TA 7780-LAO: National Integrated Water Resources Management Support Project (Cofinanced by the Government of Australia and the Spanish Cooperation Fund for Technical Assistance) Memorandum of Understanding

Joint Mid Term Review Mission (15-20 February 2013)

I. BACKGROUND

1. The Asian Development Bank (ADB) and the Australian Agency for International Development (AusAID) Joint Mid Term Review (MTR) Mission (the Mission)¹ was fielded to the Lao People's Democratic Republic (Lao PDR) from 15 to 20 February 2013 to review the Technical Assistance (TA) 7780-LAO National Integrated Water Resources Management Support Project (the Project).

2. The MTR mission reviewed overall TA implementation progress against the design and monitoring framework (DMF) targets; assessed the likelihood of achieving TA impact, outcome and outputs, and the need to restructure or reformulate the TA and, if so, the effects of this on the outcome and expected impact of the Project; revised and updated the TA DMF; reviewed and recommended adjustments to the TA implementation arrangements; and reviewed the draft annual work plan and budget for 2013.

3. The Mission met the Director General of the Department of Water Resources, Ministry of Natural Resources and the Environment (DWR, MONRE), Director General of the Nam Ngum River Basin Committee Secretariat, Project Management Unit (PMU) Manager, component managers of the Project Implementation Units, TA international Integrated Water Resources Management (IWRM) advisor, and Project consultants from consulting firms Aecom, Idom and GHD. The Mission was received by Excellency Vice Minister Sisavath on 20 February 2013. The Director General, DWR chaired the wrap up meeting on 20 February 2013. The list of persons met by the Mission is provided in Appendix 1 and the Mission schedule is in Appendix 2.

4. The key findings and recommendations of the Mission are summarized in this Memorandum of Understanding (MOU). The Mission requests comments from the Government by 27 February 2013. The agreements in this MOU are subject to the approval by higher authorities of the Government and ADB.

II. MISSION FINDINGS

A. Physical progress

5. The four outputs of the Project are: Output 1 – National capacity built in IWRM; Output 2 –River basin management development; Output 3 – National groundwater management action plan prepared and Output 4 – IWRM education strengthened at the National University of Laos.

6. The PMU prepared a progress report covering the period of August to December 2012, which is attached in Appendix 3.

¹ The Mission comprised Su Chin Teoh, Natural Resources Specialist (SEER), Mission leader; Hidefumi Murashita, Water Resources Specialist (SEER); Sisavanh Phanouvong, Senior Project Officer (LRM); John Dore, Senior Regional Water Resources Sector Specialist (AusAID); Somsanith Mounphoxay, Program Officer (AusAID). The Mission was assisted by the TA IWRM advisor (consultant). Country Director LRM participated in the meeting at the Nam Ngum River Basin Committee Secretariat Office on 16 February 2013.

Output 1 National capacity built in IWRM

7. **Implementation progress towards DMF targets.** Key progress is on the training plan which has been developed and which will be implemented in 2013. The rigorous training needs assessment (TNA) process took more time than initially envisaged, hence the DMF target that the staff would have already been participating in personal continuing professional development (CPD) programs by end 2012 is off track. However, the Mission feels that this delay is not a concern and there is adequate time to catch up by the end of TA duration. The DMF target will be revised to a more realistic target date.

8. **Key issues**. Original TA design and corresponding Package 1 TOR was set up to be overly process-heavy in the name of capacity building, but the main capacity that appears to be built is the improved, but still limited capacity to manage the TA itself which does not warrant the extensive and expensive resources dedicated. DWR, MONRE has requested the Mission to consider some proposed changes to the TOR of Package 1. The Mission will do so upon receipt of DWR's request.

9. The Mission learnt that the Package 1 consultants are working on a set of harmonized World Bank and ADB procurement guidelines. The Mission advised the consultants to check with ADB LRM the availability of Lao translations of ADB guidelines. The World Bank has mobilized an international expert on procurement and project administration to provide intermittent support to the PMU, and has offered that the same expert could assist on the ADB components.

10. Capacity of the PMU and PIUs remains a challenge and is the source of many implementation delays.

11. **Priorities for 2013.** The key activities to be carried out under Component 1 are related to the training plan.

- 12. **Way forward**. The Mission agreed the following with DWR/MONRE and the consultant:
 - (i) **Implementation of the training plan.** The training plan needs to be updated to include the information ADB requires in the concept notes and the necessary budget breakdown. Once this is done, it will be the basis of approval of training activities.
 - (ii) Gender action plan. DWR is such a nascent organizational unit that it is unlikely that work on the Gender Action Plan as originally designed will gain much traction. Mission however recognizes the importance of the gender aspect and will work with the ADB gender specialist staff to identify ways in which gender can be mainstreamed. Package 2 participation consultant (Idom) will also provide recommendations on how gender can be mainstreamed into river basin planning (RBP) processes and implementation.
 - (iii) **Asia Water Week.** As part of capacity development, key PIU technical team members have indicated interest to attend Asia Water Week in Manila in March 2013. Their participation will be financed from the TA.

Output 2 River basin management (RBM) development

Implementation progress towards DMF targets. Idom consultants continue to support 13. DWR and its branches in provinces (PONRE)², districts (DONRE³) and villages⁴ and the Nam Ngum River Basin Committee Secretariat (NNRBCS) to prepare the river basin plan. Activities held include (i) consultation with relevant MONRE departments on river basin planning processes, the state of the basin outline and stakeholder consultation guidelines; (ii) development of a workplan for December-January 2013 with five milestones to get the component back on track, including the organizing of the first meeting of the national river basin management taskforce and Nam Ngum Technical Working Group at provincial level, the organization of stakeholder workshops in the basin. DWR and its braches have been closely worked with related line agencies both in central and NNRB based on their mandates such as: data collection for NN profile development, NN IWRM Plan, RB and sub-basin modeling and WR inventory⁵, water quality management and monitoring⁶, water quantity monitoring, sub-basin planning and management, initiative for RB planning guidelines⁷, various trainings and local public awareness raising⁸, survey and prepare to establish national IWRM demonstration site in Vangvieng District, advise the proposed water management proposals from provinces and districts. In addition, the DWR's branches have regularly reported both vertical and horizontal, especially their daily works, water related issues, etc. The first draft of Guidelines for River Basin Plan presenting the recommended processes design and structure for the further development of the NNRB Plan was submitted to the PIU-2 in early October and discussed in specific meetings held in November and December 2012. An improved second draft was shared in January 2013. The mission requested that the TA should carefully study the role and linkage of relevant agencies in central, province, district and village as well as other stakeholders for RB Planning and Implementation. Because this will be applied in other basins, the TA should work closely with DWR for this accomplishment. DWR has not been involved since beginning of the process while its mandate was clearly specified. Another important step towards achievement of the DMF targets concerns the Prime Minister's Decision no.10/PM dated 29 January 2013 on the organization and activities of the Nam Ngum River Basin Committee (NNRBC). However, the new NNRBC and Secretariat mandates are unclear comparing to existing Local Administrative Law, No. 03/NA, dated 21 October 2003, MONRE Decree, PONRE and DONRE mandates. The presentation of Component 2 on implementation progress is attached as Appendix 4.

14. **Key issues**. The component has been recently split into two subcomponents by MONRE. A Component 2.1 will cover national level policy and guidelines on river basin planning and management which coordinates with other basins in the country while Component 2.2 is the original TA design under Output 2 as well as C2.1 activities also originally support and link to the original Output 2, this is just split for clearer role between DWR (national) and basin level in order to accredit the Output 2 milestones in consistent with and effective approach for RBMP in NN and efficiently replicate the lessons from NN to others. This does not constitute any change to the original concept of Component 2 of the TA. DWR has the responsibility to lead and

² PONRE is Provincial Department of Natural Resources and Environment

³ DONRE is District Office of Natural Resources and Environment

⁴ Village Water Resource Committee (comprises of deputy head of village as a chairman, village security staff, voluntary safeguard, youth, women, Worker Union, Lao Front Construction, voluntary public health).

⁵ Water quantity, quality, river/tributaries, wetlands and surface and groundwater.

⁶ Piloted in 3 sub-basins in NN namely Nam Lik, Nam Ting-Nam Chat and Nam Kho and WQM guideline development and built local capacity for WQ sampling collection, tool usage and maitenance, etc..This leaded by Division of Surface and Groundwater Quality Management of DWR.

⁷ This initiated by existing DWR capacity and team (leaded by Division of RB Management and Development in DWR), experience and this will be further discussed with C2 and national TWG.

⁸ Water day, wetland day, river clean up activity-Nam Xong, etc.

coordinate IWRM in Lao PDR in the basin and sub-basin scales, so the conceptual split of the Component is generally logical given the range of activities that have been included to collectively support IWRM. In practical terms, DWR is responsible for coordination with related agencies and stakeholders in the basin and nationally while NNRBCS has very general and unclear mandate to coordinate and play the legal role with local agencies in the NN basin. Because, NNRBCS has no branches in provinces and districts as well as staff in provinces and districts. NNRBC is an ad-hoc which is not in the line agencies and the Secretariat has very limited capacity with inadequate staffs to deal with the issues happened in NNRB. In addition, NNRBCS is not formally executed in the MONRE organizational structure (out of 17 departments which has no legal rights to get annual budget from MONRE based on its Mandate No. 435/PM, dated 28 November 2011. This is to make sure the continuity and sustainability once the project finished). This faced some difficulties for RBM and activity monitoring system by MONRE Department of Inspection in the past experience. Meanwhile, DWR has legal mandate which supported by its water resource section/unit in each PONRE and DONRE (vertical organization of DWR). They have very clear mandate in terms of reporting and coordinating within the respective provinces and districts agencies (horizontal line) and also with central level representing by DWR and related Departments of MONRE. This supported the GoL policy and legislative framework, i.e. Local Administrative Law, No. 03/NA, dated 21 October 2003, PM Decree on MONRE, 3Built Policy of GoL (decentralization of responsibility to province, district and village), etc. Moreover, the DWR has very clear mandate to guide the local agencies for their IWRM planning in river basin and implementation by provinces and districts. This legal linkage is considered as an important element in administrative system of Lao PDR. Because all of the issues and solutions are direct responsibility of provinces and districts (governors is the highest position for making decision in their own areas). . The separation of Component 2 into C2.1 and C2.2 has also amplified the need for clarifications of roles. This directive appoints a new C2.1 Component Manager to provide overall DWR guidance and coordination of RBM in accordance with the DWR mandate. The PMU will advise the Mission formally of the setting up on the new PIU and its composition and TOR, and the establishment of its subaccount. Upon receipt of this advice, TA will make the financial provision for running costs for a PIU for C2.1. The Mission will then have to examine how the TA can accommodate a budget for the new activities proposed under C2.1.

15. **Team leader replacement.** In October, DWR requested the replacement of the package 2 Team Leader (TL) for a number of reasons concerning his performance. The Idom Project Manager accompanied by a Senior Partner-Director travelled to Vientiane the following week to deal in person with the issue. Aware that under the current situation expressed by the EA representatives the continuity of the Team Leader would not help for a successful finalization of the TA, IDOM proposed an in-house expert with international background as the suitable replacement for the TL position that was accepted by DWR and ADB. The first input of the new TL commenced the 20 November 2012. The Mission appreciates the considerable effort that Idom has put into identifying an appropriate candidate for the TL position. The impact of the replacement in the overall performance and in strengthening the collaboration among the parties can be assessed as positive, given his different approach and working style compared to the previous TL. Given this positive change, and the fact that time was lost in part due to the transition between the two TL, the performance issues of the previous team leader, the Mission accepts to increase the input of the new TL. However, the new TL and consultants of Package 2 should be more active in supporting the C2 both C2.1 and C2.2 nationally and basin level respectively to fit the Component milestones. Because the activities split out by C2.1 is the same as planned in DMF and suite with TOR (the AWPB of C2 were jointly identified by DWR (C2.1), C2.2 and P2). The mission requested the P2 to carefully divide the TA time for both C2.1 and C2.2 based upon the existing TOR and work activities of each sub-component including concept notes, approach, report and RBM coordination mechanism support without separate advice between C2.1 and C2.2. The detailed TA support for both subcomponents will be

advised by PMU based on C2 input. This is one of the harmonization of the C2 milestone achievements for the rest of the TA, except Sedone works.

16. **Sedone River Basin**. DWR is contemplating initiating work on another river basin plan, with the assistance of the IWRM Advisor. Preliminary discussion indicates that Sedone river basin as a likely choice. In August 2012, the Mission had advised that DWR/MONRE needs to examine the projected use of the unallocated Project budget and determine the amount that is needed for the work on the second river basin (Aide memoire August 2012). The proposal for Sedone and its accompanying budget was only received on 19 February 2013 and therefore Mission will continue discussions with DWR. DWR intends to carry out the work through the C2.1 PIU.

17. **Priorities for 2013.** The key activities to be carried out under this component will center around the guidelines for the RB plan process, state of the basin report, river basin management strategy, 5 year river basin management action plan and communication plan for Nam Ngum (and Sedone, to the extent the TA budget allows), top down/bottom up stakeholder involvement strategy and technical working group for NNRBMP. The Mission received on 19 February 2013 the proposed activities and budget for C2.1 (for example on the task force) and Sedone river basin planning and will review in due course.

18. **Way forward**. The Mission agreed the following with DWR,MONRE, NNRBCS and the consultants:

- (i) **Priority**. All agree that this component is critical to the success of the TA. Increased cooperation and collaboration is needed between DWR and NNRBCS for this component to succeed.
- (ii) Availability of funds. The fund request for C2.1 activities and Sedone will be reviewed by the Mission. For C2.2, which has already shared the concept notes with the Mission, the concept notes need to be revised following Mission comments and resubmitted;
- (iii) Mobilisation of consultants. All consultant mobilization needs the prior clearance of ADB to ensure optimal use of resources and that consultant inputs coincide with key activities. Delay in the organization of key activities may imply holding off on mobilization of consultants;

Output 3 – National groundwater management action plan prepared

19. **Implementation progress towards DMF targets.** NREI has gathered and compiled data for groundwater sector assessment and groundwater resource assessment, with the technical support of consultants. In addition, groundwater team was established in central and provincial level to facilitate Component 3 activities. The component is on track to meeting its DMF targets.

20. **Key issues**. NREI is addressing the two main issues (i) the scope of work in the package 3 consultant contract which does not full cover the scope of works stated in the Designing and Monitoring Framework (DMF) of the TA; (ii) links of component 3 activities to the ACIAR funded groundwater research program being implemented by a team led by the International Water Management Institute (IWMI). The DMF includes purchase of specialized groundwater monitoring equipment, a pilot study, and training. However, PIU3 requires assistance to carry out these activities, and there is no provision in the Package 3 contract. On the other hand, the purpose of the ACIAR project is to demonstrate viable technologies and identify strategies that would enhance agricultural use of economically accessible groundwater in Lao PDR for both dry season and supplementary wet season irrigation by smallholder

farmers. The ACIAR project contains in field and modeling based studies, therefore, to make sure that there are appropriate links between the two projects, PIU3 participated in the inception meeting and stakeholder consultations of the ACIAR funded project. Details on the ACIAR work are attached as Appendix 5.

21. The Mission had a meeting with PMU, PIU3, consultants, AusAID and IWMI team, and agreed with the IWMI team leader that Component 3 and the ACIAR funded project would have close coordination and cooperation on data inventory and capacity building and pilot activities. At the same time, the Mission confirmed the necessity for conducting a pilot assessment on Component 3 for capacity building and making the first national groundwater management action plan. PIU3 needs to clarify the pilot assessment activity and AWPB 2013 on Component 3 as well as the necessity of consultant contract variation as soon as possible. In addition, the Mission confirmed with PMU that groundwater management training would be conducted in Component 1 training with close cooperation with the capacity building activities in the ACIAR funded project.

22. **Priorities for 2013.** The key activities to be carried out under Component 3 this year will lead up to management plan and the final workshop of the consultant in November 2013.

- 23. **Way forward**. The Mission agreed the following with NREI:
 - (i) **International consultant**. The Mission will discuss with GHD the possibilities of increasing the inputs of the international consultant.

Output 4 – IWRM education strengthened at the National University of Laos

24. **Implementation progress towards DMF targets.** DMF target on NUOL graduates has in part been achieved, with 43 graduates from the first batch of students, with approximately 50% female graduates. However these students understandably did not benefit from the improved curriculum which is to be rolled out. Therefore while the quantitative target has been achieved, the implied qualitative aspect still has to be delivered. Package 4 consultants accomplished its activities based on the TOR which include; (i) review of the curricula; (ii) implement a study tour for senior WRED staff; (iv) prepare a strategic plan and detailed proposal for implementing the curriculum; (v) prepare a design and monitoring framework and detailed monitoring and evaluation (M&E) plan. The consultant was expected to facilitate twinning agreements with one of more universities and/or institutes. WRED signed the inprincipal agreements for cooperation at the faculty level with two institutions, Kasetsart University and Asian Institute of Technology in Thailand, however WRED has entered into formal twinning arrangements which have to signed at the central university level with any international university.

25. **Key issues**. This Mission reminds NUOL as it did during the August 2012 review mission that this IWRM curriculum is made available to NUOL students studying agriculture, hydropower and mining. At the present time, NUOL is receiving support from a World Bank-AusAID Hydropower and Mining Technical Assistance Project. In addition the Mission requested NUOL to consider how its IWRM students can be involved in other components of the NIWRMSP, including for field work and internships. The Mission visited NUOL and studied the university library that needs to be expanded for IWRM education.

26. **Priorities for 2013.** Endorsement of the Strategic Plan by NUOL, and identification of key strategic priority areas that could be proposed for funding under the TA.

27. **Way forward**. The Mission agreed the following with NUOL:

(i) NUOL needs to clarify, prioritize and make concept notes of the component 4 next step activities based on the strategies and action plan for further strengthening IWRM education at NUOL.

B. Design and Monitoring Framework

28. The Mission reviewed the DMF. The revised DMF is proposed in Appendix 6. There is a general update in the DMF to replace WREA with MONRE. The impact and outcome statements remain valid.

29. As for the output statements, while they remain valid, the reference to the IWRM Support Program component has been removed. While the concept behind the TA remains to provide inputs to the Support Program which is directly linked to the National Water Resources Policy and Strategy, the Policy and Strategy has only been in draft form and in any case, the Mission is aware of the updating of the latter. The updating exercise has now introduced 12 or possibly 16 key areas and if possible the Mission would like to have an English translation of the summary of the updated key areas to ensure that the TA and the consultant input offered to the Government using TA funds are in line with the latest thinking on the Policy and Strategy.

30. Some target years were adjusted to take into account delays in project implementation, stemming from the time needed to mobilize the four consulting packages as well as the slow implementation progress noted in 2012. Overall TA duration of 4 years is still deemed sufficient.

31. The Mission suggests that the existing two gender related indicators be removed or revised. For example, the TA does not have control over the percentage of female RBC members. An updating will be proposed in line with the Mission's view that the gender aspect of the TA be mainstreamed as far as possible into the technical components and be as realistic and meaningful as possible. For example, the Component 2 has been requested to look into ways of incorporating gender aspects into the river basin planning process. Similarly the Mission requested Component 1 to look into training on gender related issues.

32. **Assumptions and risks**. The Mission carried out a thorough review of assumptions and risks, as in Appendix 7. The Mission feels that the TA remains relatively risky, mainly because of institutional issues and because the capacity of PMU is at present inadequate to manage a TA of this size and complexity.

C. TA approach

33. The Mission reviewed the original TA approach. The TA is designed primarily as a capacity building TA (CDTA). It was recognized that the capacity in the IWRM was limited within DWR, MONRE, but the work is of critical importance to Lao PDR, and especially the Nam Ngum River Basin (NNRB) which is taking the lead in RBP. Much is said about the need for the TA consultants to assist the government staff to implement the TA activities (rather than substituting their role), which in principle is correct. However, since IWRM is a relatively new discipline for most of the counterpart staff, in practical terms it is necessary for the consultants to take a strong lead in implementation of the TA activities. This involves initiating the activities, and from a position of action, progressively drawing in the counterpart resources and building capacity. It must also be recognized that robust capacity building is a long-term undertaking, and it would be unrealistic to expect that adequate capacity can be achieved within the life of this TA. The important issue it to make a start, and at the same time advance the work, which can be held up as examples of good practice, and hence a launching pad for future work. One implication of this reality check is that more international consultant inputs are needed, especially for Components 2 and 3, as discussed above.

34. The original TA approach was that by building the Government's capacity, the Government would be able to deliver the outputs in the DMF. For example, the TA inputs are supporting Nam Ngum river basin plan preparation, but the assumption was that a second river basin plan would be prepared by the Government using its own or other resources. This approach is ambitious given the current state of capacity.

35. The original TA approach to use the PMU as a single entry point for management of funds and coordination across the components. However it is equally important in terms of efficient project management to ensure ways that promote ownership of the TA work and the corresponding availability of financial resources, paired with technical accountability and financial responsibility. This mismatch between resource availability and technical accountability has become obvious in Component 2 and if the problems of budget transfer between PMU and PIUs are not resolved, the Mission will make an exception to the general TA approach. See the discussion on the financial section for further details (ref para. 41)

D. Financial progress

36. **Disbursement**. The total approved TA amount is \$3.9 million.⁹ The Government has agreed to contribute \$0.31 in in-kind contribution. As of 18 February 2013, The TA has committed \$2.74 million (and has disbursed \$1.05 million. The decrease in the committed amount (from \$3.08 million in August 2012) is due to the cancellation of the AusAID reserved amount, following receipt of the final tranche of AusAID funds in November 2012. An uncommitted amount of \$1.16 million remains. The financial status of the Project, by category can be found in Appendix 8.

37. **Advance payment facility**. The total amount advanced to DWR/MONRE is \$215,392. This comprises of two advances (\$89,638 in November 2011 and \$125,754.15 in August 2012) using the advance payment facility. The original request for the second advance was \$128,718 but only \$125,754 was released due to an unliquidated amount of \$2,964 from the first advance. The EA has been advised that this amount of \$2,964 this can be used for activities included in the second advance. The current unliquidated amount is \$99,122.38. A detailed status of the advance is attached in Appendix 9.

38. The Mission reminded the PMU that the third request for advance can not be made until approximately 75% of the current advance has been liquidated. The Mission urged the PMU to liquidate on a timely basis. For the next advance request, ADB will review the breakdown of the advance request with the accompanying one-page concept notes (in line with AWPB, when PMU manages to prepare one of sufficient quality). Upon approval of the third advance, the PMU and PIUs can proceed with the activities without further approval from ADB, unless it is related to items that need such approval (studies, contracts with service providers, international travel, equipment) or to an activity which was not in the approved advance.

39. **Expenditure guidelines**. The Package 1 consultant on administration and finance has prepared expenditure guidelines, which have been reviewed by the Project Management Specialist. The PMU informed the Mission that it will send the agreed version to ADB. The Mission reminded the PMU that unit rates indicated in the Ministry of Finance Decision No 0008/MOF must be used without exception. For items which do not figure in the said decision, the unit rates proposed by PMU appear to be reasonable.

40. While clear expenditure guidelines are certainly useful, Mission notes however that most of the budget inaccuracies that are routinely identified during ADB review of the activity budget

⁹ ADB's Technical Assistance Special Fund (TASF) finances \$0.3 million. The Government of Australia provides A\$3.2 million equivalent and the Spanish Cooperation Fund for Technical Assistance provides \$600,000, administered by ADB.

proposals refer to mistakes such as the overestimation of the number of eligible per diem days, choice of location of workshop that is not justifiable and so on. The Mission has advised PMU and PIUs that the accountability for a proper detailed activity budget preparation lies with them, and that any expenditure made mistakenly will not be liquidated.

41. **Fund flow**. The Mission observed difficulty in fund flow from PMU to PIUs, especially in the case of Component 2.2. The Mission learnt that it only takes a day to transfer the funds to the PIU subaccounts. The Mission expects therefore that in the future, the preparation of fund transfer and actual transfer does not require more than five working days from the time of ADB approval. If by that time the transfer is not made, ADB will proceed with other means of ensuring that activities are not delayed For Component 2.2, two main options will be a direct transfer to the NNRBCS using its own advance payment facility or an increase in the Idom contract to cover critical activities without which mobilization of the international and national consultants would be futile. NNRBCS already has the experience of being an implementing agency (IA) under the Nam Ngum River Basin Development Sector Project, and also has specific NNRBCS strengthening support under the said project's ongoing additional financing.

42. Budget for 2013. The Mission discussed the annual work plan and budget of each component. The budgets are in different stages of preparedness, mostly received in an uncoordinated way during the Mission duration itself, and therefore need seriously further review by Component PIUs and ADB. There has been no exercise yet to rationalize the overall TA budget. The Mission notes that the rough estimates exceed the available uncommitted budget. In order to be properly review the budget, there needs be a more informative workplan (currently only annotated budgets are available) and failing which, the corresponding one-page concept summaries are essential to understand the rationale behind the activity and hence the appropriateness of the budget. Up to now, only the activities on Nam Ngum have corresponding concept notes (reviewed by Mission and IWRM advisor). Component 1 has a detailed training plan, that, when adjusted to incorporate the standard information requested in the one-page concept notes can be accepted in lieu of concept notes. If ADB does not receive a complete annual budget proposal, ADB will approve batches of concept notes as they are submitted, in accordance with the priorities explained below, so that the whole TA is not delayed. In the interest of transparency and saving time, henceforth PIUs are requested to copy ADB and AusAID at the same time they submit the concepts and budget estimates to PMU. The Mission advises that it will review the budget according to the following principles:

- (i) High priority implementation of the training plan;
- (ii) High priority necessary increases in international consultant inputs;
- (iii) High priority activities that were originally envisaged at TA design. New activities will be considered as second priority or the relevant PIU will be encouraged to mobilize other resources;
- (iv) Low priority activities and equipment that could be covered by other projects;
- Low priority/exclusion any activity which for which there is no evident need for capacity development, i.e. if the local institutions can already carry out the work using existing internal capacity, then they will be encouraged to mobilize other resources;
- (vi) Exclusion procurement of vehicles (other than the vehicle currently being procured for Nam Ngum RBC activities and some motorcycles);
- (vii) Exclusion any ordinary meeting that is budgeted as a workshop.

E. Project management

43. **Guidance and oversight.** In the last review mission (August 2012) the Project Director informed the Mission that DWR/MONRE would strengthen the TA guidance, coordination and leadership functions by assigning another DWR/MONRE staff to assist PMU and by assigning one of the two Deputy Director Generals as Deputy Project Director for the NIWRMSP (i.e. both ADB and World Bank supported components). The Mission welcomes the fact that the DDGs have been in post since January 2013 and request DWR, MONRE to explain further the direct role of the DDG in assisting the Project Director to fulfill the necessary TA guidance, coordination and leadership functions.

44. **Steering committee**. The Mission requests that, in coordination with the World Bank supported components, the joint steering committee meeting be held to discuss the MTR recommendations and to actively look for areas of collaboration.

45. **National implementation support consultant**. The Project Director requested the Mission to consider the recruitment of a national implementation support consultant. The Project Director stressed the importance of a Lao-speaking national consultant who would be able to work closely with the counterpart national consultant on the World Bank funded components to ensure NIWRM-SP wide coordination. The PMU will submit a TOR to ADB for this position for an initial 12 months. The PMU must also explain in its submission to ADB, how this proposed position does not overlap with the coordination functions of the Package 1 consultants.

46. **Reporting**. Recommendations of the last review mission have not been followed. They have been updated by the PMS (see appendix 10) Reporting should also include a quick analysis of training evaluation by the participants.

47. **Consultant inputs**. The summary of consultant inputs used as of February 2013 is shown in Appendix 11.

III. GENERAL MTR RECOMMENDATIONS

- 48. In general, the three main recommendations of the MTR are:
- (i) Improved cooperation and collaboration between different parts of the Government and different projects are necessary to optimize the benefits to Lao PDR from this external assistance.
- (ii) The remaining inputs of international and national consultants must be used in an efficient and effective manner. This includes scheduling and funding activities like studies and workshops in a timely way.
- (iii) Fund flow problems must be fixed by improving the annual work plan and budget planning process and justification for budget requests, transfers and liquidation.

IV. FOLLOW UP ACTIONS

49. The actions taken since the August 2012 review mission were summarized in Appendix 3 of the aide memoire of the Special TA Administration Mission of January 2013. PMU has accomplished most of the actions. Looking ahead, the following actions and timeframe have been agreed:

Table 1: Key follow up actions

Para. Ref.	Action	By whom	By when
2	Request changes to the TOR of Package 1	PIU1, DWR	27 Feb 2013
12	Update and finalise training plan for approval	PIU1, DWR	27 Feb 2013
12	Identify gender mainstreaming linked to actual TA components	ldom, ADB	27 Feb 2013
14	Advise ADB of the setting up on the new PIU, its composition and TOR, and the establishment of its subaccount.	PMU	27 Feb 2013
18	Clarify synergy with Nam Ngum River Basin Development Sector Project (additional financing)	DWR, ADB	27 Feb 2013
23	Discuss international consultant input	PIU3, ADB	15 March 2013
27	Clarify, prioritize and make concept notes of the component 4	PIU4	27 Feb 2013
45	Submit TOR for national implementation consultant	PMU	As soon as possible
Gen	Submit Annual Workplan and Budget 2013 and accompanying concept notes	PMU and PIUs	As soon as possible

50. The next Joint Review Mission is proposed to be held in August 2013.

51. The Mission expresses its gratitude to the Government, its staff and agencies met for the cooperation extended to the Mission.

Signed:

Chanthanet Boulapha (signatory to be provided) **Director General** AusAID Department of Water Resources MONRE ADB Date:

Su Chin Teoh

Natural Resources Specialist Mission Leader

Date:

Date:

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- Progress report prepared by PMU (August 2012 to December 2012) 3.
- Presentation by PIU 2 4.
- ACIAR project summary 5.

- Revised Design and Monitoring Framework 6.
- Review of assumptions and risks (in the Design and Monitoring Framework) Financial status of the Project, by category 7.
- 8.
- Status of Advance Payment Facility usage 9.
- 10. Recommendations of Project Management Specialist (from final report 27 December 2012)
- 11. Summary of consultant inputs

LIST OF PERSONS MET (TO INSERT MEETING ATTENDANCE LISTS)

Name and Surname	Position	Organization	Tel	Email
DWR				
Mr Chanthanet BOULAPHA	DG	DWR	00405400	chanthanet@gmail.com
Mr Phonexay SIMMALAVONG	Administrative	DWR	22485198	mrjoybig@yahoo.com
Mr Phousavanh FONGKHAMDENG	Planning	DWR	23665577	Lan.jrp@gmail.com
Mr. Ounakone XAYVILIYA	PMU	DWR	22239223	ounakone@gmail.com
Ms Chindavanh		DWR	22219930	chindavanh.one@gmail.com
Mr Sakda PHIXAYAVONG	M&E	PMU, DWR	99650000	s_sakda@live.com
Mr Pinthong SALEUSAY	Finance	PMU, DWR	22008400	pin_sls@yahoo.com
Ms Vanseng KHAMMANIKHOT	Admint	PMU, DWR	22235490	k.vanseng@gmail.com
Mrs Phoukham KEOSEHOUN	Accountion	PMU	22018786	keosehoun@hotmail.com
Component 1				
Mr. Bounsanong FONGNALY	P1 Manager	P1	55478689	Fongnaly79@yahoo.com
Ms Keodokmay	Finance	P1	55654200	Keo.pk@hotmail.com
Antonio Dano	СТА	NIWRMSP		tonydano93@yahoo.com
Mr Simoune	P1 Consultant	P1	54872679	Simoune_dara@hotmail.com
Mr Bounlap	M&E specialist	ESC	55676726	bounlap@hotmail.com
Mrs Sengmanichans	Training Specialist	P1		Sengmanichanhsoncham@gmail.com
Maporn (Gaew) Lertsuridy	AECOM Project coordinator	AECOM ASIA	58892407	Maporn.lertsuridy@aecom.com
Mr Khamkeng CHANTHAVONGSA Component 2	Institutional Develop Specialist	AECOM, NIWRM- DWR	55699473	chhamkeng@yahoo.com
Mr Souphasay KORMANY	P2 coordinator	NNRBCS	97985040	Kormany_s@gmail.com
Mr Khounma VORLALATH	Finance	P2	55920861	loyhenry_9@yahoo.com
Jorge Ocin	P2	IDOM		jocon@idom.com
Rudi Kuiper	TL P2	IDOM		rudikubb@gmail.com
Mr Boriboun	Dpty P2	LCG/IDOM	55555133	bsanasisane@gmail.com
Component 3				
Mr Oulaphone ONGKEO	P3 Manager	P3, NREI	22248529	oulaphoneongkeo@gmail.com
Mr. Bounhieugs Component 4	National Consultant	P3	55833273	bounhieugsvnhaneb@yahoo.com
Mr Bounyam THOUMMAVONG	PIU, P4	WRED/NUOL	22418423	yomthoma@gmail.com
Mr Khamtan	M&E	PIU , P4, NUOL	23071979	khamtanh@yahoo.com
Dr. Torkil Jonch Clausen	IWRM Adviser	ADB	22531570	TJC@DHIGROUP.com
Paul Pavelic	RS	IW MI		ppavelic@cgiar.org
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MISSION SCHEDULE

Date/Day	Item	Notes
15 February	9:00 – Courtesy call on CD, LRM	Mission
2013 (Friday)	9:30 - Mission meeting (ADB LRM Learning Center)	Mission
	10:30 – Kick off meeting (DWR Meeting Room)	Present: EA, IAs,
	Presentation of overall progress (Project Director)	PMU, PIUs consultants and
	Progress since last review mission (PMU)	Mission
	Identification of issues to be discussed for current review (Mission)	
	Confirmation of review programme	
	14:00 – Discussion on AWPB for Component 2	NNRBCS, PMU, consultants, Mission
16 February 2013 (Saturday)	9:00 – visit to NNRBCS office; further discussion as necessary on Component 2	NNRBCS, PMU, consultants, Mission
17 February	10:00 – meeting with IDOM	Mission
2013 (Sunday)	16:00 - meeting with staff consultant (GMS flood and drought)	
18 February 2013 (Monday)	9:00 – Discussion on AWPB for Component 3	NREI, PMU, consultants, Mission
	14:00 – Discussion on AWPB for Component 4 (at NUOL Tadthong campus)	NUOL, PMU, consultants, Mission
	16:30 – Discussion on Component 2 (continued)	101351011
19 February	7:30 – Meeting with staff consultants (GMS flood and drought)	
2013 (Tuesday)	9:00 – Discussion on AWPB for Component 1 and training plan (at DWR); discussion on revised DMF	PMU, PIU, consultants,
	14:00 – Discussion with PMU and C1 manager on financial and administration matters	Mission
	15:00 – Discussion with DG DWR	
20 February	9:00 – Draft MOU sent to Government for review	All
2013 (Wednesday)	10:00 – Meeting with DOI, MAF, MPWT and IAs on resettlement and social issues (GMS flood and drought)	Mission
	14:00 – Meeting with Vice Minister Sisavath, MONRE	
	15:00 – Wrap up meeting and discussion of draft MOU	

PROGRESS REPORT PREPARED BY PMU

(To insert)

PRESENTATION ON COMPONENT 2 PROGRESS PREPARED BY PIU2

(To insert)

SUMMARY AND SCOPE OF ACIAR PROJECT

(To insert)

REVISED DMF

	Derformer Terrete en l	Data Sources and	
Design Summary	Performance Targets and Indicators	Reporting Mechanisms	Assumptions and Risks
Impact	By 2020 in five basins:	meenamismis	Assumption
Water resources managed in Lao PDR river basins for sustainable economic, social, and environmental objectives	Investment decisions are consistent with IWRM river basin plans (baseline 2010 = 0). Water resources use agreements implemented (baseline 2010 = 0)	Project investment plans and proposals reported in the River Basin Committee and WREA annual reports MOUs with concession holders	All of the department in MONRE, MAF and MEM are cooperative to IWRM. Risk Critical decisions may be made before MONRE has significant influence.
			Hydropower, mining, and agricultural concessionaires resist implementation of basin management plans and regulations.
Outcome	By the end of 2015:		
IWRM human resources and institutional capacity strengthened in MONRE, two RBC(S) and other key agencies	Effective river basin committees operating in at least two basins. (baseline 2010 = 0)	MONRE executive and management action plans and meeting minutes	Risks Delay in finalization of new water laws constrains the role of MONRE in providing leadership in the sector
	At least two major river basins have IWRM plans fully integrated with province and national plans. (baseline 2010 = 0)	Provincial records of adoption of basin plans.	Change of senior leadership and loss of trained staff weakens MONRE
	75% of MONRE staff successfully complete phase	RBC minutes and records.	
	1 CPD programs (baseline 2010 = 0)	CPD assessment reports	
	Water allocation and regulation mechanisms established and in use.		
		MONRE water allocation decisions widely disseminated	
Outputs 1. National capacity built	80% of water resources	MONRE executive	Assumptions
in integrated water resources management	management sector professional staff in MONRE are actively participating in tailored personal CPD programs by end of 2015	and management action plans and individual training plans	Parallel financing by development partners is provided within the IWRM support framework.
	(baseline 2010 = 0). MONRE GAP prepared as a	State-of-the-rivers publications	Additional financing for GAP implementation secured
	financing application by end 2014 (baseline 2010 – No specific WREA GAP).	National, provincial, and district socioeconomic plans	MONRE employs water resources management staff continuously.
	Two basin plans are published by MONRE in collaboration with basin management organizations.		Risks Sustainable financing for RBCs not obtained
2. River basin management developed.		River basin committee minutes and publications	19

Appendix 7 REVIEW OF ASSUMPTIONS AND RISKS

Impact level

Risk: Critical decisions may be made before WREA has significant influence.

MTR mission comments: WREA is no longer in existence. On November 28th 2011, GOL established the Ministry of Natural Resources and Environment (MoNRE), under which the Department of Water Resources (DWR) absorbs the functions of the former WREA. As a new Department, it is building up its influence while still working out clear demarcation of roles and responsibilities. Therefore, this risk remains valid..

Risk: Hydropower, mining, and agricultural concessionaires resist implementation of basin management plans and regulations.

MTR mission comments: This risk remains valid.

MTR mission recommendations: There is an important assumption at impact level which needs to be included. The assumption is that "All the departments in MONRE, MAF and MEM cooperate according to IWRM principles", because IWRM will not materialize without active cooperation among the water related government agencies.

Outcome level

Assumption: Natural resources remain key basis for economic development.

MTR mission comments: It is fairly obvious that natural resources will remain the key basis for economic development in the foreseeable future in Lao PDR. This assumption is not directly relevant to the TA and the MTR mission recommends that it be removed.

Risk: Delay in finalization of new water laws constrains the role of WREA in providing leadership in the sector

MTR mission comments: As noted above, WREA has been replaced by DWR, MONRE. This risk identified remains valid, although work on the updating of the water law has been ongoing in 2012. The TA needs to ensure sufficient coordinatation with IFC and the World Bank Water Law Component.

Risk: Change of senior leadership and loss of trained staff weakens WREA

MTR mission comments: This is a risk that has materialized. The project design was led by strong leadership of WREA which now has changed with the institutional reorganization in MONRE. Sufficient leadership and ownership in in the TA has not been demonstrated over the last 12 months. Similarly the lack of a critical mass of trained staff in DWR means that the baseline for capacity development is low.

Output 1

Assumption: Parallel financing by development partners is provided within the IWRM support framework.

MTR mission comments: The IWRM support framework has been updated and is being finalised but the Mission has not received a copy. In fact the IWRM support framework does not at present to be a widely used framework besides during the initial desing of the ADB and World Bank components. Mission suggests to remove the word "parallel" as it has a connotation of cofinancing which could be confusing.

Assumption: Additional financing for GAP implementation secured

MTR mission comments: MTR mission recommends that instead of a general gender action plan for gender aspect would be incorporated in RBP on Component 2. tbd

Output 2

Risk: Sustainable financing for RBCs not obtained

MTR mission comments: We need to watch the budget for RBCs carefully, and according to the RBCs budget situation, we need to finance RBCs activities for the development of river basin management.

Risk: Coordination with other ministries, projects and basin actors fails to generate expected synergy of action

MTR mission comments: The success of this output depends on a key assumption which is that the DWR and NNRBCS have a good cooperative relationship. However, this risk has materialized because of less coordination and cooperation between the two organizations. We need to watch the progress and activities on National Task Force for making NNRBP.

Output 3

No risk/assumption identified at design.

MTR mission comments: According to the situation of groundwater use, we need to manage the risk that major groundwater users resist implementation of groundwater management action plan.

Output 4

No risk/assumption identified at design and confirmed at MTR.

	FINANCIAL STATU	S OF THE PROJECT	(USD)			
	as of 18 February 2013					
	Allocation (a)	Commitments (b)	Disbursements (c)	% Disbursed (c)/(a)	Uncommitted (a)-(b)	
Consultants	2,350,000	2,214,812	855,761	36%	135,188	
Equipment	125,000	110,028	91,374	73%	14,972	
Trainings/Seminars	205,000	185,475	87,408	43%	19,525	
Studies	680,000	65,000		0%	615,000	
Contract Negotiations	10,000	10,001	3,251	33%	(1)	
Miscellaneous TA Admin	130,000	28,095	15,803	12%	101,905	
Contingency	400,000	121,926	-	0%	278,074	
Total	3,900,000	2,735,337	1,053,597	27%	1,164,663	
Source: ADB						

FINANCIAL STATUS OF THE PROJECT (USD)

STATUS OF ADVANCE PAYMENT FACILITY 1 AND 2

T7780-LAO: National Integrated Water Resources Management Support Project					
Status of the Advance					
As of 15 February 2013	3				
Item	Value Date	Amo	ount		
ADVANCE			215,392.00		
APF1	9-Nov-11	89,638.00			
APF2	14-Aug-12	125,754.00			
LIQUIDATION			116,269.62		
Liquidation 1	8-May-12	65,916.61			
Liquidation 2	28-Jun-12	6,618.00			
Liquidation 3	2-Aug-12	14,139.54			
Liquidation 4	16-Aug-12	375.66			
Liquidation 5	22-Oct-12	7,214.25			
Liquidation 6	19-Dec-12	22,005.56			
Total Unliquidated99,122.38					
Note: Review of a liquidation (amounting to \$23,339.49), received by ADB on 13 February					
2013, is ongoing	J.				

RECOMMENDATIONS FROM PROJECT MANAGEMENT SPECIALIST (DECEMBER 2012 REPORT)

1. The TA is designed primarily as a capacity building TA (CDTA). It was recognized that the capacity in the IWRM was limited within MoNRE /DWR, but the work is of critical importance to Lao PDR, and especially the Nam Ngum River Basin (NNRB) which is taking the lead in RBP. Much is said about the need for the TA consultants to assist the government staff to implement the TA activities (rather than substituting their role), which in principle is correct. However, since IWRM is a relatively new discipline for most of the counterpart staff, in practical terms it is necessary for the consultants to take a strong lead in implementation of the TA activities. This involves initiating the activities, and from a position of action, progressively drawing in the counterpart resources and building capacity. It must also be recognized that robust capacity building is a long-term undertaking, and it would be unrealistic to expect that adequate capacity can be achieved within the life of this TA. The important issue it to make a start, and at the same time advance the work, which can be held up as examples of good practice, and hence a launching pad for future work.

2. The separation of Component 2 into C2.1 and C2.2 has also introduced the need for clarifications of roles. This directive appoints a new C2.1 Component Manager to provide overall DWR guidance and coordination of RBM in accordance with the DWR mandate. This does not constitute any change to the original concept of Component 2 of the TA, except it now becomes Component 2.2 under the same Component Manager and continues to have responsibility for the Nam Ngum RBP as before. However, it now falls under DWR guidance on overarching policy matters provided through C2.1. Although the precise role of each is currently a topic of ongoing discussions, there is clear logic to this is decision because:

- It facilitates the application of the guidelines and framework for river basin planning and management in line with national policy.
- It enables information exchange and a degree of harmonization between the planning and management in various basins.

Specific recommendations

<u>Recommendation on coordination with World Bank funded components</u>: DWR should consider convening a joint NIWRMSP meeting (possibly a retreat), preferably <u>in Q1 2013</u> as the WB components are still in the early stages. It should involve key staff and consultants from all components so they can get to know each other, inform each other of their activities, and discuss specific linkages that should be established. Regular follow-up meetings should also be scheduled (monthly or quarterly). The PMU, assisted by P1, will arrange the meetings, and the meetings should be chaired by the NPD.

Recommendation on IWRM Advisor guidance:

- (i) To anchor the advice and guidance provided by the IWRM Advisor, it should be presented in the reports on each of the IWRM's visits so that the DWR (and particularly the NPD) are able to readily access it as required.
- (ii) To assist the IWRM Advisor to plan and schedule his inputs, the PMU /CTA/C2 should prepare a list of the reports, workshop /training concept notes, and other documents that they wish to have reviewed by him, and the likely timing.

<u>Recommendation on monitoring and S curve</u>: The P1 team will convene a consultation meeting with all the component staff to discuss and review the draft presented by the Project Management Specialist, and reach consensus on breakdown of activities and percentage weightings. This will then be the basis for the TA S-curve that will be finalized for inclusion in the Q4 2012 Quarterly Progress Report.

<u>Recommendation on Expenditure Guidelines:</u> The FAS, with the assistance of the CTA for quality checks, should finalize the Expenditure Guidelines taking into consideration the comments that have been provided by the PMS in December 2012, and resubmit them to PMU.

Recommendation on Review and Approval of Technical Reports

These procedures are designed to have the reports cleared within 3 weeks if there are acceptable without comments, 8 weeks if 1-step revisions are needed, or a maximum of 10 weeks if a second round of revisions is needed. The process in Table 2 has been discussed at a weekly meeting of the components, and so far no specific changes have been suggested. However, the time for the various steps may need further discussion and adjustment if considered necessary.

	Activity	Respon- sibility	Due Date	Cumulative time (weeks)
1.	Submission of draft Report to PMU. (PIU to agree the report is ready for wider review before submission). Submitted informally to ADB /AusAID at this stage.	PIU/ Consultant		
2.	Discuss the report and the planned action	PMU & PIU	Not more than 1 week after submission (Step 1).	1 week
3.	Submit draft report for review to ADB, AusAID, individuals (eg, CTA, & IWRM Advisor if applicable), & institution that need to review /comment	PMU	Max 1.5 weeks after submission	1.5 weeks
4.	Hold a stakeholder's workshop (or meeting) to review or clear the report	PMU	Max 3 weeks after submission of the report	3 weeks
5.	Consolidate all comments, and send to the Consultant for the revision of the report	PMU	Not more than 1 week after the workshop	4 weeks
6.	Revise the report and re-submit to PMU	Consultant	Max 2 weeks after receiving the comments (or as specified in the contract)	6 weeks
7.	Review the revised report and recommend either approval (or additional provide further comments to consultant if necessary)	PMU & PIU	Max 1 week after resubmission of report	7 weeks
8.	Final Approval of Report (if Step 7 accepts) Consultant to submit final to ADB /AusAID	PMU /NPD	Max 2 weeks after resubmission	8 weeks
9.	If additional revisions are needed, discuss with consultants, agree on additonal revisions, and receive 2 nd resubmission from Consultant	PMU, PIU, & Consultant	Max 2 weeks from Step 7	9 weeks
10.	Subject to acceptance, approval report. Consultant to submit final to ADB /AusAID	PMU /NPD	Max 1 weeks after 2 nd resubmission	10 weeks

Table 1: Review Process for Technical Reports

Recommendations on Reporting:

- (i) MPRs of each component will be de-formalized and serve as information sharing, and prepared according to the standard template prepared by the CTA and issued by the PMU to the PIUs in May 2012. For each component, MPRs will be prepared by the consultants in close consultation with their respective PIUs. They will be a max 2-3 pages, shall be completed not later than 1 week after the end of the month, and not subject to formal approvals. Only electronic form of MPRs are required, and when complete will be emailed by the PIU Manager to the following cc list: DG (as the National Project Director), PMU, ADB, AusAID, the other 3 PIU Managers, and the consultant Team Leaders of each Package.
- (ii) QPRs at the end of each quarter starting from Q3 2012 (covering the period July-September), the CTA will assist the PMU to prepare a QPR covering the overall TA. It will be completed and cleared for distribution not later than 2 weeks after the end of each quarter. It will be distributed electronically (cc: DG, ADB, AusAID, 4 x PIU Managers, 4 x consultant TLs). P1 will also prepare hard copies x 15 to be distributed by the PMU (distribution: DG x 1, PMU x 2, ADB x 2, AusAID x 2, each PIU x 1, each Package x 1).
- (iii) APRs –each component will continue to prepare an annual progress report with the assistance of the consultants. They will be completed and cleared by each PIU not later than 15 days from the end of the year, and submitted (electronically and hard copy if requested) to the PMU for clearance. The PMU will provide clearance (or comments) within 1 week. If cleared, the PMU will distribute them electronically (same cc list as for QPRs), and the concerned consultant will prepare 15 hard copies for the PMU to distribute (same distribution as QPRs).

Name of consultant	Position	Total person- months	Person- months utilized as of Feb. 12, 2013	Person- months remaining
Package 1				
International				
 Antonio M. Daño Mathew Ko National 	CTA/Water Governance M & E specialist	25 5	10.47 3.11	14.53 1.89
3. Khamkeng Chanthavongsa	Institution development specialist	33	12.32	20.68
4. Sengmanichanh Somchanmavong	IWRM training specialist	30	9.64	20.36
5. Simuone Darasmy	Administration & finance specialist	39	13.23	25.77
6. Bounlap Pathilath	M & E specialist	12	6.18	5.82
Package 2				
International				
7. David Baringo National	River basin management specialist	15	9.0	6.0
8. Boriboun Sanasisane	River basin management	30	14.5	15.5
9. Ms. Duangchith	specialist Participatory planning	18	9.7	8.3
Viravongsa 10. Mr. Khamkeng Sixaya	specialist Climate change adaptation	2	0.13	1.87
Package 3	specialist			
International				
11. Nick Lombardi	Groundwater Resources Specialist	4	1.96	2.04
National				
12. Mr. Bounhieng Souvanhane	Groundwater Resources Specialist	20	11.4	8.6
Package 4 International				
13. Paul Taylor	IWRM curriculum development specialist	6	5.94	0.16
National 14. Sengmanichanh	IWRM education specialist	6	5.5	0.5
Somchanmavong 15. Kanya	1 IWRM education specialist	6	6.0	0.0
16. Mone	2 Climate change adaptation specialist	2	1.0	1.0
Torkil Clausen	IWRM Adviser	10	5.5	4.5

SUMMARY OF CONSULTANT INPUTS USED