, Extension cord	-	-	-	US\$211.00	Dec. 2022	NP-PSY
124	Water meter	-	Aichi Tokei Denki	150	US\$4,173.00	Dec. 2022	NP-PSY
125	Pipe and fittings for Pilot Project 2nd batch	-	-	1	US\$54,496.56	Dec. 2022	Mai Dist. Phongsaly Province

126	Pipe and fittings for Pilot Project 2nd batch	-	-	1	US\$113,742.59	Jan. 2023	Khoun Dist. Xiengkhouang Province
127	Pipe and fittings for Pilot Project 2nd batch	-	-	1	US\$103,941.21	Jan. 2023	Xayabouly Dist. Xayabouly Province
128	Pipe guidance picket	-	-	120	US\$447.25	Feb. 2023	Mai Dist. Phongsaly Province
129	Reagent for DR1900	-	HACH	3 kinds	US\$11,718.00	Feb. 2023	18 WSSEs
130	Pipe and fittings for Pilot Project 2nd batch (Design change)	-	-	1	US\$1,338.56	Jul. 2023	Mai Dist. Phongsaly Province
131	Pipe and fittings for Pilot Project 2nd batch (Design change)	-	-	1	US\$829.37	Aug. 2023	Khoun Dist. Xiengkhouang Province
132	Pipe and fittings for Pilot Project 2nd batch (Design change)	-	-	1	US\$2,500.93	Aug. 2023	Xayabouly Dist. Xayabouly Province
133	Notebook PC for Pipeline maintenanc	HP Victus 15- fa0154TX	-	1	US\$846.67	Sep. 2023	NP-XYB
134	Notebook PC for Water quality management	ASUS Vivobook 15 (x1500ea-br3141)	-	1	US\$460.40	Sep. 2023	NP-XYB
135	External HDD	TOSHIBA CANVIO 1TB	-	1	US\$63.62	Sep. 2023	NP-XYB
136	GPS for Pipeline maintenance	Gramin 66SR	-	1	US\$550.00	Oct. 2023	NP-PSY
137	Projector / Projector screen	EPSON EB E01	-	1	US\$470.64	Oct. 2023	NP-PSY
138	Water meter	Class C, DN15mm	Aichi Tokei Denki	58	US\$1,613.00	Nov. 2023	Khoun Dist. Xiengkhouang Province
139	Water meter for intake, etc.	Class B, DN100, DN150	NWM	2	US\$1,551.00	Nov. 2023	Khoun Dist. Xiengkhouang Province
TOTAL (in US\$)					US\$2,783,915.45		

平成 30 年度 第 4 四半期 概算払受払報告書
4th Quarter, JFY 2018 Estimation Fund Report

Prepared date : 13/03/2019

独立行政法人 国際協力機構
契約担当役 ラオス事務所長 殿

Project Nameプロジェクト名／指導科目 : The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU2)

Temporary Accounting Officer 臨時会計役 : Yusuke Kinoshita

標記について、下記のとおり報告します。

【Currency : USD】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2018	
Receive Budget		69,832.72	49,815.00	1,090.00	0.00	50,905.00	120,737.72	ドル支払額合計
Paid Amount	Overseas Activities Cost	30,937.60	5,047.50	6,600.07	13,097.56	24,745.13	55,682.73	33,860.18
	Miscellaneous	24,861.60	5,047.50	6,600.07	13,097.56	24,745.13	49,606.73	30,826.15
	Travel Expense (Air fare)	0.00	0.00	0.00	0.00	0.00	0.00	3,034.03
	Travel Expense (Non Air fare)	0.00	0.00	0.00	0.00	0.00	0.00	
	Agent Service Expense	6,076.00	0.00	0.00	0.00	0.00	6,076.00	0.00
	Currency Exchange	36,950.00	9,500.00	11,500.00	7,100.00	28,100.00	65,050.00	
	Total	67,887.60	14,547.50	18,100.07	20,197.56	52,845.13	120,732.73	
Others		0.00	0.00	0.00	0.00	0.00	0.00	ドル相当残高合計
Balance		1,945.12	37,212.62	20,202.55	4.99	4.99	4.99	4.99

【Currency : LAK】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2018	
Receive Budget		0	0	0	0	0	0	換算レート
Paid Amount	Currency Exchange	314,152,000	81,240,500	98,391,500	60,818,000	240,450,000	554,602,000	8,556.29
	Overseas Activities Cost	308,263,000	82,896,500	97,114,000	66,328,500	246,339,000	554,602,000	ドル相当支払額
	Miscellaneous	96,513,000	23,264,500	11,635,000	17,131,500	52,031,000	148,544,000	9,115.05
	Travel Expense (Air fare)	48,880,000	15,180,000	7,500,000	3,280,000	25,960,000	74,840,000	6,081.02
	Travel Expense (Non Air fare)	162,870,000	44,452,000	77,979,000	45,917,000	168,348,000	331,218,000	3,034.03
	Agent Service Expense	0	0	0	0	0	0	
	Others	0	0	0	0	0	0	ドル相当残高
Balance		5,889,000	4,233,000	5,510,500	0	0	0	0.00

概算払受払報告書附属書
Appendix of estimation fund report

【Currency : USD】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	4.99	Cash	0.00
Other Income	0.00	Deposit	4.99
Total	4.99	Total	4.99

【Currency : LAK】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	0	Cash	0
Other Income	0	Deposit	0
Total	0	Total	0

平成 31 年度 第 4 四半期 概算払受払報告書
4th Quarter, JFY 2019 Estimation Fund Report

Prepared date : 19/Mar/2020

独立行政法人 国際協力機構
契約担当役 ラオス事務所長 殿

Project Nameプロジェクト名／指導科目 : The Project for Improvement of Management Capacity of Water Supply S

Temporary Accounting Officer 臨時会計役 : Yusuke Kinoshita

標記について、下記のとおり報告します。

		【Currency : USD】					
		Received/Paid Amount					
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2019
Receive Budget		245,550.00	83,500.00	0.00	7,700.00	91,200.00	336,750.00
Paid Amount	Overseas Activities Cost	93,261.54	15,843.50	28,430.07	15,081.36	59,354.93	152,616.47
	Miscellaneous	86,740.54	11,785.50	27,052.07	15,081.36	53,918.93	140,659.47
	Travel Expense (Air fare)	3,635.00	1,140.00	0.00	0.00	1,140.00	4,775.00
	Travel Expense (Non Air fare)	2,886.00	2,918.00	1,378.00	0.00	4,296.00	7,182.00
	Agent Service Expenses	0.00	0.00	0.00	0.00	0.00	0.00
	Currency Exchange	120,707.00	33,000.00	12,436.00	17,900.00	63,336.00	184,043.00
	Total	213,968.54	48,843.50	40,866.07	32,981.36	122,690.93	336,659.47
Others		0.00	0.00	0.00	0.00	0.00	0.00
Balance		31,581.46	66,237.96	25,371.89	90.53	90.53	90.53

ドル支払額合計	85,089.46
	72,492.24
	8,301.22
	4,296.00
	0.00

ドル相当残高合計	90.53
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		【Currency : LAK】					
		Received/Paid Amount					
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2019
Receive Budget		0	0	0	0	0	0
Paid Amount	Currency Exchange	1,055,215,500	292,907,000	110,565,000	159,132,500	562,604,500	1,617,820,000
	Overseas Activities Cost	1,051,216,500	292,432,000	112,855,000	161,316,500	566,603,500	1,617,820,000
	Miscellaneous	310,620,500	46,318,000	18,548,000	100,112,500	164,978,500	475,599,000
	Travel Expense (Air fare)	216,940,000	24,480,000	33,120,000	6,010,000	63,610,000	280,550,000
	Travel Expense (Non Air fare)	523,656,000	221,634,000	61,187,000	55,194,000	338,015,000	861,671,000
	Agent Service Expenses	0	0	0	0	0	0
	Others	0	0	0	0	0	0
Balance		3,999,000	4,474,000	2,184,000	0	0	0

換算レート
8,882.56

ドル相当支払額	25,734.53
	18,573.31
	7,161.22
	0.00

ドル相当残高	0.00
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概算払受払報告書附属書
Appendix of estimation fund report

		【Currency : USD】	
Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	90.53	Cash	0.00
Other Income	0.00	Deposit	90.53
Total	90.53	Total	90.53

		【Currency : LAK】	
Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	0	Cash	0
Other Income	0	Deposit	0
Total	0	Total	0

2020 年度 第1四半期 概算払受払報告書
1st Quarter, JFY 2020 Estimation Fund Report

Prepared date : 07/May/2020

独立行政法人 国際協力機構
契約担当役 ラオス事務所長 殿

Project Nameプロジェクト名/指導科目 : The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU2)

Temporary Accounting Officer 臨時会計役 : Yusuke Kinoshita

標記について、下記のとおり報告します。

		【Currency : USD】							
		Received/Paid Amount							
			Apr	May	Jun	Total in 1Q	Total in FY2020		
Receive Budget		0.00	16,243.37	-3,210.53	0.00	13,032.84	13,032.84	ドル支払額合計	
Paid Amount	Overseas Activities Cost	0.00	11,163.84	269.00	0.00	11,432.84	11,432.84	12,932.84	
	Miscellaneous	0.00	11,163.84	269.00	0.00	11,432.84	11,432.84	12,932.84	
	Travel Expense (Air fare)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Travel Expense (Non Air fare)	0.00	0.00	0.00	0.00	0.00	0.00		
	Agent Service Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Currency Exchange	0.00	500.00	1,000.00	0.00	1,500.00	1,500.00		
	Total	0.00	11,663.84	1,269.00	0.00	12,932.84	12,932.84		
Others		0.00	0.00	0.00	0.00	0.00	0.00	ドル相当残高合計	
Balance		0.00	4,579.53	100.00	100.00	100.00	100.00	100.00	

		【Currency : LAK】							
		Received/Paid Amount							
			Apr	May	Jun	Total in 1Q	Total in FY2020		
Receive Budget		0	0	0	0	0	0	換算レート	
Paid Amount	Currency Exchange	0	4,477,500	8,973,000	0	13,450,500	13,450,500	8,967.00	
	Overseas Activities Cost	0	150,000	13,300,500	0	13,450,500	13,450,500	ドル相当支払額	
	Miscellaneous	0	150,000	13,300,500	0	13,450,500	13,450,500	1,500.00	
	Travel Expense (Air fare)	0	0	0	0	0	0	1,500.00	
	Travel Expense (Non Air fare)	0	0	0	0	0	0	0.00	
	Agent Service Expenses	0	0	0	0	0	0	0.00	
	Others	0	0	0	0	0	0	ドル相当残高	
Balance		0	4,327,500	0	0	0	0	0.00	

概算払受払報告書附属書
Appendix of estimation fund report

【Currency : USD】			
Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	100.00	Cash	0.00
Other Income	0.00	Deposit	100.00
Total	100.00	Total	100.00

【Currency : LAK】			
Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	0	Cash	0
Other Income	0	Deposit	0
Total	0	Total	0

2020 年度 第 4 四半期 概算払受払報告書
4th Quarter, JFY 2020 Estimation Fund Report

Prepared date : 16/Mar/2021

独立行政法人 国際協力機構
 契約担当役 ラオス事務所長 殿

Project Nameプロジェクト名/指導科目 : The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU2)

Temporary Accounting Officer 臨時会計役 : Yusuke Kinoshita

標記について、下記のとおり報告します。

【Currency : USD】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2020	
Receive Budget		64,267.50	35,810.00	0.00	5,000.00	40,810.00	105,077.50	ドル支払額合計
Paid Amount	Overseas Activities Cost	28,031.20	10,053.40	9,446.23	15,024.16	34,523.79	62,554.99	43,102.77
	Miscellaneous	28,031.20	10,053.40	9,446.23	15,024.16	34,523.79	62,554.99	39,699.91
	Travel Expense (Air fare)	0.00	0.00	0.00	0.00	0.00	0.00	3,402.86
	Travel Expense (Non Air fare)	0.00	0.00	0.00	0.00	0.00	0.00	
	Agent Service Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Currency Exchange	24,600.00	5,000.00	5,500.00	7,372.00	17,872.00	42,472.00	
	Total	52,631.20	15,053.40	14,946.23	22,396.16	52,395.79	105,026.99	
Others		0.00	0.00	0.00	0.00	0.00	0.00	ドル相当残高合計
Balance		11,636.30	32,392.90	17,446.67	50.51	50.51	50.51	50.51

【Currency : LAK】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2020	
Receive Budget		0	0	0	0	0	0	
Paid Amount	Currency Exchange	227,882,000	46,479,000	51,334,000	68,993,000	166,806,000	394,688,000	ドル相当支払額
	Overseas Activities Cost	212,549,000	56,874,000	50,332,500	74,932,500	182,139,000	394,688,000	8,578.98
	Miscellaneous	73,501,000	23,288,000	13,143,500	11,848,500	48,280,000	121,781,000	5,176.12
	Travel Expense (Air fare)	9,660,000	4,140,000	12,420,000	15,180,000	31,740,000	41,400,000	3,402.86
	Travel Expense (Non Air fare)	129,388,000	29,446,000	24,769,000	47,904,000	102,119,000	231,507,000	
	Agent Service Expenses	0	0	0	0	0	0	0.00
	Others	0	0	0	0	0	0	ドル相当残高
Balance		15,333,000	4,938,000	5,939,500	0	0	0	0.00

換算レート

9,327.45

概算払受払報告書附属書
Appendix of estimation fund report

【Currency : USD】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	50.51	Cash	0.00
Other Income	0.00	Deposit	50.51
Total	50.51	Total	50.51

【Currency : LAK】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	0	Cash	0
Other Income	0	Deposit	0
Total	0	Total	0

2021 年度 第 4 四半期 概算払受払報告書
4th Quarter, JFY 2021 Estimation Fund Report

Prepared date : 25/Mar/2022

独立行政法人 国際協力機構
 契約担当役 ラオス事務所長 殿

Project Nameプロジェクト名／指導科目 : The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)

Temporary Accounting Officer 臨時会計役 : Yusuke Kinoshita

標記について、下記のとおり報告します。

【Currency : USD】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2021	
Receive Budget		159,075.00	69,695.00	35,000.00	0.00	104,695.00	263,770.00	ドル支払額合計
Paid Amount	Overseas Activities Cost	93,426.96	37,444.96	30,193.86	12,710.17	80,348.99	173,775.95	87,297.25
	Miscellaneous	93,206.96	37,444.96	30,193.86	12,710.17	80,348.99	173,555.95	85,153.03
	Travel Expense (Air fare)	0.00	0.00	0.00	0.00	0.00	0.00	2,144.21
	Travel Expense (Non Air fare)	220.00	0.00	0.00	0.00	0.00	220.00	
	Agent Service Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Currency Exchange	63,500.00	4,000.00	5,500.00	7,470.00	16,970.00	80,470.00	
	Total	156,926.96	41,444.96	35,693.86	20,180.17	97,318.99	254,245.95	
Others		0.00	0.00	0.00	0.00	0.00	0.00	ドル相当残高合計
Balance		2,148.04	30,398.08	29,704.22	9,524.05	9,524.05	9,524.05	9,524.05

【Currency : LAK】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2021	
Receive Budget		0	0	0	0	0	0	換算レート 11,402.79
Paid Amount	Currency Exchange	622,159,500	45,434,500	62,882,500	85,620,500	193,937,500	816,097,000	ドル相当支払額
	Overseas Activities Cost	616,805,500	44,080,500	63,354,000	91,857,000	199,291,500	816,097,000	6,948.26
	Miscellaneous	364,597,500	19,780,500	23,087,000	11,912,000	54,779,500	419,377,000	4,804.04
	Travel Expense (Air fare)	31,010,000	7,330,000	12,240,000	4,880,000	24,450,000	55,460,000	2,144.21
	Travel Expense (Non Air fare)	221,198,000	16,970,000	28,027,000	75,065,000	120,062,000	341,260,000	
	Agent Service Expenses	0	0	0	0	0	0	0.00
	Others	0	0	0	0	0	0	ドル相当残高
Balance		5,354,000	6,708,000	6,236,500	0	0	0	0.00

概算払受払報告書附属書
Appendix of estimation fund report

【Currency : USD】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	9,524.05	Cash	0.00
Other Income	0.00	Deposit	9,524.05
Total	9,524.05	Total	9,524.05

【Currency : LAK】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	0	Cash	0
Other Income	0	Deposit	0
Total	0	Total	0

2022 年度 第 4 四半期 概算払受払報告書
4th Quarter, JFY 2022 Estimation Fund Report

Prepared date : 24/Mar/2023

独立行政法人 国際協力機構
 契約担当役 ラオス事務所長 殿

Project Nameプロジェクト名／指導科目 : The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)

Temporary Accounting Officer 臨時会計役 : Yusuke Kinoshita

標記について、下記のとおり報告します。

【Currency : USD】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2022	
Receive Budget		186,208.38	69,650.00	0.00	0.00	69,650.00	255,858.38	ドル支払額合計
Paid Amount	Overseas Activities Cost	106,097.50	17,884.40	9,122.08	5,745.70	32,752.18	138,849.68	38,921.04
	Miscellaneous	103,299.11	13,547.61	9,025.08	5,745.70	28,318.39	131,617.50	34,430.91
	Travel Expense (Air fare)	1,880.00	0.00	0.00	0.00	0.00	1,880.00	4,490.13
	Travel Expense (Non Air fare)	918.39	4,336.79	97.00	0.00	4,433.79	5,352.18	
	Agent Service Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Currency Exchange	64,300.00	5,800.00	9,500.00	4,806.00	20,106.00	84,406.00	
	Total	170,397.50	23,684.40	18,622.08	10,551.70	52,858.18	223,255.68	
Others		0.00	0.00	0.00	0.00	0.00	0.00	ドル相当残高合計
Balance		15,810.88	61,776.48	43,154.40	32,602.70	32,602.70	32,602.70	32,602.70

【Currency : LAK】

		Received/Paid Amount						
		Accumulated Amount by last Q	Jan	Feb	Mar	Total in 4Q	Total in FY2022	
Receive Budget		0	0	0	0	0	0	換算レート 16,814.66
Paid Amount	Currency Exchange	1,007,106,000	97,885,000	159,353,000	80,691,000	337,929,000	1,345,035,000	ドル相当支払額
	Overseas Activities Cost	1,000,101,500	94,918,500	135,807,000	114,208,000	344,933,500	1,345,035,000	10,602.65
	Miscellaneous	307,327,500	22,102,000	33,723,000	46,955,000	102,780,000	410,107,500	6,112.52
	Travel Expense (Air fare)	93,453,000	22,410,000	50,390,000	2,700,000	75,500,000	168,953,000	4,490.13
	Travel Expense (Non Air fare)	599,321,000	50,406,500	51,694,000	64,553,000	166,653,500	765,974,500	
	Agent Service Expenses	0	0	0	0	0	0	0.00
	Others	0	0	0	0	0	0	ドル相当残高
Balance		7,004,500	9,971,000	33,517,000	0	0	0	0.00

概算払受払報告書附属書
Appendix of estimation fund report

【Currency : USD】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	32,602.70	Cash	0.00
Other Income	0.00	Deposit	32,602.70
Total	32,602.70	Total	32,602.70

【Currency : LAK】

Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	0	Cash	0
Other Income	0	Deposit	0
Total	0	Total	0

2023 年度 第 3 四半期 概算払受払報告書
3rd Quarter, JFY 2023 Estimation Fund Report

Prepared date : 11/Dec/2023

独立行政法人 国際協力機構
契約担当役 ラオス事務所長 殿

Project Nameプロジェクト名／指導科目 : The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)
Temporary Accounting Officer 臨時会計役 : Yusuke Kinoshita

標記について、下記のとおり報告します。

		【Currency : USD】					
		Received/Paid Amount					
		Accumulated Amount by last Q	Oct	Nov	Dec	Total in 3Q	Total in FY2023
Receive Budget		111,255.00	29,266.00	7,000.00	0.00	36,266.00	147,521.00
Paid Amount	Overseas Activities Cost	54,480.40	7,302.41	16,732.06	10,254.45	34,288.92	88,769.32
	Miscellaneous	46,821.40	7,302.41	16,732.06	10,254.45	34,288.92	81,110.32
	Travel Expense (Air fare)	2,704.00	0.00	0.00	0.00	0.00	2,704.00
	Travel Expense (Non Air fare)	4,955.00	0.00	0.00	0.00	0.00	4,955.00
	Agent Service Expenses	0.00	0.00	0.00	0.00	0.00	0.00
	Currency Exchange	35,000.00	5,500.00	17,500.00	500.00	23,500.00	58,500.00
	Total	89,480.40	12,802.41	34,232.06	10,754.45	57,788.92	147,269.32
Others		0.00	0.00	0.00	0.00	0.00	0.00
Balance		21,774.60	38,238.19	11,006.13	251.68	251.68	251.68
							ドル支払額合計
							44,358.40
							43,624.20
							734.20
							0.00
							ドル相当残高合計
							251.68

		【Currency : LAK】					
		Received/Paid Amount					
		Accumulated Amount by last Q	Oct	Nov	Dec	Total in 3Q	Total in FY2023
Receive Budget		0	0	0	0	0	0
Paid Amount	Currency Exchange	639,482,500	113,160,500	361,164,000	10,329,500	484,654,000	1,124,136,500
	Overseas Activities Cost	629,409,500	105,673,000	371,464,500	17,589,500	494,727,000	1,124,136,500
	Miscellaneous	175,626,000	70,013,000	105,297,500	16,989,500	192,300,000	367,926,000
	Travel Expense (Air fare)	77,349,000	20,560,000	-5,436,000	0	15,124,000	92,473,000
	Travel Expense (Non Air fare)	376,434,500	15,100,000	271,603,000	600,000	287,303,000	663,737,500
	Agent Service Expenses	0	0	0	0	0	0
	Others	0	0	0	0	0	0
Balance		10,073,000	17,560,500	7,260,000	0	0	0
							換算レート
							20,599.27
							ドル相当支払額
							10,069.48
							9,335.28
							734.20
							0.00
							ドル相当残高
							0.00

概算払受払報告書附属書
Appendix of estimation fund report

【Currency : USD】			
Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	251.68	Cash	0.00
Other Income	0.00	Deposit	251.68
Total	251.68	Total	251.68

【Currency : LAK】			
Breakdown of estimation balance		Breakdown of the cash and deposit balance	
Overseas Activities Cost	0	Cash	0
Other Income	0	Deposit	0
Total	0	Total	0

**MINUTES OF MEETING
OF THE JOINT COORDINATING COMMITTEE
FOR**

**“The Project for Improvement of Management Capacity of Water Supply Sector
(MaWaSU 2)”**

The 1st meeting of the Joint Coordinating Committee (hereinafter referred to as “JCC”) of The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2) was held on 22 November, 2018.

The outline of the Project, report of the project activities, forecast of the project activities, Plan of Operation (PO) and Annual Plan of Operation (APO) 2019 were presented and discussed among the JCC Meeting participants.

The JCC confirmed the above mentioned documents attached hereto within the framework of R/D. Main points of the discussion have been summarized in the attached document I.

Vientiane Capital, 22 November, 2018



Yoshiharu YONEYAMA
Chief Representative
Laos Office
Japan International Cooperation Agency,
Japan



Phomma Veoravanh
Director General
Department of Water Supply
Ministry of Public Works and Transport
Lao People's Democratic Republic

Attached Document I: Main points of the discussion summarized

Prof. Dr. Somphone Dethoudom, Advisor to the Minister, Ministry of Public Works and Transport (MPWT)

1. According to my experiences in the water supply sector in Laos, the project design corresponds to the Lao government policy.
2. The achievements of MaWaSU1 and project activity plans of MaWaSU2 also correspond to international circumstances and hope of people in Laos, expecting good results of the Project.
3. As a personnel involved in regulation revisions in other sectors of MPWT, I am able to support this Project.

Ms. Ammala Keonuchan, Ministry of Home Affairs (MoHA)

4. MoHA cooperates in project activities related to the Ministry.
5. MoHA requests the Project to support dissemination of the strategy to the province level.
6. MoHA reaffirms making guidelines is important for investors to remove fear and risk as well as for government to check investment procedure.

Ms. Vilavanh Silasack, Ministry of Planning and Investment (MPI)

7. MPI understands the Ministry involves in project activities related to Output 2.
8. MPI has an application format for projects.

Ms. Saori Yamamoto, JICA Laos Office

9. As a person in charge of the Project, I am glad to hear the Prof. Dr. Somphone's comment that activity plans of MaWaSU2 correspond to current situation of Laos. In order to correspond to the situation, MaWaSU2 sets higher goals, but this is going to be a pioneer project in aspect of challenge for government institutional arrangement to other sectors of the Lao Government.
10. In terms of a pioneer to other sectors, participation in project activities is worthwhile even to the persons who are not belonging to DWS or WSSE. Positive participation from all related organizations is expected.
11. JICA Laos Office welcomes opinion exchanges, discussions, etc. for better project implementation.

Mr. Keisuke Sonoda, Chief Advisor of MaWaSU2

12. The project outline, project activities for the previous 6 months and APO 2019 were presented in this 1st JCC Meeting.
13. To achieve the project goal, cooperation and clear division of roles among MPWT, Department of Public Works and Transport (DPWT) and Water Supply State Enterprise

(WSSE) is important. In terms of national dissemination, leadership of the 3 pilot WSSEs is expected.

14. It is quite important to cooperate with other related Ministries when improving institutional arrangement to a large extent. Some numbers of committees for the related Ministries to participate are set in MaWaSU2. To proceed to committee discussions, leadership of Department of Water Supply (DWS), MPWT is critical.

Mr. Phomma Veoravanh, Director General of DWS, MPWT

15. To achieve the Prime Minister Decision, cooperation and opinion exchanges with other related Ministries are important.
16. Instead of heavily relying on supports from international donors, realizing self-reliance waterworks operations including new installation of water supply system is necessary.
17. Vice Minister evaluates high and expects MaWaSU2 in the 1st JCC Meeting. I understand Vice Minister instructs to proceed to MaWaSU2 through cooperation among MPWT, MoHA, MPI, Ministry of Finance, DPWT and WSSE.

(End)

Attachments:

- I. Main points of the discussion summarized
- II. Agenda of the 1st JCC Meeting
- III. Participants list
- IV. Outline of the Project
- V. APO 2019

Agenda of 1st JCC Meeting

Time, Date: 13:00-16:00, 22 November, 2018

Place: Lane Xang Hotel

Schedule:

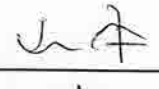
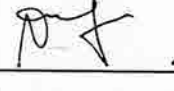
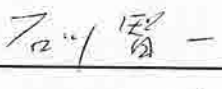
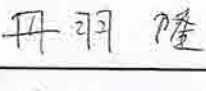
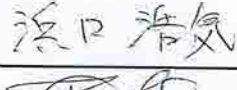
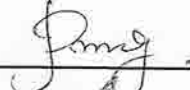
Time	Contents	Person in charge
13:00	1. Opening remarks Greeting	Dr. Santisouk Simmalavong, MPWT Mr. Yoshiharu Yoneyama, Chief Representative, JICA Laos Office
13:20	2. Project outline (60min)	Mr. Phomma Veoravanh, Project Director
14:20	3. Report of project activities (from May to November 2018) (15min)	Mr. Khanthone Vorachith, Project Manager
14:35	Coffee break	
14:50	4. Forecast of project activities in 2018 and APO (20min)	Mr. Khanthone Vorachth, Project Manager
15:10	5. Comments from representatives	Representative of each organization
15:40	6. Discussion	All participants
15:50	7. Conclusion & Closing remarks	Dr. Santisouk Simmalavong, MPWT

The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)**Registration
1st JCC Meeting**

Venue: Lane Xang Hotel

Date: 22/11/2018

No.	Name & Surname	Organization	Signature
1	Dr. Santisouk Simmalavong	Ministry of Public Works and Transport (MPWT)	
2	Dr. Somphone Dedudom	MPWT	
3	Mr. Phomma Veoravanh	MPWT	
4	Ms. Ammala Keonouchan 55197456.	Ministry of Home Affairs	
5	Ms. Vanida Savathdy	Ministry of Finance (MOF)	
6	Mr. Photthakhan	MOF	
7	Mr. Sonphet Inthavong	MOF	
8	Mr. Somkhith Kaoyaheuang	Ministry of Planning and Investment (MPI)	
9	Ms. Viravanh Silasack	MPI	
10	Mr. Audsaween Inphithuk	Department of Public Works and Transport (DPWT), Luang Prabang Province	
11	Mr. Phitsamay Kongsadeth	DPWT, Khammouane Province	
12	Mr. Korakan Seanbottalath	DPWT, Vientiane Capital	
13	Mr. Viengthouay Vannarath	Vientiane Capital Water Supply State Enterprise (WSSE)	
14	Mr. Chanthone Sanaphay	Luang Prabang Province WSSE	
15	Mr. Khangeun Sengiem	Khammouane Province WSSE	
16	Mr. Anousack Vannasi	Luang Prabang Province WSSE	
17	Mr. Khamveuy Tayavong	Khammouane Province WSSE	
18	Mr. Khamphoung Vanhvilay	MPWT	

19	Mr. Siphachanh Soumphonphakdee	MPWT	
20	Ms. Phoungern Phommalin	MPWT	
21	Mr. Phankham Mongphachanh	MPWT	
22	Mr. Yoshihara Yoneyama	JICA Laos Office	
23	Mr. Shunsuke Sakudo	JICA Laos Office	
24	Ms. Saori Yamamoto	JICA Laos Office	
25	Mr. Kingsada Siphanthong	JICA Laos Office	
26	Mr. Keisuke Sonoda	MaWaSU2 Project	
27	Mr. Daisuke Masugata	MaWaSU2 Project	
28	Mr. Yusuke Kinoshita	MaWaSU2 Project	
29	Mr. Tomokazu Ishikawa	MaWaSU2 Project	
30	Mr. Takashi Niwa	MaWaSU2 Project	
31	Mr. Koki Hamaguchi	MaWaSU2 Project	
32	Mr. Hiroshi Nishimaki	MaWaSU2 Project	
33	Mr. Kenta Inoue	MaWaSU2 Project	
34	Mr. Khankham Mahavang	MaWaSU2 Project	
35	Ms. Inthasone Vichitvongsa	MaWaSU2 Project	
36	Mr. Khan Thone Vorachith		
37	Mrs. Soukphavanh Saivanh		
38	Mr. Phoukeo Thammavong		
39			
40			

The Project for Improvement of Management Capacity of Water Supply Sector

MaWaSU 2

Outline of Project MaWaSU2



1st Joint Coordination Committee





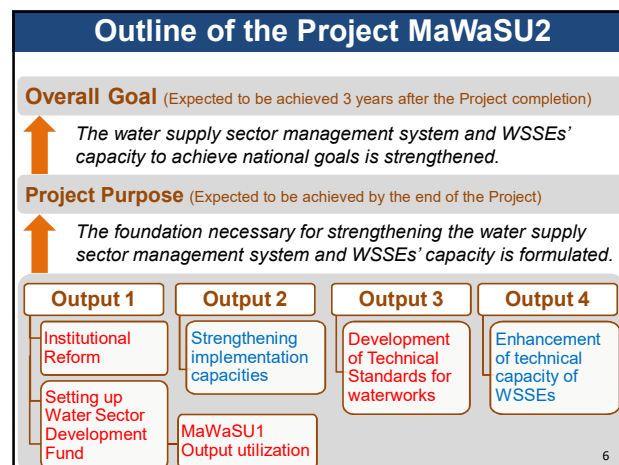
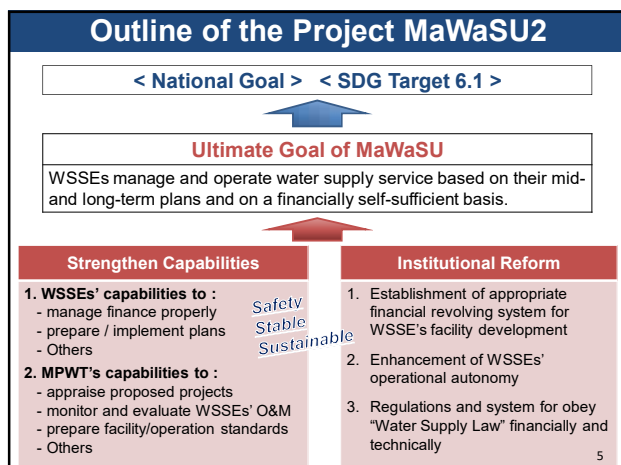
22nd November 2018

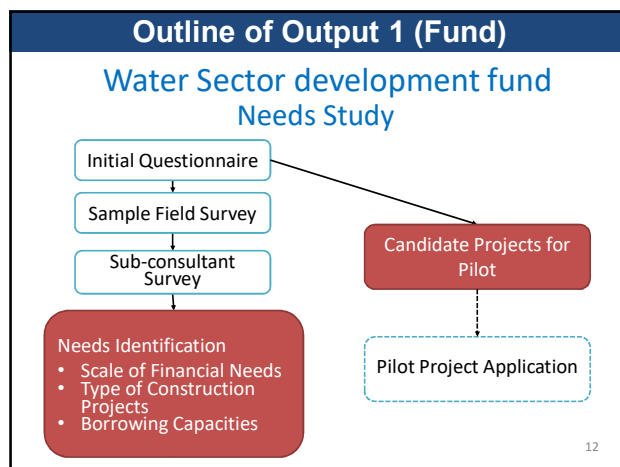
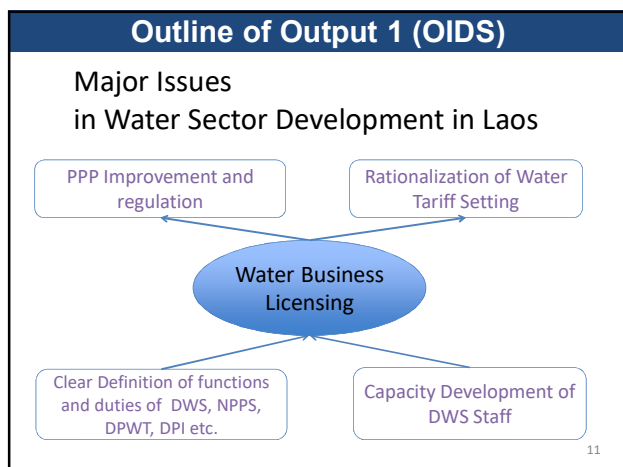
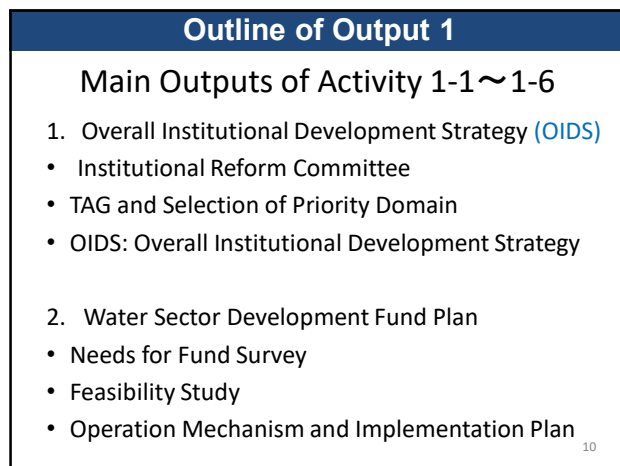
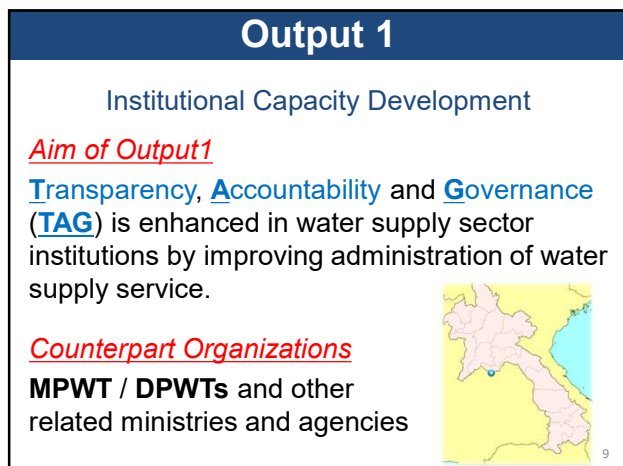
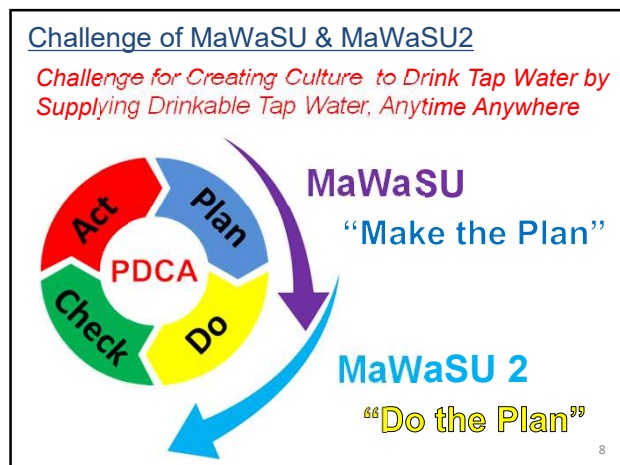
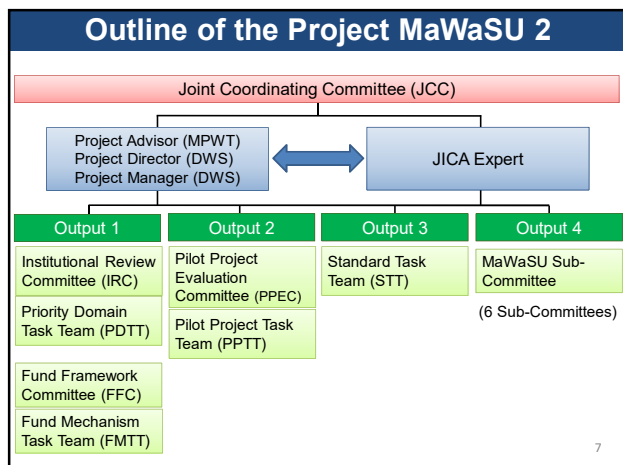


Contents
• Outline of Project MaWaSU2
• Output 1 -Institutional Capacity Development
• Output 2 -Strengthening implementation capacities
• Output 3 -Development of Technical Standards
• Output 4 -Enhancement of WSSEs' capacity
• Project Schedule

Outline of the Project MaWaSU2	
General Information	
Project Name	The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU2)
Project Duration	21 st May 2018 – 20 th May 2023 (5 years)
Target	Whole Lao Water Supply Sector (MPWT, DPWTs, WSSEs)
Counterpart Organization	Department of Water Supply (MPWT) Department of Public Works and Transport(DPWT) -Vientiane CC, Luang Prabang province, Khammouane province Water Supply State Enterprises (WSSE / NPP) -Vientiane CC, Luang Prabang province, Khammouane province
Stakeholder Organization	Ministry of Home Affairs (MHA) Ministry of Finance (MOF) Ministry of Planning and Investment (MPI) *Ministry of Health (MOH)

Outline of the Project MaWaSU2			
Project Input (Plan)			
Long-term expert	Duration	Organization	Remarks
Chief Advisor	5 years	Saitama City	Total 2 experts
Sub-Chief Advisor	5 years	Kawasaki City	Total 2 experts
Coordinator	4 & half years	Public offering	
Short-term expert	Term	Organization	Remarks
Technical Standard (Output3)	4-6 month / year	Saitama City	Total 9 experts
Civil work (Output4)	4-6 month / year	Kawasaki City	Total 9 experts
Water Quality (Output4)	4-6 month / year	Saitama Pref	Total 9 experts
Finance (Output4)	4-6 month / year	Yokohama City	Total 9 experts
Consultant expert	Term	Remarks	
Institutional Reform (Output1)	Oct2018-Aug2021	Exe Idea	
Water Sector Development Fund (Output1)	Oct2018-Aug2021	A.I.Network	
Priority domain Specialist (Output1)	2020-		
Design/Construction management (Output2)	Jan2019-		





Outline of Output 1 (Fund)

Water Sector development fund Feasibility Study

- Financial Needs
- Lending Conditions
- Funding Sources (Grant, Concessional Loan, Market Loan etc.)
- Fund Operation Methods
- Operation Inputs and Cost Estimation
- Cash Flow Analysis Simulation

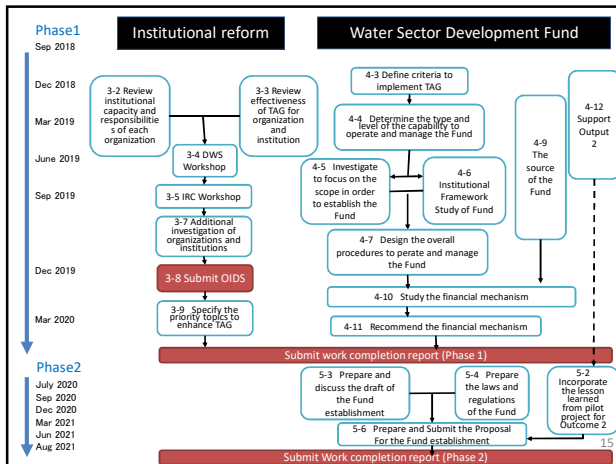
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Outline of Output 1 (Fund)

Water Sector development fund Implementation Plan

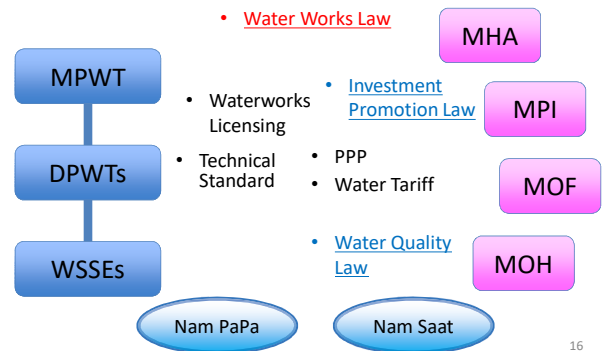
- Ownership and Governance
- Management of Daily Operation
- Fund Management Procedure
- Human Resource Development
- TAG Mechanism

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Outline of Output 1

Stakeholders & Related topics



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Outline of Output 1 (MaWaSU1 Output Utilization)

Main Outputs of Activity 1-7

1. Water Supply Statistics System

- Utilization of Water Supply Guideline(WSG) *MaWaSU1 Output
- Utilization of Annual Report *MaWaSU1 output
- Improve and unify current monitoring system
- Improve data accuracy of Lao Water Supply Sector

2. Water Supply Strategy

- Utilization of Water Supply Strategy(WSS) *MaWaSU1 version
- Make Provincial Water Supply Strategy(PWSS)

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Output 2

Strengthening implementation capacities

Aim of Output2

Capacity of WSSEs for planning and implementation, MPWT/DPWTs for monitoring and evaluation of water supply projects is enhanced.

Counterpart Organizations

DWS / DPWTs / WSSEs



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Output 2

Activities

- A) Definition of roles, functions and procedures of each organization
- B) Guidelines for preparation of proposal
- C) Pilot project implementation by JICA fund (Proposal⇒Selection⇒Construction／Monitoring)
- D) Evaluation and feed-back

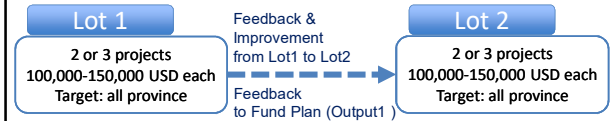


Good practice, experience and guidelines through the activities with DWS, MPWTs and NPPs

19

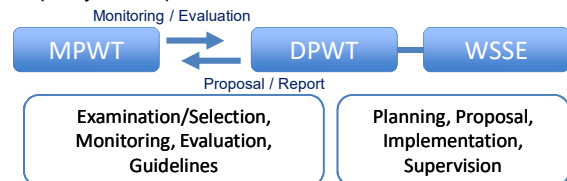
Output 2

Pilot Project Implementation (Tentative)



Capacity development through Pilot Project best practices

Capacity Development Structure



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Output 3

Development of Technical Standards

Aim of Output 3

Technical standards necessary for water supply service are developed.

Counterpart Organizations

DWS / DPWTs / WSSEs



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Output 3 (Development of Technical Standard)

Article 15 of Water Supply Service Act

The design and construction of water supply facilities shall comply with technical standard defined by MPWT.



■ Technical standard (Ministerial ordinance)

Regulation for all Lao water supply sector

■ Criteria (Design and construction)

Concrete technical contents for Ministerial ordinance

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Output 3 (Development of Technical Standard)

Activities

- A) Establish Standard Task Team (STT)
 - (STT.1) Generals
 - (STT.2) Water Treatment Plant
 - (STT.3) Pipeline
- B) Creation of Technical standard (Ministerial ordinance)
- C) Creation of Criteria (Design and construction)
- D) Diffusion throughout the country

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Output 4

Enhancement of WSSEs' capacity

Aim of Output4

Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.

Counterpart Organizations

DWS / DPWTs / WSSEs

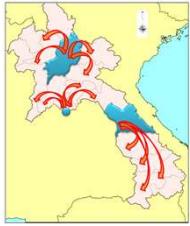


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Output 4 (Enhancement of WSSEs' capacity)

Current situations

- I. Dissemination activities of MaWaSU1 is not sufficient



- Data management manual
- Water supply guideline
- Annual report
- Customer survey
- NPP Class
- Call center
- Long term plan
- Financial plan
- Others

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Output 4 (Enhancement of WSSEs' capacity)

Current situations

- II. WSSEs can not inspect all 23 items of water quality inspection



But....

There is no inspection equipment

There is no funds to purchase

Consider water quality inspection system to ensure water safety and protect consumer health !!

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Output 4 (Enhancement of WSSEs' capacity)

Current situations

- III. There are many items to consider for the establishment of Las Water Works Association (LWWA)

- Organizational Structure ?
- The role of association ?
- Operation method ?
- Others



Reference other associations (Japan, Thai, Indonesia, Vietnam, etc.)

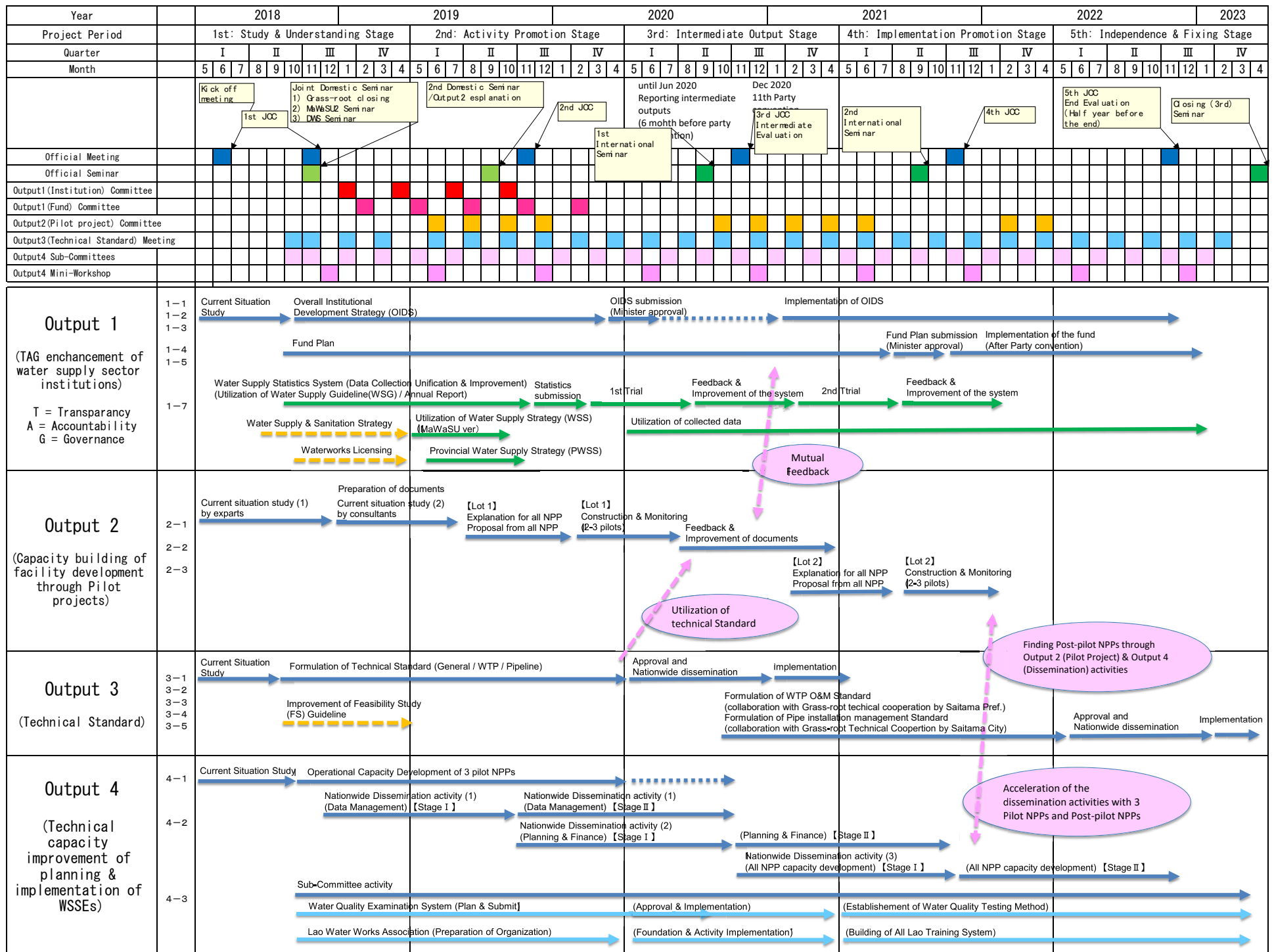
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Output 4 (Enhancement of WSSEs' capacity)

【Output 4】 Sub-Committee (SC)

(1) Data Management	Water Supply Guideline, Data Management Manual and Annual Report (Dissemination)
(2) Customer Relations	Customer Questionnaire, Water Education Class, Call center (Dissemination)
(3) Planning	Strengthening Long, mid and annual planning capacity of all NPP
(4) Finance	Strengthening Middle-term financial planning capacity of all NPP
(5) Water Quality	All Lao water quality testing system
(6) LWWA	Support preparation of LWWA foundation and actual activities

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Annual Plan of Operation (from November 2018 to December 2019)

Project title: The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)

		Calendar year	2018					2019										
Inputs		Year	1st Year							2nd Year								
			II	III		IV			I			II			III			
			2018				2019											
Experts			11	12	1	2	3	4	5	6	7	8	9	10	11	12		
	Long-term expert (Chief Adviser)	Plan																
	Long-term expert (Sub-Chief Adviser / Water Supply Technique)	Plan																
	Long-term expert (Project Coordinator)	Plan																
	Short-term expert (Output1) (Institution1)	Plan																
	Short-term expert (Output1) (Institution2)	Plan																
	Short-term expert (Output1) (Fund)	Plan																
	Short-term expert (Output2) (Design/Construction Works)	Plan																
	Short-term expert (Output3) (Technical Standard)	Plan																
	Short-term expert (Output4) (Civil works)	Plan																
	Short-term expert (Output4) (Water Quality)	Plan																
	Short-term expert (Output4) (Finance)	Plan																
Equipment																		
Equipment necessary to attain output 4.(Item will be specified in activity 4-1-1 and 4-1-2)		Plan																
Training in Japan																		
Institutional reform, Fund, Development of technical standards, Water quality Management, Civil works, Financial management		Plan																
In-country training /Third country training																		
		Plan																
Output 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.																		
1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains.																		
	1-1-2. Review the current institutional effectiveness in terms of TAG.	Plan																
	1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations.	Plan																
	1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarging instition/governance and undertake the studies.	Plan																
	1-1-5. Submit an Overall Institutional Development Strategy (OIDS) including recommendations to the concerned organizations.	Plan																
1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities.																		
	1-4-1. Define a scope of required capacities and its level for management of the fund.	Plan																
	1-4-3. Define key elements to achieve TAG.	Plan																
	1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and undertake specific target studies.	Plan																
1-5. Propose the funding mechanism.																		
	1-5-1. Define target level for urban self-sufficiency and rural subsidization.	Plan																
	1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.).	Plan																
	1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis	Plan																
1-7. WSS, PWSS, WSG, and WSSY supported by MaWaSU are finalized and/or revised to be utilized.																		
	1-7-2. Necessary items to be revised those strategies and guidelines are identified to be practiced.	Plan																
	1-7-3. WSS, PWSS, WSG, and WSSY are finalized and/or revised.	Plan																

	Calendar year	2018							2019						
Activities	Year	1st Year							2nd Year						
Sub-activities		II	III		IV			I			II		III		
		11	12	1	2	3	4	5	6	7	8	9	10	11	12
Output 2. In the water supply sector capacity building and implementation supervision abilities of facility development plan for water supply sector are improved.															
2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects.															
2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs.	Plan														
2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects.	Plan														
2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation.	Plan														
2-1-4. PPTT prepares procedures for developing proposals.	Plan														
2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure.	Plan														
2-2. Implement the pilot projects.															
2-2-1 Pilot Project Evaluation Committee (PPEC) holds briefing sessions for all WSSEs for application of finance.	Plan														
2-2-2 WSSEs applying for finance by the Project prepare and submit proposals to PPEC.	Plan														
2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects.	Plan														
2-2-4 Financing is decided for the pilot projects that passed the review by PPEC.	Plan														
2-2-5 WSSEs prepare for the design documents and the bidding documents for the implementation of the pilot projects in consultation with DPWT and submit them to PPEC.	Plan														
	Calendar year	2018							2019						
Activities	Year	1st Year							2nd Year						
Sub-activities		II	III		IV			I			II		III		
		11	12	1	2	3	4	5	6	7	8	9	10	11	12
Output 3. Technical standards necessary for water supply projects are developed.															
3-2 Priority for technical standards is determined.	Plan														
3-2-4. Schedule for creation of technical standards is determined.	Plan														
3-2-5. Schedule for creation of criteria is determined.	Plan														
3-3 Based on the priority order, STT discusses and determines the scope of standards.	Plan														
3-3-1. Standard Task Team (STT) meeting is held.	Plan														
3-3-2. Composition of technical standards is determined.	Plan														
3-3-3. Creating sharing of technical standards is determined.	Plan														
3-3-4. Composition of criteria is determined.	Plan														
3-3-5. Creating sharing of criteria is determined.	Plan														
3-4 STT formulates the draft standards.	Plan														
3-4-1. Technical standards (draft) are created.															
3-4-3. Criteria (draft) are created.															

4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved.

4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved.

4-1-4. JICA Experts provides guidance to those trainers.

Plan

4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented.

4-2-1. DP is reviewed.

Plan

4-2-2. Based on the review, DP is implemented.

Plan

4-2-3. Evaluate contents of DP and compile the results of activities.

Plan

4-2-4. Report on the result of dissemination activities to MPWT.

Plan

4-2-5. Formulate a plan for implementation of the next plan, and the budget for the next plan is requested to MPWT and/or DPWTs.

Plan

4-2-6. The activities from 4-2-1 to 4-2-5 will be continued according to the allocation of the budget.

Plan

4-3. Activities of MaWaSU Sub-Committee are promoted.

4-3-2. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year.

Plan

4-3-3. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee.

Plan

4-3-4. National Water Quality Inspection Plan (draft) is prepared at sub-committee (Water Quality).

Plan

4-4. WSSes prepare for the establishment of the Laos Water Works Association.

Plan

4-4-1. Materials necessary for the Laos Water Works Association Preparation Committee are prepared.

Plan

4-4-2. The establishment of the Laos Water Works Association Preparation Committee will be approved by the Ministry concerned.

Plan

4-4-3. The Laos Water Works Association Preparation Committee will be held.

Plan

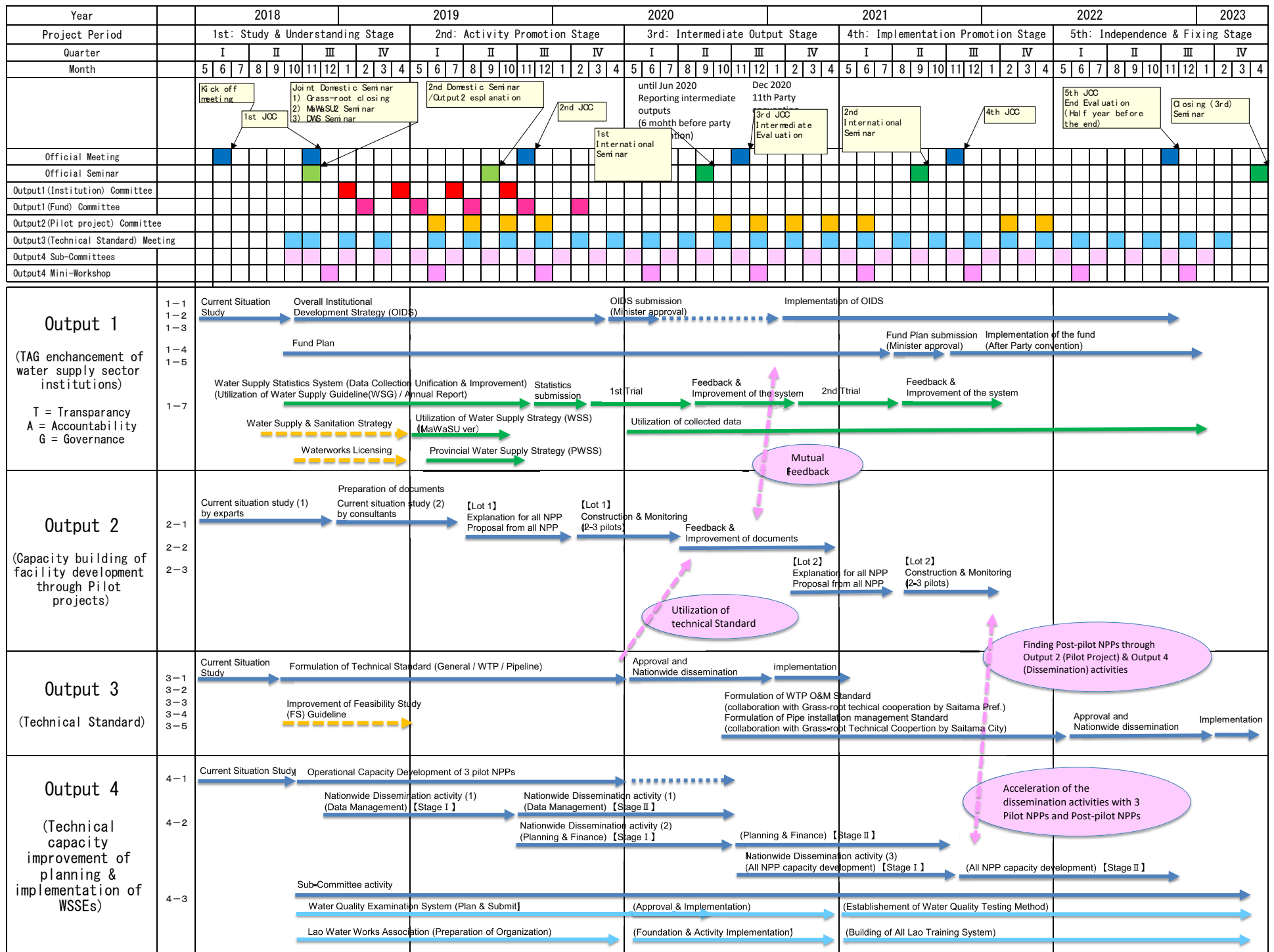
4-4-4. Materials necessary for the Laos Water Works Association are prepared.

Plan

4-4-5. Procedures necessary for the establishment of the Laos Water Works Association are implemented.

Plan

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**MINUTES OF MEETING
OF THE JOINT COORDINATING COMMITTEE
FOR**

**“The Project for Improvement of Management Capacity of Water Supply Sector
(MaWaSU 2)”**

The 2nd meeting of the Joint Coordinating Committee (hereinafter referred to as “JCC”) of The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2) was held on 21 November, 2019.

Report of the project activities, forecast of the project activities, arranged Project Design Matrix (hereinafter referred to as “PDM”), arranged Plan of Operation (hereinafter referred to as “PO”) and Annual Plan of Operation (hereinafter referred to as “APO”) 2020 were presented and discussed among the JCC Meeting participants.

The JCC confirmed the above mentioned documents attached hereto within the framework of R/D. Main points of the discussion have been summarized in the attached document I.

Vientiane Capital, 21 November, 2019


Yoshiharu YONEYAMA
Chief Representative
Laos Office
Japan International Cooperation Agency,
Japan


Phomma Veoravanh
Director General
Department of Water Supply
Ministry of Public Works and Transport
Lao People's Democratic Republic

Attached Document I: Main points of the discussion summarized

Mr. Keisuke Sonoda, Chief Advisor of MaWaSU2

1. Chief Advisor of MaWaSU2 proposes to revise the PDM and PO after one year and a half have been passed since the commencement of the project.
2. Chief Advisor of MaWaSU2 explains the revision of the PDM and PO that no major revision affecting the project framework is included. The revision will be made for clarifying and adjusting project activities and future plans according to the current activity progress.
3. Chief Advisor of MaWaSU2 reminds that the activity plans in 2020 are as in the Forecast of Project Activities explained by Mr. Phomma, Director General, Department of Water Supply (DWS).

Dr. Ammala Keonuchan, Ministry of Home Affairs (MoHA)

4. MoHA will continue to cooperate with the project.
5. MoHA expresses importance of the Water Supply Strategy and expectation for its dissemination.

Mr. Bounluerth NLS, Ministry of Finance (MOF)

6. MOF states necessity of improvement of Water Supply State Enterprises (WSSEs) because financial figures of WSSEs tends to be the worse. WSSEs need to manage expenditure according to expected income. Customer service is important concept for increasing income.
7. MOF expects the project to develop capacity of WSSEs in terms of business operation.

Mr. Soulivanh Phommahasey, Department of Public Works and Transport, Vientiane Capital (DPWT-NL)

8. DPWTs need human resources who are specialized in the water supply sector. DPWT-NL hopes to establish an independent unit of the water supply sector.
9. DPWT-NL expects JICA to support establishing a university course of the water supply sector in Lao PDR. Due to limitations of numbers who are able to participate in the existing training or overseas study programs, DPWT-NL supposes the program in Lao PDR would be able to secure quality and quantity.

Mr. Adsavinh Inphithack, Department of Public Works and Transport, Luangprabang Province (DPWT-LP)

10. DPWT-LP confirms the statement of DPWT-NL in terms of human resource and independent unit of the water supply sector.

Ms. Saori Yamamoto, JICA Laos Office

11. JICA Laos Office requests DWS for proactive donor coordination for integrated financial arrangements of Water Supply Sector Fund (Output 1).
12. JICA Laos Office requests to all related organizations about intensive quality and safety management in construction of the Pilot Project (Output 2).
13. JICA Laos Office requests the related ministries to support for earlier establishment of Lao Water Works Association.
14. JICA Laos Office requests to nominate promising officials/staffs for waterworks to Master Course in Japan under JICA scheme.

Prof. Dr. Somphone Dedudom, Advisor to the Minister, Ministry of Public Works and Transport (MPWT)

15. Advisor to the Ministry highly evaluates the project approach that Japanese experts support assignments of Lao officials/staffs. This method should be spread to other projects than the water supply sector.
16. Advisor to the Ministry states that it is necessary for efficient dissemination that standards and guidelines must have formal validity.
17. Advisor to the Ministry expresses importance for improvement of the water supply sector that policy, formal standards, manuals for implementation and human resource to implement should be ready.

Mr. Viengsavath Siphandone, Vice Minister, Ministry of Public Works and Transport (MPWT)

18. Vice Minister, co-chairperson, confirms project activity report in the past year and activity plans in 2020.
19. Vice Minister states water is life. Vice Minister requests related organizations in the project cooperate each other to proceed the project activities.
20. Vice Minister states it is important division of rules between waterworks administration and waterworks operation. WSSEs, major waterworks operator, needs to operate waterworks business with autonomous mindset, while waterworks administration such as DWS and DPWT monitors waterworks operators with adequate involvement.

(End)

Attachments:

- I. Main points of the discussion summarized
- II. Agenda of the 2nd JCC Meeting
- III. Participants list
- IV. PDM arranged
- V. PO arranged
- VI. APO 2020

Agenda of 2nd JCC Meeting

Time, Date: 14:00-16:00, 21st (Thu) November, 2019

Place: Lao Plaza Hotel

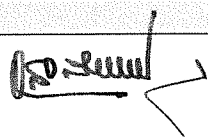
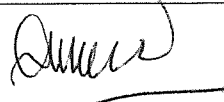
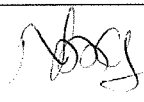
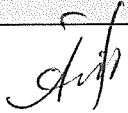
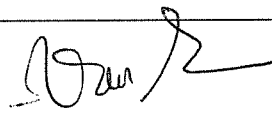
Schedule:

Time	Contents	Person in charge
13:30	1. Registration	
14:00	2. Opening remarks Greeting	Mr. Viengsavath Siphandone Vice Minister, MPWT Mr. Yoshiharu Yoneyama, Chief Representative, JICA Laos Office
14:15	3. Report of project activities (from Nov 2018 to Oct 2019) (20min)	Mr. Khanthone Vorachith, Project Manager
14:35	Coffee break	
14:50	4. Project direction and forecast of activities in 2020 (30min)	Mr. Phomma Veoravanh, Project Director
15:20	5. Comments from Representatives	Representative of each organization
15:35	6. Discussion	All participants
15:50	7. Conclusion & Closing remarks	Ms. Viengsavath Siphandone Vice Minister, MPWT

Participants: [MPWT] Mr. Viengsavath (Chairperson), Dr. Somphone
 [DWS] Mr. Phomma (Project Director), Mr. Phoukeo, Mr. Khanthone (Project Manager),
 Mr. Somchay, Ms. Phoungern
 [MoHA] Dr. Aummala
 [MPI] Mr. Sengsouly
 [MOF] Mr. Vanida, Mr. Nousey, Dr. Sonephet
 [DWPT-NL] Mr. Korlakan
 [DPWT-LP] Mr. Adsavin, Mr. Bounpone
 [DPWT-KM] Mr. Phitsamai, Mr. Phethponemany
 [NPNL] Mr. Viengthouay, Mr. Bounpasong
 [NPLP] Mr. Soulith
 [NPKM] Mr. Khanngern, Mr. Amphaivanh

 [JICA Laos Office] Mr. Yoneyama, Ms. Yamamoto, Mr. Kingsada
 [MaWaSU2] Mr. Sonoda, Mr. Masugata, Mr. Kinoshita, Mr. Nishimaki, Mr. Inoue
 Mr. Toyoda, Mr. Ueda, Mr. Fujimura
 Mr. Khankham, Ms. Thippavanh, Ms. Toulavanh, Ms. Chidpasong

Registration
2nd JCC Meeting
21 November 2019, Lao Plaza Hotel

No.	Name & Surname	Division / Position	Tel	Signature
I DWS, MPWT				
1	Mr. Viengsavath Siphandone	Vice Minister, MPWT		
2	Professor, Dr. Somphone Dethudom	Advisor to the Minister		
3	Mr. Phomma Veoravanh	Director General of DWS		
4	Mr. Phoukeo Thammavong	Deputy Director General of DWS		
5	Mr. Khanthone Vorachith	Director of WSD, DWS		
6	Mr. Somchay Indavong	Technical engineer		
7	Ms. Phoungern Phommalin	Technical engineer		
II Ministry of Home Affairs				
1	Dr Ammalak KEONUCHAN	Department of Planning and Cooperation	DDG 55197456	
III Ministry of Planning and Investment				
1	Mr. Sengsouly Laboulivanh	Technical Engineer, Department of Evaluation		
2				
IV Ministry of Finance				
1		Department of External Finance Department		
2		Department of Treasury		
3	Bounleuth NLS	Department of State-Owned Enterprises Financial Management		

Registration 2nd JCC Meeting

21 November 2019, Lao Plaza Hotel

V Vientiane Capital (DPWT-NPNL)				
1	Mr. Soulivanh Phommavong	Dep Dir. DPWT VTE		Sout
2	Mr. Kelekele Senghath	DPWT-VT		KE
3	Mr. Viengthouay Vannarath	Deputy General Manager of NPNL		V
4	Mr. Bounpasong Phonhalath	NPNL		B
VI Luang Prabang Province (DPWT-NPLP)				
1	Mr. Adsavin Inphithack	Deputy Director General of DPWT-LP		A
2	Mr. Bounpone Mekdara	DPWT-LP		B
3	Mr. Soulith Chindamany	General Manager of NPLP		S
VII Khammouane Province (DPWT-NPKM)				
1	Mr. Phitsamai Kongsadeth	Director of DPWT - KM		P
2	Mr. Phetphonemany Thammavong	DPWT-KM		P
3	Mr. Khanngern Sengiem	General Manager of NPKM		K
4	Mr. Amphaivanh Douangkhamchan	NPKM		A
VIII JICA Lao Office				
1	Mr. Yoneyama Yoshiharu	Chief Representative		Y
2	Ms. Saori Yamamoto	Jica Laos Office		S
3	Mr. Kingsada Siphanthong	Jica Laos Office		K

Registration
2nd JCC Meeting
21 November 2019, Lao Plaza Hotel

IX	JICA MaWaSU2 Project			
1	Mr. Keisuke Sonoda	Chief Advisor		園田 圭佑
2	Mr. Daisuke Masugata	Sub-Chief Advisor / Water Supply Technique		丸瀬 大介
3	Mr. Yusuke Kinoshita	Project Coordinator		木野 祐
4	Mr. Hiroshi Nishimaki	Institution Expert		西巻 寛
5	Mr. Keita Inoue	Financial Expert		井上 慶太
6	Mr. Akihisa Ueda	Short-term Expert		上田 晶久
7	Mr. Akiyoshi Fujimura	Short-term Expert		藤村 明良
8	Mr. Toru Toyoda	Pilot Project Expert		豊田 徹
9	Mr. Khankham Mahavang	National Project Officer		Khankham
10	Ms. Thippavanh Nenhuangmala	Project Assistant		Thipp
11	Ms. Toulavanh Oupaxa	Project Assistant		Toulavanh
12	Ms. Chidpasong Khattavong	Project Secretary		Yal

Total: 36 pax

The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU2) PDM Arrangement (Draft)

Narrative Summary	Before (Ver.1)		After (Ver.2)		Remarks
	Objectively Verifiable Indicators	Means of Verification	Objectively Verifiable Indicators	Means of Verification	
Overall Goal The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.	a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part. b. The Lao government takes action including exploring financial resources toward establishment of the fund. c. Activities of national dissemination are continuously practiced based on the Dissemination Plan (DP) ¹ .	a. Implementation reports regarding PDCDS b. Implementation reports of the fund. Activity reports of WSSEs.	No Change	No Change	
Project Purpose The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.	a. The Lao government takes action toward implementation of PDCDS. b. The Lao government approves the plan of the fund. c. Implementation of WSSEs' water supply projects based on the PDCA ² cycle is promoted.	a. Documents of PDCDS. b. Implementation documents of the fund. c. Application of water supply project submitted by WSSEs.	No Change	No Change	
Outputs 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply	1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. 1b. The fund plan is endorsed by the Minister of MPWT. 1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics	1a. PDCDS document. 1b. Fund plan. 1c. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	No Change	No Change	

¹ DP is one of outputs formulated in "The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)" (MaWaSU).

² Plan-Do-Check-Action (PDCA)

service.	Yearbook (WSSY) supported by MaWaSU ³ are utilized. ⁴				
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.	2a. The procedures for planning, appraisal, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guideline, Appraisal Guideline, Pilot Project Implementation Guideline, Pilot Project Monitoring Guideline, and Accounting Guideline are developed. 2c. At least two pilot projects completed and are evaluated. 2d. Lessons learned from pilot projects are reflected on the fund as well as other procedures of the Lao government.	2a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 2b. Guideline documents. 2c. Project completion / Evaluation reports of pilot projects. 2d. Fund Plan.	No Change	No Change	
3. Technical standards necessary for water supply service are developed.	3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report. 3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	3a. As-built drawing/ design report, technical standards. 3b. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	No Change	No Change	

³ The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)

⁴ Purpose of those strategies and guidelines are as follows:

WSS known as “strategy” is to show national direction of water supply management being formulated by DWS.

PWSS also known as “strategy” is to show provincial direction of water supply management formulated by DPWTs.

WSG is for self-analysis and goal setting by quantifying and quantitatively evaluating the management of water utilities based on performance indicators(PIs).

WSAR is to capture the water supply management situation at the provincial level which is made by WSSEs every year.

4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.	4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved. 4b. DP supported by MaWaSU is utilized. 4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP supported by MaWaSU. 4d. The activities of MaWaSU Sub-Committees are continued.	4a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 4b. Activity reports of DP. 4c. Mini-workshop reports and budget document of WSSEs. 4d. Activity reports of MaWaSU Sub-Committees.	No Change	No Change	
	Before (Ver.1)	After (Ver.2)	Remarks		
Activities	<Activities> The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part. 1-1. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains. 1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps. 1-1-2. Review the current institutional effectiveness in terms of TAG. 1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations. 1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarding	<Activities>			

	institution/governance and undertake the studies. 1-1-5. Submit an Overall Institutional Development Strategy (OIDS) including recommendations to the concerned organizations. 1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS such as licensing, PPP, technical/financial monitoring of WSSEs and private water service providers. 1-2. By initiative of DWS, the Priority Domain Task Team (PDTT) is formulated from all the stakeholder organizations, including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments to undertake the following activities. 1-2-1 Review the current situations of the priority domain. 1-2-2 Review the current mandates of laws and regulations regarding the priority domain. 1-2-3. Review the current institutional effectiveness in terms of TAG. 1-2-4. According to the needs identified, undertake workshops to provide the results of 1-2-2 and 1-2-3 to PDTT members and other concerned organizations. 1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study. 1-3. Formulate PDCDS. 1-3-1. Make a draft of PDCDS. 1-3-2. Discuss the draft among IRC. 1-3-3. Undertake workshops for dissemination and feedback of the draft. 1-3-4. Submit the final draft of PDCDS to DWS. 1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities: 1-4-1. Define a scope of required capacities and its level for management of the fund. 1-4-2. Extract lessons learned from pilot projects		
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	conducted in 2-2. 1-4-3. Define key elements to achieve TAG. 1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and undertake specific target studies 1-4-5. Design the complete procedures for the entire cycle of the fund management. 1-5. Propose the funding mechanism. 1-5-1. Define target level for urban self-sufficiency and rural subsidization. 1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.). 1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis 1-5-4. Propose an overall funding mechanism. 1-6. Submit the fund plan. 1-6-1. Combine fund framework and funding mechanism discussed on 1-4 and 1-5. 1-6-2. Make a draft proposal for establishment of the fund. 1-6-3. Discuss the draft proposal among all the stakeholders. 1-6-4. Undertake workshops for dissemination and feedback of the draft proposal. 1-6-5. Submit a final proposal to DWS as the fund plan. 1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSSY are examined and evaluated. 1-7-2. Necessary items to be revised those strategies and guidelines are identified to be practiced. 1-7-3. WSS, PWSS, WSG, and WSSY are finalized and/or revised.	1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines(WSG), and Water Supply Annual Report (WSAR) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated. 1-7-2. WSG is revised. 1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR. 1-7-4. DWS updates WSAR. 1-7-5. DWS revises WSS. 1-7-6. DPWTs make PWSS based on revised WSS.	
	2 Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is		

	enhanced. 2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects. 2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs. 2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects. 2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation. 2-1-4. PPTT prepares procedures for developing proposals.⁵ 2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure. 2-2. Implement the pilot projects. 2-2-1 Pilot Project Evaluation Committee (PPEC) holds briefing sessions for all WSSEs for application of finance. 2-2-2 WSSEs applying for finance by the Project prepare and submit proposals to PPEC. 2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects. 2-2-4 Financing is decided for the pilot projects that passed the review by PPEC.⁶ 2-2-5 WSSEs prepare for the design documents and the bidding documents for the implementation of the pilot projects in consultation with DPWT and submit them to PPEC. 2-2-6 PPEC confirms the validity of the tender documents and approves them. 2-2-7 WSSEs will conduct bidding using tender		
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⁵ PPTT considers consistency with guidelines made with MaWaSU as a precondition of the procedures.

⁶ The information shall be shared to JICA Laos Office since a contract shall be signed between a contractor and JICA Laos Office.

	documents approved by PPEC in consultation with DPWT.⁷ 2-2-8 WSSEs prepare a bid evaluation report in consultation with DPWT and submit it to PPEC. 2-2-9 PPEC approves the evaluation result of the submitted bid evaluation report. 2-2-10 JICA Laos Office enters into a contract for the pilot projects. 2-2-11 WSSEs carry out supervision for pilot projects in consultation with DPWT. 2-2-12 WSSEs prepare certification documents verifying the invoices submitted by the contractors in consultation with DPWT and submit them to DWS. 2-2-13 DWS and DPWT monitor the progress of the pilot projects and advise WSSEs as necessary. 2-2-14 WSSEs prepare the project completion reports in consultation with DPWT and submit them to DWS. 2-2-15 DWS approves the project completion reports. 2-3. Review the system for implementing the pilot projects. 2-3-1. Implement ex-post evaluation of activities of the 1st batch. Regarding the series of pilot projects implemented in 2-2, PPTT will review the procedures, responsibilities, and give feed-back to the next pilot projects as necessary. 2-3-2. PPTT reviews the implementation of the pilot projects in terms of TAG.	2-2-7 WSSEs prepare a bid evaluation report in consultation with DPWT and submit it to PPEC. 2-2-8 PPEC approves the evaluation result of the submitted bid evaluation report. 2-2-9 PPEC enters into a contract with the DPWTs and WSSEs for the pilot projects. 2-2-10 WSSEs carry out supervision for pilot projects in consultation with DPWT. 2-2-11 WSSEs prepare certification documents verifying the invoices submitted by the contractors in consultation with DPWT and submit them to PPEC. 2-2-12 PPEC and DPWT monitor the progress of the pilot projects and advise WSSEs as necessary. 2-2-13 WSSEs prepare the project completion reports in consultation with DPWT and submit them to PPEC. 2-2-14 PPEC approves the project completion report and submit to DWS.	
	3 Technical standards necessary for water supply service are developed. 3-1 Standard Task Team (STT) is formed at DWS, DPW and WSSEs to consider and formulate technical standards.	3-1. Necessary Task Team for Technical Standard is formed at DWS, DPWT and WSSEs and the priority and the scope of the standard are determined. 3-1-1. Standard Task Team (STT) is formed at DWS, DPW	

⁷ The bidding process and contract with procurement company shall be taken by JICA Laos Office.

	3-2 Priority for technical standards is determined. 3-3 Based on the priority order, STT discusses and determines the scope of standards. 3-4 STT formulates the draft standards. 3-5 STT submits the draft standards to MPWT.	and WSSEs to consider and formulate technical standards. 3-1-2. Priority for technical standards is determined. 3-1-3. Based on the priority order, STT discusses and determines the scope of standards. 3-2 Necessary committees/taskteams for official approval are organized to develop the determined priority technical standards. 3-2-1. Establish Technical Standard Committee (TSC) for official approval of the technical standards consisting of DWS, DPWTs and WSSEs. 3-2-2. Establish Ministerial Ordinance Taskteam (MTT) consisting of DWS. 3-3 Develop and submit the priority technical standards. 3-3-1. MTT develops a draft technical standard (Ministerial Ordinance). 3-3-2. TSC reviews the draft technical standard (Ministerial Ordinance). 3-3-3. TSC submits the draft technical standard (Ministerial Ordinance) to MPWT. 3-3-4. STT develop a draft technical standard (Criteria). 3-3-5. TSC reviews the draft technical standard (Criteria). 3-3-6 STT submits the draft technical standard (Criteria). 3-4 Technical Standard is disseminated. 3-4-1. TSC discusses and decides dissemination methods of the technical standard for DPWTs and WSSEs nationwide. 3-4-2. Implement the dissemination methods of the technical standard. 3-5. Discuss and decide next priority scope of technical standard other than those developed and submitted in activity 3-3.	
	4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.		

	4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved. 4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development. 4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project. 4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and assessed their capacity. 4-1-4. JICA Experts provides guidance to those trainers. 4-1-5. Evaluate the capacity of the trainers of the pilot WSSEs. 4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented. 4-2-1. DP is reviewed. 4-2-2. Based on the review, DP is implemented. 4-2-3. Evaluate contents of DP and compile the results of activities. 4-2-4. Report on the result of dissemination activities to MPWT. 4-2-5. Formulate a plan for implementation of the next plan, and the budget for the next plan is requested to MPWT and/or DPWTs. 4-2-6. The activities from 4-2-1 to 4-2-5 will be continued according to the allocation of the budget. 4-3. Activities of MaWaSU Sub-Committee are promoted. 4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee. 4-3-2. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year. 4-3-3. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee.	4-1-5. Re-evaluate the capacity of the trainers of the pilot WSSEs. 4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated. 4-2-4. Activities are carried out based on the DP of the latter half of the project. 4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWWA activities. 4-3-2. The pilot WSSEs reorganize MaWaSU Sub-Committees according to the current situation. 4-3-3. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year. 4-3-4. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the	
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	4-4. WSSEs prepare for the establishment of the Laos Water Works Association.	operation of the MaWaSU Sub-Committee. 4-4. National Framework of Water Quality Management is strengthened. 4-4-1. Review the current situation of water quality management of WSSEs. 4-4-2. Develop a plan of National Framework of Water Quality Examination. 4-4-3. Implement the plan of National Framework of Water Quality Examination with equipment provided. 4-4-4. Improve water quality management of WSSEs nationwide. 4-5. WSSEs establish the Lao Water Works Association (LWWA) and implement activities. 4-5-1. WSSEs prepare establishment of LWWA. 4-5-2. WSSEs establish LWWA. 4-5-3. LWWA implements activities. 4-5-4. LWWA discusses continuation of MaWaSU2 activities after the end of the project. 4-5-5. LWWA takes over some activities from the project.	
Inputs	<Inputs> Lao Side 1. Project personnel 1) Project Adviser Advisor to the Minister of Public Works and Transport 2) Project Director Director General, DWS, MPWT 3) Project Manager Director of Water Supply Division, DWS, MPWT 4) CPs 2. Land, buildings, facilities necessary for the implementation of the Project, including office spaces for Japanese Expert team and a meeting room at the DWS and the pilot WSSEs. 3. Running expenses.		

	Japanese Side 1. Japanese Experts (1) Long-term experts Chief Advisor Sub-Chief Advisor (water supply management) Project Coordinator (2) Short-term Experts 1) Institution 1 2) Institution 2 3) Financial Management 4) Design/Construction Management 5) Civil Works 1 6) Civil Works 2 7) Water Quality 8) Finance (3) Equipment (4) Training in Japan 1) Following six (6) courses are expected. a. Intuition Reform b. Fund c. Development of Technical Standards d. Water Quality Management e. Civil Works f. Financial Management 2) Duration Approximately one (1) to three (3) weeks in each course 3) Participants Approximately six (6) members in each course.	(3) Equipment necessary to attain output 4. (Water quality examination equipment) (4) Training in Japan 1) Following six (6) courses are expected. a. Role division of water supply sector b. Water Works Association c. Planning and Finance d. Water quality management e. Technical standard f. Fund 3) Participants Approximately seven (7) members in each course. (Example- DWS:1, NPNL:2, NPLP:2, NPKM:2)	
Important Assumptions			
Pre-conditions			

Plan of Operation (Result from November 2018 to October 2019, APO 2020 & Total Schedule)

Project title: The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)

	Calendar year Year	2018				2019				2020				2021				2022				2023															
Inputs		1st Year				2nd Year				3rd Year				4th Year				5th Year																			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV																
		2018				2019				2020				2021				2022				2023															
Experts		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Long-term expert (Chief Adviser)	Plan																																				
	Actual																																				
Long-term expert (Sub Chief Adviser / Water Supply Technique)	Plan																																				
	Actual																																				
Long-term expert (Project Coordination)	Plan																																				
	Actual																																				
Consultant expert (Output1) (Institution1)	Plan																																				
	Actual																																				
Consultant expert (Output1) (Institution2)	Plan																																				
	Actual																																				
Consultant expert (Output1) (Fund)	Plan																																				
	Actual																																				
Consultant expert (Output2) (Design/Construction Works)	Plan																																				
	Actual																																				
Short-term expert (Output3) (Technical Standard) (Pipe)	Plan																																				
	Actual																																				
Short-term expert (Output4) (Technical Standard) (WTP)	Plan																																				
	Actual																																				
Short-term expert (Output4) (Civil works/Planning)	Plan																																				
	Actual																																				
Short-term expert (Output4) (Water Quality)	Plan																																				
	Actual																																				
Short-term expert (Output4) (Finance)	Plan																																				
	Actual																																				
Equipment																																					
Equipment necessary to attain output 4. (Water quality examination equipment)	Plan																																				
	Actual																																				
Training in Japan																																					
Role division of water supply sector, Waterworks association, Planning & Finance, Water Quality, Technical standard, Fund	Plan																																				
	Actual																																				
In-country training / Third country training																																					
P2P(Project to Project) meeting	Plan																																				
	Actual																																				

Output 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.

1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains.

[illegible]

1-2. By initiative of DWS, the Priority Domain Task Team (PDTT) is formulated from all the stakeholder organizations, including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments to undertake the following activities.

[illegible]

1-3. Formulate PDCDS.

[illegible]

1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities.

[illegible]

	Calendar year	2018					2019					2020					2021					2022					2023										
Activities	Year	1st Year					2nd Year					3rd Year					4th Year					5th Year															
Sub-activities		I	II	III	IV		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV															
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
1-7. Water Supply Strategy(WSS), Provincial Water Supply Strategy(PWSS), Water Supply Guidelines(WSG), and Water Supply Annual Report(WSAR) supported by MaWaSU are finalized and/or revised to be utilized.																																					
1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated.	Plan																																				
	Actual																																				
1-7-2. WSG is revised.	Plan																																				
	Actual																																				
1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR.	Plan																																				
	Actual																																				
1-7-4. DWS updates WSAR.	Plan																																				
	Actual																																				
1-7-5. DWS revises WSS.	Plan																																				
	Actual																																				
1-7-6. DPWTs make PWSS based on revised WSS.	Plan																																				
	Actual																																				

	Calendar year	2018					2019					2020					2021					2022					2023										
Activities	Year	1st Year					2nd Year					3rd Year					4th Year					5th Year															
Sub-activities		I	II	III	IV		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV															
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Output 2. In the water supply sector capacity building and implementation supervision abilities of facility development plan for water supply sector are improved.																																					
2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects.																																					
2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs.	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects.	Plan																																				
Actual																																					
2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation.	Plan																																				
Actual																																					
2-1-4. PPTT prepares procedures for developing proposals.	Plan																																				
Actual																																					
2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure.	Plan																																				
Actual																																					
2-2. Implement the pilot projects.																																					
2-2-1 Pilot Project Evaluation Committee (PPEC) holds briefing sessions for all WSSEs for application of finance.	Plan																																				
	Actual																																				
2-2-2 WSSEs applying for finance by the Project prepare and submit proposals to PPEC.	Plan																																				
	Actual																																				
2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects.	Plan																																				
	Actual																																				
2-2-4 Financing is decided for the pilot projects that passed the review by PPEC.	Plan																																				
	Actual																																				
2-2-5 WSSEs prepare for the design documents and the bidding documents for the implementation of the pilot projects in consultation with DPWT and submit them to PPEC.	Plan																																				
	Actual																																				
2-2-6 PPEC confirms the validity of the tender documents and approves them.	Plan																																				
	Actual																																				

	Calendar year	2018					2019					2020					2021					2022					2023										
Activities	Year	1st Year					2nd Year					3rd Year					4th Year					5th Year															
Sub-activities		I	II	III	IV		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV															
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Output 3. Technical standards necessary for water supply projects are developed.																																					
3-1. Necessary Task Team for Technical Standard is formed at DWS, DPWT and WSSEs and the priority and the scope of the standard are determined.																																					
3-1-1. Standard Task Team (STT) is formed at DWS, DPW and WSSEs to consider and formulate technical standards.	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
3-1-2. Priority for technical standards is determined.	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
3-1-3. Based on the priority order, STT discusses and determines the scope of standards.	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
3-2 Nessesary committees/taskteams for official approval are organized to develop the determined priority technical standards.																																					
3-2-1. Establish Technical Standard Committee (TSC) for official approval of the technical standards consisting of DWS, DPWTs and WSSEs.	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
3-2-2. Establish Ministerial Ordinance Taskteam (MTT) consisting of DWS.	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
3-3 Develop and submit the priority technical standards.																																					
3-3-1. MTT develops a draft technical standard (Ministerial Ordinance).	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
	Plan																																				
	Actual																																				
3-3-2.TSC reviews the draft technical standard (Ministerial Ordinance).	Plan																																				
	Actual																																				
	Plan																																				
	Actual																								</												

	Calendar year	2018					2019					2020					2021					2022					2023											
Activities	Year	1st Year					2nd Year					3rd Year					4th Year					5th Year																
Sub-activities		I	II	III	IV		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV																
		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Output 4. Technical capacity necessary for the WSSEs to implement the water supply projects is improved.																																						
4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved.																																						
4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development.	Plan																																					
	Actual																																					
	Plan																																					
	Actual																																					
	Plan																																					
	Actual																																					
	Plan																																					
	Actual																																					
	Plan																																					
	Actual																																					
Plan																																						
Actual																																						
4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented.																																						
4-2-1. DP is reviewed.	Plan																																					
	Actual																																					
4-2-2. Based on the review, DP is implemented.	Plan																																					
	Actual																																					
4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated.	Plan																																					
	Actual																																					
4-2-4. Activities are carried out based on the DP of the latter half of the project.	Plan																																					
	Actual																																					
4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWWA activities.	Plan																																					
	Actual																																					

4-3. Activities of MaWaSU Sub-Committee are promoted.																											
4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee.	Plan																										
	Actual																										
4-3-2. The pilot WSSEs reorganize MaWaSU Sub-Committees according to the current situation.	Plan																										
	Actual																										
4-3-3. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year.	Plan																										
	Actual																										
4-3-4. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee.	Plan																										
	Actual																										
4-4. National Framework of Water Quality Management is strengthened.																											
4-4-1. Review the current situation of water quality management of WSSEs.	Plan																										
	Actual																										
4-4-2. Develop a plan of National Framework of Water Quality Examination.	Plan																										
	Actual																										
4-4-3. Implement the plan of National Framework of Water Quality Examination with equipment provided.	Plan																										
	Actual																										
4-4-4. Improve water quality management of WSSEs nationwide.	Plan																										
	Actual																										
4-5. WSSEs establish the Lao Water Works Association (LWWA) and implement activities.																											
4-5-1. WSSEs prepare establishment of LWWA.	Plan																										
	Actual																										
4-5-2. WSSEs establish LWWA.	Plan																										
	Actual																										
4-5-3. LWWA implements activities.	Plan																										
	Actual																										
4-5-4. LWWA discusses continuation of MaWaSU2 activities after the end of the project.	Plan																										
	Actual																										
4-5-5. LWWA takes over some activities from the project.	Plan																										
	Actual																										

Duration / Phasing																																						
		Calendar year	2018					2019					2020					2021					2022					2023										
Monitoring Plan		Year	1st Year					2nd Year					3rd Year					4th Year					5th Year															
			I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV												
			6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Monitoring																																						
Joint Coordinating Committee		Plan																																				
		Actual																																				
Set-up the Detailed Plan of Operation		Plan																																				
		Actual																																				
Submission of Monitoring Sheet		Plan																																				
		Actual																																				
Monitoring Mission from Japan		Plan																																				
		Actual																																				
Joint Monitoring		Plan																																				
		Actual																																				
Post Monitoring		Plan																																				
		Actual																																				
Reports/Documents																																						
Project Completion Report		Plan																																				
		Actual																																				
Public Relations																																						
		Plan																																				
		Actual																																				

**MINUTES OF MEETING
OF THE JOINT COORDINATING COMMITTEE
FOR**

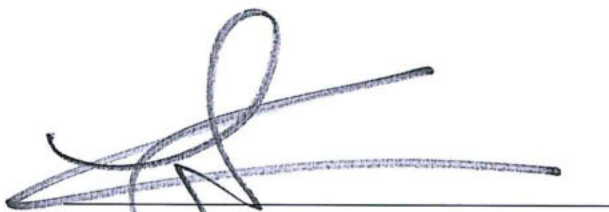
**“The Project for Improvement of Management Capacity of Water Supply Sector
(MaWaSU 2)”**

The 3rd meeting of the Joint Coordinating Committee (hereinafter referred to as “JCC”) of The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2) was held on 27 July, 2021.

Summary of the project, report of the project activities (from Nov. 2019 to Mar. 2021) and project activity plan (2021-2023) including Annual Plan of Operation (hereinafter referred to as “APO”) 2021-2022 were presented and discussed among the JCC meeting participants. Revision of Project Design Matrix (hereinafter referred to as “PDM”) including extension of the project period was mentioned.

The JCC confirmed the above-mentioned documents attached hereto within the framework of R/D. Main points of the discussion have been summarized in the attached document I.

Vientiane Capital, 27 July, 2021



Toshio NAGASE
Chief Representative
Laos Office
Japan International Cooperation Agency
Japan



Sompong SITTHIVONG
Director General
Department of Water Supply
Ministry of Public Works and Transport
Lao People's Democratic Republic

Attached Document I: Main points of the discussion summarized

Mr. Khampheuy Vongsakhamphui, General Manager of Vientiane Capital Water Supply State Enterprise (NPNL)

1. NPNL agrees the presentations in the JCC meeting.
2. General Manager of NPNL is the President of Lao Water Works Association (LWWA). LWWA takes over many activities of Project MaWaSU2 after the project. LWWA requests continuous support from JICA and Japanese experts for LWWA operations.
3. LWWA also requests Japan Water Works Association for financial and technical support such as sustainable human resource development including Training of Trainers (TOT).

Mr. Phitsamay Kongsadeth, Director General of Khammouane Province Department of Public Works and Transport (DPWT-KM)

4. DPWT-KM agrees the presentations in the JCC meeting.
5. DPWT-KM expresses appreciation for continuous support from Japan to Lao PDR, especially the special activity of COVID-19 prevention in Thakhek District.
6. DPWT-KM request JICA to support the 3 remaining districts in Khammouane Province where no water supply facility is developed.

Mr. Bongvang Vangchiaxa, Director General of Luangprabang Province Department of Public Works and Transport (DPWT-LP)

7. DPWT-LP expresses appreciation for provision of water quality measurement equipment by Project MaWaSU2. DPWT-LP considers sustainable usage of the equipment is important.
8. DPWT-LP requests JICA to support water supply facility in Phoukhoun District. While DPWT-LP develops water supply facility by provincial budget, Luangprabang Water Supply State Enterprise's business operation faces difficulty due to decrease of water revenue by COVID-19 as well as 28-29% of Non-Revenue Water ratio.

Mr. Kingsada Siphanthong, Program Office of JICA Laos Office

9. In relation to the JICA support in Luangprabang, JICA Laos Office reports the progress of the project for expansion of water supply system in Luang Prabang city that it is delayed due to unsuccessful bidding and COVID-19. Five companies show their interests to next bidding.

Mr. Khanngoun Sengiem, General Manager of Khammouane Province Water Supply State Enterprise (NPKM)

10. NPKM agrees the presentations in the JCC meeting.



11. NPKM expresses appreciation for the activities of Project MaWaSU2 that contributes capacity development of the staffs. Making long-term plan (2020-2030) of NPKM by proper planning and finance/accounting is one of the examples. Consciousness of improvement and problem solving among NPKM staffs becomes high because of Project MaWaSU2.

Ms. Saimonekham Mangnomek, DDG, Department of International Cooperation, Ministry of Planning and Investment (MPI)

12. MPI recognizes Project MaWaSU2 carries out good activities in human resource development of the water supply sector with many outcomes.
13. MPI has interest in sustainability because the project does not continue forever. LWWA and the water supply development fund may be able to contribute to the sustainability of the project activities.

Mr. Attanakhone Vongsana, Training Center of Public Administration Management, Ministry of Home Affairs (MOHA)

14. MOHA is able to support for capacity development of public administration such as TOT.

Ms. Vanna Chitdala, Ministry of Finance (MOF)

15. MOF understands the project implements properly. MOF requests Project MaWaSU2 to continue capacity development of the water supply sector.
16. MOF understands Project MaWaSU2 provides a number of equipment. MOF request the related organizations to manage the assets properly.

Mr. Keisuke Ujike, JICA Headquarters (HQ)

17. JICA HQ appreciates counterpart organizations and officials/staffs (CPs) for their contribution to the project activities in the first half. JICA HQ requests CPs for continuous efforts for project activities including additional activities related to COVID-19 prevention to achieve the project goals at the end of the project.

Ms. Akiko Sanada, Senior Representative, JICA Laos Office

18. JICA Laos Office appreciates CPs for implementing a wide range of project activities with many outcomes even during the time when the Japanese experts evaluated to Japan due to COVID-19.
19. JICA Laos Office requests Project MaWasU2 focuses on LWWA operations and water supply development fund plan in terms of sustainability. JICA Laos Office considers that resource of the fund and operations of the fund are critical points. In terms of the operations, it is better to coordinate with activities of Output2.

20. JICA Laos Office expects Project MaWaSU2 finds realistic and sustainable ways for the fund. JICA Laos Office also cooperate with Project MaWaSU2.

Mr. Sompong Sitthivong, Director General of Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT)

21. DWS requests the Japanese experts to consider time-effective methods to support DWS, especially in the regulations of the water supply law, in a way that the Japanese experts introduce a Japanese legislation and adjust it to situations in Lao PDR to fasten development and improvement of the law.
22. DWS requests the Japanese experts to support for development of ministerial order of management of LWVA with clear division of roles between DWS and LWVA in term of monitoring and guidance of LWVA.
23. DWS requests the Japanese experts to introduce cost-effective water treatment systems suitable to Lao PDR in implementation of the Pilot Project.

Mr. Tomokazu Ishikawa, Chief Advisor, Project MaWaSU2

24. Chief Advisor states that revision of PDM will be proceeded according to the progress and current situation of the project activities. Main points of the revision are project period (extension about 7 months), orientation of the water supply development fund, additional activities related to COVID-19 prevention, etc.

Mr. Toshio Nagase, Chief Representative, JICA Laos Office

25. JICA Laos Office recognizes the 3rd JCC meeting is successful with active and lively discussions.
26. JICA Laos Office recognizes that Project MaWaSU2 has been proceeded by mutual cooperation between Lao and Japanese sides.
27. JICA Laos Office expects that the water supply and sanitation strategy and technical standards will be approved by the Minister.
28. JICA Laos Office introduces possibility of fund resource for the water supply development fund: JICA has experiences to provide fund resource with low-interests (0.75%/year) and long-term financing (repayment within 40 years). However, it is impossible to provide to Lao PDR unless debt management becomes more transparent by MPI and MOF. JICA Laos Office suggests that MPWT discusses and consults with MPI and MOF if MPWT interests JICA's low-interest, long-term financing for the fund resource of the water supply development fund.

Ms. Vilaykham Phosalath, Vice Minister, MPWT

29. Vice Minister confirms the project activity report and activity plan with one consent.
30. Vice Minister confirms that Japan has supported the water supply sector of Lao PDR for

long time in many cities that deepens relationship between Japan and Lao PDR.

31. Vice Minister expects Project MaWaSU2 proceeds to activities according to the advices of JICA Chief Representative, Senior Representative and Japanese experts.
32. Vice Minister expects water supply facility development properly follows the rules in terms of technical and financial aspects.
33. Vice Minister expects all the participants to share the contents/information of the 3rd JCC meeting among each organization and instruct in the respective organizations.
34. Vice Minister expects Japanese experts advise for clear division of roles of LWWA for capacity building and proper operations.
35. Vice Minister states the water supply development fund is mentioned in the water supply law. Vice Minister requests Project MaWaSU2 to consider orientation and operation methods for the Government of Lao PDR to approve the fund.
36. Vice Minister reports the results of the 3rd JCC meeting to the Minister of MPWT.

(End)

Attachments:

- I. Main points of the discussion summarized
- II. Agenda of the 3rd JCC Meeting
- III. Participants list



Agenda of 3rd JCC Meeting

Time, Date: 13:00-16:00, 27 July 2021

Place: Lao Plaza Hotel

Schedule:

Time	Contents	Person in charge
13:00	1. Registration	DWS+MaWaSU2
13:30	2. Introduction of meeting participants	Ms. Soukphaivanh, DWS, MPWT
13:35	3. Opening remarks	Ms. Vilaykham, Vice Minister, MPWT
13:50	4. Greeting	Mr. Nagase, CR, JICA Laos Office
14:05	5. Summary of project activities	Mr. Sompong, DG, DWS, MPWT
14:20	6. Report of project activities (from Nov. 2019 to Apr. 2021)	Ms. Phouvanh, Director of WSD, DWS
14:40	Coffee break (15min)	
15:00	7. Project direction and forecast of activities in 2021-2022	Mr. Khanthone, DDG, DWS, MPWT
15:15	8. Comments from representatives	Representative of each organization
15:30	9. Discussion	All participants
15:50	10. Conclusion & Closing remarks	Ms. Vilaykham, Vice Minister, MPWT

Participants:

[MPWT]

[DWS]

Ms. Vilaykham Phosalath (Chairperson)

Mr. Sompong Sitthivong (DG),

Mr. Khanthone Vorachith (DDG)

Ms. Phouvanh Senebottalath (Director of WSD)

Mr. Somchay Indavong,

Mr. Soulasack Souvannaeth Secretary of Vice Minister, MPWT

Mr. Sackthida Huangmany Technical Engineer

Ms. Soukphaivanh Sayyavanh Technical Engineer

Ms. Vilaphone Kidtiyasack Technical Engineer

Mr. Soulivanh Phommahaxay, Director General of DPWT-NL

Mr. Bongvang Vangchiaya, Director General of DPWT-LP

Mr. Phitsamai Kongsadeth, Director of DPWT -KM

Mr. Khampheuy Vongsakhamphui, General Manager, NPNL

Mr. Soulith Chindamany, General Manager, NPLP

Mr. Khanngun Sengiem, General Manager, NPKM

[DWPT-NL]

[DPWT-LP]

[DPWT-KM]

[NPNL]

[NPLP]

[NPKM]



[JICA Headquarters (On-line participation)]

Mr. Yoichi Inoue, Director, Global Environment Department

Mr. Keisuke Ujike, Global Environment Department

[JICA Laos Office]

Mr. Toshio Nagase, Chief Representative

Ms. Akiko Sanada, Senior Representative

Ms. Reiko Matsui, Representative (On-line participation)

Mr. Kingsada Siphanthong, Program Officer

[MaWaSU2]

Mr. Tomokazu Ishikawa

Mr. Atsushi Nozawa

Mr. Yusuke Kinoshita

Mr. Khankham Mahavang

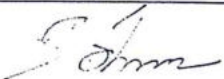
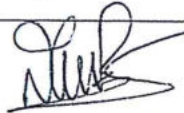
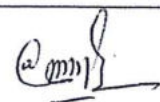
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Ms. Chidpasong Khattavong

Ms. Toulavanh Oupaxa

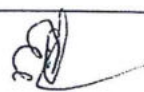
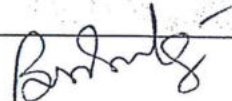
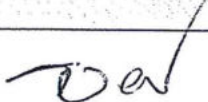
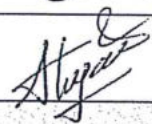
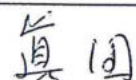
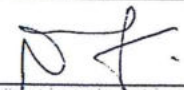
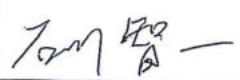
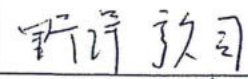
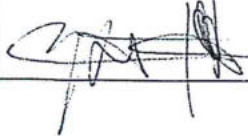


Registration
3rd JCC Meeting
27 July 2021, Lao Plaza Hotel (13:00-16:00)

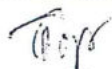
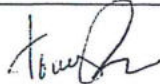
No.	Name & Surname	Division / Position	Role	Signature
I	DWS, Ministry of Public Works and Transport (MPWT)			
1	Ms. Vilaykham Phosalath	Vice Minister, MPWT		
2	Mr. Sompong Sitthivong	Director General, DWS		
3	Mr. Khanthone Vorachith	Deputy Director General, DWS		
4	Ms. Phouvanh Senebouttalath	Director of WSD, DWS		
5	Mr. Somchay Indavong	Technical Engineer		
6	Mr. Soulasack Souvannaeth	Secretary of Vice Minister, MPWT		
7	Mr. Sackthida Huangmany	Technical Engineer		
8	Ms. Soukphaivanh Sayyavanh	Technical Engineer		
9	Ms. Vilaphone Kidtiyasack	Technical Engineer		
II	Ministry of Home Affairs			
1	Mr. Attanakhone Vongsana			
III	Ministry of Finance			
1	Ms. Vanna Chitdala			
2	Mrs. Vongphavanh	egw.mv		
IV	Ministry of Planning and Investment			
1	Saymonekham MANOWOMEX	DDG DFC MPE		

3. Mrs. Viengphet Vongmoonty, DD, EFDD, MoF

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V	Vientiane Capital (DPWT-NPNL)			
1	Mr. Soulivanh Phommahaxay	Director General of DPWT-NL		
2	Mr. Khampheuy Vongsakhamphui	General Manager, NPNL		
VI	Luangprabang Province (DPWT-NPLP)			
1	Mr. Bongvang Vangchiaya	Director General of DPWT-LP		
2	Mr. Soulith Chindamany	General Manager, NPLP		
VII	Khammouane Province (DPWT-NPKM)			
1	Mr. Phitsamai Kongsadeth	Director of DPWT -KM		
2	Mr. Khanngoun Sengiem	General Manager, NPKM		
VIII	JICA Headquarters			
1	Mr. Yoichi Inoue	Director, Global Environment Department		On-line Participation
2	Mr. Keisuke Ujike	Global Environment Department		On-line Participation
IX	JICA Laos Office			
1	Mr. Toshio Nagase	Chief Representative		
2	Ms. Akiko Sanada	Senior Representative		
3	Ms. Reiko Matsui	Representative		On-line Participation
4	Mr. Kingsada Sipphanthong	Program Officer		
X	JICA MaWaSU2 Project			
1	Mr. Tomokazu Ishikawa	Chief Advisor		
2	Mr. Atsushi Nozawa	Sub-chief Advisor/Water Supply Technique		
3	Mr. Yusuke Kinoshita	Project Coordinator		

Registration
3rd JCC Meeting
27 July 2021, Lao Plaza Hotel (13:00-16:00)

4	Mr. Khankham Mahavang	National Project Officer		
5	Ms. Thippavanh Nenuangmala	Project Assistant		
6	Ms. Toulavanh Oupaxa	Project Assistant		
7	Ms. Chidpasong Khattavong	Project Secretary/Assistant		

Total: 32 pax

Ms. Viengsavanh

Mr. Saythong

Viengsavanh
 Saythong

**MINUTES OF MEETING
OF THE JOINT COORDINATING COMMITTEE
FOR**

**“The Project for Improvement of Management Capacity of Water Supply Sector
(MaWaSU 2)”**

The 4th meeting of the Joint Coordinating Committee (hereinafter referred to as “JCC”) of The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2) was held on 15 June, 2022.

Summary of the project, report of the project activities (from June 2021 to May 2022) and project activity plan (2022-2023) were presented and discussed among the JCC meeting participants.

The JCC confirmed the above-mentioned documents attached hereto within the framework of R/D. Main points of the discussion have been summarized in the attached document I.

Vientiane Capital, 15 June, 2022

Noriyuki ITO
Senior Representative
Laos Office
Japan International Cooperation Agency
Japan



Sompong SITTHIVONG
Director General
Department of Water Supply
Ministry of Public Works and Transport
Lao People's Democratic Republic

Attached Document I: Main points of the discussion summarized

Mr. Khampheuy Vongsakhamhui, General Manager of Vientiane Capital Water Supply State Enterprise (NPNL), President of Lao Water Works Association (LWWA)

1. Both NPNL and LWWA agree the presentations in the JCC meeting and national dissemination of guidelines/manuals developed by Project MaWaSU2.
2. LWWA requests Project MaWaSU2 to carefully consider dissemination procedure, especially trainers training including budget allocation for it.

Mr. Soulith Chindamany, General Manager of Luang Prabang Province Water Supply State Enterprise (NPLP)

3. During COVID-19, NPLP proceeded to project activities by on-line including Sub-Committee (SC) 1: Data Management, SC2: Customer Relations, SC3: Planning, SC4: Finance, SC5: Water Quality Management, achieving a certain degree of success.
4. Important activity in the rest of the project period is to disseminate project activities for all WSSEs in the country through LWWA. It is necessary to clarify dissemination procedure.

Mr. Khangeun Sengiem, General Manager of Khammouane Province Water Supply State Enterprise (NPKM)

5. NPKM achieved many successes in the project activities including dissemination activities. All planned dissemination activities were implemented. NPKM appreciates Project MaWaSU2.

Mr. Phitsamay Kongsadeth, Director General of Khammouane Province Department of Public Works and Transport (DPWT-KM)

6. DPWT-KM agrees the presentations in the JCC meeting.
7. DPWT-KM expresses appreciation for continuous support from Japan to Lao PDR, especially the special activity of COVID-19 prevention in Thakhek District.
8. DPWT-KM considers to develop water facilities in the 3 remaining districts in Khammouane Province where no water supply is provided.
9. DPWT-KM understands Project MaWaSU2, waterworks management project, is important for sustainable waterworks operation. DPWT-KM requests Project MaWaSU2 to advise NPKM to produce a profit.

Mr. Bongvang Vangchiaya, Director General of Luang Prabang Province Department of Public Works and Transport (DPWT-LP)

10. DPWT-LP expresses appreciation for Project MaWaSU2.



11. DPWT-LP requests to clarify how to use amount of money saved as depreciation. DPWT-LP understands there is no detailed regulation on usage of depreciation yet.
12. DPWT-LP emphasizes continuous budget allocation is important by sharing a case example that a project was stopped due to budget discontinuation by the central government.
13. DPWT-LP requests Project MaWaSU2 to provide reasons Luang Prabang Province was not selected in Pilot Project.

Mr. Korlakanh Senebouttalath, Representative of Vientiane Capital Department of Public Works and Transport (DPWT-NL)

14. DPWT-NL understands project members work hard, even in the period of COVID-19, to achieve success in each activity.
15. DPWT-NL requests Project MaWaSU2 to indicate the direction of Provincial Water Supply Strategy. DPWT-NL tried to make it during MaWaSU1 (preceding project).
16. In regards to the MaWaSU slogan "*Challenge for Creating Culture to Drink Tap Water by Supplying Drinkable Tap Water, Anytime Anywhere,*" DPWT-NL is anxious in terms of pipeline quality and other quality, and requests Project MaWaSU2 to advise to realize it.

Mr. Tomokazu Ishikawa, Chief Advisor, Project MaWaSU2

17. Chief Advisor states all the participants confirmed project activity report 2021-2022 and plan 2022-2023. It is grateful to hear ability of project members have improved.
18. Chief Advisor requests the JCC members to share the contents of project activity report and plan with project members in each organization.

Mr. Atsushi Nozawa, Sub-chief Advisor, Project MaWaSU2

19. Sub-chief Advisor confirms to accelerate project activities toward to the end of the project (1.5 years) including slowed activities due to COVID-19.
20. (1) Coverage of water supply, (2) Human Resources Development (HRD), (3) Climate Change, (4) Data Management are main topics of the Water Supply and Sanitation Strategy. Sub-chief Advisor request all the members to have a perspective of sustainability, especially profitability and fulfilling of the Technical Standards, in developing new water supply facilities. In resolving challenges on HRD, Climate Change and Data Management, role of LWVA is important. Japan has a history of resolving many challenges and developing an effective water supply sector by cooperating between government and Water Works Association. Sub-chief Advisor expects DWS/MPWT and LWVA cooperate each other in the same way.

Mr. Shunichiro Hayashi, Representative of JICA Laos Office



21. Representative of JICA Laos Office asks the JCC members following questions: (1) reasons for the delay of approval of the Water Supply Sector Development Fund (WSSDF) and (2) reasons for the delay of approval of the Technical Standards, and what JICA can do to fasten the approval procedure.
22. Mr. Sompong Sitthivong, Director General of Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT), replies:
- WSSDF: No detailed study has conducted yet. In order to present WSSDF to decision-makers, it is necessary to provide feasibility of WSSDF with certain foundation. However, ability of staff is not sufficient. DWS requests JICA to provide an opportunity to study fund development in Japan.
- Technical Standards: Contents are difficult for Lao people, especially those who approve the Technical Standards. DWS is asking a learned individual from the private sector (Mr. Khambay) to check the contents. DWS requests JICA to provide an opportunity to study technical standards in Japan.
- Mr. Bougvang (DPWT-LP) provided his comments on WSSDF:
- It is premature to set up WSSDF. Established rule needs to be instituted. WSSEs should develop and expand their water supply facilities by their own budget in the provinces.

Mr. Khanthone Voracith, Deputy Director General (DDG) of DWS, MPWT

23. DDG confirms capacity of the water supply sector developed through MaWaSU1 and MaWaSU2.
24. WSSDF can be primary fund for water supply facility development for people in Lao PDR. It is also mentioned in the Water Supply and Sanitation Strategy. DWS needs to explain feasible development and operation methods to decision-makers for approval. Capacity development takes place step-by-step. Sometimes capacity development does not appear as expected.
25. DWS requests Project MaWaSU2 to work with LWWA in the following proposals:
1. To evaluate the capacity to fulfill the obligations and duties of LWWA; Ability to operate and of current personnel to implement activities of LWWA;
 2. To review the roles in operation and management of LWWA for ensuring same understanding with MPWT in terms of management of LWWA, for example: LWWA supports MPWT in terms of improving the Technical Standards in the water supply sector of Lao PDR and human resources development equivalent to neighboring and international countries;
 3. To focus on capacity development of LWWA to fulfill its obligations in the future in the rest of the project period;
 4. To provide in-depth training for personnel responsible for management of LWWA to achieve the initial goals of establishment and mid-term operation for sustainability of LWWA.



Mr. Tomokazu Ishikawa, Chief Advisor, Project MaWaSU2

26. Chief Advisor confirms required achievement in terms of WSSDF in PDM of MaWaSU2 is to make a WSSDF plan, not approval of WSSDF by the Minister. While consultant expert team drafted a fund proposal, difficulties and challenges to set up WSSDF are piled up. Setting up WSSDF is quite ambitious challenge, so that careful preparation requires longer period of time. Basic concept of funding is investment primarily by WSSE budget and WSSDF supplements WSSE budget.

Mr. Shunichiro Hayashi, Representative of JICA Laos Office

27. Representative of JICA Laos Office introduces time schedule of application for the project after Project MaWaSU2. Application form should be sent from MPWT to MPI by the end of July 2022. Tentative results will be informed in October 2022. If everything goes smoothly (the application is approved by Government of Japan), MaWaSU3 is able to start in January 2024 right after Project MaWaSU2. Representative of JICA Laos Office reminds that MaWaSU3 is not for implementing activities leftover of MaWaSU2 and requests to achieve the project goals of MaWaSU2 in the project period.

Mr. Sompong Sitthivong, Director General of DWS, MPWT

28. DWS appreciates JICA's continuous support for the water supply sector in Lao PDR.
29. DWS confirms contribution of Project MaWaSU2 to development of legal systems and management of central government in the water supply sector including the Water Supply and Sanitation Strategy, capacity development in the Sam Sang (3-builds) policy, fund study and monitoring/evaluation.
30. DWS comments the Output1-4 of Project MaWaSU2 as follows:
- Output1: DWS renovated implementation methods by assigning one activity to one section in DWS that led proactive engagement of the activities by each section. As a part of dissemination of the Water Supply and Sanitation Strategy, DWS together with Project MaWaSU2 will provide capacity development to make Provincial Water Supply Strategy. The Minister has also provided positive comments on this activity.
- Output2: DWS appreciates Project MaWaSU2 to provide both hard and soft components through Pilot Projects and confirms capacity development of planning, selection, implementation, monitoring and evaluation through the implementation of Pilot Projects.
- Output3: DWS prioritizes approval of Technical Standards and considers it is necessary to continue this activity in MaWaSU3. DWS introduces an expert team of WaterWorX/World Waternet Amsterdam for the JICA expert team to discuss and find out effective support to Lao PDR. In regard to capacity of technical aspects, JICA has provided many opportunities including Master's program, group trainings, etc. However, many Lao officials/staffs fail the selection in terms of English language ability. DWS



would like Senior Representative of JICA Laos Office to know the real situation of Lao PDR.

Output4: DWS confirms many staffs of WSSEs have developed capacity through Project MaWaSU2.

31. DWS continues to consider development of WSSDF and advances the discussion of WSSDF.

32. Director General, DWS concludes the 4th JCC Meeting as follows:

All the participants confirmed project activity report 2021-2022 and plan 2022-2023. Project MaWaSU2 continues project activities to ensure 3S (Safe, Stable and Sustainable) water supply for citizens in Lao PDR by reflecting comments and advices in the 4th JCC Meeting. DWS appreciates JICA's support.

(End)

Attachments:

- I. Main points of the discussion summarized
- II. Agenda of the 4th JCC Meeting
- III. Participants list

II. Agenda of the 4th JCC Meeting

Agenda of 4th JCC Meeting

Time, Date: 13:00-16:30, 15 June 2022

Place: Lao Plaza Hotel, Plaza Hall (2F)

Schedule:

Time	Contents	Person in charge
13:00	1. Registration	DWS+MaWaSU2
13:30	2. Introduction of meeting participants	Ms. Soukphaivanh, DWS, MPWT
13:35	3. Opening remarks	Mr. Sompong, DG, DWS, MPWT
13:50	4. Greeting	Mr. Ito, SR, JICA Laos Office
14:05	5. Summary of project activities	Mr. Khanthone, DDG, DWS, MPWT
14:20	6. Report of project activities (from June 2021 to May 2022)	Mr. Somchai, WSD, DWS
14:45	7. Project direction and forecast of activities in 2022-2023	Ms. Phouvanh, Director of WSD, DWS
15:00	Coffee break (15min)	
15:20	8. Comments from representatives	Representative of each organization
16:20	9. Application schedule for next project after MaWaSU2	Mr. Hayashi, JICA Laos Office
16:30	10. Conclusion & Closing remarks	Mr. Sompong, DG, DWS, MPWT

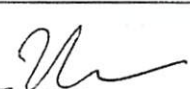
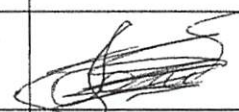
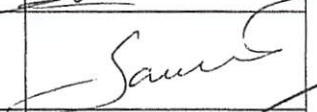
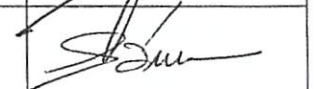
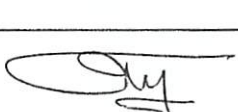
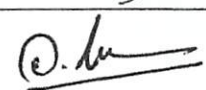
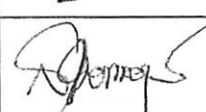
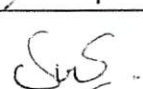
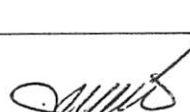
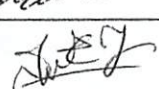
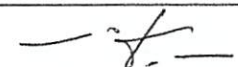
Participants: Shown in the Participants list

III. Participants list

Registration

4th JCC Meeting

15 June 2022, Lao Plaza Hotel (13:00-16:00)

No.	Name & Surname	Division / Position	Tel	Signature
I	DWS, Ministry of Public Works and Transport (MPWT)			
1	Ms. Vilaykham Phosalath	Vice Minister, MPWT		
2	Mr. Sompong Sitthivong	Director General, DWS		
3	Mr. Khanthone Vorachith	Deputy Director General, DWS	55654665	
4	Mr. Saleumsak Sayamoungkhoun	Deputy Director General, DWS		
5	Mr. Vanhsaveng Outthachack	Deputy Director General, DWS	59042188	
6	Ms. Phouvanh Senebouttalath	Director of WSD, DWS	55685915	
7	Mr. Sengsavath Sithlakone	Director of Administration and Personnel Division, DWS		
8	Mr. Khamphouvong Sikholom Mr. Vongdevan LORLON	Director of Water Supply Regulatory Division, DWS	95878888	
9	Mr. Vilakone Sayasen	Director of Inspection Division, DWS		
10	Mr. Xaysana Saphakdee deputy Ms. Vilaphone Kattiyasack	Director of Sanitation Division, DWS	55256769	
11	Ms. Chanpaseuth Thongsisavath Mr. Souvanna Seng	Director of Planning and Cooperation Division, DWS		
12	Ms. Soukphaivanh Xayyavanh	Deputy Director of Administration and Personnel Division, DWS		
13	Mr. Soulasack Souvannaeth	Secretary of Vice Minister, MPWT		
14	Mr. Sackthida Huangmany	Technical Engineer		
15	Mr. Somchai Indavong	Technical Engineer		
16	Mr. Khunkham Ladsavong Khounkham	Secretary of DG	52313744	

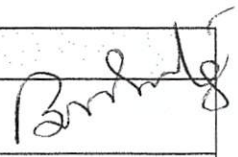
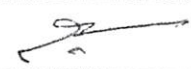
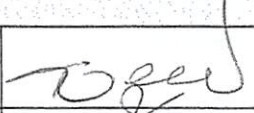
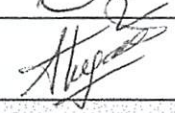
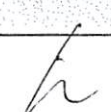
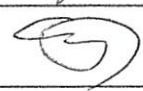
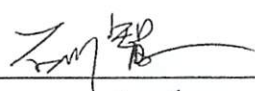
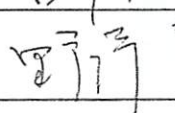
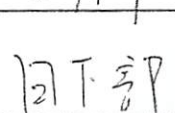
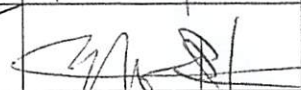
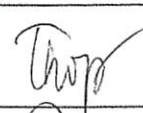
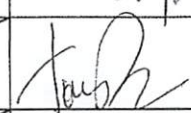
Registration
4th JCC Meeting
15 June 2022, Lao Plaza Hotel (13:00-16:00)

17	Mrs Thipphany PHETTHAVONG	Cabinet Office, MPWT	54545539	Wmmml
18	Mrs VANSARONG MANNIXAY	Department of Administration and Personnel, MPWT	8983 8884	Douls
19	Mr Syphandone	Department of Inspection, MPWT	999 59382	Quangmr.
20	MR. SOPHA SONGHITVONGSA	Department of Planning and Finance	55396455	Sph vongsa
II Ministry of Finance				
1	Dr. Sonephet Inthavong	Director General, Department of State Enterprise and Insurance Management	22223015	M S S S S
2	Ms. Phengkiam Xayakeo	Deputy Director General, Department of Foreign Exchange and Debt Management		
3	Mr. Nouseuy Phomlichanh	Deputy Head of the National Treasury		
III Ministry of Home Affairs				
1	Mr. Attanakhone Vongsana	Deputy Director General, Institute of Administrative Science Research and Training		
IV Ministry of Planning and Investment				
1	Ms. Saymonkham Mangnomek	Deputy Director General, Department of International Cooperation		
2	Ms. Vilavanh Silasack	Director, Division of Electricity Energy and Water Supply Projects Evaluation, Department of Evaluation		
V Vientiane Capital (DPWT-NPNL)				
1	Mr. Soulivanh Phommahaxay Mr. Korkakom	Director General of DPWT-NL Deputy of Division	22406855	Koff
2	Mr. Khampeuy Vongsakhamphui	General Manager, NPNL		S





Registration
4th JCC Meeting
15 June 2022, Lao Plaza Hotel (13:00-16:00)

VI Luangprabang Province (DPWT-NPLP)				
1	Mr. Bongvang Vangchiaya	Director General of DPWT-LP	54841789	
2	Mr. Soulith Chindamany	General Manager, NPLP	88721414	
VII Khammouane Province (DPWT-NPKM)				
1	Mr. Phitsamai Kongsadeth	Director of DPWT -KM	22320111	
2	Mr. Khanngoun Sengiem	General Manager, NPKM	55550506	
VIII JICA Laos Office				
1	Mr. Koji Oshikiri	Senior Representative		
2	Mr. Noriyuki Ito	Senior Representative		
3	Mr. Shunichiro Hayashi	Representative		
4	Mr. Kingsada Siphanthong	Program Officer		
IX JICA MaWaSU2 Project				
1	Mr. Tomokazu Ishikawa	Chief Advisor		
2	Mr. Atsushi Nozawa	Sub-chief Advisor/Water Supply Technique		
3	Mr. Takaaki Kusakabe	Water Supply Technique/Construction supervision		
4	Mr. Yusuke Kinoshita	Project Coordinator		
5	Mr. Khankham Mahavang	National Project Officer		
6	Ms. Thippavanh Nenuangmala	Project Assistant		
7	Ms. Toulavanh Oupaxa	Project Assistant		
8	Ms. Chidpasong Khattavong	Project Secretary/Assistant		

Total: 37 pax




**MINUTES OF MEETING
OF THE JOINT COORDINATING COMMITTEE
FOR
“The Project for Improvement of Management Capacity of Water Supply Sector
(MaWaSU 2)”**

The 5th meeting of the Joint Coordinating Committee (hereinafter referred to as “JCC”) of The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2) was held on 08 June, 2023.

Terminal Evaluation Report and activity plan until end of the Project (from June to December 2023) were presented and discussed among the JCC meeting participants.

The JCC confirmed the above-mentioned documents attached hereto within the framework of R/D. Remarks and main points of the discussion have been summarized in the attached document III.

Vientiane Capital, 09 June, 2023



Noriyuki ITO
Senior Representative
Laos Office
Japan International Cooperation Agency
Japan



Khanthone VORACHITH
Deputy Director General
Department of Water Supply
Ministry of Public Works and Transport
Lao People's Democratic Republic

**MINUTES OF MEETINGS
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
MINISTRY OF PUBLIC WORKS AND TRANSPORT OF
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC
ON
THE PROJECT FOR IMPROVEMENT OF MANAGEMENT
CAPACITY IN WATER SUPPLY SECTOR (MaWaSU2)**

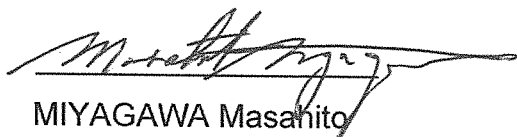
The 5th Joint Coordinating Committee (JCC) Meeting of "The Project for Improvement of Management Capacity in Water Supply Sector (MaWaSU2)" (hereinafter referred to as "the Project") was held on June 8th, 2023 in Vientiane, to discuss the result of the Joint Terminal Evaluation of the Project.

The Joint Terminal Evaluation was conducted by the Joint Team (hereinafter referred to as "the Team"), which consists of members from Ministry of Public Works and Transport (hereinafter referred to as "MPWT") of the Laotian side and members organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") of the Japanese side.

As a result of the intensive study and analysis of the activities and achievement of the Project, the Team prepared the Terminal Evaluation Report (hereinafter referred to as "the Report") attached hereto and presented it to the 5th JCC.

After discussions in respect of recommendations for successful implementation of the Project and maximizing the project effects, the 5th JCC approved the contents of the Report. Based upon the common understandings on the Project, MPWT and JICA agreed on the matters referred to the document attached hereto.

Vientiane, June, 9th 2023



MIYAGAWA Masahito

Leader

Terminal Evaluation Team

Japan International Cooperation Agency



SITTHIVONG Sompong

Director General

Department of Water Supply

Ministry of Public Works and Transport

THE ATTACHED DOCUMENT

1. Terminal Evaluation of the Project

The Team presented the results of the Joint Terminal Evaluation at the 5th JCC, and the JCC approved the report as attached.

(END)

Appendix: Terminal Evaluation Report

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**Terminal Evaluation Report
on Japanese Technical Cooperation
for
the Project for Improvement of Management Capacity of Water
Supply Sector (MaWaSU2) in Lao People's Democratic Republic
(Lao PDR)**

**Japan International Cooperation Agency
and
Department of Water Supply (DWS) of the Ministry of Public Works and
Transport (MPWT), Lao PDR**

June 2023



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ANNEX LIST

- Annex 1 PDM version 2
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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AFD	Agence Française de Développement
BOT	Build Operate Transfer
COVID-19	Coronavirus Disease of 2019
C/P	Counterpart
CP	Corporate Plan
DMA	District Metered Area
DOF	Department of Finance
DPI	Department of Planning and Investment
DPWT	Department of Public Works and Transport
DWS	Department of Water Supply
EPC	Engineering, Procurement and Construction
FFC	Fund Framework Committee
GRET	Groupe de Recherches et d'Echanges Technologiques
IRC	Institutional Review Committee
JCC	Joint Coordinating Committee
JICA	Japan International Cooperation Agency
JPP	JICA Partnership Program
KfW	Kreditanstalt für Wiederaufbau
KPI	Key Performance Indicators
LAK	Laos Kip
LWWA	Lao Water Works Association
MaWaSU	The Capacity Development Project for Improvement of Management Ability of Water Supply Authorities
MaWaSU2	The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)
MOH	Ministry of Health
MPI	Ministry of Planning and Investment
MPWT	Ministry of Public Works and Transport
MTT	Ministerial Ordinance Task Team
Nam Papa	Water Supply State Enterprise (WSSE)
NORAD	Norwegian Agency for Development Cooperation
NPCS	Nam Papa Champasak Province (Champasak Province Water Supply State Enterprise)
NPKM	Nam Papa Khammouane Province (Khammouane Province Water Supply State Enterprise)
NPLP	Nam Papa Luang Prabang Province (Luang Prabang Province Water Supply State Enterprise)
NPNL	Nam Papa Nakhone Luang (Vientiane Capital Water Supply State Enterprise)
NPSVK	Nam Papa Savannakhet Province (Savannakhet Province Water Supply State Enterprise)
NRW	Non-Revenue Water
OBE	Outcome-based Education
OIDS	Overall Institutional Development Strategy
O & M	Operation and Maintenance
PDCA	Plan-Do-Check-Action
PDCDS	Priority Domain Capacity Development Strategy
PDM	Project Design Matrix
PI	Performance Indicators
PO	Plan of Operations
PPEC	Pilot Project Evaluation Committee
PPP	Public-Private Partnership
PPTT	Pilot Project Task Team
R/D	Record of Discussions
STT	Standard Task Team
TAG	Transparency, Accountability and Governance
TOT	Training of Trainers




TSC	Technical Standard Committee
WASOBA	Water, Sanitation and Hygiene Output-Based Aid
WASRO	Water Supply Regulation Office
WSSDF	Water Supply Sector Development Fund
WSSE	Water Supply State Enterprise (nam papa)
WTP	Water Treatment Plant

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1. OUTLINE OF THE TERMINAL EVALUATION STUDY

1.1 Background of the Terminal Evaluation

Lao PDR has set a target of 90% clean water coverage for the entire population by 2020 in the Eighth Five-Year National Socio-Economic Development Plan (NSED) (2016-2020), and according to the analysis of the Ninth NSED (2021-2025), this figure is 85.9% in 2019, and 88.5% in 2020 (estimated value). On the other hand, the national target for the development of piped water supply is set at 80% water supply coverage in urban areas by 2020 based on Prime Minister's Decree 37, but the coverage rate of water supply in urban areas throughout the country is 77.40% in 2021¹.

The water supply sector in Lao PDR is managed by the Department of Water Supply (DWS) of the Ministry of Public Works and Transport (MPWT) at the macro level. In addition, under the Prime Minister's Decree 37, Water Supply State Enterprises (WSSEs) are responsible for: i) management and operation of all water supply and wastewater management system and ii) development of raw water in urban and rural areas within their respective provincial boundaries.

JICA has been implementing a technical cooperation project, the "Capacity Development Project for Improvement of Management Ability of Water Supply Authorities (MaWaSU) (2012-2017)," to develop a system to strengthen management capacity of the WSSEs on a medium- to long-term perspective targeting three WSSEs in Vientiane Capital, Luang Prabang, and Khammouane Provinces.

In February 2017, the "Lao Water Supply Sector Information Gathering and Verification Study (hereinafter referred to as "Basic Study") was conducted to identify remaining issues after the completion of MaWaSU, and the "The Project for Improvement of Management Capacity of Water Supply Sector Phase 2 (MaWaSU2)" (2018-2023) was launched as a further cooperation. The project aims to: 1) strengthen transparency, accountability, and governance of the water supply sector through improved water supply administration; 2) strengthen the planning and implementation capacity of the WSSEs as well as the capacity for monitoring and evaluation capacity of DWS/MPWT in facility development projects; 3) develop the Technical Standards necessary for water supply services; and 4) strengthen the planning and implementation capacity of the WSSEs in relation to water supply services. Three long-term experts (Chief Advisor, Sub-Chief Advisor, and Project Coordinator) are currently being dispatched to undertake Project's activities. The purpose of the Terminal Evaluation Study is to confirm, analyze, and evaluate the level of achievements of project activities, outputs, prospects for achieving the Project Purpose, as well as to identify challenges and the remaining issues to be solved before the end of the Project. The results of the terminal evaluation will be compiled into an evaluation report, including recommendations for the Project, and will be jointly discussed and agreed with the Laotian side.

1.2 Objectives of the Terminal Evaluation

The Objectives of the Terminal Evaluation are as follows;

- (1) To verify the level of achievement of the Outputs and the Project Purpose as indicated in the Project Design Matrix (PDM);
- (2) To identify factors that promoted or inhibited the performance of the Project;

¹ 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030) and 4-year Development Plan (2022-2025)

- (3) To analyze the JICA's technical cooperation and overall project intervention from the point of views of the six evaluation criteria; and
- (4) To identify recommendations and extract lessons for planning and implementing similar technical cooperation projects in the future.

1.3 Members of the Terminal Evaluation Team

The Terminal Evaluation was conducted jointly by representatives of both Japanese and Laotian sides and was composed of the following members:

1.3.1 Japanese Side:

Designation	Name	Position/Organization
Team Leader	Mr. Masahito Miyagawa	Director, Water Resource Team 1, Water Resource Group, Global Environment Department, JICA
Water Supply Management	Mr. Yoshiaki Yokota	Technical Advisor, Water Resource Group, Global Environment Department, JICA
Cooperation Planning	Ms. Kotomi Narita	Water Resource Team 1, Water Resource Group, Global Environment Department, JICA
Evaluation Analysis	Ms. Yuko Tanaka	Consultant, Tekizaitekisho LLC

1.3.2 Laotian side:

Name	Position, Organisation
Mr. Anon RAJSAPHONH	Director, Project Management Division, DWS, MPWT
Mr. Phankham MONGPHACHAN	Technical Engineer, Sanitation Division, DWS, MPWT

1.4 Schedule of the Terminal Evaluation

The evaluation was conducted from May 23, 2023 to June 8, 2023.

1.5 Stakeholders Consulted/Interviewed

The stakeholders who were consulted or interviewed for the Terminal Evaluation consisted mainly of the following:

- Japanese experts assigned to the Project
- Counterparts (C/Ps) from DWS/MPWT, WSSEs, DPWTs, LWVA
- Stakeholders interviewed during the field visit in Luang Prabang, Khammouane, Bolikhamxay Provinces

1.6 Methodology of the Terminal Evaluation

1.6.1 Procedure

The PDM version 2 dated 27 July 2021 (see **Annex 1**) is adopted as a framework of the Terminal Evaluation. The Terminal Evaluation Team (hereinafter referred to as "the Team") conducted surveys by questionnaires and interviewed the counterparts (hereinafter referred to as "C/P") and the Japanese experts (also referred hereinafter as "JICA experts") as well as those officials concerned with the Project. Both quantitative and qualitative data were gathered and utilized for analysis. Data collection methods used for the evaluation were as follows:

- Literature/Documentation Review;
- Questionnaires;
- Individual and/or group interviews;

➤ Direct Observations

1.6.2 Items of the Terminal Evaluation

(1) Achievement of the Project

Achievement of the Project is measured in terms of the progress of the provision of Inputs, extent of the production of Outputs, and the extent of achieving the Project Purpose, with reference to the Objectively Verifiable Indicators identified in the PDM version 2.

(2) Implementation Process

In order to identify the promoting and inhibiting factors affecting the performance of the project, implementation process is reviewed from various viewpoints, including communication among stakeholders, monitoring and project management, among others.

(3) Analysis based on the Six Evaluation Criteria

Based on the observations made under the previous two items, the Project is assessed from the viewpoints of the six evaluation criteria defined by JICA and originally espoused-by the DAC (OECD) shown in Table 1-1 below.

Table 1-1 Summary Definition of the Six Evaluation Criteria

Six Evaluation Criteria		Definitions as per JICA Evaluation Guidelines
1.	Relevance	The extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.
2	Coherence	The compatibility of the intervention with other interventions in a country, sector or institution.
3.	Effectiveness	The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.
4.	Efficiency	The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.
5.	Impact	The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects.
6.	Sustainability	The extent to which the net benefits of the intervention continue, or are likely to continue.

Source: Definition of six evaluation criteria by OECD DAC Network on Development Evaluation,
<https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

2. OUTLINE OF THE PROJECT

The outline of the Project summarized in the PDM is as follows.

2.1 Overall Goal

The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.

2.2 Project Purpose

The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.

2.3 Outputs

There are four Outputs in this Project, namely:

1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.
3. Technical standards necessary for water supply service are developed.
4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.

3. ACHIEVEMENT AND IMPLEMENTATION PROCESS

3.1 Inputs

Inputs to the Project as of May 2023 since its inception are as follows:

3.1.1 Japanese Side

a) Dispatch of the JICA experts

Since the inception of the Project, a total of six long-term experts were dispatched in four areas of expertise, namely "Chief Advisor," "Sub-Chief Advisor/Water Supply Technique", "Water Supply Technique/ Construction Supervision" and "Project Coordination" (see Table 3-1). A total of 22 short-term experts were dispatched for a total of 43.7 months as of the time of the terminal evaluation (June 2023) (see Table 3-2).

Table 3-1 Summary of Long-term Experts

Area of expertise	Total number of persons dispatched	Dispatch period
Chief Adviser	2 persons	1) 2018.5-2021.5 2) 2021.5-present
Sub Chief Adviser/Water Supply Technique	2 persons	1) 2018.5-2020.12 2) 2020.11-present
Water Supply Technique/ Construction Supervision	1 person	2021.8- 2022.1
Project Coordination	1 person	2018.10-present

Source: Data provided by the Project

Table 3-2 Summary of Short-term Experts

Areas of Expertise / Terms of Reference (TOR)	Total number of persons dispatched	Dispatch period (month)	Average duration per visit (month)
Civil Engineering	4	9.87	2.47
Water Quality	4	7.70	1.93
Finance	5	10.63	2.13
Facility	2	2.63	1.32
Water Supply Technique/Construction Supervision	6	8.87	1.48
Water Supply Technical Standards	1	4.00	4.00
Total	22	43.70	-

Source: Compiled based on data provided by the project

As for short-term experts mentioned above, experts were dispatched mainly from the four water utilities (Saitama City, Kawasaki City, Saitama Prefecture, Yokohama City) in Japan. In addition, a total of five experts were assigned under consultant contracts for Output 1 and 2, for a total of 198.2 man-months (M/M) (Table 3-3).

Table 3-3 Summary of Experts assigned under consultant contracts

Designation	Contract Period	Assignment in Lap PDR (MM)	Assignment in Japan (MM)	Number of visits to Lao PDR
Team leader/Institutional expert (Output	1) Sept 2018-	7.17	3.30	11 times

1)	July 2020			
Water Sector Development Fund (Output1)	2) Nov 2020-Feb 2022	6.03	1.60	12 times
Design, Supervising, Institution (Output2)	Mar 2019-Mar 2022	5.03	12.0	3 times
Total MM		18.23	16.90	35.13MM-

Source: Compiled based on data provided by the Project

In JFY2020-2021, due to the impact of the pandemic of novel coronavirus infection ("COVID-19"), short-term experts were not dispatched, and consultant experts' activities were mainly conducted through online, replacing their originally planned local work with in-country work in Japan. The detailed lists of the experts are attached as Annex 2.

b) Training in Japan

At the time of evaluation (June 2023), a total of 28 Lao counterparts ("C/Ps") participated in the training in Japan, of which 7 were from the MPWT/DWS, 1 from the DPWT-LP, 19 from the three WSSEs, and 1 from the Lao Water Works Association (LWWA). At the time of planning the Project, six training courses in Japan were planned, but due to the COVID-19 pandemic, the Project could only conduct a total of four courses in Japan. A summary of the training programs in Japan is presented in the table below.

Table 3-4 Summary of the Training in Japan

JFY	Theme	No. of participant	Duration
2019	Waterworks Administration/Division of Roles in Water Supply Sector	6	2019 Aug 17-24 0.2 months
2019	Roles and activities of Water Works Association	6	2020 Feb 2-11 0.3 months
2022	Water Quality Management	7	2023 Jan 27 - Feb10 0.4 months
2023	Planning and Finance in Waterworks Operation	9	2023 Jun 26 – Jul 6 0.3 months (planned)

Source: Data provided by the Project

c) Local Expenses

Local costs for the project amounted to USD1,052,853 as of March 2023 (of which the equivalent of USD457,941 was spent in Lao kip). About 90% of the total expenditure in USD (USD594,913) was miscellaneous, and the other breakdown was travelling expenses (including airfare) and agent service (Table 3-5). Miscellaneous expenses consist mainly of staff salaries, car rental, translation and interpretation fees, etc.

Table 3-5 Summary of Local Activity Costs

Item	Expenditures (USD)
Miscellaneous	569,427
Travel Expenses: Air Fare	6,655
Travel Expenses: Non-Aire Fare	12,754
Agent Service Expenses	6,076
Expenditures in LAK	457,941

Total	1,052,853
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Source: Data provided by the Project

As for the expenditures spent in LAK, they were, in descending order of percentage, travel fees (other than airline tickets) (53.4%), miscellaneous (33.5%), and travel fees (airline tickets) (13.1%).

d) Equipment

A total of USD2,944,404.31 worth of equipment was provided by the Japanese side from May 2018 to May 2023. Of this amount, about 35.4% or USD1,041,290.37 worth of equipment was provided for the implementation of the pilot projects (batches 1, 1.5, and 2) under Output 2 (see Table 3-6). In addition, an additional USD1,344,561.90 worth of equipment was provided under the "Special Activities for COVID-19 Prevention" for Khammouane and Xaysomboun Provinces. The detailed list of equipment is attached as Annex 2.

Table 3-6 Amount of equipment provided (Overview)

Item	Amount (USD)
Pilot Project 1 st batch	291,911.07
Pilot Project 1.5 batch	436,922.00
Pilot Project 1 st and 1.5 batch	3,252.00
Pilot Project 2 nd Batch	309,205.30
COVID-19 Special Activity	1,344,561.90
Other than above	558,552.04
TOTAL	2,944,404.31

Source: Compiled based on data provided by the project

3.1.2 Laotian Side

a) Assignment of Counterparts

As of June 2023, a total of 426 persons were assigned as counterparts (C/Ps) to the Project. The organizational breakdown of C/Ps assigned at the time of evaluation includes 61 from MPWTs (54 from DWSs and 7 from other departments), a total of 290 from NPP (including 30 from NPPL, 24 from NPLP, 33 from NPKM), a total of 71 from DPWTs, and 4 from other ministries (such as MOF and MOHA). Moreover, from each of the 15 provinces other than the three pilot provinces, counterpart members were assigned as follows: one project director, one or two coordinators, and one or two members each for the STT and subcommittees (SC1-5), respectively. The detailed list of counterparts assigned to the Project is attached as Annex 2.

b) Provision of Facilities for Project Operations

The Laotian side secured office space within MPWT/Public Works and Research Institute for JICA experts.

3.2 Achievement of the Project

3.2.1 Activities

Activities were conducted based in accordance with Plan of Operations (PO) of the Project, and the monitoring of the progress was made through the PDM and PO. Although there were some delays in the progress of activities due to the Covid-19 pandemic, the overall activities were continued within the same framework prescribed as outputs and the Project Purpose in the PDM, with some modifications in indicators.

3.2.2 Outputs

Output 1: <Result: Mostly achieved>

Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.

The table below shows the level of achievements of Output1 with reference to indicators specified in PDM (ver. 2).

Table 3-7 Level of Achievement with Reference to Indicators (Output 1)

Indicators as per PDM	Major Achievements
1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT.	● After various consultations with DWS, OIDS (Overall Institutional Development Strategy) was formulated, and among the seven key issues, strengthening the legal system regime and legal system development were selected as the Priority Domain Capacity Development Strategy (PDCDS) to be analyzed. ● Although the words OIDS and PDCDS are not explicitly mentioned within the official documents of Lao PDR, efforts are being made as DWS initiates to revise the relevant laws and regulations, including “Prime Minister’s Order on Water Tariffs” and “Ministerial Decree on Water Tariff Structure”, and “Development of Corporate Plan Guidelines” etc. ● “The vision to 2035, Development Strategy on Water Supply and Sanitation 9 years (2022-2030) and Development Plan 4 years (2022-2025)” was endorsed by the Prime Minister Office and signed by the MPWT Minister; hence we have concluded that this indicator is fulfilled.
1b. The fund plan is drafted in DWS.	● A Water Supply Sector Development Fund (WSSDF) proposal (grant-based and loan-based) was proposed by the consultant experts and was explained and discussed with DWS. ● After the 2nd IRC meeting and subsequent discussions with DWS, the decision was made to conduct further studies and analyses in order to address possible risk that might be involved.
1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Annual Report (WSAR) supported by MaWaSU are finalized.	● “The vision to 2035, Development Strategy on Water Supply and Sanitation 9 years (2022-2030) and Development Plan 4 years (2022-2025)” was developed in consultation with DWS/MPWT based on the Water Supply Project Strategy (Water Supply Vision) initially supported by MaWaSU. It was approved and put into effect in 2022. ● Provincial Water Supply Strategies (PWSS): PWSS is developed in Luang Prabang, Oudomxay, and Bokeo Provinces. ● Water Supply GL (WSG): the Water Supply Guidelines, which was initiated with the support of MaWaSU, were revised in December 2019 and was declared effective nationwide in the same year. ● Water Sector Annual Report (WSAR): The 2020 edition has been developed. The 2021 edition is also in the process of finalization.

Source: Project Reports, Questionnaire and Interviews

Output 1 is mostly achieved in light of the indicators of the PDM. As for the fund (WSSDF) under Indicator 1b, the proposal was reviewed and discussed with DWS, and it was concluded that there is a need to conduct further studies and analyses in order to address possible risk that might be involved, thus the PDM was modified to reflect this status.

As for Indicator 1a, although the terms OIDS and PDCDS are not used within the Lao government, the Project supported the identification of issues related to strengthening the legal and institutional system in the water supply sector in Lao PDR by jointly developing PDCDS and OIDS. The Project will finalize PDCDS and will explain the contents to Director of DWS and receive its approval by October 2023, before the end of the Project. Indicator 1c are regarding the items supported by MaWaSU, and these were refined and finalized during MaWaSU2.

Output 2: <Result: Achieved>

Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.

The level of achievements of Output 2 with reference to indicators identified in PDM is shown in the table below.

Table 3-8 Level of Achievement with Reference to Indicators (Output 2)

Indicators as per PDM	Major Achievements
2a. The procedures for planning, Implementation, monitoring, and evaluation of water supply projects are improved.	● The pilot projects were implemented up to batches 1-2 based on the guidelines prepared by the Project (Indicator 2b), resulting in an improved planning, implementation, monitoring, and evaluation process. ● The pilot projects were implemented by the DPWT and WSSEs in Phongsaly, Saravane, Borlikhamxay, Xiengkhuang, Sayabouly, Savannakhet Provinces, and improvement was made in terms of systematic planning, construction photo albums, and construction completion drawings etc. ● DWS/MPWT has enhanced its capacity through the realization of monitoring and evaluation practices in the pilot projects mentioned above.
2b. Proposal Development Guidelines and Implementation Guidelines are developed.	● Proposal development guidelines and implementation guidelines were developed over the course of implementing the pilot projects. ● In collaboration with JICA Partnership Program (Saitama City), the Project had the opportunity to utilize four guidelines/manuals on Pipeline installation, Service pipe/water meter installation, Material storage management and Test Meter Utilization Guidelines. ● In Batch 1.5, an operation manual for the automatic chemical injection device was prepared in cooperation with the WSSE in Xiengkhouang Province (NP-XKH). ● Based on the experience of Batch 1, guidelines for construction planning, Designing/As-built designing and Construction picture album making were developed.
2c. At least five pilot projects completed and are evaluated.	● A total of 11 pilot projects were conducted in 8 provinces, including 2 for the "Special Activity for COVID-19 Prevention" project. ● Of these, 6 (Batch 1 and 1.5) have completed construction, and 3 in Batch 1 were evaluated jointly with the Lao side counterparts.
2d. Lessons learned from pilot project	● Lessons learned from the pilot project were discussed through the task

projects are reflected on the fund as well as other procedures of the Lao government.	team (PPTT) and the result was reported during the Lesson Learned Meeting on the Implementation of Pilot Project for the Committee of Water Supply Sector Development Fund (WSSDF), with the aim of reflecting their recommendation in the Fund plan.
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Source: Project Reports, Questionnaire and Interviews

Output 2 has been achieved. Planning and implementation guidelines for facility development projects were developed primarily by the task team (PPTT) members and capacities for monitoring and evaluation were strengthened among evaluation committee (PPEC) members. These capacities were strengthened as a result of building up experience in planning, implementation, and monitoring and evaluation through the implementation of pilot projects from batches 1 to 2.

It was also reported that members of DWS/MPWT, DPWTs and WSSEs of the pilot provinces have a good understanding of the contents of planning and implementation guidelines developed by the Project.

In the future, it is hoped that the above guidelines will be disseminated to the provinces that did not implement the pilot project, and it is expected that DWS and related parties, including DPWTs and WSSEs who have high capacity, to clarify concrete measures for their dissemination throughout the country.

Output 3: <Result: Mostly achieved>

Technical standards necessary for water supply service are developed.

The level of achievements of Output 3 with reference to indicators identified in PDM is shown in the Table below.

Table 3-9 Level of Achievement with Reference to Indicators (Output 3)

Indicators as per PDM	Major Achievements
3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report.	● The Project originally prepared two set of documents: 1) A Ministerial Ordinance on the Technical Standards and 2) Technical Guidelines on Design and Construction for Water Supply Facilities, in accordance with the Article 15 of the Water Supply Law. ● After series of discussions with DWS, the Project decided to prepare one document "Guidelines on the Technical Standards for Design of Water Supply Facilities" (hereafter referred to as "the Technical Standards"). ● The detailed design of the pilot projects (COVID-19 Special Program and Batch 2) for Output 2 was based on the description of the Chapter 7 Water Distribution Facilities of the draft Technical Standards.
3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	● Once the Technical Standards are approved by the MPWT Minister, the Project plans to disseminate them to WSSEs and relevant stakeholders throughout the country using the Instruction Manual prepared by the Project.

Source: Project Reports, Questionnaire and Interviews

Output 3 has been mostly achieved. Led by the Standards Task Team (STT) and the Technical Standards Committee (TSC) members, a final draft of the Technical Standards to be established by the MPWT/DWS

based on the provisions of Article 15 of the Water Supply Law were prepared. It was reported that the members of the WSSEs from pilot provinces, in particular, understood the contents of the above-mentioned guidelines and therefore they would be able to pass on the technology within the organization. The final draft of the Technical Standards has been prepared and internal procedures have been initiated within DWS for approval by the MPWT Minister. by August 2023². DWS is currently reviewing the Technical Standard, but due to high level in technical aspect comparing to the capacity of DWS, DWS sought for a fund to hire a private Laotian consultant to review the technical aspects within the guidelines in order to fully achieve the quality of the standard as this is one of the key tasks of DWS. Once the Technical Standards are approved, the Project will implement necessary activities to fulfill Indicators 3a and 3b specified in PDM.

Output 4: <Result: Mostly achieved>

Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.

The level of achievements of Output 4 with reference to indicators identified in PDM is shown in the Table below.

Table 3-10 Level of Achievement with Reference to Indicators (Output 4)

Indicators as per PDM	Major Achievements
4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved.	● The nine subcommittees established by MaWaSU for national dissemination have been reorganized into six sub-committees (SCs), and resource persons from the three water utilities (NPWL, NPLP, and NPKM) have developed manuals and training materials and given lectures during the national dissemination activities. ● The three WSSEs continue to provide advice and follow-up to the rest of WSSEs within their respective jurisdictions in the North, Central, and South regions. ● With regard to the three focus areas listed in Indicator 4a, two of them (SC5 Water Quality and SC4 Finance) are relevant SCs.
4b. DP supported by MaWaSU is utilized.	● The Dissemination Plan prepared by MaWaSU is being revised and utilized by MaWaSU2.
4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP.	● Generally, once a year, nationwide dissemination activities (Mini workshops) are held in the northern, central, and southern regions (see Annex 2). ● Mini workshops were conducted six times in five years under the own planning and budget of WSSEs. However, the Project covered the participation costs of the DWS and the LWLA.
4d. The activities of MaWaSU Sub-Committees (SCs) are continued by LWLA under supervision of DWS.	● LWLA was established in December 2020 ● "The vision to 2035, Development Strategy on Water Supply and Sanitation 9 years (2022-2030) and Development Plan 4 years (2022-2025)" formulated by the DWS/MPWT for 2022 also includes the development of waterworks associations, including "training of engineers (staff)" and the formulation of regulations (positioned under the law) related to water supply.

Source: Project Reports, Questionnaire and Interviews

² Interview with DWS personnel on 29 May, 2023, followed by discussion with DWS on 6 June, 2023.

Output 4 was mostly achieved. The nine subcommittees established by MaWaSU for national dissemination have been reorganized into six sub-committees (SCs), and resource persons from the three water utilities (NPNL, NPLP, and NPKM) have developed manuals and training materials and given lectures during the national dissemination activities. Regarding indicator 4c, the implementation of the program on its own budget, it is necessary to consider a sustainable way to continue the nationwide dissemination, involving DWS/MPWT, WSSEs, LWWA and related stakeholders.

On the other hand, the LWWA's main source of funding is the membership fees and that it has only been in existence for a short period of time since its establishment in January 2021, there is some needs to strengthen further its organizational and financial foundation as well as technical aspects.

3.2.3 Project Purpose

Project Purpose: <Result: Prospected to be mostly achieved>

The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.

The prospect for achieving the Project Purpose before its end, with reference to indicators identified in PDM, is shown in the table below.

Table 3-11 Prospect for Achievement with Reference to Indicators (Project Purpose)

Indicators as per PDM	Major Achievements
a. The Lao government takes action toward implementation of PDCDS.	● During the activities of Output 1, the OIDS was formulated as a document that outlines institutional challenges in the water supply sector and the future direction to solve them, and action plans for seven specific areas were briefly proposed for institutional improvement. Among them, "Strengthening of the legal and institutional structure and development of legal systems" was selected as a PDCDS (Priority Domain Capacity Development Strategy) as a high priority issue. ● Among the action plans proposed in the OIDS and PDCDS, efforts that have been initiated by the Lao government include: the development of technical standard for water supply facility development (Article 15 of the Water Supply Law) and guidelines for the revision of water supply tariffs, etc. ● Within the "9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030) and 4-year Development Plan (2022-2025)", developed in 2022, the revision of the Water Supply Law and the preparation of 11 regulations and guidelines are listed as issues to be addressed.
b DWS discusses the fund plan with MPWT multiple times, and sort out the issues for realization.	● Regarding the Fund, Article 22 of the Water Supply Law mentions the need for a fund to promote the development of rural water supply, and the need to draft a "Decree on Water Supply Infrastructure Development Fund" is mentioned in the "9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030) and 4-year Development Plan (2022-2025)" mentioned above. ● The Project has presented the "Water Supply Sector Development Fund (WSSDF) Proposal (grant-based and loan-based)" to the DWS for

	further discussions within MPWT towards the establishment of the Fund.
c. Implementation of WSSEs' water supply projects based on the PDCA cycle is promoted.	● Through the implementation of pilot projects under Output 2, the capacity of DWS and the WSSEs has been enhanced in the planning, implementation, monitoring, and evaluation process by hands-on practices. ● It was also reported that efforts of systematic planning by identifying issues of the current situation and link them to improvements are gradually consolidated among task team members through activities under Outputs 1 and 4.

Source: Project Reports, Questionnaire and Interviews

Based on the analysis of the level of achievement against the indicators in the table above, the Project Purpose is prospectively to be mostly achieved by the end of the Project. As for the PDCDS (Indicator a), the term PDCDS itself is not used within the Government of Lao PDR, but the need to strengthen the legal system and improve the legal system is already acknowledged, and it was mentioned in the "9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030)". Discussions on the Fund (Indicator b) have been held within DWS, but the identification of issues for its establishment and consensus building within the MPWT on these issues remain to be addressed.

With regard to the implementation of projects using the PDCA cycle at WSSEs (Indicator c), the level of achievement naturally varies among provinces depending on whether they participated in the pilot project or not, thus there still some needs for continuous capacity building among WSSEs nationwide.

3.3 Implementation Process

3.3.1 Some descriptions regarding Implementation Process

The following are some characteristics of the implementation process of this Project:

- **Facility Improvement through Pilot Projects:** As discussed in section 3-1, the Project funded a total of 11 facility improvement projects in 8 provinces by administering a large amount of equipment and construction costs under Output 2. Through this experience, the planning and implementation capacity of the WSSEs and the project monitoring and evaluation capacity of DWS/MPWT were enhanced, and guidelines for the planning and implementation of project implementation were developed under Output 2.
- **Coordination with JICA Partnership Program (JPP):** The Project was coordinated with the JPP (implemented by Saitama City), which was implemented from 2018 to 2023. The mentioned JPP project implemented "Non-Revenue Water reduction focusing on water supply pipes" targeting three WSSEs (NPNL, NPLP, NPKM), and the respective manuals on pipe laying, service pipe equipment, material management and test meter utilization were also utilized in the pilot projects of the Project.
- **Utilization of online platform:** The Project provided equipment and materials for online meetings and established a system to continue work remotely, despite the travel restrictions of the COVID-19 pandemic. This enabled counterparts from remote provinces to participate in the sub-committee activities through online meetings.
- **Revision of PDM:** The PDM was revised twice, in 2019 and 2021, based on consensus reached at the 2nd JCC (November 2019) and the 3rd JCC (July 2021), respectively. The PDM (ver.3) is currently effective in English; during the 2021 revision, the Project period was extended for 7 months to cover activities that were suspended due to the COVID-19 pandemic, and the indicators were revised in line with the actual

status of the project, including the establishment of the LWVA and the progress of the WSSDF.

- **Promotion activity:** The Project issues regular newsletters and produced promotion goods to motivate project members involved. Water class activities were also conducted by SC2 members to raise awareness of utilization of clean water in the local communities.

3.3.2 Promoting Factors for the Realization of the Project's Effects

As contributing factors for the Project, the implementation of the pilot projects mentioned above provided a practical platform for DWS and the WSSEs to plan, implement, monitor and evaluate projects, and facilitated their capacity enhancement and consolidation. In addition, the implementation of the preceding project (MaWaSU) and the collaboration with the JPP contributed to the realization of an effective working relationship with the Lao side, which had already been established, and to the synergy effects of the project results. The utilization of online platform has facilitated communication with counterparts from other provinces nationwide, especially during some restrictions of local activities due to COVID-19 pandemic.

3.3.3 Inhibiting Factors for the Realization of the Project's Effects

Restrictions of local activities due to COVID-19 pandemic also affected some progress of the Project such as implementation of pilot activities and decision making regarding the WSSDF. For the implementation of the pilot activities, the Project appointed several local members as “pilot project construction supervision supporters” in order to provide follow-up of local activities especially during the absence of Japanese experts in the field.

4. EVALUATION RESULTS BY SIX EVALUATION CRITERIA

4.1 Relevance <Result: High>

The Project is consistent with the Lao government's development plan, policies and strategies in the water supply sector, and the needs of the target areas and target groups, therefore, the relevance of the Project is high at the time of the evaluation.

4.1.1 Compatibility with Lao Government Policy

The Lao government's 9th NSEDP (2021-2025) sets clean water coverage at 90% of the total population (target), and according to the MPWT's 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030) and 4-year Development Plan (2022-2025), the target for urban areas in provinces and capitals by 2020 is 80%. The Project contributes to strengthening the organization for planning and administrative management of the water supply sector, which is consistent to the national strategy mentioned above.

4.1.2 Consistency with the Needs of the Target Group

The direct beneficiaries of the Project are the DWS/MPTW and the WSSEs and DPWT of Vientiane Capital, Luangprabang and Khammouane provinces as well as provinces where pilot projects were implemented. The Project established various sub-committees under each Output, based on the needs of direct beneficiaries in order to strengthen their capacities. As for the selection of the pilot projects (Output 2), the pilot projects were selected and implemented based on the proposals, which reflects the needs for water facility development in each province.

4.1.3 Adequacy as a Means

The Project worked primarily with WSSEs from three provinces (Vientiane Capital, Luangprabang and Khammouane provinces) whose capacities were strengthened in the preceding Project (MaWaSU), and conducted capacity development activities for each issue such as planning of facility improvement projects, water quality, data management, and customer management for WSSEs and DPWTs nationwide. In addition, through implementation of pilot projects (Output 2), the Project aimed for strengthening capacities in each process from planning to monitoring and evaluation of water facility improvement. The practical approach in the form of on-the-job training has strengthened the planning and implementation capacity of WSSEs and the management capacity of DWS, indicating that the Project's approach is appropriate to achieve its aim.

4.2 Coherence <Result: High>

The consistency of the Project is high. The Project is consistent with the cooperation policies of Japan and JICA, and is also consistent with the ongoing cooperation projects conducted by other international development partners in water sector in Lao PDR.

4.2.1 Consistency with Japan's Development Cooperation Policy

Under the basic policy (major goal) of "strengthening the economic and social infrastructure to break away from LDCs" in the "Country Development Cooperation Policy for Lao PDR (April 2019)," the Project is being implemented as cooperation positioned under the priority area (4), issue 4-1 of the Rolling Plan (2019). Furthermore, the Project is in line with the JICA's "Global Agenda 19: Securing Sustainable Water Resources and Water Supply" and its cluster strategy "Supporting the Growth of Water Utilities".

4.2.2 Consistency with the SDGs and Other International Agendas

The Project aims to strengthen sustainable management systems in the water supply sector and the capacity of WSSEs through improved water supply administration and capacity building of WSSEs, thus contributing to Goal

6 of the SDGs (ensure availability and sustainable management of water and sanitation for all people).

4.2.3 Synergistic Effects with JICA Projects and Other Donor Cooperation

As for JICA projects, starting with the preceding project (MaWaSU) implemented from 2012 to 2017, four grant aid projects (one of which is in progress) had been implemented. In addition, four other JICA Partnership Program projects (one of which is in progress) had been implemented by Saitama City Waterworks Bureau and Saitama Prefectural Bureau of Public Enterprises.

Of these, the Project collaborated with the "Project for Supporting Improvement of Waterworks Pipeline Maintenance and Management Capacity of Waterworks Public Corporations (Saitama City Waterworks Bureau)," by utilizing and disseminating the three guidelines developed in the mentioned project to other provinces, resulting in a synergistic effect between the two projects.

Major cooperation by other donors includes the ADB's Water Supply and Sanitation Sector Project, the World Bank's Scaling-up Water Supply, Sanitation and Hygiene Project, and the Korea Economic Development Cooperation Fund (EDCF)'s Water Supply System Development Projects in 2 Southern Provinces, etc.

The Project collaborated with ADB's non-revenue water measures project and the Saitama City Waterworks Bureau's grassroots technical cooperation to provide portable water meter test kits to WSSEs in 10 provinces, including 8 provinces that were excluded from the grant recipients of these projects, in order to promote maintenance and accuracy of water meters. Furthermore, ADB implement "Water Supply and Sanitation Project" to support non-revenue water measures and water tariff revisions targeting eight provinces in the north-central region.

4.3 Effectiveness <Result: Relatively high>

The effectiveness of the Project was determined to be relatively high for the following reasons:

4.3.1 Prospect for Achieving the Project Purpose

As seen in the previous section "3-2-3 Prospects for Achievement of Project Purpose," we have estimated that the prospect for achieving the Project Purpose: "The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated." by the end of the Project is relatively high.

Regarding the strengthening of administrative capacity, the "Strengthening of the Legal and Institutional Structure and Development of the Legal System" defined in the PDCDS was summarized as a document, and issues regarding the development of laws and regulations that should be strengthened in the water supply administration in the future were identified. The establishment of the fund stipulated in the Water Supply Law has been discussed within DWS, but the identification of issues for its establishment and consensus building within the MPWT on these issues are still to be addressed.

Regarding the capacity building of WSSEs, efforts have been made to strengthen their capacity, particularly in three pilot WSSEs and WSSEs in the provinces where pilot projects were implemented. In some provinces collaboration between the WSSE and the DPWT was also strengthened during the course of the Project. In order to sustain the outcomes of the Project, it is important to create a sustainable mechanism in order to continue to provide capacity building programs for WSSEs nationwide.

4.3.2 External Conditions from Outputs to the Project Purpose

The external condition is that "the policy and regulations regarding local governance and privatization of water supply service shall not affect plans support by the Project". After the start of the Project, the Decree on Private Sector Partnership (PPP No. 624/GOV dated 21.12.2020) came into effect in January 2021, and the Prime Minister's Order on Water Tariffs (November 2022) and "Ministerial Decree on Water Tariff Structure" (January 2023) were enacted by the DWS. These policies are not in conflict with the plan prepared by the Project, and therefore the risks described in the external conditions are not foreseen.

In addition, “The vision 2035, Development Strategy on Water Supply and Sanitation 9 years (2022-2030) and Development Plan 4 years (2022-2025)”, developed in 2022, indicates the need for amendment of the current Water Supply Law as well as the enactment of decrees and regulations, including the drafting of a decree on the Water Supply Development Fund. These are the encouraging factors that will help sustain the results of the Project.

4.4 Efficiency <Result: Moderate>

The efficiency of the Project is considered to be moderate for the following reasons:

4.4.1 Input from the Japanese side

Until the outbreak of COVID-19, the timing, quality, and quantity of Japanese inputs were appropriate and generally on schedule. However, due to the COVID-19 pandemic, the dispatch of experts from Japan and training in Japan were temporarily suspended, and work was shifted to remote operations and local activities were affected.

As for the pilot projects under Output 2, a total of 9 pilot projects were conducted in 6 provinces throughout the country through Batches 1, 1.5 and 2, and a total of US\$1,041,000 of equipment was administered for the pilot projects. In addition, projects under the “COVID-19 Special activity” were included in Output 2, with equipment amounting to US\$1,903,000 administered when combined with the amount of equipment provided under this scheme (US\$1,344,000). The capacity of the WSSEs in pilot provinces and the central DWS to conduct planning to monitoring and evaluation was strengthened through the implementation of these pilot projects, which led to the achievement of the Output 2.

4.4.2 Input from the Laotian side

As discussed in section 3.1.2 earlier, a total of 426 persons (as of June 2023) were assigned as counterparts (C/Ps) to the Project. The organizational breakdown of C/Ps assigned at the time of evaluation includes 61 from MPWTs (including 54 from DWSs), a total of 290 from NPP nationwide (including 30 from NPPL, 24 from NPLP, 33 from NPKM), a total of 71 from DPWTs (see section 3.1.2 for more details). The personnel changes in the WSSEs were generally small, and many of the C/Ps have been involved in the Project from its inception to the present. As for the central administration (DWS), there were several personnel changes within the department level, but C/Ps were assigned to the Project continuously. Moreover, 7 to 10 C/Ps were assigned from each of the 15 provinces other than the pilot 3 provinces.

4.4.3 Influences of COVID-19 pandemic

The Project was implemented during the time of COVID-19 pandemic. There were both positive and negative side of the influence caused by some restrictions of local activities due to COVID-19 pandemic. The negative side was that the dispatch of Japanese experts as well as the implementation of training in Japan had to be suspended for a while, and that affected the implementation of various activities such as decision-making process regarding the development WSSDF and the implementation of pilot projects.

On the other hand, there were some positive aspects regarding the shift in work modality due to COVID-19 pandemic. For example, while field activities were restricted due to COVID-19, activities related to the development of laws and regulations were carried out at home during this time. Furthermore, the project provided equipment and materials for online meetings and established a system to continue work remotely so that the counterparts from remote provinces may be able to participate meetings via online.

As a result of influence of COVID-19 pandemic and its influence on the progress of local activities, the Project extended the cooperation period for another 7 months (until December 2023) and also modified some indicators of the PDM to make it more feasible. Another aspect relating to the efficiency of the Project was that some of the pilot

projects in Output 2 were only able to secure connections for fewer households than originally expected after the installation of water facilities, since there were some households who still rely on well water and do not use the water supply as much as originally anticipated.

4.5 Impact <Result: It has various positive impacts>

The Project has generated multiple positive impacts. With regard to the prospects of achieving the Overall Goal, it is difficult to determine due to the limited information available regarding the future progress of the development WSSDF and the LWVA at the time of the terminal evaluation. The impact of the Project can be enhanced by the establishment of a mechanism for dissemination activities centered in the LWVA, as well as the clarification of internal procedure within DWS regarding the establishment of WSSDF.

4.5.1 Prospect for Achieving the Overall Goal

The table below shows the prospect for achievement of the Overall Goal with reference to indicators of the PDM (ver. 2). As for indicator a. (implementation of PDCDS), the Project is in the process of finalizing the document. It aims to obtain approval by the Director of DWS once PDCDS document is finalized.

Table 4-1 Prospect for Achievement with Reference to Indicators (Overall Goal)

Indicators as per PDM	Major Achievements
a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part.	● PDCDS is currently being finalized by the Project. It aims to obtain approval from the Director of DWS by October 2023, before the end of the Project.
b. The Lao government implements necessary improvements to realize the fund plan in whole or in part.	● The issues related to the establishment and operation of the Fund are being discussed and a draft water development fund plan is being prepared. ● The Project has proposed a surcharge system from water tariffs as a funding source, but due to the need to obtain approval from the prefectural governor for determination of water tariffs and the necessary internal procedure within DWS in order to initiate discussion with MPWT is not yet determined, cooperation on the establishment of a water development fund will not be included as part of MaWaSU3. ● The above makes the prospect of implementing the plan to establish the Fund, whether in part or in whole, uncertain.
c. Activities of national dissemination for water supply management promotion and improvement are continuously practiced based on MaWaSU2 dissemination activity by LWVA.	● The Project is seeking to create a mechanism to transfer activities of subcommittees (SCs) organized under Outcome 4 to LWVA so that it can continue to implement dissemination activities nationwide. ● On the other hand, the LWVA is mainly funded by membership fees, and in the responses to the questionnaire, there was a notable concern about the continued implementation of national development activities due to budgetary constraints.

Source: Project Reports, Questionnaire and Interviews

4.5.2 Positive Impact Other than Progress Toward the Overall Goal

A series of SC activities that have been conducted as part of the national dissemination under Output 4 have promoted standardization in the water supply services by WSSEs nationwide, in areas of (1) SC1 (Data Management), (2) SC2 (Customer Relations), (3) SC3 (Planning), (4) SC4 (Finance), and (5) SC5 (Water Quality). Furthermore, in relation to SC6 (LWVA), the Lao Waterworks Association was established in December 2020, as the first initiative in Lao PDR.

As a result of the nationwide dissemination activities by each SC, the following table shows the results achieved by the WSSEs in each province. By sustaining these results, the impact of the Project is expected to be enhanced, if these results are sustained and improved by each WSSE in the next three to five years after the completion of the Project.

Table4-2 Subcommittees (SC) Under Output 4 and the Achievement of WSSEs Nationwide

SCs	Achievement of WSSEs nationwide
SC1 : Data Management	✓ Annual Report: All 18 WSSEs have completed the 2020 report, and 15 of the 18 WSSEs have completed the 2021 report. ✓ Water Service GL (WSG)(2021) : All 18 WSSEs already calculated PI.
SC2 : Customer Relations	✓ Conducting water classes and customer surveys ✓ The detailed status of implementation in FY2022 is shown in the separate sheet
SC3 : Planning	✓ Planned water supply area: 16 out of 18 WSSEs have already developed ✓ Water demand projections: 16 out of 18 WSSEs have already developed
SC4 : Finance	✓ 5 financial tables / financial summary report / budget (2021): completed by all 18 WSSEs ✓ Medium- and Long-term Plan (Financial Balance) (2021): completed by 3 out of 18 WSSEs
SC5 : Water Quality	✓ Water Quality Lab Equipment: all 18 WSSEs have confirmed their locations ✓ Water quality inspections at major water treatment plants (2022): 4 WSSEs are inspecting 23 items, while the remaining 14 are inspecting 22 items excluding mercury ✓ Water Quality Inspection Report (2021): 17 of 18 WSSEs have already produced this report
SC6:LWWA	✓ LWWA was established in December 2020. ✓ The rules of the Association were developed.

Source: Compiled based on the data provided by the Project

No negative impacts have been identified so far.

4.6 Sustainability <Result: Relatively high>

The sustainability of the Project is considered be relatively high for the following reasons.

4.6.1 Policy Aspect

The sustainability of the policy aspects of the Project is high. In the water supply sector, the 9-Year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030) and 4-Year Development Plan (2022-2025) were approved in 2022, which includes the need to revise and improve the laws and regulations proposed by the Project in the form of OIDS/PDCDS. In addition, the Project also supports the formulation of provincial supply strategies at the Vientiane Capital and other 17 provinces based on the national strategy, the provincial water strategies are scheduled to be completed by the end of November 2023. With regard to water tariffs, a "Prime Minister's Order on Water Tariffs (2022)", "Ministerial Decree on Water Tariff Structure (2023)" and "Development of Corporate Plan Guidelines" have been formulated to standardize the method of setting unit prices for water tariffs nationwide.

4.6.2 Institutional and Financial Aspect

The sustainability of the Project in terms of organizational aspect is relatively high, while financial aspect remains to be a challenge. The LWWA was established as a new organization in 2020 with the support of the Project. It is reported that the LWWA plans to establish a “technical research committee” and two sub-committees (Water Quality Management, Waterworks Construction Management) under the mentioned technical research committee in order to provide capacity building programs. The creation of these committees may enhance the sustainability in terms of organizational aspect.

Regarding the financial aspect, the creation of the WSSDF has been studied over time during the Project, and is currently being discussed within the DWS. It is reported that during the first half of the Project, the government side was a little reluctant of the establishment of the WSSDF because the study showed that the existing Funds in Lao PDR were not very effective then. However, various new funds have been established recently and there seems to be better enabling environment with regard to the establishment of WSSDF.

4.6.3 Technical Aspects

The Project consistently emphasized the "intrinsic development approach" since the cooperation on the preceding project (MaWaSU), and the C/Ps themselves proactively prepared various guidelines and educational materials through the activities of various subcommittees under each output. As for the three pilot WSSEs (NPNL, NPLP, and NPKM), the responses to the questionnaire indicate that C/P members have relatively high level of understanding of the Project products, and the subcommittee members have also played major roles in providing guidance on the contents of SC 1-5 to other WSSEs in their jurisdictional areas. The technical sustainability of the Project will be enhanced if the resource persons from the three pilot WSSEs are mobilized and are able to continue providing capacity building programs for the WSSEs nationwide.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The Project is making good progress. Regarding level of achievements, Outputs 1, 3 and 4 are considered to be mostly achieved, while Output 2 is achieved. As for the achievement of the Project Purpose “the foundation necessary for strengthening the water supply sector management system and WSSEs’ capacity is formulated” by the end of the Project (December 2023), it is prospected to be mostly achieved.

In terms of six evaluation criteria, relevance and coherence are both considered to be high, while the effectiveness of the Project is relatively high. Efficiency was considered to be moderate, due to factors that reduced efficiency, which was mainly caused by some influences of COVID-19 pandemic.

Multiple positive impacts were identified, among which the six sub-committees under Output 4 have led to standardization of water supply services and operations as well as capacity building of WSSEs nationwide. These are considered as an impact identified other than the Overall Goal of the PDM. Regarding the sustainability, it is considered to be high in terms of policy aspect, relatively high in terms of organizational aspect, however there are still issues in terms of financial aspect. Sustainability in terms of technical aspects is relatively high among three pilot WSSEs, while there still some more room for continuous capacity building programs before the technical sustainability is obtained by all other WSSEs nationwide.

5.2 Recommendations

On the basis of the results of the study summarized above, the Terminal Evaluation Team has made the following recommendations to the Project.

5.2.1 Recommendations to be Considered During the Project Period (until December 2023)

1. Approval of the Technical Standards by MPWT Minister, Output 3
The Project is in the process of finalizing the Technical Standards (Output 3) within the DWS in order to get approval by the MPWT Minister before August 2023. It is suggested that the approval by the MPWT Minister shall be obtained promptly, so that the Project can proceed to its remaining activities of national dissemination before the end of the Project.
2. Utilization of the Technical Standards for the Achievement of Indicators 3a and 3b, Output 3
It is suggested that the Project shall implement activities in order to fulfill indicators 3a and 3b of the Output3 once the Technical Standards are approved by the MPWT Minister.
3. Modification of Indicators in PDM Regarding “PDCDS”
The OIDS and PDCDS developed by the Project are scheduled to be finalized by the end of the Project, and the team noted that their contents have been already approved by the MPWT Minister as a " the 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030)". Therefore, the following modifications are suggested regarding the respective indicators in the PDM.
 - 1) Indicator a, Project Purpose: The Lao government takes action toward implementation of the 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030).
 - 2) Indicator a, Overall Goal: The Lao government implements the 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030) in whole or in part.

4. Approval of Final OIDS and PDCDS Documents by DWS Director, Output 1
The Project has already finalized OIDS and it is working towards the finalization of PDCDS document. Once PDCDS is finalized, the Project will seek approval by the Director of DWS of the two documents (i.e., OIDS and PDCDS) by October 2023.
5. Utilization of Guidelines and Manuals for Construction Planning and Management at the Institutional Level
The Project developed various guidelines on Waterworks construction management under Output 2, however, in light of the limited opportunities for the WSSEs to be involved directly in designing and implementing the waterworks construction and management, it is suggested that the Project takes some measures to ensure that above-mentioned guidelines will continue to be utilized at the institutional level of WSSEs. One possible measure includes the incorporation of these guidelines into the training program of the LWWA, so that it can continue to disseminate them to the WSSEs nationwide.
6. Promoting Household Connections in the Pilot Project Areas
It is suggested for DPWTs and WSSEs from provinces where pilot projects were conducted to continue to promote household connections of the water facilities developed in the pilot project (Output 2).
7. Implement LWWA's Plan to Set Up Technical Research Committee and Two Sub-Committees
LWWA currently plans to set up a "Technical Research Committee" and two sub-committees under it (one for Water Quality and the other for waterworks construction management). The Team welcomes this initiative and suggests that dissemination of relevant guidelines developed by the Project (i.e. SC5 and Output 2) shall be conducted as part of the activities of these sub-committees, once they are established.

5.2.2 Recommendations to be Considered After the Completion of the Project

1. Enforcement of Laws and Regulations Through Strengthened Monitoring and Management by DWS
The Technical Standards are developed by the Project, and DWS has also developed several legislative documents including "the Prime Minister's Decree on Water Tariffs (2022)", "the Ministerial Order on Determination of Water Tariff Structure (2023)", and "Development of Corporate Plan Guidelines", among others. It is recommended that the DWS shall continue its effort to enforce and monitor the compliance of these laws, regulations, and rules throughout the country by providing guidance to relevant parties, including the DPWTs and WSSEs.
2. Development of Sustainable Mechanism for Continuous Capacity Building of WSSEs
The Project carried out several initiatives to strengthen operational capacity of WSSEs through different SCs under Output 4. The Project has also gained experience in providing guidance to WSSEs nationwide, mainly through the resource persons from three pilot WSSEs (NPNL, NPLP, and NPKM). In order to sustain effects of the Project, it is suggested to develop a mechanism and structure for sustainable capacity building for WSSEs nationwide, for instance, through collaboration with the LWWA and incorporation of SC activities of MaWaSU2 into the LWWA.
3. Information Sharing Between DPWTs and WSSEs in Planning Process of Waterworks Facility Development
Drawing from experiences of pilot projects of Output 2, it is suggested for DPWTs and WSSEs, under supervision of DWS, to reflect water demand and technical/financial viability of water services on water facility development plan.

5.3 Lessons Learned

The following lessons were drawn from the findings of the terminal evaluation:

1. **Effective Use of Local Human Resources in Areas Where There are Some Restrictions on Visits by Japanese Experts**
In implementing the pilot project, there were areas and periods when Japanese experts could not visit directly due to security reasons and travel restrictions imposed by the COVID-19 pandemic. Under these circumstances, local members were dispatched as "Pilot Project Construction Supervision Supporters (PPCSS)" to follow up on the construction management of the pilot project. This not only lead to the capacity building of PPCSS members, but also enabled the Project to remotely and effectively manage the progress of the pilot project.
2. **Utilization of Local Human Resources with Experience in Administrative Decision-Making Processes**
In support for strengthening water supply administration, such as development of legislative documents and the Fund, it is useful to utilize local human resources who have good knowledge and understanding of the decision-making process and the legal framework of water supply administration in the counterpart country.
3. **Confirmation of Positioning of Project Products within the Counterpart Legislative Structure and Its Approval Procedures**
For cooperation on development of the Technical Standards and strengthening of water supply administration, it is effective to clarify at what level the products are legally positioned in the counterpart government, and to confirm the necessary approval procedures with the counterpart government in advance.
4. **Translation of Technical Terms into Local Language**
In preparing the Technical Standards, it took time to confirm their contents due to the lack of a unified technical terminology in the local language. Therefore, it is necessary to ensure sufficient time for its preparation and internal confirmation procedures.

Title of the Project: 'The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)'

Project Area: Vientiane Capital, Provinces of Luang Prabang, Khammouane and others

Duration of the Project: 5 years and 7 months (May 2018 – December 2023)

Executing Organization: Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT) of Lao PDR

Implementing Organizations: DWS of MPWT, Vientiane Capital Water Supply State Enterprise (NPPL), Luang Prabang Provincial Water Supply State Enterprise (NPLB) and Khammouane Provincial Water Supply State Enterprise (NPKM) as the pilot water supply state enterprises (WSSEs), Department of Public Works and Transport (DPWT) of Vientiane Capital, Luang Prabang, Khammouane and WSSEs and DPWTs of other provinces

Direct Beneficiaries: Staff of: DWS of MPWT; WSSEs (NPPL, NPLB, NPKM, and other provinces); and DPWTs of Vientiane Capital, Luang Prabang, Khammouane and other provinces

Indirect Beneficiaries: People living in the water supply areas of the pilot and other WSSEs

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<Overall Goal> The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.	a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part. b. The Lao government implements necessary improvements to realize the fund plan in whole or in part. c. Activities of national dissemination for water supply management promotion and improvement are continuously practiced based on MaWaSU2 dissemination activity by LWWA.	a. Implementation reports regarding PDCDS b. Implementation reports of necessary improvement for the fund plan. c. Activity report of LWWA	

Annex 1



<Project Purpose> The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.	a. The Lao government takes action toward implementation of PDCDS. b. DWS discusses the fund plan with MPWT multiple times, and sort out the issues for realization. c. Implementation of WSSEs' water supply projects based on the PDCA¹ cycle is promoted.	a. Documents of PDCDS. b. Consultation documents of the fund plan with MPWT. c. Documents related to budget and settlement of WSSEs.²	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans supported by the Project.
<Outputs> 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.	1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. 1b. The fund plan is drafted in DWS. 1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU³ are utilized.⁴	1a. PDCDS document. 1b. Fund plan. 1c. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans supported by the Project.
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.	2a. The procedures for planning, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guidelines, Implementation Guidelines, are developed. 2c. At least five pilot projects completed and are evaluated. 2d. Lessons learned from pilot projects are reflected on the fund as well as other procedures of the Lao government.	2a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 2b. Guideline documents. 2c. Project completion / Evaluation reports of pilot projects. 2d. Fund Plan.	

¹ Plan-Do-Check-Action (PDCA)

² Water supply business summary (Plan and budget), settlement and annual report.

³ The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)

⁴ Purpose of those strategies and guidelines are as follows:

WSS known as "strategy" is to show national direction of water supply management being formulated by DWS.

PWSS also known as "strategy" is to show provincial direction of water supply management formulated by DPWTs.

WSG is for self-analysis and goal setting by quantifying and quantitatively evaluating the management of water utilities based on performance indicators (PIs).
WSAR is to capture the water supply management situation at the provincial level which is made by WSSEs every year.

3. Technical standards necessary for water supply service are developed.	3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report. 3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	3a. As-built drawing/ design report, technical standards. 3b. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	Project counterparts are assigned by the commencement of respective activities.
4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.	4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved. 4b. DP supported by MaWaSU is utilized. 4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP supported by MaWaSU. 4d. The activities of MaWaSU Sub-Committees are continued by LWWA under supervision of DWS.	4a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 4b. Activity reports of DP. 4c. Mini-workshop reports and budget document of WSSEs. 4d. Activity report of LWWA	
<Activities>			
1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains.			
1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps.			
1-1-2. Review the current institutional effectiveness in terms of TAG.			
1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations.			
1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarding institution/governance and undertake the studies.			
1-1-5. Share an Overall Institutional Development Strategy (OIDS) including recommendations with the concerned organizations.			
1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS such as licensing, PPP, technical/financial monitoring of WSSEs and private water service providers.			
<Inputs> Lao Side 1. Project personnel 1) Project Adviser Advisor to the Minister of Public Works and Transport 2) Project Director Director General, DWS, MPWT 3) Project Manager Deputy Director General, DWS, MPWT 4) CPs			

1-2. By initiative of DWS, undertake the following activities to review current government ability of the prioritized issues identified in 1-1-6 in cooperation with the concerned organization including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments. 1-2-1 Review the current situations of the priority domain. 1-2-2 Review the current mandates of laws and regulations regarding the priority domain. 1-2-3. Review the current institutional effectiveness in terms of TAG. 1-2-4. Undertake workshops to share the review results of 1-2-1, 1-2-2 and 1-2-3 at DWS. 1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study. 1-3. DWS formulates PDCDS. 1-3-1. Make a draft of PDCDS. 1-3-2. Discuss the draft among IRC. 1-3-3. Undertake workshops for dissemination and feedback of the draft. 1-3-4. DWS finalizes PDCDS. 1-3-5. DWS implements some of institutional improvement and/or capacity development of PDCDS. 1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities: 1-4-1. Define a scope of required capacities and its level for management of the fund. 1-4-2. Extract lessons learned from pilot projects conducted in 2-2. 1-4-3. Define key elements to achieve TAG. 1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and undertake specific target studies	2. Land, buildings, facilities necessary for the implementation of the Project, including office spaces for Japanese Expert team and a meeting room at the DWS and the pilot WSSEs. 3. Running expenses.	
Japanese Side 1. Japanese Experts (1) Long-term experts Chief Advisor Sub-Chief Advisor (water supply management) Project Coordinator Water supply technique/Construction Supervision (2) Short-term Experts 1) Institution 2) Financial Management 3) Design/Construction Management 4) Civil Works 1 (Technical		

1-4-5. Design the complete procedures for the entire cycle of the fund management. 1-5. Propose the funding mechanism. 1-5-1. Define target level for urban self-sufficiency and rural subsidization. 1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.). 1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis 1-5-4. Propose an overall funding mechanism. 1-6. DWS finalizes the fund plan. 1-6-1. Combine fund framework and funding mechanism discussed on 1-4 and 1-5. 1-6-2. Make a draft proposal for establishment of the fund. 1-6-3. Discuss the draft proposal among all the stakeholders. 1-6-4. Undertake workshops for promotion of understanding and feedback of the draft proposal. 1-6-5. DWS discuss the draft with related organization in MPWT and arrange the issues. 1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Annual Report (WSAR) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated. 1-7-2. WSG is revised. 1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR. 1-7-4. DWS updates WSAR. 1-7-5. DWS revises WSS. 1-7-6. DPWTs make PWSS based on revised WSS.	standards) 5) Civil Works 2 (Planning) 6) Water Quality 7) Finance (3) Equipment - Vehicles - Water quality examination equipment - Automatic chemical injection equipment - Water distribution pipes and machines to construct pipelines - Other equipment as necessary	
	(4) Training in Japan 1) Following six (6) courses are expected. a. Role division of water supply sector b. Water Works Association c. Planning and Finance	

2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects. 2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs. 2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects. 2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment – implementation – monitoring – evaluation. 2-1-4. PPTT prepares procedures for developing proposals.⁵ 2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure. 2-2. Implement the pilot projects. 2-2-1 DWS holds briefing sessions for all WSSEs for application. 2-2-2 WSSEs in consultation with DPWTs prepare and submit proposals to DWS. 2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects. 2-2-4 DWS evaluates the proposals to select provinces to implement and informs all the provinces about the selection results. 2-2-5 Selected WSSEs in consultation with DPWTs prepare detailed design and BOQ for procurement. 2-2-6 DWS enters into a contract with the DPWTs and WSSEs for the pilot projects. 2-2-7 Implementing WSSEs in consultation with DPWTs carry out supervision for pilot projects. 2-2-8 Implementing WSSEs in consultation with DPWTs submit mid-term and completion reports of pilot projects to DWS.	d. Water quality management e. Technical standard f. Construction supervision 2) Duration Approximately one (1) to three (3) weeks in each course 3) Participants Approximately seven (7) members in each course. (Example- DWS:1, NPNL:2, NPLP:2, NPKM:2)	
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⁵ PPTT considers consistency with guidelines made with MaWaSU as a precondition of the procedures.

2-2-9 DWS and DPWTs monitor the progress of pilot projects and advise WSSEs as necessary. 2-2-10 Construction supervision supporters visit pilot project sites in charge approximately once a month to advise including Japanese expert comments on construction management. 2-2-11 DWS approves the project completion reports.	
2-3. Review the system for implementing the pilot projects. 2-3-1. DWS implements ex-post evaluation of pilot projects. 2-3-2. DWS reviews pilot projects implementation and reflect the fund plan of Output1. 2-4. Implement supporting activities related to COVID-19 prevention partly utilizing the Pilot Project scheme.	
2-5. DWS develops Proposal Development Guidelines and Construction Implementation Guidelines.	
3-1. Necessary Task Team for Technical Standard is formed at DWS, DPWT and WSSEs and the priority and the scope of the standard are determined. 3-1-1. Standard Task Team (STT) is formed at DWS, DPWTs and WSSEs to consider and formulate technical standards. 3-1-2. Priority for technical standards is determined. 3-1-3. Based on the priority order, STT discusses and determines the scope of standards.	
3-2 Necessary committees/task teams for official approval are organized to develop the determined priority technical standards. 3-2-1. Establish Technical Standard Committee (TSC) for official approval of the technical standards consisting of DWS, DPWTs and WSSEs.	

3-2-2. Establish Ministerial Ordinance Task team (MTT) consisting of DWS. 3-3 Develop and submit the priority technical standards. 3-3-1. MTT develops a draft technical standard (Ministerial Ordinance). 3-3-2. TSC reviews the draft technical standard (Ministerial Ordinance). 3-3-3. TSC submits the draft technical standard (Ministerial Ordinance) to MPWT. 3-3-4. STT develop a draft technical standard (Criteria). 3-3-5. TSC reviews the draft technical standard (Criteria). 3-3-6 STT submits the draft technical standard (Criteria). 3-4 Technical Standard is disseminated. 3-4-1. TSC discusses and decides dissemination methods of the technical standard for DPWTs and WSSEs nationwide. 3-4-2. Implement the dissemination methods of the technical standard. 3-5. Discuss and decide next priority scope of technical standard other than those developed and submitted in activity 3-3. 4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved. 4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development. 4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project. 4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and assessed	
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their capacity. 4-1-4. JICA Experts provide guidance to those trainers. 4-1-5. Re-evaluate the capacity of the trainers of the pilot WSSEs. 4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented. 4-2-1. DP is reviewed. 4-2-2. Based on the review, DP is implemented. 4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated. 4-2-4. Activities are carried out based on the DP of the latter half of the project. 4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWWA activities. 4-3. Activities of MaWaSU Sub-Committee are promoted. 4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee. 4-3-2. The pilot WSSEs reorganize MaWaSU Sub-Committees according to the current situation. 4-3-3. The pilot WSSEs hold the MaWaSU Sub-Committee approximately four to six times a year. 4-3-4. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee. 4-4. National Framework of Water Quality Management is strengthened. 4-4-1. Review the current situation of water quality management of WSSEs. 4-4-2. Develop a plan of National Framework of Water Quality Examination. 4-4-3. Implement the plan of National Framework of Water Quality Examination with equipment provided.		
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4-4-4. Improve water quality management of WSSEs nationwide. 4-5. WSSEs establish the Lao Water Works Association (LWWA) and implement activities. 4-5-1. WSSEs prepare establishment of LWWA. 4-5-2. WSSEs establish LWWA. 4-5-3. LWWA implements activities. 4-5-4. LWWA discusses continuation of MaWaSU2 activities after the end of the project. 4-5-5. LWWA takes over some activities from the project. 4-6. WSSEs implement handwashing promotion activities for COVID-19 prevention through waterworks education class.		
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Annex 2 Lists of Inputs

List of Japanese Experts Allocated to MaWaSU2

Duration: May 2018 - Dec. 2023

Long Term Experts

No.	Name 氏名	Designation 担当分野	Period 派遣期間	Period (from)	Period (to)	Duration 派遣日数(MM)
1	Mr. Keisuke Sonoda 園田 圭佑	Chief Adviser チーフアドバイザー	21 May 2018 ~ 28 May 2021	21-May-18	28-May-21	36.2 Month(s)
2	Mr. Tomokazu Ishikawa 石川 智一	Chief Adviser チーフアドバイザー	09 May 2021 ~ 20 Dec. 2023	9-May-21	20-Dec-23	31.4 Month(s)
3	Mr. Daisuke Masugata 升潟 大介	Sub-chief Advisor/Water Supply Technique サブチーフアドバイザー／水道技術	21 May 2018 ~ 27 Dec. 2020	21-May-18	27-Dec-20	31.2 Month(s)
4	Mr. Atsushi Nozawa 野澤 敦司	Sub-chief Advisor/Water Supply Technique サブチーフアドバイザー／水道技術	14 Nov. 2020 ~ 20 Dec. 2023	14-Nov-20	20-Dec-23	37.2 Month(s)
5	Mr. Nobutaka Maruyama 丸山 伸孝	Water Supply Technique / Construction Supervision 水道技術／施工監理	01 Aug. 2021 ~ 28 Jan. 2022	1-Aug-21	28-Jan-22	5.9 Month(s)
6	Mr. Yusuke Kinoshita 木下 雄介	Project Coordinator 業務調整	14 Oct. 2018 ~ 20 Dec. 2023	14-Oct-18	20-Dec-23	62.2 Month(s)

Short Term Japanese Experts

No.	Name (氏名)	Designation (担当分野)	Period (派遣期間)	Period (from)	Period (to)	Duration (派遣期間: 月)
FY 2018						
1	Mr. Tomokazu Ishikawa 石川 智一	Civil Engineering 土木	15 Oct. 2018 ~ 14 Dec. 2018	15-Oct-18	14-Dec-18	2.0 Month(s)
2	Mr. Takashi Niwa 丹羽 隆	Finance 財政	15 Oct. 2018 ~ 30 Nov. 2018	15-Oct-18	30-Nov-18	1.5 Month(s)
3	Mr. Takaaki Kusakabe 日下部 貴章	Civil Engineering 土木	14 Jan. 2019 ~ 16 Mar. 2019	14-Jan-19	16-Mar-19	2.1 Month(s)
4	Mr. Hisayoshi Utsugi 宇津木 久芳	Water Quality 水質	21 Jan. 2019 ~ 20 Feb. 2019	21-Jan-19	20-Feb-19	1.0 Month(s)

FY 2019

5	Dr. Daiki Fujise 藤瀬 大輝	Water Quality 水質	10 Jun. 2019 ~ 07 Sep. 2019	10-Jun-19	7-Sep-19	2.9 Month(s)
6	Mr. Akihisa Noguchi 野口 明久	Civil Engineering 土木	17 Jun. 2019 ~ 14 Sep. 2019	17-Jun-19	14-Sep-19	2.9 Month(s)
7	Mr. Takashi Tokunaga 徳永 隆	Finance 財政	05 Aug. 2019 ~ 04 Oct. 2019	5-Aug-19	4-Oct-19	2.0 Month(s)
8	Mr. Yasumasa Yamauchi 山内 康正	Facility 設備	05 Aug. 2019 ~ 14 Sep. 2019	5-Aug-19	14-Sep-19	1.3 Month(s)
9	Mr. Akihiro Takeda 竹田 明弘	Facility 設備	09 Sep. 2019 ~ 19 Oct. 2019	9-Sep-19	19-Oct-19	1.3 Month(s)
10	Mr. Akihisa Ueda 上田 晶久	Civil Engineering 土木	16 Sep. 2019 ~ 14 Dec. 2019	16-Sep-19	14-Dec-19	2.9 Month(s)
11	Mr. Akiyoshi Fujimura 藤村 明良	Water Quality 水質	04 Nov. 2019 ~ 14 Dec. 2019	4-Nov-19	14-Dec-19	1.3 Month(s)
12	Mr. Kiyotaka Suzuki 鈴木 清貴	Finance 財政	07 Dec. 2019 ~ 05 Mar. 2020	7-Dec-19	5-Mar-20	2.9 Month(s)
13	Mr. Koji Nakamura 中村 浩二	Water Quality 水質	06 Jan. 2020 ~ 21 Mar. 2020	6-Jan-20	21-Mar-20	2.5 Month(s)

FY 2022

14	Mr. Ryuta Ochi 越智 龍太	Water Supply Technique / Construction Supervision 水道技術／施工監理	01 May 2022 ~ 02 Jun. 2022	1-May-22	2-Jun-22	1.0 Month(s)
15	Mr. Takaaki Kusakabe 日下部 貴章	Water Supply Technique / Construction Supervision 水道技術／施工監理	29 May 2022 ~ 15 Jul. 2022	29-May-22	15-Jul-22	1.5 Month(s)
16	Mr. Hiroaki Nakamura 中村 宏明	Water Supply Technique / Construction Supervision 水道技術／施工監理	09 Jul. 2022 ~ 26 Aug. 2022	9-Jul-22	26-Aug-22	1.6 Month(s)
17	Mr. Koki Hamaguchi 浜口 浩氣	Finance 財政	06 Aug. 2022 ~ 23 Sep. 2022	6-Aug-22	23-Sep-22	1.6 Month(s)
18	Mr. Yuki Hayashi 林 佑樹	Water Supply Technique / Construction Supervision 水道技術／施工監理	18 Aug. 2022 ~ 07 Oct. 2022	18-Aug-22	7-Oct-22	1.6 Month(s)
19	Mr. Takashi Saiki 佐伯 孝志	Water Supply Technical Standards 水道技術基準	15 Nov. 2022 ~ 15 Mar. 2023	15-Nov-22	15-Mar-23	4.0 Month(s)
20	Mr. Kiyotaka Suzuki 鈴木 清貴	Finance 財政	05 Jan. 2023 ~ 25 Mar. 2023	5-Jan-23	25-Mar-23	2.7 Month(s)
21	Mr. Naofumi Imasaka 今坂 直史	Water Supply Technique / Construction Supervision 水道技術／施工監理	05 Jan. 2023 ~ 19 Feb. 2023	5-Jan-23	19-Feb-23	1.5 Month(s)
22	Mr. Naoki Hamano 濱野 直樹	Water Supply Technique / Construction Supervision 水道技術／施工監理	06 Feb. 2023 ~ 25 Mar. 2023	6-Feb-23	25-Mar-23	1.6 Month(s)
SHORT TERM EXPERTS: TOTAL DURATION						43.7 Month(s)
SHORT TERM EXPERTS: TOTAL NUMBER of EXPERTS						22 Persons

Experts dispatched under the consultant contracts

No.	Name 氏名	Designation 担当分野	Contract Period 契約期間	Assignment in Lao PDR (M/M)	Assignment in Japan (M/M)	Number of visit to Lao PDR
1	Mr. Toru Toyota 豊田 徹	Design, Supervising, Institution Building support (Output 2) 設計・施工監理・制度構築支援 (Output2)	13 Mar 2019 ~ 15 Mar 2022	5.03	12.0	3 times
2	Mr. Hiroyuki Morita 森田 裕之					
3	Mr. Hiroshi Nishimaki 西牧 宏	Team Leader/Institutinal Expert (Output1) 総括／制度改善 (Output 1)	Phase I: 27 Sept 2018 ~ 31 July 2020	5.30	1.85	8 times
4	Mr. Keita Inoue 井上 慶太	Water Sector Development Fund (Output1) 水道セクター開発基金 (Output1)		4.20	0.35	9 times
5	Mr. Hiroshi Nishimaki 西牧 宏	Team Leader/Institutinal Expert (Output1) 総括／制度改善 (Output 1)	Phase II: 16 Nov 2020 ~ 28 Feb 2022	1.87	1.45	3 times
6	Mr. Keita Inoue 井上 慶太	Water Sector Development Fund (Output1) 水道セクター開発基金 (Output1)		1.83	1.25	3 times
Experts assigned under the consultant contracts TOTAL (in Months)				18.23	16.90	35.1 M/M

List of Training in Japan and third country

Training in Japan and third country 本邦研修・第三国研修

No.	Name of Training 研修コース名	Period	Period (from)	Period (to)	Duration	No. of participants 組織名(参加者数)
FY2019						
1	Waterworks Administration/Division of Roles in Water Supply Sector 水道行政のあり方／水道セクターの役割分担	17-24 Aug. 2019	2019/8/17	2019/8/24	0.2 Month(s)	6 persons (DWS/MPWT (3), DPWT-LP (1), NPLP (1), LWWA (1))
2	Roles and activities of Water Works Association 水道協会の役割と活動	02-11 Feb. 2020	2020/2/2	2020/2/11	0.3 Month(s)	6 persons (DWS/MPWT (1), NPNL (3), NPLP (1), NPKM (1))
-	8th Project to Project Meeting in Cambodia 第8回プロジェクト間 (P2P) 会議 (カンボジア)	10 -12 Feb. 2020	2020/2/10	2020/2/12	0.1 Month(s)	4 persons (DWS/MPWT (4))
FY2022						
4	Water Quality Management 水質管理	27 Jan. - 10 Feb. 2023	2023/1/27	2023/2/10	0.4 Month(s)	7 persons (DWS/MPWT (1), NPNL (2), NPLP (2), NPKM (2))
FY2023						
	Planning and Finance in Waterworks Operation 水道事業における計画・財政	26 Jun. - 06 Jul. 2023	2023/6/26	2023/7/6	0.3 Month(s)	9 persons (DWS/MPWT (2), NPNL (3), NPLP (2), NPKM (2))
Training TOTAL (in Months)					-	28 persons

List of Equipment procured for the Project

Duration of Review: May 2018 ~ May 2023

No.	NAME (Specification)	Model	Maker	Qty	Total Price (US\$)	Date of Arrival	Installed at:
FY2018							
FY2019							
1	Vehicle	HIACE	TOYOTA	1	\$31,000.00	May. 2020	Ministry of Public Works and Transport
2	Walking measure	B-20S	TOKYO RASONIC	3	US\$445.50	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
3	Measure	SGR12-50	MURATEC-KDS	3	US\$264.00	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
4	Aluminum staff	M-33FZ	TAIHEI-SANGYO	3	US\$297.00	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
5	Water pressure tester	T-50K-P	KYOWA	3	US\$759.00	Jan. 2022	NP-SLN, NP-PSY, NP-BKX
6	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	-	US\$4,551.39	Mar. 2020	NP-SLN
7	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	-	US\$1,708.97	Mar. 2020	NP-PSY
8	Concrete cutter and blade	14"	MARTON	2	US\$2,584.62	Mar. 2020	NP-PSY
9	Pipe and fittings for Pilot Project 1st batch	-	TOYO, Fish	-	US\$64,936.16	Mar. 2020	Vapi District, Salavan Province
10	Construction materials (sand, etc.) for Pilot Project 1st batch	-	-	-		Mar. 2020 Jul. 2020	Vapi District, Salavan Province
11	Pipe and fittings for Pilot Project 1st batch	-	-	-	US\$60,767.28	Feb. 2020	Phongsaly Dist. Phongsaly Province
12	Construction materials (sand, etc.) for Pilot Project 1st batch	-	-	-	US\$28,130.29	Feb. 2020	Phongsaly Dist. Phongsaly Province
13	uPVC pipe for Pilot Project 1st batch	-	-	1,338m	US\$7,236.03	Oct. 2020	Vapi District, Salavan Province
14	Portable spectrophotometer Power module for HACH 1900	DR1900 LZV813	HACH	18	US\$99,990.00	Mar. 2021	18 WSSEs
15	Turbidity (EPA) Portable Meter	HI98703-02	HANNA	18	US\$30,024.00	Jun.2021	18 WSSEs
16	Color of water portable Photometer	HI97727C	HANNA	18	US\$13,014.00	Jun.2021	18 WSSEs
17	pH meter	LAQUAtwin pH-11	HORIBA	18	US\$4,914.00	Jun.2021	18 WSSEs
18	Conductivity meter	LAQUAtwin EC-11	HORIBA	18	US\$4,914.00	Jun.2021	18 WSSEs
19	Sodium Ion meter	LAQUAtwin Na-11	HORIBA	18	US\$12,474.00	Jun.2021	18 WSSEs

20	Reagent for DR1900	-	HACH	14 kinds	US\$49,990.60	Jun.2021	18 WSSEs
21	Sentino Microbiology Pump for E. coli test equipment	No.13186	PALL	18	US\$50,400.00	Jun.2021	18 WSSEs
22	Sentino Magnetic Filter Funnel, 150ml, 47mm for E. coli test equipment	No.4271	PALL	18	US\$2,628.00	Jun.2021	18 WSSEs
23	Sentino Pump Magnetic Funnel Adapter for E. coli test equipment	No.4283	PALL	18	US\$6,300.00	Jun.2021	18 WSSEs
24	GN-6 Metrcel MCE Membrane Disc Filters for E. coli test equipment	No.66265	PALL	18	US\$7,506.00	Jun.2021	18 WSSEs
25	Petri Dishes for E. coli test equipment	No.7245	PALL	18	US\$3,006.00	Jun.2021	18 WSSEs
26	2ml Plastic Ampules for E. coli test equipment	No.4302	PALL	18	US\$4,104.00	Jun.2021	18 WSSEs
27	Membrane tweezers for E. coli test equipment	No.4690	PALL	36	US\$5,796.00	Jun.2021	18 WSSEs
28	Incubator	No. IN30	Memmert	18	US\$29,340.00	Jun.2021	18 WSSEs
28	Arsenic Test Kit	-	-	18	US\$9,360.00	Jun.2021	18 WSSEs
30	Cold Vapor Mercury analysis apparatus set	No.2674400	HACH	3	US\$12,000.00	Jun.2021	NPNL, NPLP, NPKM
31	Laboratory vacuum pump for Cold Vapor Mercury analysis	-	HACH	3	US\$3,855.00	Jun.2021	NPNL, NPLP, NPKM
32	Digestion apparatus for Hg analysis (Hot plate with stirrer)	-	HACH	3	US\$3,855.00	Jun.2021	NPNL, NPLP, NPKM
33	Digestion reagent for Hg analysis	-	HACH	3	US\$1,665.00	Jun.2021	NPNL, NPLP, NPKM
34	Draft Chamber	No. MS-70 50H	Yamato Scientific	1	US\$10,000.00	Jun.2021	NPLP
35	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	-	US\$1,033.42	Jul. 2021	NP-BKX
36	On-line Meeting Equipment	BCC950	Logitech	12	US\$3,944.23	Jul.2021	DWS/MPWT
37	Video conferencing equipment for mid- to large-sized meeting rooms	Group	Logitech	1	US\$1,864.19	Aug.2021	DWS/MPWT
38	Portable Water Turbidity and Color Meter	WA-PT-4S	Kyomaru Chemical-Check Lab., Co., Ltd.	3	\$3,135.00	Sep. 2021	NP-SLN, NP-XKH, NP-SVK
39	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	Sibata scientific technology ltd.	3	\$1,287.00	Sep. 2021	NP-SLN, NP-XKH, NP-SVK
40	Generator for COVID-19 Special Activity	EG6500CX	HONDA	1	US\$1,872.32	Sep. 2021	NPKM
41	Cutter for COVID-19 Special Activity	5007NF (185mm)	MAKITA	2	US\$413.85	Sep. 2021	NPKM
42	Concrete cutter for COVID-19 Special Activity	16"	MARTON	2	US\$2,474.71	Sep. 2021	NPKM

43	Pump for COVID-19 Special Activity	Platinum V220F75mm	MINKEPUMP	2	US\$393.37	Sep. 2021	NPKM
44	Hose for COVID-19 Special Activity	3", 100m	Thairubber	1	US\$126.27	Sep. 2021	NPKM
45	Blade for concrete cutter for COVID-19 Special Activity	16"	MARTON	1	US\$884.56	Oct. 2021	NPKM
46	Construction safety items for Pilot Project 1st batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$11,944.87	Nov.2021	NPKM
47	Water supply facility (treatment plant and pipeline)	-	-	1	US\$103,192.27	Nov.2021	Paksan Dist. Bolikhamxay Province
48	Notebook PC for Pipeline maintenanc	VICTUS 16-d0105TX	HP	1	\$1,614.73	Nov. 2021	NP-BKX
49	GPS for Pipeline maintenance	LT700H Rugged GNSS RTK Tablet	CHC Navigation	1	\$3,500.00	Dec. 2021	NP-BKX
50	Surveying Camera for Pipeline maintenanc	Label NA322	Leica	1	\$850.00	Dec. 2021	NP-BKX
51	Unmanned Aerial Vehicle (Drone) for Pipeline maintenanc	AIR 2 Fly More Combo	MAVIC	1	\$1,300.00	Dec. 2021	NP-BKX
52	Backhoe loader	3DS Super 4x4	JCB	1	US\$99,950.00	Dec. 2021	NPKM
53	Excavator	KX080-3	KUBOTA	1	US\$91,741.10	Dec. 2021	NPKM
54	Dump Truck	NMR71L-EH5AYN	ISUZU	2	US\$84,000.00	Dec. 2021	NPKM
55	Plate Compactor	PC100	SAKAI	2	US\$7,000.00	Dec. 2021	NPKM
56	Walk-behind Roller	HS67ST	SAKAI	2	US\$43,000.00	Dec. 2021	NPKM
57	Rammer	RS45	SAKAI	2	US\$5,800.00	Dec. 2021	NPKM
58	Generator	DG15LDE/T	ROWEL	1	US\$5,172.04	Dec. 2021	NPKM
59	Pipe and fittings for COVID-19 Special Activity	-	-	1	US\$416,981.65	Dec. 2021	Thakhek Dist., Khammouane Province
60	Cement, Rebar, Floor Tiles, White Cement for COVID-19 Special Activity	50kg / bag 10m / bar 11pcs of tiles = 1 m2/box 1 kg / bag	SCG TATA STEEL CAMPANA CHALAWAN	1,923bags 835bars 530boxes 132bags	US\$13,493.79	Dec. 2021	Thakhek Dist., Khammouane Province
61	Gravel and Sand for COVID-19 Special Activity	-	-	306m3 10,285m3	US\$47,589.98	Dec. 2021	Thakhek Dist., Khammouane Province
62	Hydraulic butt-welding machine for COVID-19 Special Activity	-	Xaignavong Group Sole Co., Ltd.	2	US\$3,930.00	Dec. 2021	NPKM
63	Backfilling sand for COVID-19 Special Activity	-	-	1,989m3	US\$5,171.33	Dec. 2021	Thakhek Dist., Khammouane Province
64	Wood for COVID-19 Special Activity	2.5x20x400mm	-	18m3	US\$4,796.03	Dec. 2021	Thakhek Dist., Khammouane Province

65	Laterite compaction, Asphalt for COVID-19 Special Activity	-	-	75m3 180m2	US\$6,546.31	Dec. 2021	Thakhek Dist., Khammouane Province
66	Wire bundles and nails for COVID-19 Special Activity	-	-	107Kg 124Kg	US\$328.97	Dec. 2021	Thakhek Dist., Khammouane Province
67	Fittings for DMA in COVID-19 Special Activity	-	-	1	US\$8,543.80	Dec. 2021	Thakhek Dist., Khammouane Province
68	Electromagnetic Water Meter	SU080-KF-N	Aichi Tokei Denki	1	US\$2,312.00	Jan. 2022	Thakhek Dist., Khammouane Province
69	Electromagnetic Water Meter	SU100-KF-N	Aichi Tokei Denki	3	US\$7,620.00	Jan. 2022	Thakhek Dist., Khammouane Province
70	Electromagnetic Water Meter	SU150-KF-N	Aichi Tokei Denki	4	US\$13,520.00	Jan. 2022	Thakhek Dist., Khammouane Province
71	Electromagnetic Water Meter	SU200-KF-N	Aichi Tokei Denki	4	US\$15,028.00	Jan. 2022	Thakhek Dist., Khammouane Province
72	Wood for DMA in COVID-19 Special Activity	2.5x20x400	-	6m3	US\$1,547.91	Jan. 2022	Thakhek Dist., Khammouane Province
73	Cement, Rebar, Wire bundles, etc. for DMA in COVID-19 Special Activity	-	-	1	US\$2,324.17	Jan. 2022	Thakhek Dist., Khammouane Province
74	Pipe and fittings for COVID-19 Special Activity	-	-	1	US\$33,734.68	Jan. 2022	Anousone Dist., Xaysomboun Province
75	Electromagnetic Water meter for COVID-19 Special Activity	SU100-KF-N	Aichi Tokei Denki	1	US\$2,794.00	Jan. 2022	Anousone Dist., Xaysomboun Province
76	Electricity installation for COVID-19 Special Activity	-	-	1	US\$6,692.49	Jan. 2022	Anousone Dist., Xaysomboun Province
77	Transfer Pump for COVID-19 Special Activity	IR15-200B	SAER	2	US\$6,692.49	Jan. 2022	Anousone Dist., Xaysomboun Province
78	Gravel for COVID-19 Special Activity	-	-	60m3	US\$813.93	Jan. 2022	Anousone Dist., Xaysomboun Province
79	Walking measure for COVID-19 Special Activity	B-20S	TOKYO RASONIC	1	US\$209.00	Jan. 2022	Anousone Dist., Xaysomboun Province
80	Measure for COVID-19 Special Activity	SGR12-50	MURATEC- KDS	1	US\$121.00	Jan. 2022	Anousone Dist., Xaysomboun Province
81	Aluminum staff for COVID-19 Special Activity	M-33FZ	TAIHEI- SANGYO	1	US\$132.00	Jan. 2022	Anousone Dist., Xaysomboun Province
82	Water pressure tester for COVID-19 Special Activity	T-50K-P	KYOWA	1	US\$385.00	Jan. 2022	Anousone Dist., Xaysomboun Province
83	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	Sibata scientific technology ltd.	1 2	\$583.00	Jan. 2022	NP-BKX
84	pH Meter	LAQUAtwin pH-11	HORIBA	2	\$836.00	Jan. 2022	NP-BKX
85	Turbidity (EPA) Portable Meter	HI98703-02	HANNA	3	\$4,983.00	Jan. 2022	NP-BKX
86	Maintenance equipment and Control Panel material reserves of WTP	-	-	1	\$1,051.41	Jan. 2022	NP-BKX
87	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	Sibata scientific technology ltd.	3	\$1,287.00	Jan. 2022	NP-SLN, NP- BKX, NP-PSY

88	Automatic Chemical Feeding Turbidity and Chlorine Control	750m3/d (1) 1,500m3/d (2)	Tohkemy	3	\$432,500.00	Jan. 2022	NP-SLN, NP-XKH, NP-SVK
89	Control panel and related electrical equipment for COVID-19 Special Activity	-	-	1	US\$5,753.83	Feb. 2022	Anousone Dist., Xaysomboun Province
90	Wood for structure deformed, Wood related materials for COVID-19 Special Activity	26m3	-	19	US\$6,093.68	Feb. 2022	Anousone Dist., Xaysomboun Province
91	Construction safety items for COVID-19 Special Activity (Helmet, globe, vest, sign, etc.) for COVID-19 Special Activity	-	-	1	US\$1,582.77	Feb. 2022	Anousone Dist., Xaysomboun Province
92	Vehicle	HIACE	TOYOTA	1	\$34,200.00	Feb. 2022	Ministry of Public Works and Transport
93	Projector	EB-1795F	EPSON	17	\$22,100.00	Feb. 2022	DWS/MPWT, 15 Provinces, LWWA
94	Truck with crane (5t)	FVR34UL-PDN	ISUZU	2	US\$280,000.00	Mar.2022	NPKM
95	Excavator carrier truck	FVR34UL-PDN	ISUZU	1	US\$88,500.00	Mar.2022	NPKM
96	Electromagnetic Water Meter	SU300-KF-N	Aichi Tokei Denki	1	US\$6,550.00	Mar.2022	Thakhek Dist., Khammouane Province
97	Residual Chlorine measurement kit / DPD reagent (500 packages of reagent)	080540-521 080540-503	scientific technology Ltd	18 18	US\$7,722.00	Mar.2022	18 WSSEs
98	Portable Water Pressure Recorder	FJN-501 (1.0MPa, A type)	Fujitecom	2	US\$3,252.00	Mar.2022	NP-PSY, NP-XKH
99	Protable water test meter kit	TR-IV	Aichi Tokei Denki	18	US\$53,100.00	Mar.2022	10 Provinces/Capital
100	Walking measure	B-20S	TOKYO RASONIC	3	US\$609.90	Aug. 2022	NP-XKH, NP-PSY, NP-XYB
101	Measure	SGR12-50	MURATEC-KDS	3	US\$353.10	Aug. 2023	NP-XKH, NP-PSY, NP-XYB
102	Aluminum staff	M-33FZ	TAIHEI-SANGYO	3	US\$385.20	Aug. 2023	NP-XKH, NP-PSY, NP-XYB
103	Water pressure tester	T-50K-P	KYOWA	3	US\$1,123.50	Aug. 2023	NP-XKH, NP-PSY, NP-XYB
104	Portable Water Pressure Recorder	FJN-501 (1.0MPa, A type)	Fujitecom	3	US\$4,878.00	Sep. 2023	NP-PSY, NP-XKH
105	Walking measure	B-20S	TOKYO RASONIC	3	US\$609.90	Oct. 2022	LWWA
106	Measure	SGR12-50	MURATEC-KDS	3	US\$353.10	Oct. 2022	LWWA
107	Aluminum staff	M-33FZ	TAIHEI-SANGYO	3	US\$385.20	Oct. 2022	LWWA
108	Water pressure tester	T-50K-P	KYOWA	3	US\$1,123.50	Oct. 2022	LWWA
109	Reagent for DR1900	-	HACH	9 kinds	US\$22,985.12	Dec. 2022	18 WSSEs
110	Reagent for E coli	-	PALL	2 kinds	US\$10,033.20	Dec. 2022	18 WSSEs
111	Cold asphalt and Asphalt	PREMIX MC70	-	656bags 1can	US\$4,526.02	Dec. 2022	NP-XKH

112	Construction safety items for Pilot Project 2nd batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$1,924.26	Dec. 2022	NP-XKH
113	Construction safety items for Pilot Project 2nd batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$1,362.51	Dec. 2022	NP-XYB
114	Construction safety items for Pilot Project 2nd batch (Helmet, globe, vest, sign, etc.)	-	-	1	US\$1,706.20	Dec. 2022	NP-PSY
115	Electric iron cutter	14"	BERALA	1	US\$72.00	Dec. 2022	NP-PSY
116	Open-end wrench and Socket wrench set	-	-	1 each	US\$52.00	Dec. 2022	NP-PSY
117	Generator	6500 (5KVA)	-	1	US\$715.00	Dec. 2022	NP-PSY
118	Concrete cutter	-	HONDA	1	US\$885.00	Dec. 2022	NP-PSY
119	Rammer	RS75	SAKAI	1	US\$3,500.00	Dec. 2022	NP-PSY
120	Concrete breaker	-	HITACHI	2	US\$800.00	Dec. 2022	NP-PSY
121	Threading machine for GSP	15mm-75mm	-	1	US\$1,450.00	Dec. 2022	NP-PSY
122	Welding machine for GSP	-	-	1	US\$129.00	Dec. 2022	NP-PSY
123	Iron bar for opening iron tab, Pick, Hoe, Scoop, Small hammer, Hammer, Extension cord	-	-	-	US\$211.00	Dec. 2022	NP-PSY
124	Water meter	-	Aichi Tokei Denki	150	US\$4,173.00	Dec. 2022	NP-PSY
125	Pipe and fittings for Pilot Project 2nd batch	-	-	1	US\$54,496.56	Dec. 2022	Mai Dist. Phongsaly Province
126	Pipe and fittings for Pilot Project 2nd batch	-	-	1	US\$113,742.59	Jan. 2023	Khoun Dist. Xiengkhouang Province
127	Pipe and fittings for Pilot Project 2nd batch	-	-	1	US\$103,941.21	Jan. 2023	Xayabouly Dist. Xayabouly Province
128	Pipe guidance picket	-	-	120	US\$447.25	Feb. 2023	Mai Dist. Phongsaly Province
129	Reagent for DR1900	-	HACH	3 kinds	US\$11,718.00	Feb. 2023	18 WSSEs
TOTAL (in US\$)					US\$2,944,404.31		

List of Counterparts Assigned

Duration of Review: May 2018 ~ May 2023

Duration of Review: May 2018 ~ May 2023

#	Name	Title, Department/Designation	From	To
A. Ministry of Public Works and Transport (Project Management)				
1	Mr. Phomma Veoravanh	(Project Director) Director General, Department of Water Supply, MPWT	May-18	Mar-20
2	Mr. Sompong Sitthivong	(Project Director) Director General, Department of Water Supply, MPWT	Mar-20	Present
3	Mr. Khanthone Vorachith	(Project Director) Deputy Director General, Department of Water Supply, MPWT	May-18	Jan-23
4	Ms. Vilaphone Kattiyasack	(Project Director) Deputy Director, Sanitation Division, Department of Water Supply	Jan-23	Present
5	Ms. Phoungern Phommalath	(Project Coordinator) Technical Engineer, ADB Project	May-18	
6	Mr. Phouthong Phasavanh	(Project Coordinator) Deputy Director, Water Supply Division, Department of Water Supply, MPWT		Present
B. Output1				
Institutional Review Committee (IRC)				
1	Mr. Vanhsaveng Outthachack	Deputy Director General, Department of Water Supply, MPWT	03/2022	Present
2	Ms. Phouvanh Sengboulath	Director, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 9 members from DWS/MPWT, Department of Personnel, Planning and Finance/MPWT, MPI, MoHA, DPWT-NL, LP, KM		2019	Present
OIDS/PDCDS Sub-committee				
1	Mr. Sengsavath Sidlakhone	Director, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	
2	Ms. Soukphaivanh Saiyavanh	Deputy Director, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 3 members from Administration-Personnel and Planning Division, Department of Water Supply, MPWT		03/2023	Present
Fund Framework Committee (FFC)				
1	Mr. Saleumsak Sayamoungkhoun	Deputy Director General, Department of Water Supply, MPWT	03/2022	
2	Mr. Khamphouvong Sikholom	Director, Water Supply and Sanitation Regulatory Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 10 members from DWS/MPWT, Department of Personnel, Planning and Finance/MPWT, MOF, MoHA, DPWT-NL, LP, KM		2019	Present
Fund Sub-committee				
1	Ms. Chanpasert Thongsisavanh	Director, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Suvannaseng Xaymonti	Deputy Director, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	Present
3	Mr. Xayasith Chanthaphone	Deputy Director, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 2 members from Administration-Personnel and Planning Division, Department of Water Supply, MPWT		03/2022	Present
Strategy Sub-committee (Water supply)				
1	Ms. Phouvanh Sengboulath	Director, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Phouthong Phasavanh	Deputy Director, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present

#	Name	Title, Department/Designation	From	To
-	Other 4 members from Water Supply Division, Department of Water Supply, MPWT		03/2022	Present
	Strategy Sub-committee (Sanitation)			
1	Mr. Xaysana Saphakdee	Director, Sanitation Division, Department of Water Supply, MPWT	03/2022	Present
2	Ms. Vilaphone Kattiyasack	Deputy Director, Sanitation Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 2 members from Water Supply Division, Department of Water Supply, MPWT		03/2022	Present
B. Output2				
	Pilot Project Evaluation Committee (PPEC)			
1	Mr. Khanthone Vorachith	Deputy Director General, Department of Water Supply, MPWT	2019	Present
2	Ms. Vilavanh Silasack	Director of Division, Department of Evaluation, MPI	2019	Present
-	Other 5 members from DWS/MPWT, Department of Personnel, Planning and Finance/MPWT, MOF		2019	Present
	Pilot Project Task Team (PPTT)			
1	Mr. Vilakone Xayasene	Director, Inspection Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Vorasith Dengkayaphichith	Deputy Director, Inspection Division, Department of Water Supply, MPWT	03/2022	Present
3	Mr. Khonesavanh Vinavong	Deputy Director, Inspection Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 3 members from Inspection Division and Water Supply Division, Department of Water Supply, MPWT		2019	Present
	Pilot Project Construction Supervision Supporters			
1	Mr. Somchai Indavong	Technical Engineer, Water Supply Division, Department of Water Supply, MPWT	15-Oct-2019	Present
2	Mr. Kikeo Vongdala	Deputy Head of Technical Unit, NPPL	15-Oct-2019	Present
3	Mr. Sombandith Soudkhanueng	Staff of the Project for the Expansion of Water Supply Systems in Luang Prabang City, NPLP	15-Oct-2019	Present
4	Mr. Saykham Vongpady	Deputy Head of Technical Section, NPKM	15-Oct-2019	Present
5	Mr. Siwanna Liako	Staff, Housing and Urban Planning Division, DPWT-XSB	2020	Present
6	Mr. Bounpheng Douangmany	Staff in charge of Pipeline&Water Meter Management, Technical Engineering Section, NP-XSB	2020	Present
7	Mr. Chanpheng Douangchansi	Staff in charge of Pipeline&Water Meter Management, Technical Engineering Section, NP-XSB	2020	Present
8	Mr. Mong Fongsinouan	Staff, Water Supply Technical Engineering Division, NP-BKX	04/2022	Present
	MaWaSU2-Saitama City Partnership Program Coordination Team			
1	Mr. Khamphouvanh Vongsakhamphouy	Staff of Technical Division, NPPL	08/2021	Present
2	Mr. Mesha Sinhhalath	Staff of Technical Division, NPPL	08/2021	Present
3	Mr. Kikeo Vongdala	Deputy Head of Technical Unit, NPPL	08/2021	Present
4	Mr. Chanthalangsy Keomany	Head of Pipeline Expansion Design Survey Unit, NPLP	08/2021	Present
5	Mr. Sonsanith Bounthongsy	Staff of Technical Sector, NPLP	08/2021	Present
6	Mr. Sombandith Soudkhanueng	Staff of the Project for the Expansion of Water Supply Systems in Luang Prabang City, NPLP	08/2021	Present

#	Name	Title, Department/Designation	From	To
7	Mr. Amphaivanh Doungkhamchan	Chief of Technical section, NPKM	08/2021	Present
8	Ms. Temkham Sithisone	Engineer of Technical Section, NPKM	08/2021	Present
9	Mr. Saykham Vongpady	Deputy Chief of Technical Section, NPKM	08/2021	Present
B. Output3				
Technical Standard Committee (TSC)				
1	Mr. Khanthone Vorachith	Deputy Director General, Department of Water Supply, MPWT	2019	Present
2	Mr. Khamphouvong Sikholom	Director, Water Supply and Sanitation Regulatory Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 10 members from DWS/MPWT, DPWT-NL, LP, KM, NPNL, NPLP, NPKM		2019	Present
Ministerial ordinance Task Team (MTT)				
1	Ms. Phouvanh Sengboutalath	Director, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Phouthong Phasavanh	Deputy Director, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
-	Other 4 members from Water Supply Division, Department of Water Supply, MPWT		03/2022	Present
Standard Task Team (STT)				
STT1: General				
1	Mr. Somchai Indavong	Technical Engineer, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Houmphanh Oudomsavath	Deputy General Manager, NPNL	18-Sep-2018	Present
3	Mr. Khamphouvanh Vongsakhamphouy	Staff of Technical Division, NPNL	18-Sep-2018	Present
4	Mr. Ladda Philavong	Head of Project Implementation Unit of the Project for the Expansion of Water Supply Systems in Luang Prabang City, NPLP	2018	Present
5	Mr. Sunti Chandaeng	Head of GIS Unit, NPLP	2018	
6	Mr. Khampasith Sinthepphavong	Chief of Planning Section, NPKM	2018	Present
7	Mr. Amphaivan Douangkhamchan	Chief of Technical section, NPKM	2018	Present
STT2: Water Treatment Plant (WTP)				
1	Mr. Phouthong Phasavath	Deputy Director, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Anousa Oudomsavath	Chief of Electricity and Production Management Division, NPNL	18-Sep-2018	Present
3	Mr. Lideth Khamfongpunyarpot	Deputy Head of Production Cost Management Unit, NPNL	18-Sep-2018	Present
4	Mr. Sengkeo Bounsavath	Head of Electricity Unit, NPLP	2018	Present
5	Mr. Anousack Souliya	Head of Water Treatment Operation Unit, NPLP	2018	Present
6	Mr. Bounmy Phonemany	Chief of Factory Section, NPKM	2018	Present
7	Mr. Ounkham Souliyong	Electrical staff of Factory Section, NPKM	2018	Present

#	Name	Title, Department/Designation	From	To
STT3: Pipeline				
1	Mr. Phankham Mongphachanh	Technical Engineer, Sanitation Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Souphet Bouphaxay	Deputy Chief, of Technical Division, NPNL	18-Sep-2018	Present
3	Ms. Phoutsadavanh Phonephomnavong	Deputy Head of Pipeline Management Unit, NPNL	18-Sep-2018	Present
4	Mr. Bounthueng Phanthalangsy	Head of Technical Sector, NPLP	2018	Present
5	Mr. Somsith Duangdeth	Deputy Head of Technical Sector, NPLP	2018	Present
6	Mr. Sonsanith Bounthongsy	Staff of Technical Sector, NPLP	2018	Present
7	Mr. Amphaivan Douangkhamchan	Chief of Technical section, NPKM	2018	Present
8	Mr. Saykham Vongpady	Deputy Chief of Technical section, NPKM	2018	Present
9	Ms. Temkham Sidthisone	Engineer of Technical Section, NPKM	2018	Present
10	Mr. Khamla Khamvongsa	Deputy Chief of Installation Section, NPKM	08/2021	Present
Sub-committee (SC)				
SC1: Data Management				
1	Mr. Vongduean Lolonesy	Technical Engineer, Water Supply and Sanitation Regulatory Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Toui Xayvihueang	Technical Engineer, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
3	Ms. Viengphane Yammixay	Technical Engineer, Water Supply and Sanitation Regulatory Division, Department of Water Supply, MPWT	03/2022	Present
4	Mr. Hadsadong Nakmany	Head of Personnel Unit, NPNL	18-Sep-2018	Present
5	Ms. Niphaphone Soumphonphakdy	Staff of Statistic Unit, NPNL	7-May-2019	Present
6	Mr. Soulideth Thidavan	Deputy General Manager, NPLP	2018	Present
7	Mr. Kathi Duangchampa	Head of Organization-Administration Unit, NPLP	2018	Present
8	Mr. Soulapong Phabouddy	Chief of Commercial Section, NPKM	2018	Present
9	Mr. Sompasong Souliyong	Staff of Administration Section, NPKM	2018	Present
10	Mr. Phouthalom Sengiem	Staff of Finance Section, NPKM	08/2021	Present
SC2: Customer relations				
1	Ms. Hong Phanthavong	Technical Engineer, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	Present
2	Ms. Ongxiong Tongnamavong	Chief of ICT Division, NPNL	18-Sep-2018	Present
3	Ms. Soysavanh Chanthavong	Deputy Head of Software Unit, ICT Division, NPNL	18-Sep-2018	Present
4	Ms. Vatthanaline Siphada	Head of Commercial Sector, NPLP	2018	Present
5	Ms. BangOn Lithavongsack	Head of Liabilities Unit, NPLP	2018	Present
6	Ms. Naphaphone Nanthavilay	Staff of Planning Section, NPKM	2018	Present

#	Name	Title, Department/Designation	From	To
7	Mr. Phongphat Silivong	Staff of Commercair Section, NPKM	2018	Present
8	Mr. Vilaysak Phengthalangsy	Deputy Chief of Commercial Section, NPKM	08/2021	Present
9	Mr. Phaichit Deepasery	Deputy Chief of Inspection Section, NPKM	08/2021	Present
SC3: Planning				
1	Mr. Khamphouvong Sikholom	Director, Water Supply and Sanitation Regulatory Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Khamphouvang Vanvilay	Technical Engineer, Water Supply and Sanitation Regulatory Division, Department of Water Supply, MPWT	03/2022	Present
3	Mr. Bounpasong Phonhalath	Deputy Chief of Statistic and Planning Division, NPPL	18-Sep-2018	Present
4	Mr. Sombut Vongsakhamphouy	Deputy Head of Planning Unit, NPPL	4-Feb-2021	Present
5	Mr. Khamxay Vue	Staff of Planning Unit, NPPL	4-Feb-2021	Present
6	Mr. Anousack Vannasy	Deputy Head of Administration Sector, NPPL	2018	Present
7	Ms. Nittaya Chindamany	Head of Statistic-Planning Unit, NPPL	2018	Present
8	Mr. Khampasith Sinthepphavong	Chief of Planning Section, NPKM	08/2021	Present
9	Ms. Phounsavanh Keolakhone	Staff of Planning Section, NPKM	2018	Present
10	Ms. Vilayvone Kanyanousone	Staff of Planning Section, NPKM	08/2021	Present
SC4: Finance				
1	Mr. Xayasith Chanthaphone	Deputy Director, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	Present
2	Ms. Malaythong Bangkhamphao	Technical Engineer, Administration-Personnel and Planning Division, Department of Water Supply, MPWT	03/2022	
4	Ms. Nouanenapha Vorasarn	Deputy Chief of Finance Division, NPPL	18-Sep-2018	Present
5	Ms. Thippachanh Sengchanthala	Head of Accounting Unit, NPPL	18-Sep-2018	Present
7	Mr. Oudone Chittaphone	Head of Administration Sector, NPPL	2018	Present
8	Mr. Chackkavin Inphithack	Head of Financial Unit, NPPL	2018	Present
9	Mr. Phonevilay Keomanykhout	Staff of Administration Section, NPKM	2018	Present
10	Ms. Si Bounthavong	Staff of Finance Section, NPKM	2018	Present
11	Ms. Vadsana Khamsoukthavong	Staff of Finance Section, NPKM	08/2021	Present
SC5: Water Quality				
1	Ms. Vilaphone Kattiyasack	Deputy Director, Sanitation Division, Department of Water Supply, MPWT	03/2022	Present
2	Mr. Sackthida Hueangmany	Technical Engineer, Water Supply Division, Department of Water Supply, MPWT	03/2022	Present
3	Ms. Khonesavanh Keomanyvong	Deputy Chief of Chinaimo Water Treatment Plant, NPPL	18-Sep-2018	Present
4	Ms. Chanmany Philavanh	Deputy Head of Dongmakkhai Water Treatment Plant Unit, NPPL	18-Sep-2018	Present
5	Ms. Mutthulatda Thongsavanh	Staff of Kaoliew Water Treatment Plant, NPPL	4-Feb-2021	Present

#	Name	Title, Department/Designation	From	To
6	Mr. Yhoy Mounmeuangxam	Head of WTPs, NPLP	2018	Present
7	Ms. Lany Vue	Staff of Laboratory in Namkhan WTP, NPLP	2018	Present
8	Ms. Vongvilay Panyvong	Staff of Water Quality Section, NPKM	2018	Present
9	Mr. Anucha Kaikangvonh	Staff of Water Quality Section, NPKM	2018	Present
10	Ms. Valanith Chanthanouvong	Staff of Water Quality Section, NPKM	08/2021	Present
SC6: Lao Water Works Association (LWWA)				
1	Mr. Khanthone Vorachith	Deputy Director General, Department of Water Supply, MPWT	2018	Present
2	Mr. Khampheuy Vongsakhamphui	General Manager, NPNL	18-Sep-2018	Present
3	Mr. Siphanh Inmeuangxay	Deputy General Manager, NPNL	18-Sep-2018	Present
4	Mr. Amphaivanh Vixayyalath	Staff of Secretariat and International Relations Unit, NPNL	18-Sep-2018	Present
5	Ms. Phaimany Sengphouvong	Deputy Head of Personnel Unit, NPNL	18-Sep-2018	Present
6	Ms. Khamla Navady	Deputy Head of Secretariat and International Relations Unit, NPNL	4-Feb-2021	Present
7	Ms. Nitdavanh Keokhammy	Deputy Head of Wage and Social Security Unit, NPNL	4-Feb-2021	Present
8	Mr. Arounxy Meexaiyalath	Staff of Chinaimo Training Center, NPNL	13-Dec-2021	Present
9	Mr. Soulith Chindamany	General Manager, NPLP	2018	Present
10	Mr. Chanthone Sanaphay	Deputy General Manager, NPLP	2018	Present
11	Mr. Khanngoun Sengiem	General Manager, NPKM	2018	Present
12	Mr. Khamveuy Taiyavong	Deputy General Manager, NPKM	2018	Present
13	Mr. Pasitsay Sidthisone	Chief of Administration Section, NPKM	08/2021	Present
14	Ms. Viphavanh Sengsavang	Secretary, NPKM	08/2021	Present
Other 15 Provinces Water Supply State Enterprise				
1	Project Director	General Manager	2018	Present
2	Project Coordinator (1-2 persons)		2018	Present
3	STT (1-3 persons)		2018	Present
4	SC1: Data Management (1-2 persons)		2018	Present
5	SC2: Customer relations (1-2 persons)		2018	Present
6	SC3: Planning (1-2 persons)		2018	Present
7	SC4: Finance (1-2 persons)		2018	Present
8	SC5: Water Quality (1-2 persons)		2018	Present

Workshop and Seminar Record

Updated: 03/05/2023

No	Date DD/MM/YYYY	Title/Theme	Number of Participants	CP Participants	Activity
1	26/07/2018	Kick-off Meeting	46		General
2	11/10/2018	Seminar by Prof. Satoshi Takizawa on "Governance of the Water Supply Sector"	25		General
5	21/11/2018	Project MaWaSU2 National Seminar	106		General
6	22/11/2018	1st JCC Meeting	28		General
18	06/02/2019	The Laos-Japan Waterworks & MaWaSU2	85		General
19	07/02/2019	The Laos-Japan Waterworks & MaWaSU2	85		General
71	21/11/2019	2nd JCC Meeting	36	21	General
83	28/01/2020	The Lao-Japan Waterworks & MaWaSU2 Conference 2020	190	139	General
84	29/01/2020	The Lao-Japan Waterworks & MaWaSU2 Conference 2020	190	140	General
85	30/01/2020	The Lao-Japan Waterworks & MaWaSU2 Conference 2020	135	101	General
107	24/12/2020	MaWaSU2 National Seminar 2020	133	125	General
116	27/07/2021	3rd JCC Meeting	35	22	General
131	27/12/2021	NPWL MaWaSU2 Annual Report	25	23	General
133	12/01/2022	Project MaWaSU2 Annual Report 2021	24+Online	13+Online	General
134	13/01/2022	Project MaWaSU2 Annual Report 2021/Japan Cooperation Session	21+Online	12+Online	General
151	15/06/2022	4th JCC Meeting	37	25	General
171	13/12/2022	MaWaSU2 Annual Report 2022	160	133	General
172	14/12/2022	Japan Cooperation Session/Saitama City Partnership Program Final Report	151	117	General
17	05/02/2019	1st IRC Meeting in VTE	28		Output1
99	11/11/2020	DWS Workshop (1)	14	9	Output1
101	25/11/2020	DWS Workshop (2)	12	8	Output1
102	03/12/2020	DWS Workshop (3)	9	5	Output1
105	17/12/2020	DWS Workshop (4)	14	8	Output1
113	18/03/2021	DWS Workshop (5)	15	10	Output1
124	25/08/2021	Brief explanation of Fund proposal	16	8	Output1
160	13/09/2022	Water Supply and Sanitation Strategy in Central and Southern provinces	61	58	Output1
184	21/03/2023	Regional Explanation of Provincial Water Supply Strategy (Central region)	33	24	Output1
185	22/03/2023	Regional explanation of Guidelines of Water tariff policy, Corporate planning, etc.	33	24	Output1
186	20/04/2023	Regional Explanation of Provincial Water Supply Strategy (Northern region)	42	40	Output1
187	21/04/2023	Regional explanation of Guidelines of Water tariff policy, Corporate planning, etc.	37	35	Output1
188	26/04/2023	Regional Explanation of Provincial Water Supply Strategy (Southern region)	42	40	Output1
189	27/04/2023	Regional explanation of Guidelines of Water tariff policy, Corporate planning, etc.	37	35	Output1
20	21/02/2019	1st PPTT Meeting	18		Output2
24	06/05/2019	2nd PPTT Meeting	17	12	Output2
28	28/05/2019	3rd PPTT Meeting	16	9	Output2
29	14/06/2019	4th PPTT Meeting	19	11	Output2
38	11/07/2019	5th PPTT Meeting/1st PPEC Meeting	24	16	Output2
41	26/07/2019	6th PPTT Meeting/2nd PPEC Meeting	20	11	Output2
45	07/08/2019	7th PPTT Meeting/3rd PPEC Meeting	25	13	Output2

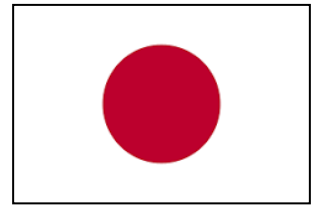
52	18/09/2019	4th PPEC Meeting	12	6	Output2
55	01/10/2019	5th PPEC Meeting	13	8	Output2
56	04/10/2019	6th PPEC Meeting	9	6	Output2
57	11/10/2019	7th PPEC Meeting	11	6	Output2
58	21/10/2019	8th PPEC Meeting	10	5	Output2
59	22/10/2019	Construction Supervision Workshop (Lecture)	12	4	Output2
60	23/10/2019	Construction Supervision Workshop (Site)	9	4	Output2
67	06/11/2019	9th PPEC Meeting	15	9	Output2
70	19/11/2019	2nd Construction Supervision Workshop	10	5	Output2
78	24/12/2019	Construction Supervision Meeting	11	6	Output2
79	24/12/2019	10th PPEC Meeting	8	4	Output2
93	18/03/2020	8th PPTT Meeting/11th PPEC Meeting	23	15	Output2
100	19/11/2020	Construction Supervision Supporter Training	14	7	Output2
104	16/12/2020	12th PPEC Meeting	8	3	Output2
110	11/02/2021	9th PPTT Meeting/13th PPEC Meeting	16	10	Output2
114	07/04/2021	Pilot Project 1.5 batch National Explanation Meeting	99	89	Output2
121	18/08/2021	MaWaSU2-Saitama Partnership Program Coordination Meeting	13	9	Output2
125	14/09/2021	MaWaSU2-Saitama Partnership Program Coordination Meeting (2)	15	8	Output2
128	29/10/2021	MaWaSU2-Saitama Partnership Program Coordination Meeting (3)	16	10	Output2
129	19/11/2021	MaWaSU2-Saitama Partnership Program Coordination Meeting (4)	10	5	Output2
130	17/12/2021	MaWaSU2-Saitama Partnership Program Coordination Meeting (5)	15	9	Output2
135	21/01/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (6)	15	7	Output2
138	25/02/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (7)	13	8	Output2
139	04/03/2022	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (1)	21	15	Output2
142	25/03/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (8)	14	8	Output2
143	01/04/2022	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (2)	20	15	Output2
144	08/04/2022	Pilot Project 2nd batch Implementation Guidance	21+Online	13+Online	Output2
145	25/04/2022	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (3)	30	24	Output2
146	26/04/2022	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (3)	40	34	Output2
147	28/04/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (9)	14	8	Output2
148	18/05/2022	Proposal making guidance	19+Online	11+Online	Output2
149	20/05/2022	MaWaSU2-Saitama Partnership Program Coordination Report Meeting	37+Online	29+Online	Output2
152	03/06/2022	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (4)	23	17	Output2
153	30/06/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (11)	16	9	Output2
154	01/07/2022	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (5)	23	18	Output2
155	27/07/2023	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (6)	25	19	Output2
156	08/08/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (12)	18	10	Output2
157	23-25/08/2022	OBE training for guidelines in Pilot Project (1)	11	20	Output2
165	28/09/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (13)	17	9	Output2
166	30/09/2022	Proposal review meeting	13+Online	7+Online	Output2
167	04-06/10/2022	OBE training for guidelines in Pilot Project (2)	20	11	Output2
168	25-27/10/2022	Construction management training for Pilot Project 2nd batch	42	39	Output2

169	02/11/2022	MaWaSU2-Saitama Partnership Program Coordination Meeting (14)	15	9	Output2
170	10/11/2022	Output2: Pilot Project 1.5 batch 3 Provinces Joint Meeting (7)	10	6	Output2
173	05/01/2023	MaWaSU2-Saitama Partnership Program Coordination Meeting (15)	13	7	Output2
174	25/01/2023	MaWaSU2-Saitama Partnership Program Coordination Meeting (16)	17	11	Output2
176	10/02/2023	MaWaSU2-Saitama Partnership Program Coordination Meeting (17)	8	6	Output2
46	08/08/2019	Output2&3 information session	127	115	Output2+3
47	09/08/2019	Output2&3 information session	126	114	Output2+3
117	28/07/2021	Pilot Project 1.5 batch Proposal Feedback Session & National Seminar on Water Quality Management (1)	62	55	Output2+4
3	30/10/2018	1st STT&SC Meeting in VTE	55		Output3
4	31/10/2018	1st STT&SC Meeting in VTE	55		Output3
7	27/11/2018	2nd STT&SC Meeting in VTE	56		Output3
8	28/11/2018	2nd STT&SC Meeting in VTE	54		Output3
15	30/01/2019	3rd STT&SC Meeting in LP	60		Output3
16	31/01/2019	3rd STT&SC Meeting in LP	53		Output3
21	05/03/2019	4th STT&SC Meeting in KM	54		Output3
22	06/03/2019	4th STT&SC Meeting in KM	51		Output3
23	02/05/2019	1st Technical Standard Committee	15	10	Output3
25	14/05/2019	5th STT&SC Meeting in VTE	55	47	Output3
26	15/05/2019	5th STT&SC Meeting in VTE	47	39	Output3
37	10/07/2019	2nd Technical Standard Committee	21	12	Output3
39	24/07/2019	3rd Technical Standard Committee	18	10	Output3
40	25/07/2019	4th Technical Standard Committee	24	15	Output3
42	31/07/2019	6th STT&SC Meeting in LP	60	51	Output3
43	01/08/2019	6th STT&SC Meeting in LP	55	46	Output3
50	27/08/2019	7th STT Meeting in VTE	28	17	Output3
51	12/09/2019	5th Technical Standard Committee	28	16	Output3
53	25/09/2019	8th STT & 7th SC Meeting in KM	54	46	Output3
54	26/09/2019	8th STT & 7th SC Meeting in KM	54	45	Output3
61	24/10/2019	6th Technical Standard Committee	26	17	Output3
62	29/10/2019	9th STT	16	14	Output3
64	30/10/2019	9th STT	15	14	Output3
66	31/10/2019	7th Technical Standard Committee	38	29	Output3
68	13/11/2019	10th STT & 8th SC Meeting in VTE	55	46	Output3
69	14/11/2019	10th STT & 8th SC Meeting in VTE	47	42	Output3
80	14/01/2020	11th STT & 9th SC Meeting in LP	57	49	Output3
81	15/01/2020	11th STT & 9th SC Meeting in LP	57	49	Output3
82	16/01/2020	12th STT Meeting in LP	23	17	Output3
88	19/02/2020	13th STT Meeting in VTE	20	15	Output3
89	20/02/2020	13th STT Meeting in VTE	18	13	Output3
90	02/03/2020	14th STT Meeting in VTE (JICA Laos Office)	14	11	Output3
91	11/03/2020	15th STT & 10th SC Meeting in KM	58	49	Output3
92	12/03/2020	15th STT & 10th SC Meeting in KM	57	48	Output3
94	24/03/2020	8th Technical Standard Committee	20	14	Output3
95	05/08/2020	9th Technical Standard Committee	9	2	Output3
96	06/08/2020	9th Technical Standard Committee	6	4	Output3
97	12/08/2020	10th Technical Standard Committee	18	14	Output3
98	13/08/2020	10th Technical Standard Committee	17	13	Output3
103	08/12/2020	Technical Standard Preparation Meeting	34	28	Output3
106	22/12/2020	Technical Standard / Unit Cost National Explanation Meeting	117	107	Output3
106	23/12/2020	Technical Standard / Unit Cost National Explanation Meeting	118	109	Output3
108	05/01/2021	16th STT & 11th SC Meeting in NL	71	59	Output3

109	06/01/2021	16th STT& 11th SC Meeting in NL	55	48	Output3
111	10/03/2021	17th STT& 12th SC Meeting in LP	60	55	Output3
112	11/03/2021	17th STT& 12th SC Meeting in LP	59	54	Output3
44	02/08/2019	MTT&SC6 Joint meeting in LP	24	16	Output3+4
9	05/12/2018	1st Mini Workshop in LPB	60		Output4
10	06/12/2018	1st Mini Workshop in LPB	61		Output4
11	12/12/2018	1st Mini Workshop in VTE	41		Output4
12	13/12/2018	1st Mini Workshop in VTE	50		Output4
13	19/12/2018	1st Mini Workshop in KM	56		Output4
14	20/12/2018	1st Mini Workshop in KM	57		Output4
30	19/06/2019	2nd Mini Workshop in CPS	41	35	Output4
31	20/06/2019	2nd Mini Workshop in CPS	53	47	Output4
32	26/06/2019	2nd Mini Workshop in HPN	52	45	Output4
34	27/06/2019	2nd Mini Workshop in HPN	51	45	Output4
35	02/07/2019	2nd Mini Workshop in XKH	51	43	Output4
36	03/07/2019	2nd Mini Workshop in XKH	51	42	Output4
63	29/10/2019	Preparation Meeting for 3rd Mini Workshop	21	17	Output4
65	30/10/2019	Preparation Meeting for 3rd Mini Workshop	20	16	Output4
72	26/11/2019	3rd Mini Workshop in Central Region (Vientiane Province)	65	58	Output4
73	27/11/2019	3rd Mini Workshop in Central Region (Vientiane Province)	63	56	Output4
74	04/12/2019	3rd Mini Workshop in Northern Region (Bokeo Province)	63	57	Output4
75	05/12/2019	3rd Mini Workshop in Northern Region (Bokeo Province)	66	60	Output4
76	10/12/2019	3rd Mini Workshop in Southern Region (Salavan Province)	67	58	Output4
77	11/12/2019	3rd Mini Workshop in Southern Region (Salavan Province)	66	57	Output4
115	13-15/07/2021	SC5 (Water quality): Preparation for National Seminar on Water Quality Management and Mini workshops	14	9	Output4
118	29/07/2021	LWWA Research Activity on Water Quality Management	61	54	Output4
119	11/08/2021	4th Mini Workshop in Northern Region (Oudomxay Province)	33	30	Output4
120	12/08/2021	4th Mini Workshop in Northern Region (Oudomxay Province)	34	31	Output4
122	18/08/2021	4th Mini Workshop in Central Region (Bolikhamxay Province)	26	22	Output4
123	19/08/2021	4th Mini Workshop in Central Region (Bolikhamxay Province)	27	22	Output4
126	14/09/2021	Opinion exchange with MOH on Water Quality Framework	11	6	Output4
127	17/09/2021	Opinion exchange with DWS on division of roles and management of LWWA	12	6	Output4
132	28/12/2021	LWWA Annual Report	68	55 (?)	Output4
136	23/02/2022	4th Mini Workshop in Southern Region (Savannakhet Province)	28	24	Output4
137	24/02/2022	4th Mini Workshop in Southern Region (Savannakhet Province)	27	23	Output4
140	10/03/2022	National Seminar on Water Quality Management (2)	59	51	Output4
141	11/03/2022	National Seminar on Water Quality Management (2) National Water Quality Practitioner Training	49	42	Output4
150	07/06/2022	National Data Management Seminar	24+Online	16+Online	Output4
158	07/09/2022	5th Mini Workshop in Northern Region (Xayabouly Province)	45	40	Output4
159	08/09/2022	5th Mini Workshop in Northern Region (Xayabouly Province)	45	40	Output4
161	15/09/2022	5th Mini Workshop in Southern Region (Attapeu Province)	40	35	Output4
162	16/09/2022	5th Mini Workshop in Southern Region (Attapeu Province)	41	36	Output4
163	20/09/2022	5th Mini Workshop in Central Region (Vientiane Capital)	38	30	Output4
164	21/09/2022	5th Mini Workshop in Central Region (Vientiane Capital)	46	38	Output4
177	15/02/2023	Preparation Meeting for 6th Mini Workshop	14	10	Output4
178	22/02/2023	6th Mini Workshop in Southern Region (Seking Province)	55	49	Output4
179	23/02/2023	6th Mini Workshop in Southern Region (Seking Province)	55	49	Output4
180	01/03/2023	6th Mini Workshop in Northern Region (Luang Namtha Province)	45	42	Output4
181	02/03/2023	6th Mini Workshop in Northern Region (Luang Namtha Province)	58	55	Output4
182	15/03/2023	6th Mini Workshop in Central Region (Vientiane Capital)	37	34	Output4
183	16/03/2023	6th Mini Workshop in Central Region (Vientiane Capital)	45	42	Output4



Attached Document II: Activity report until the end of the Project (English)



The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)

5th JCC Meeting Project Activity Plan from 6/2023 to 12/2023 (Final Year of the Project)

Vientiane Capital, 08 June 2023



Output 1

OIDS-PDCDS

- Draft PDCDS document by June 2023
- Content confirmation of committee by July 2023
- Approval process of **Director General** by September 2023
- Approved by **Director General** by October 2023

WSSDF

- Making draft process by October 2023
- Hearing survey for existing fund in Laos by July 2023
- Consultation with other departments August 2023
- Content confirmation of committee by October 2023
- Explanation to water supply sector by October 2023
- Approved by Director General of DWS by November 2023

PWSS

- Making draft process by July 2023
- Submit draft to DWS by July 2023
- Site visit some provinces in August and September 2023
- Set up Draft PWSS by October 2023

Output 2

Pilot Project

Pilot Project 1st batch

1. Salavan Province: Ex-post evaluation completed
2. Phongsaly Province: Ex-post evaluation completed
3. Bolikhamxay Province: Ex-post evaluation completed

Pilot Project 1.5 batch

1. Xiengkhouang, Salavan, Savannakhet Provinces:
Completion in July 2022, Ex-post evaluation in July 2023

Pilot Project 2nd batch

1. Xiengkhouang Province: all activities to be completed by November 2023
2. Phongsaly Province: all activities to be completed by November 2023
3. Xayabouly Province: all activities to be completed by November 2023

Output 2

Application Forms

1. Japan's Grant Assistance for Grassroots Human Security Projects (GGP)
草の根・人間の安全保障無償資金協力(日本大使館)
 2. Public Investment of the Government of Lao PDR (= Application forms of Pilot Project 1.5 batch and 2nd batch)
ラオス政府公共投資(パイロットプロジェクト1.5バッチ、第2バッチで使用)
- ➡ Capacity development for PPTT members through OJT

Implementation Guidelines

1. Pipeline installation 管路布設
 2. Service pipe/water meter installation 給水装置設置
 3. Material storage management 資機材管理
 4. Construction planning 施工計画
 5. Designing/As-built designing 設計・完成図
 6. Construction picture album making 工事写真アルバム作成
- ➡ Training for other WSSEs through LWVA

Output 3

Development of Technical Standards and the dissemination

Ministerial approval of Technical standard & Criteria

- Scheduled approval: First half of 2023

Nationwide expansion activities of Technical standard

- National explanation meeting after approval
- Creation of explanatory materials by STT members

Shift to LWWA training business

- Creation of training curriculum
- Creation of teaching materials

Output 4

Operational capacity necessary for the WSSEs to implement the water supply service is enhanced

SC Subcommittee

SC1 : Date management SC2 : Customer relations SC3:Planing

SC4 : Finance SC5 : Water quality SC6:LWWA(Laos water works association)

Capacity improvement through continuous OJT, holding subcommittees

- Follow-up activities in each prefecture

SC1 : Annual report preparation, PI accuracy,
Data management manual update

SC2 : Meter reading and collection manuals
Measures against non-payment and non-collection of water charges

SC3&4 : Creation of medium- and long-term plans,
Fiscal Balance Plan, Water Tariff Simulation

SC5 : Water quality inspection and preparation of inspection report
Creation of a water quality management framework

Output 4

Training in Japan

- Planning(SC3) & Finance(SC4)
- 26/June/2023 ~ 6/July/2023

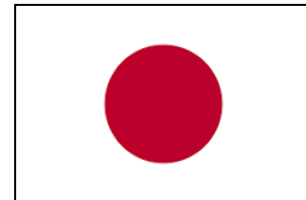
Shift of Mawasu2 activities to LWWA

- Examination of training / survey business system in place of sub-committee
Establishment of technical steering committee and subcommittees
- Implementation of water quality(SC5) & Construction supervision(Output2)
training as part of the LWWA's training program in 2023

Thank you



Attached Document II: Activity report until the end of the Project (Lao)



ໂຄງການ ພັດທະນາຄວາມອາດສາມາດ
ດ້ານການຄຸ້ມຄອງ ໃຫ້ແກ່ຂະແໜງນໍ້າປະປາ ໄລຍະທີ 2

ກອງປະຊຸມ ຄະນະຊີ້ນຳໂຄງການ ຄັ້ງທີ 5
ແຜນການຂອງໂຄງການເດືອນ 6/2023 ຫາ 12/2023
(ປີສຸດທ້າຍຂອງໂຄງການ)

ທີ່ ນະຄອນຫຼວງວຽງຈັນ, 08 ມິຖຸນາ 2023



ຜົນໄດ້ຮັບທີ 1

OIDS-PDCDS

- ມິຖຸນາ 2023: ຮ່າງເອກະສານ PDCDS ໃຫ້ສໍາເລັດ;
- ກໍລະກົດ 2023: ຜ່ານເນື້ອໃນ ກັບ ຄະນະກຳມະການ;
- ກັນຍາ 2023: ເຂົ້າສູ່ ຂັ້ນຕອນການຂໍອະນຸມັດ ຮັບຮອງ ຈາກຫົວໜ້າກົມນໍ້າປະປາ;
- ຕຸລາ 2023: ໄດ້ຮັບການຮັບຮອງຈາກຫົວໜ້າກົມນໍ້າປະປາ.

WSSDF

- ສປຕໍ່ ຮ່າງເອກະສານ ແຜນກອງທຶນ ຈົນເຖິງ ຕຸລາ 2023;
- ກໍລະກົດ 2023: ສອບຖາມ ກອງທຶນອື່ນທີ່ມີຢູ່ ສປປ ລາວ;
- ສິງຫາ 2023: ປຶກສາຫາລື ກັບ ກົມອື່ນ ແລະ ພາກສ່ວນກ່ຽວຂ້ອງ;
- ຕຸລາ 2023: ຜ່ານເນື້ອໃນ ກັບ ຄະນະກຳມະການ;
- ຕຸລາ 2023: ອະທິບາຍໃຫ້ພາກສ່ວນກ່ຽວຂ້ອງໃນຂະແໜງນໍ້າປະປາ;
- ພະຈິກ 2023: ໄດ້ຮັບການຮັບຮອງຈາກ ຫົວໜ້າກົມນໍ້າປະປາ.

PWSS

- ກໍລະກົດ 2023: ຮ່າງເອກະສານ;
- ກໍລະກົດ 2023: ນຳສົ່ງຮ່າງເອກະສາໃຫ້ ກົມນໍ້າປະປາ;
- ສິງຫາ-ກັນຍາ 2023: ລົງຕິດຕາມ ຊຸກຍູ້ ໃຫ້ ແຂວງຈຳນວນໜຶ່ງ;
- ຕຸລາ 2023: ສັງລວມເປັນ ຮ່າງສະບັບສຸດທ້າຍ.

ຜົນໄດ້ຮັບທີ 2

ໂຄງການຕົວແບບໄລຍະທີ 1

1. ແຂວງສາລະວັນ: ສໍາເລັດ ການປະເມີນຫຼັງຈົບໂຄງການ;
2. ແຂວງຜົ້ງສາລີ: ສໍາເລັດ ການປະເມີນຫຼັງຈົບໂຄງການ;
3. ແຂວງບໍລິຄໍາໄຊ: ສໍາເລັດ ການປະເມີນຫຼັງຈົບໂຄງການ.

ໂຄງການຕົວແບບໄລຍະທີ 1.5

1. ແຂວງ ຊຽງຂວາງ, ສາລະວັນ ແລະ ສະຫວັນນະເຂດ:
ສໍາເລັດ ໃນເດືອນ ກໍລະກົດ 2022, ຈະປະເມີນຜົນຫຼັງສໍາເລັດໂຄງການ ໃນເດືອນ
ກໍລະກົດ 2023

ໂຄງການຕົວແບບໄລຍະທີ 2

- ແຂວງຊຽງຂວາງ: ກົດຈະກຳທັງໝົດ ຈະສໍາເລັດໃນເດືອນ ພະຈິກ 2023;
- ແຂວງຜົ້ງສາລີ: ກົດຈະກຳທັງໝົດ ຈະສໍາເລັດໃນເດືອນ ພະຈິກ 2023;
- ແຂວງໄຊຍະບູລີ: ກົດຈະກຳທັງໝົດ ຈະສໍາເລັດໃນເດືອນ ພະຈິກ 2023;

ຜົນໄດ້ຮັບທີ 2

ແບບຟອມສະໝັກ

1. Japan's Grant Assistance for Grassroots Human Security Projects (GGP) ື່ຫນຸ່ວຍເຫຼືອລ້າຂອງລັດຖະບາຍຍີ່ປຸ່ນ ສຳລັບ ໂຄງການຮັບປະກັນຄວາມປອດໄພລະດັບຮາກຫຍ້າ(ທນສະຖານທູດຍີ່ປຸ່ນ)

2. Public Investment of the Government of Lao PDR (= Application forms of Pilot Project 1.5 batch and 2nd batch)

ື່ຫນຸ່ວຍປະມານລັດ (ແບບຟອມສະໝັກໂຄງການຕົວແບບ ໄລຍະ 1.5 ແລະ 2)

➡ ຍົກລະດັບຄວາມອາດສາມາດໃຫ້ PPTT ໂດຍຜ່ານກົດຈະກຳ OJT

ບັນດາບົດແນະນຳ ກ່ຽວກັບ ການຈັດຕັ້ງປະຕິບັດໂຄງການ

1. ການກໍ່ສ້າງວາງທໍ່
2. ການກໍ່ສ້າງຕິດຕັ້ງ ທໍ່ບໍລິການ, ໜໍ້ແທກນໍ້າ
3. ການຈັດການຄຸ້ມຄອງ ແລະ ເກັບຮັກສາ ວັດສະດຸ
4. ແຜນການດຳເນີນການກໍ່ສ້າງ
5. ການອອກແບບ/ແບບແຕ້ມ ຫຼັງສຳເລັດກໍ່ສ້າງ
6. ການສ້າງອາລາບໍ້າຮູບການກໍ່ສ້າງ

➡ ຝຶກໃຫ້ແກ່ ບັນດາລັດວິສາຫະກິດນໍ້າປະປາ ຜ່ານສະມາຄົມນໍ້າປະປາ

ຜົນໄດ້ຮັບ 3

ສ້າງ (ພັດທະນາ) ມາດຕະຖານເຕັກນິກ ແລະ ເຜີຍແຜ່
ຂໍອະນຸມັດ ຮັບຮອງ ມາດຕະຖານເຕັກນິກການອອກແບບລະບົບໂຄງລ່າງນໍ້າປະປາ ຈາກ
ທ່ານລັດຖະມົນຕີ

ສຸດຊົນໃຫ້ໄດ້ຮັບຮອງ: ພາຍໃນ ເດືອນ 8 ປີ 2023.

ກົດຈະກຳເຜີຍແຜ່ ມາດຕະຖານເຕັກນິກການອອກແບບລະບົບໂຄງລ່າງນໍ້າປະປາ ໃນທົ່ວປະເທດ

- ຈັດກອງປະຊຸມເຜີຍແຜ່ທົ່ວປະເທດ ພາຍຫຼັງໄດ້ຮັບການຮັບຮອງ;
- ສ້າງເອກະສານທີ່ໃຊ້ສໍາລັບເຜີຍແຜ່ ໂດຍ ສະມາຊິກ STT.

ກະກຽມ ຖ່າຍໂອນ ວຽກງານຝຶກອົບຮົມ ໃຫ້ ສະມາຄົມນໍ້າປະປາ

- ສ້າງຫຼັກສູດການຝຶກອົບຮົມ;
- ສ້າງເອກະສານສໍາລັບການຝຶກອົບຮົມ.

ຜົນໄດ້ຮັບ 4

ຄວາມອາດສາມາດຂອງລັດວິສາຫະກິດນໍ້າປະປາໃນດ້ານການດໍາເນີນງານ ຈັດຕັ້ງ ປະຕິບັດ ວຽກງານນໍ້າປະປາ ຈະຖືກຍົກລະດັບ

SC: ກຸ່ມອະນຸກຳມະການ (Sub-committee)

SC1: ວຽກຄຸ້ມຄອງຂໍ້ມູນ SC2: ວຽກຟື້ວຟັນລູກຄ້າ SC3: ວຽກແຜນການ

SC4: ການເງິນ SC5: ວຽກຄຸ້ມຄອງນະພາບນໍ້າ SC6: ສະມາຄົມນໍ້າປະປາລາວ (LWWA)

ຍົກລະດັບຄວາມອາດສາມາດ ໂດຍການສືບຕໍ່ ກິດຈະກຳ OJT ແລະ ການປຶກສາຫາລືຂອງບັນດາອະນຸກຳມະການ

- ຕິດຕາມການຈັດຕັ້ງປະຕິບັດກິດກຳ ໃນ ບັນດາແຂວງ

SC1: ກະກຽມບົດລາຍງານປະຈຳປີ, ຄວາມຖືກຕ້ອງໃນການຄິດໄລ່ PI, ປັບປຸງ ຄູ່ມືຄຸ້ມຄອງຂໍ້ມູນ

SC2: ຄູ່ມື ຈົດເລກນໍ້າ ແລະ ເກັບເງິນຄ່ານໍ້າ
ມາດຕະການຮັບມື ການຄ້າງ່າຍ (ໜີ້) ຄ່ານໍ້າ

SC3&4: ສ້າງ ແຜນໄລຍະກາງ ແລະ ໄລຍະຍາວ, ແຜນງົບປະມານປະຈຳປີ, ທົດລອງຄິດໄລ່ລາຄານໍ້າປະປາ

SC5: ວຽກກວດຄຸ້ມຄອງນະພາບນໍ້າ ແລະ ກະກຽມສ້າງບົດລາຍງານວຽກກວດຄຸ້ມຄອງນະພາບນໍ້າ
ສ້າງ ແຜນການຄຸ້ມຄອງຄຸ້ມຄອງນະພາບນໍ້າປະປາ (framework)

ຜົນໄດ້ຮັບ 4

ການຝຶກອົບຮົມ ທີ່ ປະເທດຍີ່ປຸ່ນ

- ວຽກ ແຜນການ (SC3) & ການເງິນ (SC4)
- ວັນທີ 26/6/2023 ~ 6/7/2023

ຖ່າຍໂອນ ບັນດາກິດຈະກຳ ຂອງ Mawasu2 ໃຫ້ LWWA

- ທົດລອງປະຕິບັດ ລະບົບການຈັດຕັ້ງປະຕິບັດວຽກ ຝຶກອົບຮົມ/ສຳຫຼວດ ປ່ຽນແທນ ກຸ່ມ ອະນຸກຳມະການ;
ຈັດຕັ້ງ ຄະນະກຳມະການ ແລະ ອະນຸກຳມະການ ດ້ານວຽກງານເຕັກນິກ.
- ຈັດຕັ້ງປະຕິບັດການຝຶກອົບຮົມ ວຽກຄຸນນະກາບນ້ຳ (SC5) ແລະ ຄຸ້ມຄອງ-ຕິດຕາມ ການກໍ່ສ້າງໂຄງການນ້ຳປະປາ (Output2) ໃນນາມສ່ວນໜຶ່ງຂອງຫຼັກສູດຝຶກອົບຮົມ ຂອງ LWWA ໃນປີ 2023.

ຂໍຂອບໃຈ

Attached Document III: Remarks and main points of the discussion summarized

(1) Remarks summarized

Ms. Vilaykham Phosalath, Vice Minister of Public Works and Transport (Opening remarks)

1. Vice Minister states that the Government of Lao PDR directs economic development with improvement of people's daily life by infrastructure construction to increase water supply coverage and provide safe water.
2. Vice Minister reminds all the JCC participants that actual effectiveness is realized when each province utilizes the outcomes of MaWaSU2 in its regular work.
3. Vice Minister requests all the JCC participants to aim for self-sustained waterworks operation by understanding the purpose of the Project (capacity development) and confirming the progress of the Project.

Mr. Noriyuki Ito, Senior Representative of JICA Laos Office (Remarks)

4. Senior Representative emphasizes the issues to address for the rest of the Project period are (1) PDCDS (institutional improvement of the law and regulations in the water supply sector) is finalized and (2) the Technical Standards are approved by the Vice Minister and Minister.
5. Senior Representative requests that the Technical Standards will be approved within 2 months (by August 2023) to secure enough time for disseminating utilization methods in the sustainable point of view.
6. Senior Representative states that JICA prepares the next project, MaWaSU3, for four years. Becoming 15 years support in total since MaWaSU1, as the Vice Minister mentioned, MaWaSU3 sets activities for self-sustained waterworks operation.

(2) Main points of the discussion summarized on Terminal Evaluation Report

Mr. Khanngun Sengiem, General Manager of Khammouane Province Water Supply State Enterprise (NPKM)

7. NPKM agrees with the Terminal Evaluation Report. NPKM implemented project activities according to the plan. With well understanding of the purpose and activities of the Project by other Water Supply State Enterprises (WSSE), NPKM recognized the Project was quite effective and developed staffs' capacity contributing to improvement of regular work in NPKM.

Mr. Bounpasong Phonhalath, Deputy Chief of Statistic and Planning Division, of Vientiane Capital Water Supply State Enterprise (NPNL)

8. NPNL agrees with the Terminal Evaluation Report, especially the recommendations: confirming approval level of laws and regulations to be developed beforehand is



important. It is also important to define technical terms of the water supply sector in Lao language.

Mr. Soulith Chindamany, General Manager of Luang Prabang Province Water Supply State Enterprise (NPLP)

9. NPLP agrees with the Terminal Evaluation Report. NPLP participated in the interviews of the Terminal Evaluation. NPLP also assents to the recommendations after the Project and will utilize guidelines and manuals developed through the Project. NPLP expects continuous support by the next project for effective utilization of the project outcomes in NPLP and other WSSEs throughout the country.

Mr. Khanthone Vorachith, Deputy Director General (DDG) of DWS, MPWT, Co-chairperson of the JCC Meeting, requests provinces with experiences of pilot project implementation to provide comments on asset registration and service pipe/meter installation.

Mr. Phoukham Doaungphachan, General Manager of Xiengkhouang Province Water Supply State Enterprise (NP-XKH)

10. NP-XKH implemented Pilot Project 1.5 batch and is implementing Pilot Project 2nd batch. In the 1.5 batch, NP-XKH completed asset registration by coordination including site visit among organizations concerned. In the 2nd batch, NP-XKH recognizes there is no problem on service pipe/meter installation because of high demand for water supply by residents in the expansion areas. NP-XKH agrees with the Terminal Evaluation Report.

(3) Main points of the discussion summarized on Activity Plan until the end of the Project

Mr. Noriyuki Ito, Senior Representative of JICA Laos Office

11. Senior Representative proposes each committee/sub-committee to clarify who does what in each activity because there was no subject in the report of each activity plan.

Ms. Soukphaivanh Saiyavanh, Deputy Director, Administration-Personnel and Planning Division, Department of Water Supply, MPWT (Sub-committee member of OIDS/PDCDS)

12. OIDS/PDCDS sub-committee drafts PDCDS document. Director General (DG) will approve the document, but the progress has not reached to submit to DG yet. OIDS/PDCDS sub-committee requests the JICA expert to provide concrete experiences of Japan to finalize the PDCDS document.

Mr. Khanthone Vorachith, Deputy Director General (DDG) of DWS, MPWT

13. DDG reconfirms that since the “The vision to 2035, Development Strategy on Water



Supply and Sanitation 9 years (2022-2030) and Development Plan 4 years (2022-2025)” has been approved by the Minister of Public Works and Transport, the PDCDS document will be approved by DG of Department of Water Supply instead of Minister of Public Works and Transport.

14. DDG states that many outcomes such as construction guidelines in Output2 and manuals by sub-committees in Output4 have been produced. These outcomes can be utilized with approval of Lao Water Works Association (LWWA) or each province. In case those outcomes are expected to be utilized beyond the jurisdiction or its effect reaches over the water supply sector, central administrative approval will be necessary.

Mr. Shunichiro Hayashi, Representative of JICA Laos Office

15. Representative asks current progress of draft making and final outcomes of the Fund plan.

Mr. Khanthone Vorachith, Deputy Director General (DDG) of DWS, MPWT

16. DDG replies that DWS is undertaking unexperienced activities related to the Fund. Therefore, it is unrealistic to establish the Water Supply Sector Development Fund (WSSDF) within the Project period. Instead, the Fund plan will be drafted by the end of the Project. DWS requests the JICA expert to support for finalization of the draft Fund plan.

Mr. Tomokazu Ishikawa, Chief Advisor, Project MaWaSU2

17. Chief Advisor recognizes there are many agendas in Fund establishment. Fund sub-committee is sorting out the agendas and its countermeasures. Since preparation of the Fund establishment has not reached the level of establishment, the Fund plan indicates general direction for establishment.

Mr. Shunichiro Hayashi, Representative of JICA Laos Office

18. Representative states there will be opinion exchanges about the WSSDF in MaWaSU3 detailed planning. It is recommended Fund sub-committee collect information from the Road Fund (Department of Road) under MPWT.

Mr. Khanthone Vorachith, Deputy Director General (DDG) of DWS, MPWT

19. DDG states it was a difficult circumstance to undertake the Fund related activities in the first half of the Project because of negative posture towards Fund establishment by the former Minister and lack of transparency in other Funds. At present, the new Minister's direction on Fund changes so that a new Fund such as Railway Fund has been established.
20. While it is difficult to establish the WSSDF until the end of the Project, DWS would like



to determine directions for after the Project by fostering common understanding in DWS.

Mr. Masahito Miyagawa, Director, Water Resources Group, JICA HQ

21. Director of Water Resources Group states that he discussed with Mr. Sompong Sitthivong, DG of DWS, on Activity Plan until the end of the Project before the JCC meeting.
22. Director of Water Resources Group emphasizes its importance to utilize the outcomes of the Project including the Technical Standards and PDCDS after approval.
23. Director of Water Resources Group asks how DWS disseminates the Technical Standards nationwide and monitors its application in the activity plan of Output3 mentioning national dissemination of the Technical Standards through LWWA.

Mr. Khanthone Vorachith, Deputy Director General (DDG) of DWS, MPWT

24. DDG replies that the Technical Standards will be nationally disseminated by 3 regional workshops. DWS promotes to apply the Technical Standards to water supply facility development including projects by international donors and monitor its application by central, provincial and district levels according to the jurisdiction. In regard to dissemination methods, dissemination activity is conducted by the Project in the project period, while after the end of the Project, DWS expects LWWA to take over the dissemination task. But DWS recognizes LWWA operation is not good enough and it is not the right time that LWWA takes over the dissemination task.
25. DDG proposes that MaWaSU3 develops Equipment Standards and expects to work together with LWWA.

Mr. Noriyuki Ito, Senior Representative of JICA Laos Office

26. Senior Representative confirms the Terminal Evaluation team evaluated MaWaSU2 high: efforts of the counterparts have appeared in many outcomes and JICA's long-term supports have been spread throughout the country. JICA Laos Office will support for the activity plan reported in the JCC meeting, especially when delay of activity is foreseen.
27. Senior Representative expects inputs from the Vice Minister in MaWaSU3 formulation and requests the Lao side to proceed to document approval promptly.
28. Senior Representative shares idea of public relations introducing good practices of MaWaSU2 and requests all the counterparts to share them with JICA Laos Office.

Mr. Khanthone Vorachith, Deputy Director General (DDG) of DWS, MPWT

29. The JCC confirms the Terminal Evaluation Report and the activity plan until the end of the Project.
30. DDG reconfirms its importance of unification of technical terms in the water supply sector for smooth operation of projects.



31. DDG requests all the participants of the JCC meeting to report the results of the Terminal Evaluation Report and the activity plan until the end of the Project to officials in the director class in respective provinces for having common understanding and achieving the Project Purpose (Project Goal).

(End)

Attachments:

- I. Terminal Evaluation Report
 - II. Activity report until the end of the Project (Lao and English)
 - III. Main points of the discussion summarized
 - IV. Agenda of the 5th JCC Meeting
 - V. Participants list
-



Agenda of 5th JCC Meeting

Time, Date: 08:30-12:15, 08 June 2023

Place: Laotel Hotel

Main agenda:

1. Terminal evaluation report (Signing)
2. Activities until the end of MaWaSU2 (Approval)

Schedule:

Time	Contents	Person in charge
08:30	1. Opening remarks	Ms. Vilaykham Phosalath, Vice Minister, MPWT
	2. Greeting	Mr. Toshio Nagase, Chief Representative, JICA Laos Office
	Greeting	Mr. Khanthone Voracith, Deputy Director General, DWS, MPWT
09:15	3. Presentation on Terminal evaluation result • Introduction • Achievement, 6 Evaluation Criteria • Recommendation	Joint terminal evaluation team - JICA evaluation team - DWS evaluation team
10:00	4. Comments on Terminal evaluation result	All participants
10:15	5. Group photo & Coffee break	
10:35	6. Activities until the end of MaWaSU2	Ms. Phouvanh Senboutalath, Director, Water Supply Dept. DWS
11:20	7. Discussion on Activities until the end of MaWaSU2	All participants
11:20	8. Comments of Project Director	Mr. Khanthone Voracith
11:40	9. Conclusion & Closing remarks	Ms. Vilaykham Phosalath, Vice Minister, MPWT
12:00	Lunch	All participants in the meeting room

Joint Terminal Evaluation Team

Lao side:

Mr. Anon Latsaphone, Official, DWS

Mr. Phankham Mongphachanh, Technical Engineer, DWS

Japanese side:

Mr. Masahito Miyagawa: Team Leader, Director, Water Resources Team 1, Water Resources Group, Global Environment Department, JICA

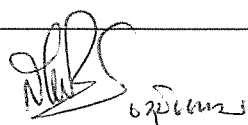
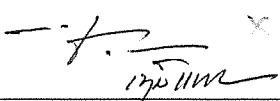
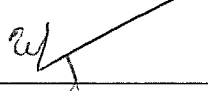
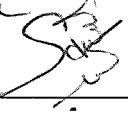
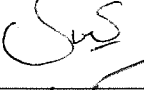
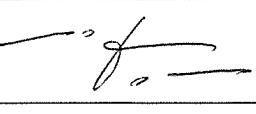
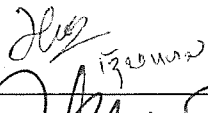
Mr. Yoshiaki Yokota, Water Supply Management, Senior Advisor, Water Resources Group, Global Environment Department, JICA

Ms. Kotomi Narita: Cooperation Planning, Water Resources Team 1, Water Resources Group, Global Environment Department, JICA

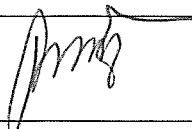
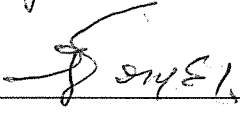
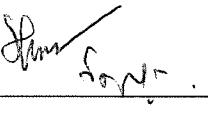
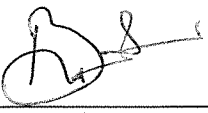
Ms. Yuko Tanaka: Evaluation Analysis, Consultant, Tekizaitekisho LLC

Ms. Yasuko Kamegai: Water Supply Planning, CTI Engineering International Co., Ltd.

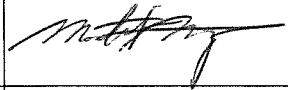
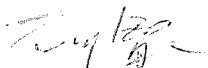
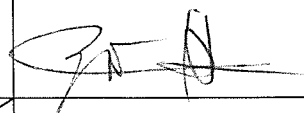
Registration
5th JCC Meeting
08 June 2023, Laotel Hotel (08:30-12:15)

No.	Name & Surname	Division / Position	Tel	Signature
I	DWS, Ministry of Public Works and Transport (MPWT)			
1	Ms. Vilaykham Phosalath	Vice Minister, MPWT		
2	Mr. Sompong Sitthivong	Director General, DWS		
3	Mr. Khanthone Vorachith	Deputy Director General, DWS		
4	Mr. Vanhsaveng Outthachack	Deputy Director General, DWS		
5	Ms. Phouvanh Senebouttalath	Director of WSD, DWS	55685918	
6	Mr. Khamphouvong Sikholom	Director of Water Supply Regulatory Division, DWS		
7	Mr. Vilakone Sayasen	Director of Inspection Division, DWS		
8	Mr. Xaysana Saphakdee	Director of Sanitation Division, DWS	representative	
9	Ms. Chanpaseuth Thongsisavath	Director of Planning and Cooperation Division, DWS		
10	Ms. Soukphaivanh Xayyavanh	Deputy Director of Administration and Personnel Division, DWS		
11	Ms. Vilaphone Kattiyasack	Deputy Director, DWS		
12	Mr. Soulasack Souvannaeth	Secretary of Vice Minister, MPWT	57746108	
13	Mr. Toui Xayveeheuang	Technical Engineer	55553094	
14	Mr. Khoumkham Ladsavong	Secretary of DG	52313749	
15	Mr. Anon Lasaphon	DWS		
16	Mr. Phankham Mongphachan	Technical Engineer	78310597	

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17	Mr. Phoumsavath	DWS		
18	ທ. ສົມະ ສິນ ສິນ ສິນ	ສະໜັບສະໜູນ (ນະຍາຍາມ)		
II	Ministry of Finance			
1	Dr. Sonephet Inthavong ສົມ ສິນ ສິນ ສິນ ສິນ	Director General, Department of State Enterprise and Insurance Management		
2	Ms. Phengkiam Xayakeo	Deputy Director General, Department of Foreign Exchange and Debt Management		
3	Mr. Nousuey Phomlichanh	Deputy Head of the National Treasury		
III	Ministry of Home Affairs			
1	Mr. Attanakhone Vongsana	Deputy Director General, Institute of Administrative Science Research and Training		
IV	Ministry of Planning and Investment			
1	Ms. Saymonkham Mangnomek	Deputy Director General, Department of International Cooperation		
2	Ms. Vilavanh Silasack	Director, Division of Electricity Energy and Water Supply Projects Evaluation, Department of Evaluation		
V	Vientiane Capital (DPWT-NPNL)			
1	Mr. Soulivanh Phommahaxay	Director General of DPWT-NL		
2	Mr. Khampheuy Vongsakhamphui	General Manager, NPNL		
VI	Khammouane Province (NPKM)			
1	Mr. Khanngoun Sengiem	General Manager, NPKM	5550506	
VII	JICA Headquarters			

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1	Mr. Masahito Miyagawa	Team Leader, Director, Water Resources Team 1		
2	Mr. Yoshiaki Yokota	Water Supply Management, Senior Advisor, Water Resources Group		
3	Ms. Kotomi Narita	Cooperation Planning, Water Resources Team 1, Water Resources Group		
4	Ms. Yuko Tanaka	Evaluation Analysis, Consultant, Tekizaitekisho LLC;		田中
5	Ms. Yasuko Kamegai	Water Supply Planning, CTI Engineering International Co., Ltd.		
VIII JICA Laos Office				
1	Mr. Toshio Nagase Noriyuki Ito	Chief Representative Senior		
2	Mr. Shunichiro Hayashi	Representative		林俊郎
3	Mr. Kingsada Siphanthong	Program Officer		OK
IX JICA MaWaSU2 Project				
1	Mr. Tomokazu Ishikawa	Chief Advisor		
2	Mr. Atsushi Nozawa	Sub-chief Advisor/Water Supply Technique		伊崎
3	Mr. Yusuke Kinoshita	Project Coordinator		
4	Mr. Khankham Mahavang	National Project Officer		
5	Ms. Thippavanh Nenhuangmala	Project Assistant		
6	Ms. Toulavanh Oupaxa	Project Assistant		

Registration
5th JCC Meeting
08 June 2023, Laotel Hotel (08:30-12:15)

7	Ms. Chidpasong Khattavong	Project Secretary/Assistant		
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Total: 40 pax

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Title of the Project: 'The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)'

Project Area: Vientiane Capital, Provinces of Luang Prabang, Khammouane and others

Duration of the Project: 5 years (April 2018 – March 2023)

Executing Organization: Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT) of Lao PDR

Implementing Organizations: DWS of MPWT, Vientiane Capital Water Supply State Enterprise (NPNL), Luang Prabang Provincial Water Supply State Enterprise (NPLB) and Khammouane Provincial Water Supply State Enterprise (NPKM) as the pilot water supply state enterprises (WSSEs), Department of Public Works and Transport (DPWT) of Vientiane Capital, Luang Prabang, Khammouane and WSSEs and DPWTs of other provinces

Direct Beneficiaries: Staff of: DWS of MPWT; WSSEs (NPNL, NPLB, NPKM, and other provinces); and DPWTs of Vientiane Capital, Luang Prabang, Khammouane and other provinces

Indirect Beneficiaries: People living in the water supply areas of the pilot and other WSSEs

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<Overall Goal> The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.	a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part. b. The Lao government takes action including exploring financial resources toward establishment of the fund. c. Activities of national dissemination are continuously practiced based on the Dissemination Plan (DP)¹.	a. Implementation reports regarding PDCDS b. Implementation reports of the fund. c. Activity reports of WSSEs.	

¹ DP is one of outputs formulated in "The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)" (MaWaSU).

<Project Purpose> The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.	a. The Lao government takes action toward implementation of PDCDS. b. The Lao government approves the plan of the fund. c. Implementation of WSSEs' water supply projects based on the PDCA² cycle is promoted.	a. Documents of PDCDS. b. Implementation documents of the fund. c. Application of water supply project submitted by WSSEs.	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans supported by the Project.
<Outputs> 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.	1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. 1b. The fund plan is endorsed by the Minister of MPWT. 1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU³ are utilized.⁴	1a. PDCDS document. 1b. Fund plan. 1c. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans support by the Project.
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.	2a. The procedures for planning, appraisal, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guideline, Appraisal Guideline, Pilot Project Implementation Guideline, Pilot Project Monitoring Guideline, and Accounting Guideline are developed. 2c. At least two pilot projects completed and are evaluated. 2d. Lessons learned from pilot projects are reflected on the fund as well as other procedures of the Lao government.	2a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 2b. Guideline documents. 2c. Project completion / Evaluation reports of pilot projects. 2d. Fund Plan.	

² Plan-Do-Check-Action (PDCA)

³ The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)

⁴ Purpose of those strategies and guidelines are as follows:

WSS known as "vision" is to show national direction of water supply management being formulated by DWS.

PWSS also known as "vision" is to show provincial direction of water supply management formulated by DPWTs.

WSG is to show how to promote the high quality and highly effective water supply service, which was approved by DWS in December, 2013.

WSSY is to capture the water supply management situation at the provincial level which shall be approved by DWS.

3. Technical standards necessary for water supply service are developed.	3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report. 3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	3a. As-built drawing/ design report, technical standards. 3b. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	
4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.	4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved. 4b. DP supported by MaWaSU is utilized. 4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP supported by MaWaSU. 4d. The activities of MaWaSU Sub-Committees are continued.	4a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 4b. Activity reports of DP. 4c. Mini-workshop reports and budget document of WSSEs. 4d. Activity reports of MaWaSU Sub-Committees.	
<Activities> 1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains. 1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps. 1-1-2. Review the current institutional effectiveness in terms of TAG. 1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations. 1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarding institution/governance and undertake the studies. 1-1-5. Submit an Overall Institutional Development Strategy (OIDS) including recommendations to the concerned organizations. 1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS such as licensing, PPP, technical/financial monitoring of WSSEs and private water service		<Inputs> Lao Side 1. Project personnel 1) Project Adviser Advisor to the Minister of Public Works and Transport 2) Project Director Director General, DWS, MPWT 3) Project Manager Director of Water Supply Division, DWS, MPWT	Project counterparts are assigned by the commencement of respective activities.

providers. 1-2. By initiative of DWS, the Priority Domain Task Team (PDTT) is formulated from all the stakeholder organizations, including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments to undertake the following activities. 1-2-1 Review the current situations of the priority domain. 1-2-2 Review the current mandates of laws and regulations regarding the priority domain. 1-2-3. Review the current institutional effectiveness in terms of TAG. 1-2-4. According to the needs identified, undertake workshops to provide the results of 1-2-2 and 1-2-3 to PDTT members and other concerned organizations. 1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study. 1-3. Formulate PDCDS. 1-3-1. Make a draft of PDCDS. 1-3-2. Discuss the draft among IRC. 1-3-3. Undertake workshops for dissemination and feedback of the draft. 1-3-4. Submit the final draft of PDCDS to DWS. 1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities: 1-4-1. Define a scope of required capacities and its level for management of the fund. 1-4-2. Extract lessons learned from pilot projects conducted in 2-2. 1-4-3. Define key elements to achieve TAG. 1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and	4) CPs 2. Land, buildings, facilities necessary for the implementation of the Project, including office spaces for Japanese Expert team and a meeting room at the DWS and the pilot WSSEs. 3. Running expenses. Japanese Side 1. Japanese Experts (1) Long-term experts Chief Advisor Sub-Chief Advisor (water supply management) Project Coordinator (2) Short-term Experts 1) Institution 1 2) Institution 2 3) Financial Management 4) Design/Construction Management 5) Civil Works 1 6) Civil Works 2	
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undertake specific target studies 1-4-5. Design the complete procedures for the entire cycle of the fund management. 1-5. Propose the funding mechanism. 1-5-1. Define target level for urban self-sufficiency and rural subsidization. 1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.). 1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis 1-5-4. Propose an overall funding mechanism. 1-6. Submit the fund plan. 1-6-1. Combine fund framework and funding mechanism discussed on 1-4 and 1-5. 1-6-2. Make a draft proposal for establishment of the fund . 1-6-3. Discuss the draft proposal among all the stakeholders. 1-6-4. Undertake workshops for dissemination and feedback of the draft proposal. 1-6-5. Submit a final proposal to DWS as the fund plan. 1-7. WSS, PWSS, WSG, and WSSY supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSSY are examined and evaluated. 1-7-2. Necessary items to be revised those strategies and guidelines are identified to be practiced. 1-7-3. WSS, PWSS, WSG, and WSSY are finalized and/or revised. 2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects. 2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs.	7) Water Quality 8) Finance (3) Equipment (4) Training in Japan 1) Following six (6) courses are expected. a. Intuitional Reform b. Fund c. Development of Technical Standards d. Water Quality Management e. Civil Works f. Financial Management 2) Duration Approximately one (1) to three (3) weeks in each course 3) Participants Approximately six (6) members in each course.	
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2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects. 2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation. 2-1-4. PPTT prepares procedures for developing proposals.⁵ 2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure. 2-2. Implement the pilot projects. 2-2-1 Pilot Project Evaluation Committee (PPEC) holds briefing sessions for all WSSEs for application of finance. 2-2-2 WSSEs applying for finance by the Project prepare and submit proposals to PPEC. 2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects. 2-2-4 Financing is decided for the pilot projects that passed the review by PPEC.⁶ 2-2-5 WSSEs prepare for the design documents and the bidding documents for the implementation of the pilot projects in consultation with DPWT and submit them to PPEC. 2-2-6 PPEC confirms the validity of the tender documents and approves them. 2-2-7 WSSEs will conduct bidding using tender documents approved by PPEC in consultation with DPWT.⁷ 2-2-8 WSSEs prepare a bid evaluation report in consultation with DPWT and submit it to PPEC. 2-2-9 PPEC approves the evaluation result of the submitted bid evaluation report. 2-2-10 JICA Laos Office enters into a contract for the pilot projects. 2-2-11 WSSEs carry out supervision for pilot projects in consultation with DPWT.		
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⁵ PPTT considers consistency with guidelines made with MaWaSU as a precondition of the procedures.

⁶ The information shall be shared to JICA Laos Office since a contract shall be signed between a contractor and JICA Laos Office.

⁷ The bidding process shall be involved by JICA Laos Office.

2-2-12 WSSEs prepare certification documents verifying the invoices submitted by the contractors in consultation with DPWT and submit them to DWS. 2-2-13 DWS and DPWT monitor the progress of the pilot projects and advise WSSEs as necessary. 2-2-14 WSSEs prepare the project completion reports in consultation with DPWT and submit them to DWS. 2-2-15 DWS approves the project completion reports. 2-3. Review the system for implementing the pilot projects. 2-3-1. Implement ex-post evaluation of activities of the 1st batch. Regarding the series of pilot projects implemented in 2-2, PPTT will review the procedures, responsibilities, and give feed-back to the next pilot projects as necessary. 2-3-2. PPTT reviews the implementation of the pilot projects in terms of TAG. 3-1 Standard Task Team (STT) is formed at DWS, DPW and WSSEs to consider and formulate technical standards. 3-2 Priority for technical standards is determined. 3-3 Based on the priority order, STT discusses and determines the scope of standards. 3-4 STT formulates the draft standards. 3-5 STT submits the draft standards to MPWT. 4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved. 4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development. 4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project. 4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and		
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assessed their capacity. 4-1-4. JICA Experts provides guidance to those trainers. 4-1-5. Evaluate the capacity of the trainers of the pilot WSSEs. 4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented. 4-2-1. DP is reviewed. 4-2-2. Based on the review, DP is implemented. 4-2-3. Evaluate contents of DP and compile the results of activities. 4-2-4. Report on the result of dissemination activities to MPWT. 4-2-5. Formulate a plan for implementation of the next plan, and the budget for the next plan is requested to MPWT and/or DPWTs. 4-2-6. The activities from 4-2-1 to 4-2-5 will be continued according to the allocation of the budget. 4-3. Activities of MaWaSU Sub-Committee are promoted. 4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee. 4-3-2. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year. 4-3-3. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee. 4-4. WSSEs prepare for the establishment of the Laos Water Works Association.		
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**MINUTES OF MEETINGS
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
MINISTRY OF PUBLIC WORKS AND TRANSPORT
FOR AMENDMENT OF THE RECORD OF DISCUSSIONS
ON
THE PROJECT FOR IMPROVEMENT OF MANAGEMENT CAPACITY ON WATER
SUPPLY SECTOR (MaWaSU2)**

The Japan International Cooperation Agency (hereinafter referred to as "JICA") and Ministry of Public Works and Transport of Lao PDR (hereinafter referred to as "the Counterpart") hereby agree that the Record of Discussions on the Project for Improvement of Management Capacity on Water Supply Sector (MaWaSU2) (hereinafter referred to as "the Project") signed on 26 December 2017, (hereinafter referred to as "the original R/D") will be amended as follows;

1. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 Duration of the Project 5 years (May 2018 - May 2023)	PDM Version 2 Duration of the Project 5 years and 7 months (May 2018 - December 2023)
Reason: - Activities of the Project stopped for 7 months in 2020 due to COVID-19.	

2. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 <Overall Goal> (Objectively Verifiable Indicators) b. The Lao government takes action including exploring financial resources toward establishment of the fund. (Means of Verification) b. Implementation reports of the fund. (Objectively Verifiable Indicators) c. Activities of national dissemination are continuously practiced based on the Dissemination Plan (DP) ¹ .	PDM Version 2 <Overall Goal> (Objectively Verifiable Indicators) b. The Lao government implements necessary improvements to realize the fund plan in whole or in part. (Means of Verification) b. Implementation reports of necessary improvement for the fund plan. (Objectively Verifiable Indicators) c. Activities of national dissemination for water supply management promotion and improvement are continuously practiced

¹ DP is one of outputs formulated in "The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)" (MaWaSU).

(Means of Verification) c. Activity reports of WSSEs.	based on MaWaSU2 dissemination activity by LWWA. (Means of Verification) c. Activity report of LWWA
Reason: b. Through the initial research of the fund, it was found that establishment of the fund was difficult within the Project period because there were many fields of capacity development in managing and operating the fund. Therefore, making a fund plan which includes fields to improve for sound management and operation of the fund became an outcome of the Project Purpose. Changes in indicators of Overall Goal follows the changes of indicators of the Project Purpose. c. Many of WSSEs' dissemination activities are expected to be taken over by LWWA.	

3. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 <Project Purpose> (Objectively Verifiable Indicators) b. The Lao government approves the plan of the fund. (Means of Verification) b. Implementation documents of the fund. (Means of Verification) c. Application of water supply project submitted by WSSEs.	PDM Version 2 <Project Purpose> (Objectively Verifiable Indicators) b. DWS discusses the fund plan with MPWT multiple times, and sort out the issues for realization. (Means of Verification) b. Consultation documents of the fund plan with MPWT. (Means of Verification) c. Documents related to budget and settlement of WSSEs. ²
Reason: b. Same as the one in Overall Goal c. Application limits only confirmation of water supply development (mainly plans). Documents related to budget and settlement of WSSEs are more suitable to confirm progress of water supply development plans and other waterworks operations.	

4. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 <Outputs> (Objectively Verifiable Indicators) 1b. The fund plan is endorsed by the Minister of MPWT.	PDM Version 2 <Outputs> (Objectively Verifiable Indicators) 1b. The fund plan is drafted in DWS.
Reason: 1b. Same as the one in Overall Goal	

5. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1	PDM Version 2

² Water supply business summary (Plan and budget), settlement and annual report.

<Outputs> (Objectively Verifiable Indicators) 2a. The procedures for planning, appraisal, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guideline, Appraisal Guideline, Pilot Project Implementation Guideline, Pilot Project Monitoring Guideline, and Accounting Guideline are developed. 2c. At least two pilot projects completed and are evaluated.	<Outputs> (Objectively Verifiable Indicators) 2a. The procedures for planning, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guidelines, Implementation Guidelines, are developed. 2c. At least five pilot projects completed and are evaluated.
Reason: 2a. Appraisal and Evaluation are under the jurisdiction of MPI. Evaluation here focuses on technical aspects. 2b. Appraisal and Project Monitoring are under the jurisdiction of MPI. Accounting is under the jurisdiction of MOF. Monitoring of construction is included in Implementation Guidelines. 2c. The number of Pilot Project increased because of Pilot Project 1.5 batch.	

6. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 <Outputs> (Objectively Verifiable Indicators) 4d. The activities of MaWaSU Sub-Committees are continued. (Means of Verification) 4d. Activity reports of MaWaSU Sub-Committees.	PDM Version 2 <Outputs> (Objectively Verifiable Indicators) 4d. The activities of MaWaSU Sub-Committees are continued by LWWA under supervision of DWS. (Means of Verification) 4d. Activity report of LWWA
Reason: 4d. Many of WSSEs' dissemination activities are expected to be taken over by LWWA.	

7. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 1-1-5. Submit an Overall Institutional Development Strategy (OIDS) including recommendations to the concerned organizations. 1-2. By initiative of DWS, the Priority Domain Task Team (PDTT) is formulated from all the stakeholder organizations, to undertake the following activities.	PDM Version 2 1-1-5. Share an Overall Institutional Development Strategy (OIDS) including recommendations with the concerned organizations. 1-2. By initiative of DWS, undertake the following activities to review current government ability of the prioritized issues identified in 1-1-6 in cooperation with the concerned organization including the

1-2-4. According to the needs identified, undertake workshops to provide the results of 1-2-2 and 1-2-3 to PDDT members and other concerned organizations. 1-3. Formulates PDCDS. 1-3-4. Submit the final draft of PDCDS to DWS. None 1-6. Submit the fund plan. 1-6-4. Undertake workshops for dissemination and feedback of the draft proposal. 1-6-5. Submit a final proposal to DWS as the fund plan.	Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments. 1-2-4. Undertake workshops to share the review results of 1-2-1, 1-2-2 and 1-2-3 at DWS. 1-3. DWS formulates PDCDS. 1-3-4. DWS finalizes PDCDS. 1-3-5. DWS implements some of institutional improvement and/or capacity development of PDCDS. 1-6. DWS finalizes the fund plan. 1-6-4. Undertake workshops for promotion of understanding and feedback of the draft proposal. 1-6-5. DWS discuss the draft with related organization in MPWT and arrange the issues.
Reason: To emphasize all the activities are initiated by DWS.	

8. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSSY are examined and evaluated. 1-7-2. Necessary items to be revised those strategies and guidelines are	PDM Version 2 1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Annual Report (WSAR) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated. 1-7-2. WSG is revised.

identified to be practiced.	
1-7-3. WSS, PWSS, WSG, and WSSY are finalized and/or revised.	1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR. 1-7-4. DWS updates WSAR. 1-7-5. DWS revises WSS. 1-7-6. DPWTs make PWSS based on revised WSS
Reason: - Water Supply Statistics Yearbook (WSSY) were discussed at only the study group level at DWS and have not yet been drafted. Instead of WSSY, The Water Supply Annual Report (WSAR) will be used as the Capacity Development for water supply administration. - WSAR was added as a DWS activity. - Provincial Water Supply Strategy (PWSS) was added as a DPWTs activity.	

9. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1	PDM Version 2
2-2-1 Pilot Project Evaluation Committee (PPEC) holds briefing sessions for all WSSEs for application of finance.	2-2-1 DWS holds briefing sessions for all WSSEs for application.
2-2-2 WSSEs applying for finance by the Project prepare and submit proposals to PPEC.	2-2-2 WSSEs in consultation with DPWTs prepare and submit proposals to DWS.
2-2-4 Financing is decided for the pilot projects that passed the review by PPEC.	2-2-4 DWS evaluates the proposals to select provinces to implement and informs all the provinces about the selection results.
2-2-5 WSSEs prepare for the design documents and the bidding documents for the implementation of the pilot projects in consultation with DPWT and submit them to PPEC.	2-2-5 Selected WSSEs in consultation with DPWTs prepare detailed design and BOQ for procurement.
2-2-6 PPEC confirms the validity of the tender documents and approves them.	2-2-6 Delete.
2-2-7 WSSEs will conduct bidding using tender documents approved by PPEC in consultation with DPWT.	2-2-7 Delete.
2-2-8 WSSEs prepare a bid evaluation report in consultation with DPWT and submit it to PPEC.	2-2-8 Delete.
2-2-9 PPEC approves the evaluation result of the submitted bid evaluation report.	2-2-9 Delete.

2-2-10 JICA Laos Office enters into a contract for the pilot projects. 2-2-11 WSSEs carry out supervision for pilot projects in consultation with DPWT. 2-2-12 WSSEs prepare certification documents verifying the invoices submitted by the contractors in consultation with DPWT and submit them to DWS. 2-2-13 DWS and DPWT monitor the progress of the pilot projects and advise WSSEs as necessary. 2-2-14 WSSEs prepare the project completion reports in consultation with DPWT and submit them to DWS. 2-2-15 DWS approves the project completion reports.	2-2-6 DWS enters into a contract with the DPWTs and WSSEs for the pilot projects. 2-2-7 Implementing WSSEs in consultation with DPWTs carry out supervision for pilot projects. 2-2-8 Implementing WSSEs in consultation with DPWTs submit mid-term and completion reports of pilot projects to DWS. 2-2-9 DWS and DPWTs monitor the progress of pilot projects and advise WSSEs as necessary. 2-2-10 Construction supervision supporters visit pilot project sites in charge approximately once a month to advise including Japanese expert comments on construction management.
2-3-1. Implement ex-post evaluation of activities of the 1st batch. Regarding the series of pilot projects implemented in 2-2, PPTT will review the procedures, responsibilities, and give feedback to the next pilot projects as necessary. 2-3-2. PPTT reviews the implementation of the pilot projects in terms of TAG.	2-3-1. DWS implements ex-post evaluation of pilot projects.
None	
None	2-3-2. DWS reviews pilot projects implementation and reflect the fund plan of Output 1. 2-4. Implement supporting activities related to COVID-19 prevention partly utilizing the Pilot Project scheme. 2-5 DWS develops Proposal Development Guidelines and Construction Implementation Guidelines.
Reason: - (2-2-1 to 2-2-11 and 2-3-1 to 2-3-2) Adjust workflow of the pilot project after implementation of the 1st batch. - (2-4) In order to increase capability to prevent the spread of the COVID-19. - (2-5) Added the activity as outcomes related to Overall Verifiable Indicators of Output 2.	

10. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1	PDM Version 2
3-1 Standard Task Team (STT) is formed at	3-1. Necessary Task Team for Technical

DWS, DPW and WSSEs to consider and formulate technical standards. 3-2 Priority for technical standards is determined. 3-3 Based on the priority order, STT discusses and determines the scope of standards.	Standard is formed at DWS, DPWTs and WSSEs and the priority and the scope of the standard are determined. 3-1-1. Standard Task Team (STT) is formed at DWS, DPWTs and WSSEs to consider and formulate technical standards. 3-1-2. Priority for technical standards is determined. 3-1-3. Based on the priority order, STT discusses and determines the scope of standards. 3-2 Necessary committees/task teams for official approval are organized to develop the determined priority technical standards. 3-2-1. Establish Technical Standard Committee (TSC) for official approval of the technical standards consisting of DWS, DPWTs and WSSEs. 3-2-2. Establish Ministerial Ordinance Task team (MTT) consisting of DWS.
Reason: - In order for the technical standards to be public and highly effective, a public review is necessary, and it was decided to set up two Task Teams for this purpose.	

11. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 3-4 STT formulates the draft standards. 3-5 STT submits the draft standards to MPWT.	PDM Version 2 3-3 Develop and submit the priority technical standards. 3-3-1. MTT develops a draft technical standard (Ministerial Ordinance). 3-3-2. TSC reviews the draft technical standard (Ministerial Ordinance). 3-3-3. TSC submits the draft technical standard (Ministerial Ordinance) to MPWT. 3-3-4. STT develop a draft technical standard (Criteria). 3-3-5. TSC reviews the draft technical standard (Criteria). 3-3-6 STT submits the draft technical standard (Criteria)
Reason: - The activities were subdivided into two sections, as it was decided to create "Ministerial Ordinance" and "Criteria".	

12. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 None	PDM Version 2 3-4 Technical Standard is disseminated. 3-4-1. TSC discusses and decides dissemination methods of the technical standard for DPWTs and WSSEs nationwide. 3-4-2. Implement the dissemination methods of the technical standard.
Reason: - Dissemination activities were added.	

13. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 None	PDM Version 2 3-5. Discuss and decide next priority scope of technical standard other than those developed and submitted in activity 3-3.
Reason: - Once the technical standards for design and construction have been developed, we leave 3-5 to work on the next required technical standards in parallel with the dissemination activities.	

14. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 4-1-5. Evaluate the capacity of the trainers of the pilot WSSEs.	PDM Version 2 4-1-5. Re-evaluate the capacity of the trainers of the pilot WSSEs.
Reason: - This is the correction of the expression.	

15. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 4-2-3. Evaluate contents of DP and compile the results of activities. 4-2-4. Report on the result of dissemination activities to MPWT. 4-2-5. Formulate a plan for implementation of the next plan, and the budget for the next plan is requested to MPWT and/or DPWTs.	PDM Version 2 4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated. 4-2-4. Activities are carried out based on the DP of the latter half of the project. 4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWWA activities.

Reason:	
- Dissemination Plan (DP) at the end of MaWaSU1 was expected to be able to be implemented by WSSE alone without the involvement of the MPWT (DWS), but in practice it was not possible for the pilot WSSEs in a parallel position to call on other WSSEs. So, DP is now being implemented with project support for DWS and the pilot WSSEs.	

16. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 4-2-6. The activities from 4-2-1 to 4-2-5 will be continued according to the allocation of the budget.	PDM Version 2 Delete
Reason:	
- 4-2-6 is already included in DP, thus it was deleted.	

17. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 None 4-3-2. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year. 4-3-3. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee.	PDM Version 2 4-3-2. The pilot WSSEs reorganize MaWaSU Sub-Committees according to the current situation. 4-3-3. The pilot WSSEs hold the MaWaSU Sub-Committee approximately four to six times a year. 4-3-4. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee.
Reason:	
- The nine Sub-Committees of MaWaSU1 were reorganized into six Sub-Committees. - Activity numbers 4-3-2 and 4-3-4 were moved up by one as new 4-3-2 was added.	

18. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 None	PDM Version 2 4-4. National Framework of Water Quality Management is strengthened. 4-4-1. Review the current situation of water quality management of WSSEs. 4-4-2. Develop a plan of National

	Framework of Water Quality Examination. 4-4-3. Implement the plan of National Framework of Water Quality Examination with equipment provided. 4-4-4. Improve water quality management of WSSEs nationwide.
Reason: - The water quality Sub-Committee's activities were added because it was the only one of the six Sub-Committees that was not listed.	

19. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 4-4. WSSEs prepare for the establishment of the Laos Water Works Association.	PDM Version 2 4-5. WSSEs establish the Lao Water Works Association (LWWA) and implement activities. 4-5-1. WSSEs prepare establishment of LWWA. 4-5-2. WSSEs establish LWWA. 4-5-3. LWWA implements activities. 4-5-4. LWWA discusses continuation of MaWaSU2 activities after the end of the project. 4-5-5. LWWA takes over some activities from the project. 4-6. WSSEs implement handwashing promotion activities for COVID-19 prevention through waterworks education class.
Reason: - Information on LWWA at the time of project formation was unclear, with multiple entries such as "already established," "preparatory committee has been set up," and "no progress has been made," making it impossible to provide details.	

20. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 (3) Equipment	PDM Version 2 (3) Equipment - Vehicles - Water quality examination equipment - Automatic chemical injection equipment - Water distribution pipes, and machines to construct pipeline - Other equipment as necessary.

Reason:

- Equipment for testing water quality had been requested since the formation of the project, and it was specified because the specifications were determined.
- Equipment for activity 2-4 was added.

21. Annex2: Project Design Matrix (PDM)

Before	Amended Version
PDM Version 1 (4) Training in Japan 1) Following six (6) courses are expected. a. Intuitional Reform b. Fund c. Development of Technical Standards d. Water Quality Management e. Civil Works f. Financial Management 3) Participants Approximately six (6) members in each course.	PDM Version 2 (4) Training in Japan 1) Following six (6) courses are expected. a. Role division of water supply sector b. Water Works Association c. Planning and Finance d. Water quality management e. Technical standard f. Construction supervision 3) Participants Approximately seven (7) members in each course. (Example- DWS:1, NPPL:2, NPKM:2)
Reason: - As the project progresses, it is revised to a theme that is more likely to be implemented. - As there are always requests from DWS to participate in training, the basic number of people was revised to 1 DWS and 2 for each of the 3 pilot WSSEs.	

The parties acknowledge and agree that this Minutes of Meetings may be executed by electronic signature, which is considered as an original signature for all purposes and has the same force and effect as an original signature. "Electronic signature" includes faxed versions of an original signature or electronically scanned and transmitted version (e.g., via pdf) of an original signature.

This amendment will become effective as of 30 Aug 2021.

Annex 1: The original R/D (signed on 26 December 2017)

Annex 2: The amended PDM as version 2

Annex 3: The amended Plan of Operations as version 2



Mr. Toshio Nagase
Chief Representative
JICA Laos Office



Mr. Sompong Sitthivong
Director General
Department of Water Supply
Ministry of Public Works and Transport

Vientiane, 30 Aug, 2021

RECORD OF DISCUSSIONS

FOR

THE PROJECT FOR IMPROVEMENT OF MANAGEMENT
CAPACITY OF WATER SUPPLY SECTOR
(MaWaSU 2)

AGREED UPON BETWEEN

MINISTRY OF PUBLIC WORKS AND TRANSPORT

OF

LAO PEOPLE'S DEMOCRATIC REPUBLIC

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

26 December 2017

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Based on the minutes of meetings on the Detailed Planning Survey for the Capacity Development Project for Improvement of Management Ability in Water Supply Sector in LAO PDR Phase II (hereinafter referred to as "the Project") signed on 15 September 2017 between Ministry of Public Works and Transport of Lao PDR (hereinafter referred to as "the Counterpart") and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with the Counterpart and relevant organizations to develop a detailed plan of the Project.

The purpose of this record of discussions (hereinafter referred to as "the R/D") is to establish a mutual agreement for its implementation by both parties and to agree on the detailed plan of the Project as described in the followings and the Annexes, which will be implemented within the framework of the Agreement on Technical Cooperation signed on 12 December 2003 (hereinafter referred to as "the Agreement") and the Note Verbales exchanged on 26 June 2017 between the Government of Japan and the Government of Lao PDR.

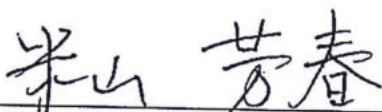
The Counterpart will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of Lao PDR.

Both parties also agreed that the Project will be implemented in accordance with the "Basic Principles for Technical Cooperation" published in December 2016 (hereinafter referred to as "the BP"), unless other arrangements are agreed in the R/D.

The R/D is delivered at Vientiane as of the day and year first above written. The R/D may be amended by a minutes of meetings between both parties, except the plan of operation to be modified in monitoring sheets. The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the R/D.

For

JAPAN INTERNATIONAL
COOPERATION AGENCY



Mr. Yoshiharu Yoneyama
Chief Representative
JICA Laos Office

For

MINISTRY OF PUBLIC WORKS AND
TRANSPORT



Mr. Phomma Veoravanh
Director General
Department of Water Supply
Ministry of Public Works and Transport

- Annex 1 Main Points Discussed
- Annex 2 Project Design Matrixes (PDM)
- Annex 3 Plan of Operation (PO)
- Annex 4 Implementation Structure
- Annex 5 List of Proposed Members of Joint Coordinating Committee
- Annex 6 Proposed Members of the Task Teams and Committees for Each Output
- Annex 7 List of Sub-Committee in MaWaSU Project

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MAIN POINTS DISCUSSED

1. Relation with MaWaSU Project and necessity of MaWaSU 2

- Both sides recognized that the Project would be implemented as the second phase of the Capacity Development Project for Improvement of Management Ability of Water Supply Authorities (hereinafter called for MaWaSU Project) which had ended on 23 August 2017, and the Project would take over outputs of MaWaSU Project in order to achieve following goals:

(1) National Goals of Lao PDR

- 1999 Prime Minister Decision No.37/PM on Management and Development of Water Supply and Waste Water Sector

"To provide 24 hour access to safe water for the 80% of urban population by 2020"

- The Eight Five-Year National Socio-Economic Development Plan (NSED) (2016-2020)

"90% of the population with use clean water"

- Strategy of the Urban Water Supply and Sanitation Sector (2013-2030) of the Ministry of Public Works and Transportation

"Urban water supply population at 80% for 2020, 90% for 2030"

(2) Sustainable Development Goals (SDGs)

- Target 6.1

"By 2030, achieve universal and equitable access to safe and affordable drinking water for all."

- Both sides agreed that based on implementation structure of MaWaSU Project, main counterpart personnel would continuously engage in the Project. In addition to the counterpart personnel of MaWaSU Project, the Project would involve other ministerial agencies mentioned in Annex 5 and 6 to discuss some of strategies and plans to be practiced by all stakeholders related to water supply sector.
- Both sides emphasized that good coordination and collaboration with all stakeholders are essential. Both sides also agreed that Ministry of Public Works and Transport (MPWT) would take a leadership such coordination as the

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responsible ministry of the Project. Moreover, importance of Department of Public Works and Transport (DPWT) in each province and Water Supply State Enterprises (WSSE(s)) are also recognized as important counterparts of the Project.

2. Concept of the Project

Both sides agreed that the outline of the Project as follows.

(1) General Concept

- a. In MaWaSU Project, capacity development of the members of WSSEs is mainly improved in order to achieve the goal set as WSSEs manage and operate water supply service based on their mid-and long-term visions and on a financially self-sufficient basis. To attain this goal, the Lao side needs to strengthen following two issues;
 - MPWT and WSSEs need to strengthen their capacity to play an appropriate role in the water sector in Laos, and
 - Capacity for water supply administration needs to be improved by reviewing each government role and to setting up a mechanism to secure fund for facilities.
- b. In order to achieve this, MaWaSU 2 will be implemented in accordance with Project Design Matrix (PDM) and tentative Plan of Operation (PO) described as Annex 2 and 3 respectively.
- c. Important points to be considered during the implementation of the Project are as follows.

(2) Output 1

- a. In terms of Output 1, the five issues originally suggested are grouped in two major sub-outputs i.e., 1) clear definition and recognition by all the stakeholders on institutional functions and responsibilities of MPWT, DPWT and WSSEs, and 2) preparation of establishment of the Water Sector Development Fund (hereafter referred to "the Fund").
- b. One of the important institutional development goals is to increase transparency, accountability and governance.
- c. Appropriate legal framework is investigated among the stakeholders on license/permits for water supply businesses including Public Private Partnership

(PPP), monitoring and supervision, and enforcement and support. An important aspect of the investigation is to find the gap within the Law of Water Supply for effective enforcement. A capacity development plan must be developed for the identified gaps.

- d. There should be sub-committees or task teams (TTs) specialized for each topic of general/construction approval, PPP licensing, functional division between central, local governments and WSSEs, the Fund and overall institutional capacity enhancement etc. with only direct stakeholders involved in a small group.
- e. As for the fund preparation, the activities must aim at preparation of a well-documented plan and proposal for the Fund, so that the establishment would follow immediately. The document must cover all the requirements for the project evaluation for full-scale development of the Fund. The document should cover the financial flow of the Fund, loan application/disbursement procedure, project evaluation/selection criteria, and monitoring/supervision of works and fund flows including recovery of loans as well as personnel and organizational setup and mechanism for transparency and accountability.
- f. The fulfillment of SDGs is predicated on supply of adequate low cost financing and cross-subsidy from affluent urban customers to the rural less affluent customers. Therefore, the Fund must be designed to incorporate such a mechanism. Possibilities of water tariff surcharge for the Fund, bond issuance as well as donor funding and other financial instruments should be explored.
- g. In addition to the sources for the Fund, the system of financial transaction corresponding closely to implementation of actual projects must be examined including the formats, criteria and methodology for fund application. The formats and elements must be prepared by reviewing the existing formats, criteria and guidelines developed and utilized by such as "Project for Enhancing Capacity in PIP Management" (PCAP) of JICA and "Small Town Water Supply Projects" of Asian Development Bank (ADB).
- h. Target date for producing the outputs for institutional framework should be set before the end of 2020.
- i. In order to strengthen administration of water sector, the Project support to revise or finalize following four (4) items which were established during MaWaSU Project;
 - 1) Water Supply Strategy (WSS) known as "vision" to show national direction of

water supply management being formulated by DWS;

- 2) Provincial Water Supply Strategy (PWSS) also known as "vision" to show provincial direction of water supply management formulated by DPWTs formulated by DPWTs;
- 3) Water Supply Guidelines (WSG) to show how to promote the high quality and highly effective water supply service, which was approved by DWS in December, 2013;
- 4) Water Supply Statistics Yearbook (WSSY) is to capture the water supply management situation at the provincial level which shall be approved by DWS.

(3) Output 2

- a. The main aim of Output 2 is to enhance the implementation capacities in water supply sector. The pilot projects to be provided by the Project are to provide hands-on and real case studies for full-fledged fund system development.
- b. Responsible organization is determined as "Pilot Project Task Team (PPTT)" in Annex 6 to prepare following items by having the series of discussion among PPTT:
 - Preparation of proposal
 - Submission of proposal
 - Preparation of design document
 - Preparation of bidding document
 - Contract
 - Construction supervision
 - Preparation of completion report
- c. The pilot projects expect to improve WSSEs' financial status by small investment. The following projects are assumed, and other projects which contribute to improve WSSE's financial status may also be adopted:
 - Project which can increase the number of customers
 - Project which can significantly decrease leakage
- d. The contents of the proposal should be easy to prepare so that all the WSSEs can submit.
- e. Clear criteria for screening of the proposals is studied and established by the committee for pilot project to secure transparency and accountability.

- f. Following guidelines shall be developed throughout the activities related to Output 2. The details of each will be decided after the commencement of the Project.
- Proposal Development Guideline
 - Appraisal Guideline
 - Pilot Project Implementation Guideline
 - Pilot Project Monitoring Guideline
 - Accounting Guideline
- *The proposal shall be prepared by the WSSEs which want to apply pilot projects.
- g. All WSSEs are eligible to apply the pilot projects.
- h. Four (4) pilot projects are currently planned. One cycle of the whole pilot project is planned as about twenty nine (29) months. In case that the whole process takes less than twenty nine (29) months, JICA considers increasing the number of the pilot projects considering remaining project period. Simultaneously, in case that the whole process takes much time compared to the planned twenty nine (29) months, JICA considers to decrease the number of the pilot project.
- i. After certain periods from the completion of the pilot projects, evaluation has to be carried out. Feed-back shall be given to the next pilot project based on the evaluation.

(4) Output 3

- a. In terms of the input of the JICA Experts and its counterpart personnel, it is difficult to prepare technical standards to cover all items. Discussions are carried out to determine a prioritized item for those standards.
- b. Preparation of the prioritized standard promotes the appropriate design, construction, construction supervision and maintenance work and so on.
- c. Throughout the activities to formulate the standard, capacity development to discuss and formulate the standard is expected. Sharing information on the standard is promoted among the concerned organization on water supply sector.
- d. DWS requested to refer good practices or case studies to formulate those standards in neighboring countries during the activities.
- e. Both sides recognized that enforcement of the standard is more critical after approval of the standard by DWS, and both sides agreed to make an effort that

WSSEs develop as-built drawing and design report according to approved technical standards.

- f. After establishment of Laos Water Works Association (LWWA), the activities such as preparation of technical standard are expected by LWWA.

(5) Output 4

- a. The contents of the nationwide dissemination activities are based on "Nationwide Dissemination Plan" created in the MaWaSU Project.
- b. The following activities are planned and implemented by the 3 pilot WSSEs (NPNL, NPLP, NPKM)¹ according to the Nationwide Dissemination Plan:

year	activities
2018	1. Mini—workshop at the 3 pilot WSSEs - 2 times/year - topics:(1) water quality management, (2) NRW 2. On-site OJT at each provinces * - 2 days/2 times/year
2019	1. Mini—workshop at the 3 pilot WSSEs - 2 times/year - topics: (1) business management (customer information, customer meter, water tariff collection), (2) human resources development 2. On-site OJT at each provinces * - 2 days/2 times/year
2020	1. Mini—workshop at the 3 pilot WSSEs - 2 times/year - topics: (1) long-term business plan, (2) financial plan 2. On-site OJT at each provinces * - 2 days/2 times/year

*The WSSEs supported by the 3 pilot WSSEs are the followings;

- NPNL (Vientiane Capital): four (4) provinces (Borikhamxay, Vientiane, Xiengkhuang, Xaysomboon)
- NPLP (Luang Prabang): six (6) provinces (Xayaboury, Huaphanh, Bokeo, Oudomxay, Luangnamtha, Phongsaly)
- NPKM (Khammouane): five (5) provinces (Attapeu, Champasack, Sekong, Saravane, Savannakhet)

- c. The necessary budget for the above activities will be covered by the Lao side by the following procedures;

¹ Vientian Capital Water Supply State Enterprise (NPNL), Luang Prabang Provincial Water Supply State Enterprise (NPLP), Khammouane Provincial Water Supply State Enterprise (NPKM)

Schedule of the Budget Allocation for All WSSEs
(the Lao fiscal year: January- December)

Time	Action
Sep.- Oct.	Confirmation of nationwide dissemination plan for next FY Making Budget Plan for next FY
Jan.	Approval of Budget Plan
Jan.-Dec.	Implementation of nationwide dissemination activities Allocate of budget

- d. Considering the sustainability of the nationwide dissemination activities, the budget for the above activities should be secured by the Lao side. In this context, the role of the Japanese expert will be adviser to the activities initiated by the Lao side.
- e. The Lao side emphasized that data management is essential and requested to the Team to establish a data management system so that all appropriate data is always accessible. The Team noted its importance.

3. Title of the Project

- Both sides agreed that the title of the Project would be changed to "The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)", subject to approval of the both governments.

4. Responsible and Implementing Agencies

- Both sides agreed that Director General, Department of Water Supply, MPWT is the Project Director; hence MPWT is responsible for the overall implementation and coordination of the Project.
- Moreover, both sides agreed that the Project Manager is the Director of Water Supply Division, DWS/MPWT.
- Lao side proposed to place the Assistant Project Manager which is expected to support the Project Manager, and JICA side agreed it. Both sides agreed that the Assistant Project Manager is Technical Staff Member, Water Supply Division, DWS/MPWT.
- Furthermore, both sides agreed that Advisor to the Minister of Public Works would be placed for the advisor of the Project.

5. Project Implementation Structure

(1) Members of the Joint Coordinating Committee (JCC) and TTs and Committees

- a. Both sides agreed to establish JCC, TTs and committees as Annex 4, 5 and 6.
- b. The Team proposed members of TTs and committees to implement activities to attain each output as Annex 6.
- c. Both sides agreed that four (4) full-time counterpart personnel mentioned in 9.(1)b. and member list of JCC, TTs, and Committees would be by 31st January, 2018.

(2) Frequency of the JCC Meeting

- a. In principle, the JCC meeting will be held every November to review activities and to discuss prospect of the project and important issues.
- b. TTs and Committees are held daily basis as a mechanism in convenience of discussing related items.

6. Duration and Schedule of the Project

- The duration of the Project would be about five (5) years from the date when the first JICA Expert (Chief Advisor) arrives.
- The tentative schedule of the Project is as tentative PO.

7. Target Area

- Both sides confirmed that the Project is mainly implemented at Vientiane, Luang Prabang, and Khammouane Province. Those three cities are hubs of dissemination activities of the Project to the other cities.

8. Tentative Plan for the Overseas Trainings

- The Team explained that JICA had intention to provide overseas trainings in Japan for the counterparts of the Project, as described in the draft R/D. The trainings will be composed of site visits, lectures and discussions. The Team proposed topics for the trainings in Japan as follows:

- (1) Institutional Reform (Output 1)
- (2) Fund (Output 1)
- (3) Development of Technical Standards (Output 3)
- (4) Water Quality Management (Output 4)
- (5) Civil Works (Output 4)

(6) Financial Management (Output 4)

- Approximately six (6) participants will be invited to each of those trainings, ideally from the members of related TTs or committees. The duration of the each training will be from one (1) to three (3) weeks.
- The trainings in third countries are also considered.

9. Major Undertakings of the Lao Side

- In addition to the undertakings mentioned in "Basic Principles for Technical Cooperation" (December, 2016), JICA, the Lao side agreed that major undertakings are as follows.

(1) Assignment of Counterpart personnel

- a. The Lao side agreed to assign counterpart personnel to implement this project as mentioned in Annex 5 and 6.
- b. DWS agreed that at least four (4) counterpart personnel would be placed as full-time which means to be available for consultation on the Project daily basis. One personnel in following issues is expected to be placed.
 - Institutional Reform (Output 1)
 - Water Sector Development Fund (Output 1)
 - Output 2
 - Output 3

(2) Secure annual budget for the implementation of the Project.

- a. The Team explained necessary budget to enforce undertakings of the Lao side. The Lao side agreed that allowance and domestic transportation to attend any workshops and seminars would be borne by the Lao side except activities related to TTs and Committees listed on Annex 6.

(3) Project Office Space

- a. The Team stressed importance to secure Project office space near the offices of key counterparts in order to ensure good communication between the counterparts and the JICA experts.
- b. The Team requested to DWS to provide office space for JICA expert working within the office of DWS and NPPL, NPLP, and NPKM, in addition to the WSSE's office which the MaWaSU Project member habited in Vientiane, and DWS agreed it.

10. Environmental and Social Considerations

With regard to the Section 10.1 of the Basic Principles (BP), the Project is likely to have minimal adverse impact on the environment and society under the 'JICA Guidelines for Environmental and Social Considerations (April 2010)'.

PDM Version 0 17/11/2017

Title of the Project: 'The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)'

Project Area: Vientiane Capital, Provinces of Luang Prabang, Khammouane and others

Duration of the Project: 5 years (April 2018 – March 2023)

Executing Organization: Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT) of Lao PDR

Implementing Organizations: DWS of MPWT, Vientiane Capital Water Supply State Enterprise (NPNL), Luang Prabang Provincial Water Supply State Enterprise (NPLB) and Khammouane Provincial Water Supply State Enterprise (NPKM) as the pilot water supply state enterprises (WSSEs), Department of Public Works and Transport (DPWT) of Vientiane Capital, Luang Prabang, Khammouane and WSSEs and DPWTs of other provinces

Direct Beneficiaries: Staff of: DWS of MPWT; WSSEs (NPNL, NPLB, NPKM, and other provinces); and DPWTs of Vientiane Capital, Luang Prabang, Khammouane and other provinces

Indirect Beneficiaries: People living in the water supply areas of the pilot and other WSSEs

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<Overall Goal> The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.	a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part. b. The Lao government takes action including exploring financial resources toward establishment of the fund. c. Activities of national dissemination are continuously practiced based on the Dissemination Plan (DP)¹.	a. Implementation reports regarding PDCDS b. Implementation reports of the fund. c. Activity reports of WSSEs.	

¹ DP is one of outputs formulated in "The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)" (MaWaSU).

<Project Purpose> The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.	a. The Lao government takes action toward implementation of PDCDS. b. The Lao government approves the plan of the fund. c. Implementation of WSSEs' water supply projects based on the PDCA² cycle is promoted.	a. Documents of PDCDS. b. Implementation documents of the fund. c. Application of water supply project submitted by WSSEs.	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans supported by the Project.
<Outputs> 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.	1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. 1b. The fund plan is endorsed by the Minister of MPWT. 1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU³ are utilized.⁴	1a. PDCDS document. 1b. Fund plan. 1c. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans support by the Project.
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.	2a. The procedures for planning, appraisal, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guideline, Appraisal Guideline, Pilot Project Implementation Guideline, Pilot Project Monitoring Guideline, and Accounting Guideline are developed. 2c. At least two pilot projects completed and are evaluated. 2d. Lessons learned from pilot projects are reflected on the fund as well as other procedures of the Lao government.	2a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 2b. Guideline documents. 2c. Project completion / Evaluation reports of pilot projects. 2d. Fund Plan.	

² Plan-Do-Check-Action (PDCA)

³ The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)

⁴ Purpose of those strategies and guidelines are as follows:

WSS known as "vision" is to show national direction of water supply management being formulated by DWS.

PWSS also known as "vision" is to show provincial direction of water supply management formulated by DPWTs.

WSG is to show how to promote the high quality and highly effective water supply service, which was approved by DWS in December, 2013.

WSSY is to capture the water supply management situation at the provincial level which shall be approved by DWS.

3. Technical standards necessary for water supply service are developed.	3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report. 3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	3a. As-built drawing/ design report, technical standards. 3b. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	
4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.	4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved. 4b. DP supported by MaWaSU is utilized. 4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP supported by MaWaSU. 4d. The activities of MaWaSU Sub-Committees are continued.	4a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 4b. Activity reports of DP. 4c. Mini-workshop reports and budget document of WSSEs. 4d. Activity reports of MaWaSU Sub-Committees.	
<Activities> 1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains. 1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps. 1-1-2. Review the current institutional effectiveness in terms of TAG. 1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations. 1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarding institution/governance and undertake the studies. 1-1-5. Submit an Overall Institutional Development Strategy (OIDS) including recommendations to the concerned organizations. 1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS such as licensing, PPP, technical/financial monitoring of WSSEs and private water service		<Inputs> Lao Side 1. Project personnel 1) Project Adviser Advisor to the Minister of Public Works and Transport 2) Project Director Director General, DWS, MPWT 3) Project Manager Director of Water Supply Division, DWS, MPWT	Project counterparts are assigned by the commencement of respective activities.

providers.

- 1-2. By initiative of DWS, the Priority Domain Task Team (PDTT) is formulated from all the stakeholder organizations, including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments to undertake the following activities.
 - 1-2-1 Review the current situations of the priority domain.
 - 1-2-2 Review the current mandates of laws and regulations regarding the priority domain.
 - 1-2-3. Review the current institutional effectiveness in terms of TAG.
 - 1-2-4. According to the needs identified, undertake workshops to provide the results of 1-2-2 and 1-2-3 to PDTT members and other concerned organizations.
 - 1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study.
- 1-3. Formulate PDCDS.
 - 1-3-1. Make a draft of PDCDS.
 - 1-3-2. Discuss the draft among IRC.
 - 1-3-3. Undertake workshops for dissemination and feedback of the draft.
 - 1-3-4. Submit the final draft of PDCDS to DWS.
- 1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities:
 - 1-4-1. Define a scope of required capacities and its level for management of the fund.
 - 1-4-2. Extract lessons learned from pilot projects conducted in 2-2.
 - 1-4-3. Define key elements to achieve TAG.
 - 1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and

4) CPs

2. Land, buildings, facilities necessary for the implementation of the Project, including office spaces for Japanese Expert team and a meeting room at the DWS and the pilot WSSEs.
3. Running expenses.

Japanese Side

1. Japanese Experts
 - (1) Long-term experts
 - Chief Advisor
 - Sub-Chief Advisor (water supply management)
 - Project Coordinator
 - (2) Short-term Experts
 - 1) Institution 1
 - 2) Institution 2
 - 3) Financial Management
 - 4) Design/Construction Management
 - 5) Civil Works 1
 - 6) Civil Works 2

undertake specific target studies 1-4-5. Design the complete procedures for the entire cycle of the fund management. 1-5. Propose the funding mechanism. 1-5-1. Define target level for urban self-sufficiency and rural subsidization. 1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.). 1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis 1-5-4. Propose an overall funding mechanism. 1-6. Submit the fund plan. 1-6-1. Combine fund framework and funding mechanism discussed on 1-4 and 1-5. 1-6-2. Make a draft proposal for establishment of the fund . 1-6-3. Discuss the draft proposal among all the stakeholders. 1-6-4. Undertake workshops for dissemination and feedback of the draft proposal. 1-6-5. Submit a final proposal to DWS as the fund plan. 1-7. WSS, PWSS, WSG, and WSSY supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSSY are examined and evaluated. 1-7-2. Necessary items to be revised those strategies and guidelines are identified to be practiced. 1-7-3. WSS, PWSS, WSG, and WSSY are finalized and/or revised. 2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects. 2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs.	7) Water Quality 8) Finance (3) Equipment (4) Training in Japan 1) Following six (6) courses are expected. a. Intuitional Reform b. Fund c. Development of Technical Standards d. Water Quality Management e. Civil Works f. Financial Management 2) Duration Approximately one (1) to three (3) weeks in each course 3) Participants Approximately six (6) members in each course.	
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2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects.		
2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation.		
2-1-4. PPTT prepares procedures for developing proposals. ⁵		
2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure.		
2-2. Implement the pilot projects.		
2-2-1 Pilot Project Evaluation Committee (PPEC) holds briefing sessions for all WSSEs for application of finance.		
2-2-2 WSSEs applying for finance by the Project prepare and submit proposals to PPEC.		
2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects.		
2-2-4 Financing is decided for the pilot projects that passed the review by PPEC. ⁶		
2-2-5 WSSEs prepare for the design documents and the bidding documents for the implementation of the pilot projects in consultation with DPWT and submit them to PPEC.		
2-2-6 PPEC confirms the validity of the tender documents and approves them.		
2-2-7 WSSEs will conduct bidding using tender documents approved by PPEC in consultation with DPWT. ⁷		
2-2-8 WSSEs prepare a bid evaluation report in consultation with DPWT and submit it to PPEC.		
2-2-9 PPEC approves the evaluation result of the submitted bid evaluation report.		
2-2-10 JICA Laos Office enters into a contract for the pilot projects.		
2-2-11 WSSEs carry out supervision for pilot projects in consultation with DPWT.		

⁵ PPTT considers consistency with guidelines made with MaWaSU as a precondition of the procedures.

⁶ The information shall be shared to JICA Laos Office since a contract shall be signed between a contractor and JICA Laos Office.

⁷ The bidding process shall be involved by JICA Laos Office.

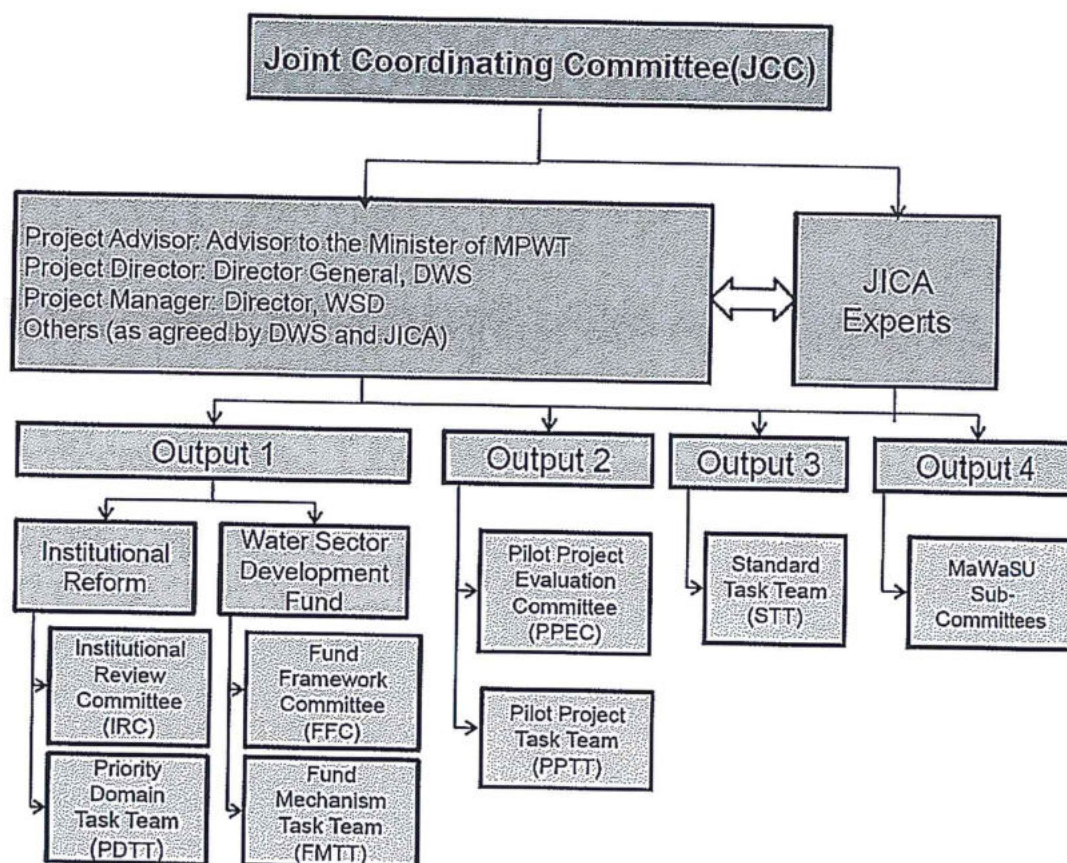
2-2-12 WSSEs prepare certification documents verifying the invoices submitted by the contractors in consultation with DPWT and submit them to DWS.		
2-2-13 DWS and DPWT monitor the progress of the pilot projects and advise WSSEs as necessary.		
2-2-14 WSSEs prepare the project completion reports in consultation with DPWT and submit them to DWS.		
2-2-15 DWS approves the project completion reports.		
2-3. Review the system for implementing the pilot projects.		
2-3-1. Implement ex-post evaluation of activities of the 1st batch. Regarding the series of pilot projects implemented in 2-2, PPTT will review the procedures, responsibilities, and give feed-back to the next pilot projects as necessary.		
2-3-2. PPTT reviews the implementation of the pilot projects in terms of TAG.		
3-1 Standard Task Team (STT) is formed at DWS, DPW and WSSEs to consider and formulate technical standards.		
3-2 Priority for technical standards is determined.		
3-3 Based on the priority order, STT discusses and determines the scope of standards.		
3-4 STT formulates the draft standards.		
3-5 STT submits the draft standards to MPWT.		
4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved.		
4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development.		
4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project.		
4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and		

assessed their capacity. 4-1-4. JICA Experts provides guidance to those trainers. 4-1-5. Evaluate the capacity of the trainers of the pilot WSSEs. 4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented. 4-2-1. DP is reviewed. 4-2-2. Based on the review, DP is implemented. 4-2-3. Evaluate contents of DP and compile the results of activities. 4-2-4. Report on the result of dissemination activities to MPWT. 4-2-5. Formulate a plan for implementation of the next plan, and the budget for the next plan is requested to MPWT and/or DPWTs. 4-2-6. The activities from 4-2-1 to 4-2-5 will be continued according to the allocation of the budget. 4-3. Activities of MaWaSU Sub-Committee are promoted. 4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee. 4-3-2. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year. 4-3-3. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee. 4-4. WSSEs prepare for the establishment of the Laos Water Works Association.		
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DA One

	Calendar year	2018				2019				2020				2021				2022				2023						
ivities	Year	1st Year				2nd Year				3rd Year				4th Year				5th Year					Responsible Organization		Achievements	Issue & Countermeasures		
Sub-activities		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	Japan	GO Laos					
Output 3. Technical standards necessary for water supply projects are developed.																												
Standard Task Team (STT) is formed at DWS, DPW and Es to consider and formulate technical standards.	Plan																											
	Actual																											
Priority for technical standards is determined.	Plan																											
	Actual																											
Based on the priority order, STT discusses and mines the scope of standards.	Plan																											
	Actual																											
STT formulates the draft standards.	Plan																											
	Actual																											
STT submits the draft standards to MPWT.	Plan																											
	Actual																											
Output 4. Technical capacity necessary for the WSSEs to implement the water supply projects is improved.																												
Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved.																												
-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development.	Plan																											
	Actual																											
-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project.	Plan																											
	Actual																											
-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and assessed their capacity.	Plan																											
	Actual																											
-1-4. JICA Experts provides guidance to those trainers.	Plan																											
	Actual																											
-1-5. Evaluate the capacity of the trainers of the pilot WSSEs.	Plan																											
	Actual																											
Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented.																												
2-1. DP is reviewed.	Plan																											
	Actual																											
2-2. Based on the review, DP is implemented.	Plan																											
	Actual																											
2-3. Evaluate contents of DP and compile the results of activities.	Plan																											
	Actual																											
2-4. Report on the result of dissemination activities to MPWT.	Plan																											
	Actual																											
2-5. Formulate a plan for implementation of the next plan, and the budget for the next plan is requested to MPWT and/or DPWTs.	Plan																											
	Actual																											
2-6. The activities from 4-2-1 to 4-2-5 will be continued according to the allocation of the budget.	Plan																											
	Actual																											
Activities of MaWaSU Sub-Committee are promoted.																												
3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee.	Plan																											
	Actual																											
3-2. The pilot WSSEs hold the MaWaSU Sub-Committee six times a year.	Plan																											
	Actual																											
3-3. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee.	Plan																											
	Actual																											
WSSEs prepare for the establishment of the Laos Works Association.	Plan																											
	Actual																											
Monitoring / Phasing																												
	Calendar year	2018				2019				2020				2021				2022				2023						
Monitoring Plan	Year	1st Year				2nd Year				3rd Year				4th Year				5th Year							Remarks	Issue	Solution	
Monitoring		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV							
Joint Coordinating Committee	Plan																											
	Actual																											
Set-up the Detailed Plan of Operation	Plan																											
	Actual																											
Submission of Monitoring Sheet	Plan																											
	Actual																											
Monitoring Mission from Japan	Plan																											
	Actual																											
Joint Monitoring	Plan																											
	Actual																											
Joint Monitoring	Plan																											
	Actual																											
Reports/Documents	Plan																											
	Actual																											
Project Completion Report	Plan																											
	Actual																											
Public Relations	Plan																											
	Actual																											
	Plan																											
	Actual																											

Implementation Structure



List of Proposed Members of Joint Coordinating Committee

- (1) Chair Person of the Committee
Vice Minister for Water Supply, Ministry of the Public Works and Transport (MPWT)
- (2) Project Team
 - 1) Project Advisor,
Advisor to the Minister of Public Works and Transport
 - 2) Project Director
Director General, Department of Water Supply (DWS), MPWT
 - 3) Project Manager
Director of Water Supply Division, DWS, MPWT
 - 4) Technical Staff Member, Water Supply Division, DWS, MPWT
 - 5) JICA Experts
 - 6) Personnel from the Counterpart
- (3) Other members from Lao side
 - Central Government
 - 1) Department of Planning and Cooperation, Ministry of Home Affairs
 - 2) Department of External Finance Department, Ministry of Finance
 - 3) Department of Treasury, Ministry of Finance
 - 4) Department of State-Owned Enterprises Financial Management, Ministry of Finance
 - 5) Department of International Cooperation, Ministry of Planning and Investment
 - 6) Department of Evaluation, Ministry of Planning and Investment
 - Provincial Government (at least three provinces)
 - 1) Director of the Department of Public Works and Transport
 - 2) Director/Head of the Water Supply Unit
 - Water Supply State Enterprises (at least three provinces)
 - 1) General Manager of WSSE in Vientiane, Luang Prabang, Khammouan
- (4) Other persons that Lao side might consider necessary (consultants, technicians, etc)
- (5) Development partners
- (6) Other members from Japanese side:
 - 1) Chief Representative, representative and staff of JICA Laos Office
 - 2) Staff from JICA Headquarters, other domestic and foreign offices
 - 3) Staff from the Embassy of Japan
 - 4) Other persons that Japanese side might consider necessary



Proposed Members of Task Teams and Committees for Each Output (Legend: ●●:secretariat ●:member PP: pilot projects)

	Output 1				Output 2		Output 3	Output 4
	Institutional Reform		Water Sector Development Fund		Pilot Project Task Team (PPTT)	Pilot Project Evaluation Committee (PPEC)	Standard Task Team (STT)	MaWaSU Sub-committees
	Institutional Review Committee (IRC)	Priority Domain Task Team (PDTT)	Fund Framework Committee (FFC)	Funding Mechanism Task Team (FMTT)				
Ministry of Public Works and Transport	●							
Department of Personnel and Organization								
Department of Planning and Cooperation			●					
Department of Finance			●					
Department of Water Supply								
Administration Management Division	●	●		●	●			●
Planning and Budget Division	●	●	●●	●●	●	●	●	●
Water Supply Division	●●	●●	●	●	●●	●●	●●	●●
WS Business Regulatory Division	●	●					●●	●●
Inspection Division	●	●			●	●	●	
Ministry of Finance								
Department of Treasury,			●	●				
Department of State-Owned Enterprise Financial								
Management Department,								
External Financing Department								
Ministry of Home Affairs	●	●	●	●				
Ministry of Planning and Investment	●	●	●	●				
Department of International Cooperation,								
Department of Evaluation,								
Department of Public Works and Transport (Vientiane, Luang Prabang, Khammouane)								
Water Supply Unit or equivalent Division	●	●	●	●				
Department of Public Investment	●	●	●	●				
Water Supply State Enterprises (Vientiane, Luang Prabang, Khammouane)							●●	●●

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List of Sub-Committee in MaWaSU Project

1. Water Safety Plan & Water Quality Control Center Plan
 - Department of Water Supply (DWS)/Water Supply Division (WSD), NPNL, NPLP, NPKM¹
2. O&M in Water Treatment Plant Facility Improvement Plan
 - DWS /Water Supply Regulatory Division (WSRD), NPNL, NPLP, NPKM
3. Long Term Human Resource Development (HRD) Plan
 - NPNL, NPLP, NPKM
4. Future System on Meter Reading, Water Meter, Billing, Customer Information Managing & Customer Relations
 - NPNL, NPLP, NPKM
5. Water Supply Guideline, Water Vision & Water Supply Statistical Yearbook
 - DWS /WSD, WSRD, Department of Public Works and Transport (DPWT)s (NL, LP, KM), NPNL, NPLP, NPKM
6. Summary Annual Report, Manual for Data Management & Long Term Plan
 - DWS, NPNL, NPLP, NPKM
7. Midterm Financial Plan
 - DWS /WSRD, NPNL, NPLP, NPKM
8. Non-Revenue Water Control
 - DWS, NPNL, NPLP, NPKM

¹ Vientian Capital (NL) Water Supply State Enterprise (NPNL), Luang Prabang(LP) Provincial Water Supply State Enterprise (NPLP), Khammouane Provincial (KM) Water Supply State Enterprise (NPKM)



Title of the Project: 'The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)'

Project Area: Vientiane Capital, Provinces of Luang Prabang, Khammouane and others

Duration of the Project: 5 years and 7 months (May 2018 – December 2023)

Executing Organization: Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT) of Lao PDR

Implementing Organizations: DWS of MPWT, Vientiane Capital Water Supply State Enterprise (NPNL), Luang Prabang Provincial Water Supply State Enterprise (NPLB) and Khammouane Provincial Water Supply State Enterprise (NPKM) as the pilot water supply state enterprises (WSSEs), Department of Public Works and Transport (DPWT) of Vientiane Capital, Luang Prabang, Khammouane and WSSEs and DPWTs of other provinces

Direct Beneficiaries: Staff of: DWS of MPWT; WSSEs (NPNL, NPLB, NPKM, and other provinces); and DPWTs of Vientiane Capital, Luang Prabang, Khammouane and other provinces

Indirect Beneficiaries: People living in the water supply areas of the pilot and other WSSEs

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<Overall Goal> The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.	a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part. b. The Lao government implements necessary improvements to realize the fund plan in whole or in part. c. Activities of national dissemination for water supply management promotion and improvement are continuously practiced based on MaWaSU2 dissemination activity by LWWA.	a. Implementation reports regarding PDCDS b. Implementation reports of necessary improvement for the fund plan. c. Activity report of LWWA	

<Project Purpose> The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.	a. The Lao government takes action toward implementation of PDCDS. b. DWS discusses the fund plan with MPWT multiple times, and sort out the issues for realization. c. Implementation of WSSEs' water supply projects based on the PDCA¹ cycle is promoted.	a. Documents of PDCDS. b. Consultation documents of the fund plan with MPWT. c. Documents related to budget and settlement of WSSEs.²	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans supported by the Project.
<Outputs> 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.	1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. 1b. The fund plan is drafted in DWS. 1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU³ are utilized.⁴	1a. PDCDS document. 1b. Fund plan. 1c. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans support by the Project.
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.	2a. The procedures for planning, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guidelines, Implementation Guidelines, are developed. 2c. At least five pilot projects completed and are evaluated. 2d. Lessons learned from pilot projects are reflected on the fund as well as other procedures of the Lao government.	2a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 2b. Guideline documents. 2c. Project completion / Evaluation reports of pilot projects. 2d. Fund Plan.	

¹ Plan-Do-Check-Action (PDCA)

² Water supply business summary (Plan and budget), settlement and annual report.

³ The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)

⁴ Purpose of those strategies and guidelines are as follows:

WSS known as "strategy" is to show national direction of water supply management being formulated by DWS.

PWSS also known as "strategy" is to show provincial direction of water supply management formulated by DPWTs.

WSG is for self-analysis and goal setting by quantifying and quantitatively evaluating the management of water utilities based on performance indicators (PIs).

WSAR is to capture the water supply management situation at the provincial level which is made by WSSEs every year.

3. Technical standards necessary for water supply service are developed.	3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report. 3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	3a. As-built drawing/ design report, technical standards. 3b. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	
4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.	4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved. 4b. DP supported by MaWaSU is utilized. 4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP supported by MaWaSU. 4d. The activities of MaWaSU Sub-Committees are continued by LWWA under supervision of DWS.	4a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 4b. Activity reports of DP. 4c. Mini-workshop reports and budget document of WSSEs. 4d. Activity report of LWWA	
<Activities> 1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains. 1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps. 1-1-2. Review the current institutional effectiveness in terms of TAG. 1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations. 1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarding institution/governance and undertake the studies. 1-1-5. Share an Overall Institutional Development Strategy (OIDS) including recommendations with the concerned organizations. 1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS such as licensing, PPP, technical/financial monitoring of WSSEs and private water service providers.		<Inputs> Lao Side 1. Project personnel 1) Project Adviser Advisor to the Minister of Public Works and Transport 2) Project Director Director General, DWS, MPWT 3) Project Manager Deputy Director General, DWS, MPWT 4) CPs	Project counterparts are assigned by the commencement of respective activities.

1-2. By initiative of DWS, undertake the following activities to review current government ability of the prioritized issues identified in 1-1-6 in cooperation with the concerned organization including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments. 1-2-1 Review the current situations of the priority domain. 1-2-2 Review the current mandates of laws and regulations regarding the priority domain. 1-2-3. Review the current institutional effectiveness in terms of TAG. 1-2-4. Undertake workshops to share the review results of 1-2-1, 1-2-2 and 1-2-3 at DWS. 1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study. 1-3. DWS formulates PDCDS. 1-3-1. Make a draft of PDCDS. 1-3-2. Discuss the draft among IRC. 1-3-3. Undertake workshops for dissemination and feedback of the draft. 1-3-4. DWS finalizes PDCDS. 1-3-5. DWS implements some of institutional improvement and/or capacity development of PDCDS. 1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities: 1-4-1. Define a scope of required capacities and its level for management of the fund. 1-4-2. Extract lessons learned from pilot projects conducted in 2-2. 1-4-3. Define key elements to achieve TAG. 1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and undertake specific target studies	2. Land, buildings, facilities necessary for the implementation of the Project, including office spaces for Japanese Expert team and a meeting room at the DWS and the pilot WSSEs. 3. Running expenses. Japanese Side 1. Japanese Experts (1) Long-term experts Chief Advisor Sub-Chief Advisor (water supply management) Project Coordinator Water supply technique/Construction Supervision (2) Short-term Experts 1) Institution 2) Financial Management 3) Design/Construction Management 4) Civil Works 1 (Technical	
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1-4-5. Design the complete procedures for the entire cycle of the fund management. 1-5. Propose the funding mechanism. 1-5-1. Define target level for urban self-sufficiency and rural subsidization. 1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.). 1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis 1-5-4. Propose an overall funding mechanism. 1-6. DWS finalizes the fund plan. 1-6-1. Combine fund framework and funding mechanism discussed on 1-4 and 1-5. 1-6-2. Make a draft proposal for establishment of the fund. 1-6-3. Discuss the draft proposal among all the stakeholders. 1-6-4. Undertake workshops for promotion of understanding and feedback of the draft proposal. 1-6-5. DWS discuss the draft with related organization in MPWT and arrange the issues. 1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Annual Report (WSAR) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated. 1-7-2. WSG is revised. 1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR. 1-7-4. DWS updates WSAR. 1-7-5. DWS revises WSS. 1-7-6. DPWTs make PWSS based on revised WSS.	standards) 5) Civil Works 2 (Planning) 6) Water Quality 7) Finance (3) Equipment - Vehicles - Water quality examination equipment - Automatic chemical injection equipment - Water distribution pipes and machines to construct pipelines - Other equipment as necessary (4) Training in Japan 1) Following six (6) courses are expected. a. Role division of water supply sector b. Water Works Association c. Planning and Finance	
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2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects. 2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs. 2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects. 2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation. 2-1-4. PPTT prepares procedures for developing proposals.⁵ 2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure. 2-2. Implement the pilot projects. 2-2-1 DWS holds briefing sessions for all WSSEs for application. 2-2-2 WSSEs in consultation with DPWTs prepare and submit proposals to DWS. 2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects. 2-2-4 DWS evaluates the proposals to select provinces to implement and informs all the provinces about the selection results. 2-2-5 Selected WSSEs in consultation with DPWTs prepare detailed design and BOQ for procurement. 2-2-6 DWS enters into a contract with the DPWTs and WSSEs for the pilot projects. 2-2-7 Implementing WSSEs in consultation with DPWTs carry out supervision for pilot projects. 2-2-8 Implementing WSSEs in consultation with DPWTs submit mid-term and completion reports of pilot projects to DWS.	d. Water quality management e. Technical standard f. Construction supervision 2) Duration Approximately one (1) to three (3) weeks in each course 3) Participants Approximately seven (7) members in each course. (Example- DWS:1, NPNL:2, NPLP:2, NPKM:2)	
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⁵ PPTT considers consistency with guidelines made with MaWaSU as a precondition of the procedures.

2-2-9 DWS and DPWTs monitor the progress of pilot projects and advise WSSEs as necessary. 2-2-10 Construction supervision supporters visit pilot project sites in charge approximately once a month to advise including Japanese expert comments on construction management. 2-2-11 DWS approves the project completion reports. 2-3. Review the system for implementing the pilot projects. 2-3-1. DWS implements ex-post evaluation of pilot projects. 2-3-2. DWS reviews pilot projects implementation and reflect the fund plan of Output1. 2-4. Implement supporting activities related to COVID-19 prevention partly utilizing the Pilot Project scheme. 2-5. DWS develops Proposal Development Guidelines and Construction Implementation Guidelines. 3-1. Necessary Task Team for Technical Standard is formed at DWS, DPWT and WSSEs and the priority and the scope of the standard are determined. 3-1-1. Standard Task Team (STT) is formed at DWS, DPWTs and WSSEs to consider and formulate technical standards. 3-1-2. Priority for technical standards is determined. 3-1-3. Based on the priority order, STT discusses and determines the scope of standards. 3-2 Necessary committees/task teams for official approval are organized to develop the determined priority technical standards. 3-2-1. Establish Technical Standard Committee (TSC) for official approval of the technical standards consisting of DWS, DPWTs and WSSEs.		
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3-2-2. Establish Ministerial Ordinance Task team (MTT) consisting of DWS. 3-3 Develop and submit the priority technical standards. 3-3-1. MTT develops a draft technical standard (Ministerial Ordinance). 3-3-2. TSC reviews the draft technical standard (Ministerial Ordinance). 3-3-3. TSC submits the draft technical standard (Ministerial Ordinance) to MPWT. 3-3-4. STT develop a draft technical standard (Criteria). 3-3-5. TSC reviews the draft technical standard (Criteria). 3-3-6 STT submits the draft technical standard (Criteria). 3-4 Technical Standard is disseminated. 3-4-1. TSC discusses and decides dissemination methods of the technical standard for DPWTs and WSSEs nationwide. 3-4-2. Implement the dissemination methods of the technical standard. 3-5. Discuss and decide next priority scope of technical standard other than those developed and submitted in activity 3-3. 4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved. 4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development. 4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project. 4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and assessed		
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their capacity. 4-1-4. JICA Experts provide guidance to those trainers. 4-1-5. Re-evaluate the capacity of the trainers of the pilot WSSEs. 4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented. 4-2-1. DP is reviewed. 4-2-2. Based on the review, DP is implemented. 4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated. 4-2-4. Activities are carried out based on the DP of the latter half of the project. 4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWWA activities. 4-3. Activities of MaWaSU Sub-Committee are promoted. 4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee. 4-3-2. The pilot WSSEs reorganize MaWaSU Sub-Committees according to the current situation. 4-3-3. The pilot WSSEs hold the MaWaSU Sub-Committee approximately four to six times a year. 4-3-4. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee. 4-4. National Framework of Water Quality Management is strengthened. 4-4-1. Review the current situation of water quality management of WSSEs. 4-4-2. Develop a plan of National Framework of Water Quality Examination. 4-4-3. Implement the plan of National Framework of Water Quality Examination with equipment provided.		
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Plan of Operation (Result from May 2018 to July 2021, & Total Schedule)

Version 2

30-Aug-21

Monitoring

Project title: The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)

	Calendar year	2018				2019				2020				2021				2022				2023				Remarks	Issue	Solution
Inputs	Year	1st Year				2nd Year				3rd Year				4th Year				5th Year				6th Year						
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II					
	Covid-19 Restriction																											
Experts		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Long-term expert (Chief Adviser)	Plan																											
	Actual																											
Long-term expert (Sub Chief Adviser / Water Supply Technique)	Plan																											
	Actual																											
Long-term expert (Project Coordination)	Plan																											
	Actual																											
Long-term expert (Water Supply Technique / Construction Management)	Plan																											
	Actual																											
Consultant expert (Output1) (Fund)	Plan																											
	Actual																											
Consultant expert (Output2) (Design/Construction Works)	Plan																											
	Actual																											
Short-term expert (Output3) (Technical Standard) (Pipe)	Plan																											
	Actual																											
Short-term expert (Output4) (Technical Standard) (WTP)	Plan																											
	Actual																											
Short-term expert (Output4) (Civil works/Planning)	Plan																											
	Actual																											
Short-term expert (Output4) (Water Quality)	Plan																											
	Actual																											
Short-term expert (Output4) (Finance)	Plan																											
	Actual																											
Short-term expert (Output4) (Customer Relations)	Plan																											
	Actual																											
Equipment																												
Water quality examination equipment	Plan																											
	Actual																											
Automatic chemical injection equipment	Plan																											
	Actual																											
Water distribution pipes and machines to construct pipelines	Plan																											
	Actual																											
Training in Japan																												
Role division of water supply sector, Waterworks association, Planning & Finance, Water Quality, Technical standard, Fund	Plan																											
	Actual																											
n-country training / Third country training																												
P2P(Project to Project) meeting	Plan																											
	Actual																											

Output 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.																				
1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains.																				
1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps.	Plan																			
	Actual																			
1-1-2. Review the current institutional effectiveness in terms of TAG.	Plan																			
	Actual																			
1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations.	Plan																			
	Actual																			
1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarging institution/governance and undertake the studies.	Plan																			
	Actual																			
1-1-5. Share an Overall Institutional Development Strategy (OIDS) including recommendations with the concerned organizations.	Plan																			
	Actual																			
1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS such as licensing, PPP, technical/financial monitoring of WSSEs and private water service providers.	Plan																			
	Actual																			
1-2. By initiative of DWS, undertake the following activities to review current government ability in cooperate with the concerned organization identified in 1-1-6 including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments																				
1-2-1 Review the current situations of the priority domain.	Plan																			
	Actual																			
1-2-2 Review the current mandates of laws and regulations regading the priority domain.	Plan																			
	Actual																			
1-2-3. Review the current institutional effectiveness in terms of TAG.	Plan																			
	Actual																			
1-2-4. Undertake workshops to share the review results of 1-2-1, 1-2-2 and 1-2-3 at DWS.	Plan																			
	Actual																			
1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study.	Plan																			
	Actual																			

Output 2. In the water supply sector capacity building and implementation supervision abilities of facility development plan for water supply sector are improved.													
2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects.													
2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs.	Plan												
	Actual												
2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects.	Plan												
	Actual												
2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation.	Plan												
	Actual												
2-1-4. PPTT prepares procedures for developing proposals.	Plan												
	Actual												
2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure.	Plan												
	Actual												
2-2. Implement the pilot projects.													
2-2-1 DWS holds briefing sessions for all WSSEs for application.	Plan												
	Actual												
2-2-2 WSSEs in consultation with DPWTs prepare and submit proposals to DWS.	Plan												
	Actual												

[illegible][illegible][illegible]

Title of the Project: 'The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)'

Project Area: Vientiane Capital, Provinces of Luang Prabang, Khammouane and others

Duration of the Project: 5 years and 7 months (May 2018 – December 2023)

Executing Organization: Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT) of Lao PDR

Implementing Organizations: DWS of MPWT, Vientiane Capital Water Supply State Enterprise (NPNL), Luang Prabang Provincial Water Supply State Enterprise (NPLB) and Khammouane Provincial Water Supply State Enterprise (NPKM) as the pilot water supply state enterprises (WSSEs), Department of Public Works and Transport (DPWT) of Vientiane Capital, Luang Prabang, Khammouane and WSSEs and DPWTs of other provinces

Direct Beneficiaries: Staff of: DWS of MPWT; WSSEs (NPNL, NPLB, NPKM, and other provinces); and DPWTs of Vientiane Capital, Luang Prabang, Khammouane and other provinces

Indirect Beneficiaries: People living in the water supply areas of the pilot and other WSSEs

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<Overall Goal> The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.	a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part. b. The Lao government implements necessary improvements to realize the fund plan in whole or in part. c. Activities of national dissemination for water supply management promotion and improvement are continuously practiced based on MaWaSU2 dissemination activity by LWWA.	a. Implementation reports regarding PDCDS b. Implementation reports of necessary improvement for the fund plan. c. Activity report of LWWA	

<Project Purpose> The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.	a. The Lao government takes action toward implementation of PDCDS. b. DWS discusses the fund plan with MPWT multiple times, and sort out the issues for realization. c. Implementation of WSSEs' water supply projects based on the PDCA¹ cycle is promoted.	a. Documents of PDCDS. b. Consultation documents of the fund plan with MPWT. c. Documents related to budget and settlement of WSSEs.²	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans supported by the Project.
<Outputs> 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.	1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. 1b. The fund plan is drafted in DWS. 1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU³ are utilized.⁴	1a. PDCDS document. 1b. Fund plan. 1c. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans support by the Project.
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.	2a. The procedures for planning, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guidelines, Implementation Guidelines, are developed. 2c. At least five pilot projects completed and are evaluated. 2d. Lessons learned from pilot projects are reflected on the fund as well as other procedures of the Lao government.	2a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 2b. Guideline documents. 2c. Project completion / Evaluation reports of pilot projects. 2d. Fund Plan.	

¹ Plan-Do-Check-Action (PDCA)

² Water supply business summary (Plan and budget), settlement and annual report.

³ The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)

⁴ Purpose of those strategies and guidelines are as follows:

WSS known as "strategy" is to show national direction of water supply management being formulated by DWS.

PWSS also known as "strategy" is to show provincial direction of water supply management formulated by DPWTs.

WSG is for self-analysis and goal setting by quantifying and quantitatively evaluating the management of water utilities based on performance indicators (PIs).

WSAR is to capture the water supply management situation at the provincial level which is made by WSSEs every year.

3. Technical standards necessary for water supply service are developed.	3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report. 3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	3a. As-built drawing/ design report, technical standards. 3b. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	
4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.	4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved. 4b. DP supported by MaWaSU is utilized. 4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP supported by MaWaSU. 4d. The activities of MaWaSU Sub-Committees are continued by LWWA under supervision of DWS.	4a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 4b. Activity reports of DP. 4c. Mini-workshop reports and budget document of WSSEs. 4d. Activity report of LWWA	
<Activities> 1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains. 1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps. 1-1-2. Review the current institutional effectiveness in terms of TAG. 1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations. 1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarding institution/governance and undertake the studies. 1-1-5. Share an Overall Institutional Development Strategy (OIDS) including recommendations with the concerned organizations. 1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS such as licensing, PPP, technical/financial monitoring of WSSEs and private water service providers.		<Inputs> Lao Side 1. Project personnel 1) Project Adviser Advisor to the Minister of Public Works and Transport 2) Project Director Director General, DWS, MPWT 3) Project Manager Deputy Director General, DWS, MPWT 4) CPs	Project counterparts are assigned by the commencement of respective activities.

1-2. By initiative of DWS, undertake the following activities to review current government ability of the prioritized issues identified in 1-1-6 in cooperation with the concerned organization including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments. 1-2-1 Review the current situations of the priority domain. 1-2-2 Review the current mandates of laws and regulations regarding the priority domain. 1-2-3. Review the current institutional effectiveness in terms of TAG. 1-2-4. Undertake workshops to share the review results of 1-2-1, 1-2-2 and 1-2-3 at DWS. 1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study. 1-3. DWS formulates PDCDS. 1-3-1. Make a draft of PDCDS. 1-3-2. Discuss the draft among IRC. 1-3-3. Undertake workshops for dissemination and feedback of the draft. 1-3-4. DWS finalizes PDCDS. 1-3-5. DWS implements some of institutional improvement and/or capacity development of PDCDS. 1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities: 1-4-1. Define a scope of required capacities and its level for management of the fund. 1-4-2. Extract lessons learned from pilot projects conducted in 2-2. 1-4-3. Define key elements to achieve TAG. 1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and undertake specific target studies	2. Land, buildings, facilities necessary for the implementation of the Project, including office spaces for Japanese Expert team and a meeting room at the DWS and the pilot WSSEs. 3. Running expenses. Japanese Side 1. Japanese Experts (1) Long-term experts Chief Advisor Sub-Chief Advisor (water supply management) Project Coordinator Water supply technique/Construction Supervision (2) Short-term Experts 1) Institution 2) Financial Management 3) Design/Construction Management 4) Civil Works 1 (Technical	
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1-4-5. Design the complete procedures for the entire cycle of the fund management. 1-5. Propose the funding mechanism. 1-5-1. Define target level for urban self-sufficiency and rural subsidization. 1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.). 1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis 1-5-4. Propose an overall funding mechanism. 1-6. DWS finalizes the fund plan. 1-6-1. Combine fund framework and funding mechanism discussed on 1-4 and 1-5. 1-6-2. Make a draft proposal for establishment of the fund. 1-6-3. Discuss the draft proposal among all the stakeholders. 1-6-4. Undertake workshops for promotion of understanding and feedback of the draft proposal. 1-6-5. DWS discuss the draft with related organization in MPWT and arrange the issues. 1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Annual Report (WSAR) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated. 1-7-2. WSG is revised. 1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR. 1-7-4. DWS updates WSAR. 1-7-5. DWS revises WSS. 1-7-6. DPWTs make PWSS based on revised WSS.	standards) 5) Civil Works 2 (Planning) 6) Water Quality 7) Finance (3) Equipment - Vehicles - Water quality examination equipment - Automatic chemical injection equipment - Water distribution pipes and machines to construct pipelines - Other equipment as necessary (4) Training in Japan 1) Following six (6) courses are expected. a. Role division of water supply sector b. Water Works Association c. Planning and Finance	
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2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects. 2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs. 2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects. 2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation. 2-1-4. PPTT prepares procedures for developing proposals.⁵ 2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure. 2-2. Implement the pilot projects. 2-2-1 DWS holds briefing sessions for all WSSEs for application. 2-2-2 WSSEs in consultation with DPWTs prepare and submit proposals to DWS. 2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects. 2-2-4 DWS evaluates the proposals to select provinces to implement and informs all the provinces about the selection results. 2-2-5 Selected WSSEs in consultation with DPWTs prepare detailed design and BOQ for procurement. 2-2-6 DWS enters into a contract with the DPWTs and WSSEs for the pilot projects. 2-2-7 Implementing WSSEs in consultation with DPWTs carry out supervision for pilot projects. 2-2-8 Implementing WSSEs in consultation with DPWTs submit mid-term and completion reports of pilot projects to DWS.	d. Water quality management e. Technical standard f. Construction supervision 2) Duration Approximately one (1) to three (3) weeks in each course 3) Participants Approximately seven (7) members in each course. (Example- DWS:1, NPNL:2, NPLP:2, NPKM:2)	
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⁵ PPTT considers consistency with guidelines made with MaWaSU as a precondition of the procedures.

2-2-9 DWS and DPWTs monitor the progress of pilot projects and advise WSSEs as necessary. 2-2-10 Construction supervision supporters visit pilot project sites in charge approximately once a month to advise including Japanese expert comments on construction management. 2-2-11 DWS approves the project completion reports. 2-3. Review the system for implementing the pilot projects. 2-3-1. DWS implements ex-post evaluation of pilot projects. 2-3-2. DWS reviews pilot projects implementation and reflect the fund plan of Output1. 2-4. Implement supporting activities related to COVID-19 prevention partly utilizing the Pilot Project scheme. 2-5. DWS develops Proposal Development Guidelines and Construction Implementation Guidelines. 3-1. Necessary Task Team for Technical Standard is formed at DWS, DPWT and WSSEs and the priority and the scope of the standard are determined. 3-1-1. Standard Task Team (STT) is formed at DWS, DPWTs and WSSEs to consider and formulate technical standards. 3-1-2. Priority for technical standards is determined. 3-1-3. Based on the priority order, STT discusses and determines the scope of standards. 3-2 Necessary committees/task teams for official approval are organized to develop the determined priority technical standards. 3-2-1. Establish Technical Standard Committee (TSC) for official approval of the technical standards consisting of DWS, DPWTs and WSSEs.		
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3-2-2. Establish Ministerial Ordinance Task team (MTT) consisting of DWS. 3-3 Develop and submit the priority technical standards. 3-3-1. MTT develops a draft technical standard (Ministerial Ordinance). 3-3-2. TSC reviews the draft technical standard (Ministerial Ordinance). 3-3-3. TSC submits the draft technical standard (Ministerial Ordinance) to MPWT. 3-3-4. STT develop a draft technical standard (Criteria). 3-3-5. TSC reviews the draft technical standard (Criteria). 3-3-6 STT submits the draft technical standard (Criteria). 3-4 Technical Standard is disseminated. 3-4-1. TSC discusses and decides dissemination methods of the technical standard for DPWTs and WSSEs nationwide. 3-4-2. Implement the dissemination methods of the technical standard. 3-5. Discuss and decide next priority scope of technical standard other than those developed and submitted in activity 3-3. 4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved. 4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development. 4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project. 4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and assessed		
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their capacity. 4-1-4. JICA Experts provide guidance to those trainers. 4-1-5. Re-evaluate the capacity of the trainers of the pilot WSSEs. 4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented. 4-2-1. DP is reviewed. 4-2-2. Based on the review, DP is implemented. 4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated. 4-2-4. Activities are carried out based on the DP of the latter half of the project. 4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWWA activities. 4-3. Activities of MaWaSU Sub-Committee are promoted. 4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee. 4-3-2. The pilot WSSEs reorganize MaWaSU Sub-Committees according to the current situation. 4-3-3. The pilot WSSEs hold the MaWaSU Sub-Committee approximately four to six times a year. 4-3-4. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee. 4-4. National Framework of Water Quality Management is strengthened. 4-4-1. Review the current situation of water quality management of WSSEs. 4-4-2. Develop a plan of National Framework of Water Quality Examination. 4-4-3. Implement the plan of National Framework of Water Quality Examination with equipment provided.		
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**MINUTES OF MEETINGS
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
MINISTRY OF PUBLIC WORKS AND TRANSPORT
FOR
AMENDMENT OF THE RECORD OF DISCUSSIONS
ON
THE PROJECT FOR IMPROVEMENT OF MANAGEMENT CAPACITY
ON WATER SUPPLY SECTOR (MAWASU2)**

The Japan International Cooperation Agency (hereinafter referred to as "JICA") and the Ministry of Public Works and Transport (hereinafter referred to as "the Counterpart") of the Lao People's Democratic Republic (hereinafter referred to as "Lao PDR") hereby agree that the amended Record of Discussions on the Project for Improvement of Management Capacity on Water Supply Sector (MaWaSU2) (hereinafter referred to as "the Project") signed on August 30, 2021, (hereinafter referred to as "the amended R/D") will be amended as follows;

1. Annex 3 : Project Design Matrix (PDM)

Before	Amended Version
PDM Version 2	PDM Version 3
Overall Goal <Objectively Verifiable Indicators> a. The Lao government implements the Priority Domain Capacity Development Strategy (PDCDS) in whole or in part.	Overall Goal <Objectively Verifiable Indicators> a. The Lao government implements the <u>9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030)</u> in whole or in part.
<Means of Verification> a. Implementation reports regarding PDCDS.	<Means of Verification> a. <u>Interview with DWS.</u>
Project Purpose <Objectively Verifiable Indicators> a. The Lao government takes action toward implementation of PDCDS.	Project Purpose <Objectively Verifiable Indicators> a. The Lao government takes action toward implementation of <u>the 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030).</u>

<Means of Verification> a. Documents of PDCDS.	<Means of Verification> a. <u>Project Report, Interview with DWS.</u>
Reason: - The contents of PDCDS have already been approved by the Minister of the Counterpart as “the 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030).”	

Both parties acknowledge and agree that this Minutes of Meetings may be executed by electronic signature, which is considered as an original signature for all purposes and has the same force and effect as an original signature. “Electronic signature” includes faxed versions of an original signature or electronically scanned and transmitted version (e.g., via pdf) of an original signature.
This amendment will become effective as of July 14, 2023.

Annex 1: The original R/D (signed on December 26, 2017)

Annex 2: The amended R/D (signed on August 30, 2021)

Annex 3: The amended PDM as version 3

Vientiane, July 14, 2023



NAGASE Toshio
Chief Representative
JICA Laos Office



SITTHIVONG Sompong
Director General
Department of Water Supply
Ministry of Public Works and Transport

Title of the Project: 'The Project for Improvement of Management Capacity of Water Supply Sector (MaWaSU 2)'

Project Area: Vientiane Capital, Provinces of Luang Prabang, Khammouane and others

Duration of the Project: 5 years and 7 months (April 2018 – December 2023)

Executing Organization: Department of Water Supply (DWS), Ministry of Public Works and Transport (MPWT) of Lao PDR

Implementing Organizations: DWS of MPWT, Vientiane Capital Water Supply State Enterprise (NPNL), Luang Prabang Provincial Water Supply State Enterprise (NPLB) and Khammouane Provincial Water Supply State Enterprise (NPKM) as the pilot water supply state enterprises (WSSEs), Department of Public Works and Transport (DPWT) of Vientiane Capital, Luang Prabang, Khammouane and WSSEs and DPWTs of other provinces

Direct Beneficiaries: Staff of: DWS of MPWT; WSSEs (NPNL, NPLB, NPKM, and other provinces); and DPWTs of Vientiane Capital, Luang Prabang, Khammouane and other provinces

Indirect Beneficiaries: People living in the water supply areas of the pilot and other WSSEs

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<Overall Goal> The water supply sector management system and WSSE's capacity to achieve national goals is strengthened.	a. The Lao government implements the 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030) in whole or in part. b. The Lao government implements necessary improvements to realize the fund plan in whole or in part. c. Activities of national dissemination for water supply management promotion and improvement are continuously practiced based on MaWaSU2 dissemination activity by LWWA.	a. Interview with DWS. b. Implementation reports of necessary improvement for the fund plan. c. Activity report of LWWA	

<Project Purpose> The foundation necessary for strengthening the water supply sector management system and WSSEs' capacity is formulated.	a. The Lao government takes action toward implementation of the 9-year Sectoral Development Strategy on Water Supply and Sanitation (2022-2030). b. DWS discusses the fund plan with MPWT multiple times, and sort out the issues for realization. c. Implementation of WSSEs' water supply projects based on the PDCA¹ cycle is promoted.	a. Project Report, Interview with DWS. b. Consultation documents of the fund plan with MPWT. c. Documents related to budget and settlement of WSSEs.²	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans supported by the Project.
<Outputs> 1. Transparency, accountability and governance (TAG) is enhanced in water supply sector institutions by improving administration of water supply service.	1a. The priority domain capacity is identified and its development strategy is approved by the Minister of MPWT. 1b. The fund plan is drafted in DWS. 1c. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Statistics Yearbook (WSSY) supported by MaWaSU³ are utilized.⁴	1a. PDCDS document. 1b. Fund plan. 1c. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	The policy and regulations regarding local governance and privatization of water supply service shall not affect plans support by the Project.
2. Capacity of WSSEs for planning, implementation, monitoring and evaluation of water supply projects is enhanced.	2a. The procedures for planning, implementation, monitoring, and evaluation of water supply projects are improved. 2b. Proposal Development Guidelines, Implementation Guidelines, are developed. 2c. At least five pilot projects completed and are evaluated. 2d. Lessons learned from pilot projects are reflected on the fund as well as other procedures of the Lao government.	2a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 2b. Guideline documents. 2c. Project completion / Evaluation reports of pilot projects. 2d. Fund Plan.	

¹ Plan-Do-Check-Action (PDCA)

² Water supply business summary (Plan and budget), settlement and annual report.

³ The Capacity Development Project for Improvement of Management Ability in Water Supply Sector in Lao PDR (2012-2017)

⁴ Purpose of those strategies and guidelines are as follows:

WSS known as "strategy" is to show national direction of water supply management being formulated by DWS.

PWSS also known as "strategy" is to show provincial direction of water supply management formulated by DPWTs.

WSG is for self-analysis and goal setting by quantifying and quantitatively evaluating the management of water utilities based on performance indicators (PIs).

WSAR is to capture the water supply management situation at the provincial level which is made by WSSEs every year.

3. Technical standards necessary for water supply service are developed.	3a. More than three WSSEs apply the approved technical standards and reflect them to as-built drawing/ design report. 3b. The approved technical standards are shared among staff of DWS, DPWT and WSSEs.	3a. As-built drawing/ design report, technical standards. 3b. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project).	
4. Operational capacity necessary for the WSSEs to implement the water supply service is enhanced.	4a. Operational and training capacity of trainers in civil works, water quality, and financial management in the pilot WSSEs is improved. 4b. DP supported by MaWaSU is utilized. 4c. Mini-workshops for dissemination activity are held at least once a year at each pilot WSSE during the project period by its own budget according to DP supported by MaWaSU. 4d. The activities of MaWaSU Sub-Committees are continued by LWWA.	4a. Joint assessment by JICA Experts and CPs (the beginning, the mid-term, and the end of the Project). 4b. Activity reports of DP. 4c. Mini-workshop reports and budget document of WSSEs. 4d. Activity report of LWWA	
<Activities> 1-1. Formulate Institutional Review Committee (IRC) to undertake the following activities and identify priority domains. 1-1-1. Review the current capacities of DWS and DPWTs as well as the mandates of each organization defined by the laws and regulations to identify capacity gaps. 1-1-2. Review the current institutional effectiveness in terms of TAG. 1-1-3. According to the needs identified, undertake workshops to provide results of the review to IRC members and other concerned organizations. 1-1-4. Based on the workshops, define the scope of a study which is necessary to detailed study regarding institution/governance and undertake the studies. 1-1-5. Share an Overall Institutional Development Strategy (OIDS) including recommendations with the concerned organizations. 1-1-6. Select a priority domain which is effective to enhance TAG among identified domains in OIDS		<Inputs> Lao Side 1. Project personnel 1) Project Adviser Advisor to the Minister of Public Works and Transport 2) Project Director Director General, DWS, MPWT 3) Project Manager Deputy Director General, DWS, MPWT	Project counterparts are assigned by the commencement of respective activities.

such as licensing, PPP, technical/financial monitoring of WSSEs and private water service providers. 1-2. By initiative of DWS, undertake the following activities to review current government ability in cooperation with the concerned organization identified in 1-1-6 including the Ministry of Planning and Investment (MPI), Ministry of Home Affairs (MHA), Ministry of Finance (MOF), local governments. 1-2-1 Review the current situations of the priority domain. 1-2-2 Review the current mandates of laws and regulations regarding the priority domain. 1-2-3. Review the current institutional effectiveness in terms of TAG. 1-2-4. Undertake workshops to share the review results of 1-2-1, 1-2-2 and 1-2-3 at DWS. 1-2-5. Identify a scope of works which is necessary to study based on the workshops, and undertake the study. 1-3. DWS formulates PDCDS. 1-3-1. Make a draft of PDCDS. 1-3-2. Discuss the draft among IRC. 1-3-3. Undertake workshops for dissemination and feedback of the draft. 1-3-4. DWS finalizes PDCDS. 1-3-5. DWS implements some of institutional improvement and/or capacity development of PDCDS. 1-4. By the initiative of DWS, the Fund Framework Committee (FFC) is formulated to consider operation and management of the fund by all the stakeholder organizations, including MPI, MHA, MOF, local governments to undertake the following activities: 1-4-1. Define a scope of required capacities and its level for management of the fund. 1-4-2. Extract lessons learned from pilot projects conducted in 2-2. 1-4-3. Define key elements to achieve TAG.	4) CPs 2. Land, buildings, facilities necessary for the implementation of the Project, including office spaces for Japanese Expert team and a meeting room at the DWS and the pilot WSSEs. 3. Running expenses. Japanese Side 1. Japanese Experts (1) Long-term experts Chief Advisor Sub-Chief Advisor (water supply management) Project Coordinator Water supply technique/Construction Supervision (2) Short-term Experts 1) Institution 2) Financial Management 3) Design/Construction	
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1-4-4. Define the scope of the study to establish the fund based on activities 1-4-1 to 1-4-3 and undertake specific target studies 1-4-5. Design the complete procedures for the entire cycle of the fund management. 1-5. Propose the funding mechanism. 1-5-1. Define target level for urban self-sufficiency and rural subsidization. 1-5-2. Study funding sources (donor, surcharge, government interest subsidy etc.). 1-5-3. Define the scope and undertake studies including specific target such as financial simulation and risk analysis 1-5-4. Propose an overall funding mechanism. 1-6. DWS finalizes the fund plan. 1-6-1. Combine fund framework and funding mechanism discussed on 1-4 and 1-5. 1-6-2. Make a draft proposal for establishment of the fund. 1-6-3. Discuss the draft proposal among all the stakeholders. 1-6-4. Undertake workshops for promotion of understanding and feedback of the draft proposal. 1-6-5. DWS discuss the draft with related organization in MPWT and arrange the issues. 1-7. Water Supply Strategy (WSS), Provincial Water Supply Strategy (PWSS), Water Supply Guidelines (WSG), and Water Supply Annual Report (WSAR) supported by MaWaSU are finalized and/or revised to be utilized. 1-7-1. Current situation of WSS, PWSS, WSG, and WSAR are examined and evaluated. 1-7-2. WSG is revised. 1-7-3. DWS makes Water Supply Sector Annual Report using WSG and WSAR. 1-7-4. DWS updates WSAR. 1-7-5. DWS revises WSS. 1-7-6. DPWTs make PWSS based on revised WSS.	Management 4) Civil Works 1 (Technical standards) 5) Civil Works 2 (Planning) 6) Water Quality 7) Finance (3) Equipment - Vehicles - Water quality examination equipment - Automatic chemical injection equipment - Water distribution pipes and machines to construct pipelines - Other equipment as necessary (4) Training in Japan 1) Following six (6) courses are expected. a. Role division of water supply sector	
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2-1. Review the current practice of the planning and supervision mechanism for implementing water supply projects, and prepare an implementation system of pilot projects. 2-1-1. Under the initiative of DWS, set up Pilot Project Task Team (PPTT) consisting of DWS, DPWT and the WSSEs. 2-1-2. PPTT discusses the roles, authorities and responsibilities of each agency concerning the implementation of water supply projects. 2-1-3. PPTT (for application process for funds to be supported within JICA's project) discusses the procedures for the facility development: plan – assessment - implementation - monitoring – evaluation. 2-1-4. PPTT prepares procedures for developing proposals.⁵ 2-1-5. PPTT prepares for briefing sessions for other WSSEs based on the procedure. 2-2. Implement the pilot projects. 2-2-1 DWS holds briefing sessions for all WSSEs for application. 2-2-2 WSSEs in consultation with DPWTs prepare and submit proposals to DWS. 2-2-3 The proposals for the pilot projects will be examined on the technical, financial, environmental and social consideration aspects. 2-2-4 DWS evaluates the proposals to select provinces to implement and informs all the provinces about the selection results. 2-2-5 Selected WSSEs in consultation with DPWTs prepare detailed design and BOQ for procurement. 2-2-6 DWS enters into a contract with the DPWTs and WSSEs for the pilot projects. 2-2-7 Implementing WSSEs in consultation with DPWTs carry out supervision for pilot projects.	b. Water Works Association c. Planning and Finance d. Water quality management e. Technical standard f. Construction supervision 2) Duration Approximately one (1) to three (3) weeks in each course 3) Participants Approximately seven (7) members in each course. (Example- DWS:1, NPNL:2, NPLP:2, NPKM:2)	
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⁵ PPTT considers consistency with guidelines made with MaWaSU as a precondition of the procedures.

2-2-8 Implementing WSSEs in consultation with DPWTs submit mid-term and completion reports of pilot projects to DWS. 2-2-9 DWS and DPWTs monitor the progress of pilot projects and advise WSSEs as necessary. 2-2-10 Construction supervision supporters visit pilot project sites in charge approximately once a month to advise including Japanese expert comments on construction management. 2-2-11 DWS approves the project completion reports. 2-3. Review the system for implementing the pilot projects. 2-3-1. DWS implements ex-post evaluation of pilot projects. 2-3-2. DWS reviews pilot projects implementation and reflect the fund plan of Output1. 2-4. Implement supporting activities related to COVID-19 prevention partly utilizing the Pilot Project scheme. 2-5. DWS develops Proposal Development Guidelines and Construction Implementation Guidelines. 3-1. Necessary Task Team for Technical Standard is formed at DWS, DPWT and WSSEs and the priority and the scope of the standard are determined. 3-1-1. Standard Task Team (STT) is formed at DWS, DPWTs and WSSEs to consider and formulate technical standards. 3-1-2. Priority for technical standards is determined. 3-1-3. Based on the priority order, STT discusses and determines the scope of standards. 3-2 Necessary committees/task teams for official approval are organized to develop the determined priority technical standards. 3-2-1. Establish Technical Standard Committee (TSC) for official approval of the technical		
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standards consisting of DWS, DPWTs and WSSEs. 3-2-2. Establish Ministerial Ordinance Task team (MTT) consisting of DWS. 3-3 Develop and submit the priority technical standards. 3-3-1. MTT develops a draft technical standard (Ministerial Ordinance). 3-3-2. TSC reviews the draft technical standard (Ministerial Ordinance). 3-3-3. TSC submits the draft technical standard (Ministerial Ordinance) to MPWT. 3-3-4. STT develop a draft technical standard (Criteria). 3-3-5. TSC reviews the draft technical standard (Criteria). 3-3-6 STT submits the draft technical standard (Criteria). 3-4 Technical Standard is disseminated. 3-4-1. TSC discusses and decides dissemination methods of the technical standard for DPWTs and WSSEs nationwide. 3-4-2. Implement the dissemination methods of the technical standard. 3-5. Discuss and decide next priority scope of technical standard other than those developed and submitted in activity 3-3. 4-1 Operational and training capacity in civil works, water quality, and financial management of the pilot WSSEs is improved. 4-1-1. Specify the operational areas in civil works, water quality, and financial management which require capacity development. 4-1-2. Evaluate the current capacity of the pilot WSSEs on the specified operational areas and determine the target level to be achieved during the Project. 4-1-3. Trainers of specified area in 4-1-1 and 4-1-2 are selected by the each pilot WSSE and assessed		
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their capacity. 4-1-4. JICA Experts provide guidance to those trainers. 4-1-5. Re-evaluate the capacity of the trainers of the pilot WSSEs. 4-2. Discuss the roles of MPWT, DPWTs, and the pilot WSSEs for implementing DP, which is approved in the MaWaSU, and DP is implemented. 4-2-1. DP is reviewed. 4-2-2. Based on the review, DP is implemented. 4-2-3. The results of DP activities in the first half of the project are compiled, and a latter half of DP (term, venue, contents, budget, etc.) is formulated. 4-2-4. Activities are carried out based on the DP of the latter half of the project. 4-2-5. The results of DP activities in the latter half of the project are compiled, and feed back to LWWA activities. 4-3. Activities of MaWaSU Sub-Committee are promoted. 4-3-1. The pilot WSSEs review current situation of MaWaSU Sub-Committee. 4-3-2. The pilot WSSEs reorganize MaWaSU Sub-Committees according to the current situation. 4-3-3. The pilot WSSEs hold the MaWaSU Sub-Committee approximately four to six times a year. 4-3-4. The pilot WSSEs review the MaWaSU Sub-Committee again and take action to improve the operation of the MaWaSU Sub-Committee. 4-4. National Framework of Water Quality Management is strengthened. 4-4-1. Review the current situation of water quality management of WSSEs. 4-4-2. Develop a plan of National Framework of Water Quality Examination. 4-4-3. Implement the plan of National Framework of Water Quality Examination with equipment provided.		
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4-4-4. Improve water quality management of WSSEs nationwide. 4-5. WSSEs establish the Lao Water Works Association (LWWA) and implement activities. 4-5-1. WSSEs prepare establishment of LWWA. 4-5-2. WSSEs establish LWWA. 4-5-3. LWWA implements activities. 4-5-4. LWWA discusses continuation of MaWaSU2 activities after the end of the project. 4-5-5. LWWA takes over some activities from the project. 4-6. WSSEs implement handwashing promotion activities for COVID-19 prevention through waterworks education class.		
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