Australian Agency for International Development

VIET NAM:

NORTH VAM NAO WATER CONTROL PROJECT II

Independent Completion Report

Final Version
February 2007

Prepared by:

Mr Edwin Shanks
Team Leader, Project management and institutional development specialist
Independent consultant

Mr Peter Millington
Water resources management specialist
Independent Consultant

Mr Simon Buckley
Manager, AusAID Mekong Water Resources Unit

Table of Contents

Acknowledgements and certification

The ICR Team would like to thank all the people involved in the North Vam Nao Project who took part in our meetings and discussions in the project area, as well as those who organized the mission. In particular, we would like to thank Mr Huynh The Nang (Vice Chairman of An Giang PPC), Mr Do Vu Hung (Director of the Project Management Board), Ms Nguyen Phuoc Nghi Dung (AusAID Activity Manager) and Mr Bill Matthews (AMC Team Leader) for the excellent arrangements that were made for the itinerary and fulfilling the information requirements of the mission. Many thanks are also extended to Mr Nguyen Ngoc Tam who assisted with the field work and translation. The ICR team is appreciative of the great efforts that were made by all partners to help ensure the independence of the review.

This report reflects the viewpoints of the members of the Independent Completion Report team. It does not necessarily reflect the viewpoints of the Government of Australia or the Government of Viet Nam, the Provincial Government of An Giang Province, or any of the agencies consulted.

List of abbreviations

AMC	Australian Managing Contractor
ACR	Activity Completion Report
CMB	Compartment Management Board
CWTF	Civil Works Trust Fund
DONRE	Department of Natural Resources and Environment
DPI	Department of Planning and Investment
EDS	Economic Development Strategy
EIA	Environmental Impact Assessment
EMS	Environmental Management Strategy / System
ESMF	Environmental and Social Management Fund
GOA	Government of Australia
GOV	Government of Viet Nam
ICR	Independent Completion Report
IMC	Irrigation Management Company
IWMP	Integrated Water Management Plan
MARD	Ministry of Agriculture and Rural Development
MOLISA	Ministry of Labour, Invalids and Social Affairs
NVN-I	First North Vam Nao Project
NVNWCP-II	Second North Vam Nao Water Control Project
ODA	Official Development Assistance
PAB	Policy Advisory Board
PCC	Project Coordinating Committee
PDD	Project Design Document
PIM	Participatory Irrigation Management
PMB	Project Management Board (for NVNWCP-II)
PPC	Province People's Committee
RAP	Resettlement Action Plan
SA	Subsidiary Arrangement
SMB	Scheme Management Board
TAG	Technical Advisory Group

Exchange Rate:

- April 2002 (project design) AU$ 1 = VND 8,500
- September 2007 (project completion) AU$ 1 = VND13,631

Project goal and objectives

Project goal:	To assist An Giang Province establish and operate an effective water management system in North Vam Nao, which is socially and environmentally sustainable and benefits the local economy by assisting in the alleviation of poverty.
Project purpose:	To demonstrate the economic and social benefits to the Vam Nao community, in particular environmental improvement and poverty alleviation, through a coordinated approach to water and land management.
Component 1:	**Project management.** The objective is to use efficient and effective project management strategies and promote these in the stakeholder agencies such that the strategies are used for ongoing management of related projects and adopted in other projects.
Component 2:	**Institutional development.** The objective is to coordinate all project activities such that they lead to institutionalizing, in a range of line agencies in An Giang Province, an acceptance of the benefits and principles of integrated water management; namely extensive stakeholder consultation, decisions based on good data, and equitable outcomes that do not compromise vital eco-systems or the socially disadvantaged.
Component 3:	**Project planning.** The objective is to undertake studies, produce an integrated water management plan and construction plan and thereafter to update the plans undertaking additional studies to ensure sustainability and incorporating innovation.
Component 4	**Engineering design and construction management.** The objective is to improve existing systems by which cost effective, fit-for-purpose engineering designs are produced, by which tenders are let to competent contractors, and by which construction is managed which result in facilities that both meet purpose and specification.
Component 5	**Economic and social benefits through Integrated Water Management Plan implementation.** The objective is to implement the agreed Integrated Water Management Plan through sustainable operations and maintenance and environmental management whilst ensuring the poor can participate in project benefits.

Key dates

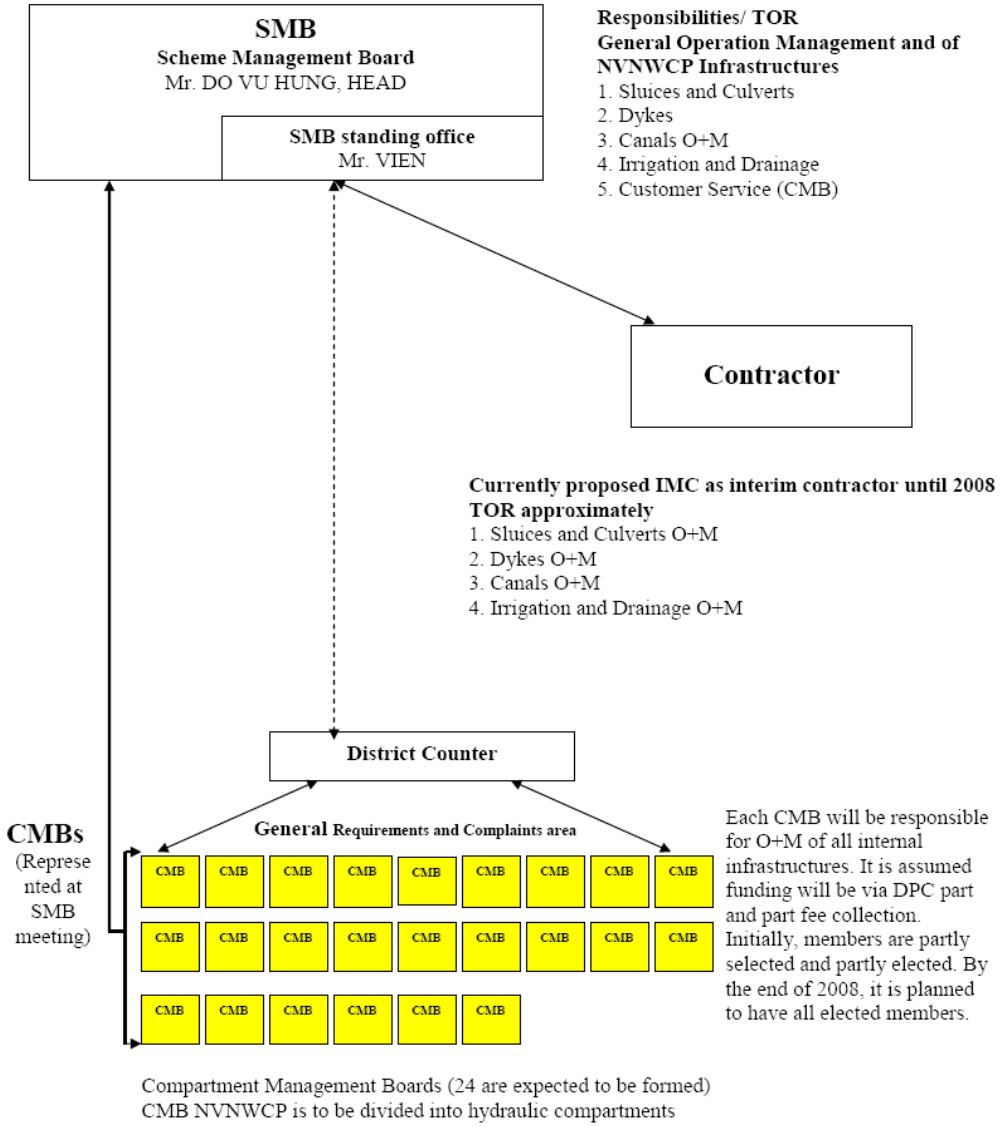
NVN-I mobilisation	January 1999
NVN-I review completed	June 2000
Project Design Document for NVNWCP-II completed	July 2001
Subsidiary Arrangement signed for NVNWCP-II	December 2001
AMC contract signed	December 2001
Start of Phase 1 NVNWCP-II (mobilisation)	January 2002
AusAID independent review of Phase I	November 2002
Integrated Water Management Plan issued	February 2003
An Giang approved feasibility study for 5 rehabilitation sluices	February 2003
Construction Plan issued	March 2003
AusAID approval of NVNWCP-II Phase 2 (with extension to 09/2006)	March 2003
An Giang PPC approval of NVNWCP-II Phase 2	April 2003
An Giang PPC withdrawal of funding (waiting central government funds)	October 2003
AusAID approved a temporary loan of $650,000 to PCC	November 2003
PPC approved feasibility study for Phase 2 new works	February 2004
RAP No. 1 approved by PPC and AusAID	February 2004
First sluice contract signed	May 2004
1st comprehensive TAG mission following independent review of Phase I	May 2004
Policy Advisory Board and working groups established	May 2004
Provincial water management workshop	June 2004
Amendment to Subsidiary Arrangement signed by PCC and AusAID	August 2004
PPC closes down Irrigation Management Company (IMC) and establishes the Centre for Management and Exploitation of Irrigation Works	August 2004
AusAID approved Environmental Management System (EMS)	October 2004
PPC endorsed NVNWCP-II Environmental Impact Assessment	February 2005
DONRE approved Environmental Impact Assessment	July 2005
PPC approved integrated water management reform implementation plan	September 2005
AMC office closed due to security risk (construction stopped for six weeks)	April to May 2006
Overall Construction progress reached 35%	July 2006
TAG mission recommended project extension to September 2007	August 2006
PPC decision to establish NVN Scheme Management Boards	September 2006
Establishment of 1st two pilot Compartment Management Boards	September 2006
ESMF stakeholder workshop to develop scope for scaling-up sub-projects	November 2006
PCC approved regulation relating to Environmental Management Group	December 2006
PPC decision on organisational and operational regulation for NVN scheme	December 2006
Overall construction progress reached 65 %	December 2006
First public meetings of the pilot Compartment Management Boards	January 2007
Regulation on infrastructure management decentralization agreed	January 2007
People's Council directive on sharing irrigation fees between province & districts	February 2007
Handover of major contracts started	August 2007
Independent Completion Report mission	September 2007
Official opening Hoa Binh sluice	September 2007
AMC officially closes NVNWCP-II	September 2007

Final cost summary

Type of payment These figures compare actual inputs to the original contract schedule of payments	Phase 1 acquittal ($)	Total project Phase 2 expected ($)	Total contract ($)	Difference (funds unspent) ($)
Milestone/monthly				
Technical assistance	2,906,595.00	5,722,569.00	8,629,164.00	
Lump sum project costs	601,879.00	445,945.00	1,047,824.00	
Total	**3,508,474.00**	**6,168,514.00**	**9,676,988.00**	**0.00**
THESE FIGURES SHOW ACTUAL PAYMENTS TO DATE BY AUSAID AND THE UNSPENT AMOUNTS				
Reimbursable costs	181,432.00	474,146.00	655,578.00	-15,000.00
Sub studies	98,870.00		98,870.00	
Subtotal	**280,302.00**	**474,146.00**	**754,448.00**	**-15,000.00**
Procurement and repairs				
Procurement	30,042.00	124,100.00	154,142.00	0.00
Procurement fee	1,299.00	4,900.00	6,199.00	0.00
Refurbishment of existing NVNWCPI supplies	9,774.00	0.00	9,774.00	0.00
Subtotal	**41,115.00**	**129,000.00**	**170,115.00**	**0.00**
ESMF Funds Trust account (funds transferred)	0.00	834,500.00	834,500.00	21,500.00
Civil Works Trust Fund (funds transferred)	271,949.00	6,115,397.00	6,387,346.00	0.00
Total	**4,101,840.00**	**13,721,557.00**	**17,823,397.00**	**(36,500.00)**

Organizational diagram

The new NVN model: Organizational arrangements as envisaged in 2007



Note: AMC recommends that Phu Tan District (covering 22 of the 24 CMBs) establish a "District CMB Counter" as a point where CMBs can come for advice and other support. This recommendation is still on the table.

EXECUTIVE SUMMARY

Initiative title:	**North Vam Nao Water Control Project II (NVNWCP-II)**
AidWorks ID:	INE966
Country/region:	Viet Nam, Mekong Delta Region, An Giang Province (+ 2 districts)
Primary sector:	Agriculture and rural development / water resources management
Date commenced:	January 2002
Date completed:	30th September 2007
Cost to GOA	AU$ 19.5 million
Total cost:	AU$ 35.5 million (GOV contribution AU$ 16 million including AU$ 8.4 million directly for the project and AU$ 7.6 million for the ring-dyke outside the specific scope of the project).
Form of aid:	Grant: (i) Technical Assistance (AMC); (ii) Civil Works Trust Fund; and (iii) Environmental and Social Management Fund.
Country strategy contributed to:	As designed the project would contribute to poverty reduction, broad-based economic growth through the deepening and strengthening of institutions, helping to strengthen the market economy and increase rural productivity, and reducing the vulnerability of rural households to natural, economic and health shocks (AusAID Development Cooperation Program Strategy 2002-2006).
Delivery organization:	Kellogg Brown & Root Pty Ltd. 186 Greenhill Road, Parkside, South Australia 5063
Counterpart organisation:	An Giang Province People's Committee. Project Management Board (PMB) under the Provincial Department for Agriculture and Rural Development.
Economic rate of return or similar:	Cost-benefit analysis undertaken in Phase I (2002) indicated an economic rate of return of 25%. The positive project economic impacts are long-term and may not occur until the water management system is fully operational in 2009 to 2010.
Final initiative quality rating:	**4.5** (5 – 4 – 4 – 4 – 5)
Project Goal:	To assist An Giang Province establish and operate an effective water management system in North Vam Nao, which is socially and environmentally sustainable and benefits the local economy by assisting in the alleviation of poverty.
Project Purpose:	To demonstrate the economic and social benefits to the Vam Nao community, in particular environmental improvement and poverty alleviation, through a coordinated approach to water and land management.
Contact AusAID employee:	Ms Nguyen Phuoc Nghi Dung (Activity Manager, AusAID, Ho Chi Minh City) Nguyen-Phuoc-Nghi.Dung@dfat.gov.au
ICR authors and organisations:	1) Mr Edwin Shanks (Team Leader, Program management and institutional development specialist / consultant). 2) Mr Peter Millington (Water resources management specialist / consultant). 3) Mr Simon Buckley (Manager, AusAID Mekong Water Resources Unit).

Introduction

1. The Second North Vam Nao Water Control Project (NVNWCP-II) represents the culmination of a long-term engagement between Australia and An Giang Province spanning 14 years. Following an initial request from Government of Viet Nam (GOV) to the GOA in 1992,

the first pre-feasibility and design missions for the North Vam Nao Scheme took place in 1993 and 1994. There followed an extended investigation period, leading to the First North Vam Nao Project which began implementation in 1999 and was scheduled for completion by 2003. However, during the first year a number of problems arose which necessitated the closure, re-design and re-costing of the initial project.

2. The current NVNWCP-II (2002 to 2006) had more thorough preparation and commenced in January 2002. This project was designed around two phases. Phase I (lasting 9 months) undertook base-line studies aimed at providing solutions to the design aspects of the Scheme and developing an Integrated Water Management Plan. AusAID conducted an independent review of Phase I in November 2002 which gave the go-ahead to move on to the second implementation phase. Due to subsequent delays in project implementation, in mid-2006 a one year extension to September 2007 was approved.

3. The NVNWCP-II is – in the opinion of the ICR team – one of the more ambitious and innovative ODA projects in the agriculture and rural development sector in Viet Nam over the last decade. It has also been a challenging and at times difficult project to manage and implement. This is the first time an attempt has been made to develop an 'integrated water management system' of this type for parts of the lower Mekong Delta. In particular, the project had a high ambition level as evident in the innovative institutional changes that have emerged, over time, and which are critical to the success of the Scheme. The project design was challenging in the diversity of components including construction management, capacity building, environmental management, social and economic development sub-components.

Relevance

4. **Goal and purpose.** The ICR team considers the basic relevance of the project remains as high today as it was at the outset, both in terms of its potential contribution to the livelihoods and well-being of the 300,000 residents of the NVN area and to the provincial economy. The project responded in design to a long established demand by An Giang Province. It has attempted to embrace all the required elements of sustainable development – economic, social, environmental – in its goal and purpose and component activities. The project has contributed to disaster preparedness, as well as being associated with reductions in poverty in the project area. It has also made good progress in raising environmental awareness and changed behaviours and introducing environmental management systems. In all these respects, the project can be shown to closely align with AusAID's country strategy and its key result areas.

5. **Aid modality.** The fund flow and management arrangements selected for the project involved a combination of: (i) technical assistance inputs through the AMC; (ii) capital works (construction) support through a Civil Works Trust Fund; and (iii) an Environmental and Social Management Fund (ESMF). This has been an appropriate set of arrangements, tailored to the specific design and needs of the project. Putting the Civil Works Trust Fund largely under the control and management of the province helped to increase local ownership and capacity, but with the essential safeguard of co-signatory arrangements with the AMC. The ESMF was designed in a way that has effectively supported a wide range of household livelihood and environmental sub-projects as well as involving a wide range of local government counterpart agencies and local communities in these activities.

Effectiveness

6. One salient feature of the NVNWCP-II has been the dynamic context in which the project operated and the evolutionary nature of the project itself. This required a high degree of flexibility and innovation, which had major implications for risk management and the response and adaptability of the project management bodies and coordination mechanisms. In the early implementation period, considerable difficulties and delays were experienced which, by mid-2004, made it questionable whether the project could continue. These delays were primarily in the program of construction works. There were three main contributory factors: (i) constraints and difficulties in procurement for design and construction; (ii) delays in the resettlement and compensation process; and (iii) delays in GOV counterpart fund allocations. These issues were always on the agenda of the Project Coordination Committee meetings, but for some time it was not possible for the province authorities and other partners to resolve them effectively.

7. **Decentralization reforms.** This situation outlined above was partly associated with the broader changes taking place in the institutional context of Vietnamese provincial government systems. While unforeseen at the time of project preparation in the late-1990s, the nature and speed of the administrative and decentralization reforms of the GOV had a major impact on project implementation. The decentralization reforms that took effect in the early period shifted the responsibility for investment management and mobilising counterpart funds to the Province. In assessing this situation, we should appreciate the extent of the adjustments this necessitated for the Province authorities, not only with respect to the NVN Scheme, but also for all other investment projects. The delay in securing and releasing the GOV counterpart funds was evidently part of the larger task of realigning the province revenue and expenditure budget sources. This was compounded by understandable caution on the part of the Province authorities in clarifying the new decentralized arrangements for investment project management.

8. **Procurement systems and construction management.** The project experienced a number of constraints in construction procurement that were only partly within the capacity of the AMC or the PMB to influence, or which took time to address and resolve. These included: (i) the dearth of competent design companies that resulted in delays completing quality designs; (ii) the rigidity of the Government's cost-norm systems and low unit cost ceilings for construction which initially posed constraints on ensuring high quality standards; and (iii) due to the construction boom in the region at the time there was a limited number of experienced construction companies interesting in bidding for small works in remote locations The project often had to make do with inexperienced contractors with a weak financial base. The AMC was flexible and resourceful dealing with this situation (through packaging of works, making interim progress payments, increasing the number and quality of AMC site supervisors and providing guidance and expertise to weak contractors).

9. At the same time, it appears that in project preparation not enough attention had been given to the procurement systems that would be used under the Civil Works Trust Fund. It was agreed the project would largely follow GOV procurement procedures and regulations (with adjustments to enhance transparency and the quality of design, construction and supervision). The intention to follow GOV procurement systems was a bold decision and a novel approach at the time. However, this should have triggered and necessitated a much more thorough analysis of the strengths and weaknesses inherent in the existing procurement systems. This was a critical oversight in view of the fact that, as could have been foreseen at the time, the procurement process would be so influential. This emerges as a critical weakness in project preparation that was to have a major impact on overall effectiveness. This is despite the fact that the project

eventually overcame these difficulties and has completed a majority of the construction works on time (in the extension period) and with evident high quality of these works.

10. **Management and coordination mechanisms.** In general, all the project management, coordination and supervision bodies and mechanisms were logically structured and performed effectively. Appropriate steps were taken by all parties to resolve the difficulties faced by the project. This included increasing the regularity of the project coordination and external supervision arrangements, through more regular Project Coordination Committee meetings to allow quicker resolution of emerging issues, as well as more regular TAG visits. These actions helped to turn-around the project towards quicker and more effective implementation. The achievements in completing the project-funded construction works have been considerable under these circumstances.

11. **Partnership and working relationships.** An important feature of this project has been the strong and transparent working relationships that were established and maintained between the AMC and counterpart agencies and local staff. In key elements of the project, the AMC adopted an effective facilitating role that was conducive to building up local ownership and capacity. The project invested considerable resources in international and national Technical Assistance personnel, and as far as can be assessed, this has represented good value for money in terms of the management and quality of the technical inputs made. The ICR team believes the project is also a good instance of 'development effectiveness' in areas important to AusAID such as in building productive partnerships, promoting good governance, and what can be achieved through dedicated commitment to change and close working relationships.

12. **Analysis and learning.** The project was based on a strong process of analysis and learning, conducted jointly with counterpart government agencies and local communities, which has resulted in high quality outputs. The design was based on a thorough analysis of the lessons from the NVN-I and it responded to many of the shortcomings in the earlier project. By expanding the focus to more fully cover social, environmental and institutional capacity building elements the overall relevance of the project was enhanced. The two-phased approach to implementation was essential for enabling this joint learning process to evolve. Phase I provided an opportunity to ensure an appropriate hydraulic scheme design was possible and allowed counterpart commitment to be developed and its depth and strength evaluated.

13. **Consultation and participation.** The project is to be commended on the very practical approach to conducting stakeholder consultations combined with thorough high-quality technical studies that was introduced at an early stage. The consultative approach was subsequently extended to the design and implementation of the ESMF and developing the institutional arrangements for the Scheme. This was fundamental to the achievements made and in enabling the local authorities to come-to-grips with many difficult issues and embracing new concepts. This highly participative approach helped to strengthen local ownership as well as creating goodwill amongst the partners and local communities. This was also highlighted as one of the main lessons and achievements of the project by the Province People's Committee. The effectiveness of the project, in these terms, has been very high.

14. **Institutional arrangements for scheme management.** The project has introduced a modern and innovative set of institutional arrangements for management and operations of the NVN Scheme. The ICR team is strongly supportive of this approach as it reflects a concerted attempt to create a more participative management system that provides a clearer voice and coordination role for the farmers – as implied in the project Goal and Purpose. The new institutional model is clearly relevant to the needs and circumstances of farmers in the area. The

relevance of these institutional arrangements to the water resources and irrigation management reform agenda of the GOV at national level is also high. In particular, the project has been at the forefront of practical application of new thinking on Participatory Irrigation Management. These arrangements are also in line with broader GOV policies on public administration reform, decentralization and the promotion of grassroots democracy.

15. However, a key question that concerns the ICR team is to what extent this new approach was brought to the attention of the high-level stakeholders (the PCC, the TAG and AusAID itself) at an early enough stage? There appears to be a gap of almost 12 months (from mid-2003 to mid-2004) during which concepts were developed with agencies on the ground, but with little evidence that the significance of these changes was in fact communicated to the higher-level stakeholders. If communicated effectively, we believe this would have led to questions such as: What does this imply for the end-of-project situation? What does it imply for the achievement of project outputs and outcomes? What does it imply for possible reallocation of resources and Technical Assistance inputs (particularly for training) needed to support the new model? In this regard, the ICR team believes there is some evidence to suggest the high profile issues regarding counterpart funding and delays in construction diverted attention away from these emerging and fundamental issues.

16. There are two implications. Firstly, the 'ambition level' of the new institutional model exceeds that set out in the project design which implied strengthening of existing management arrangements. Or to put this another way: the 'outputs' given in the project Log-frame do not adequately reflect or provide a basis for assessing the type of 'outcomes' that may be expected from this new model. This is not to suggest that the model being followed is inappropriate. Rather, it should have been recognized at an earlier stage that this was going to take longer than expected to put in place. New arrangements such as these - requiring a 'cascading' series of associated institutional changes - were always going to be difficult and time consuming to make operational. And as such they were definitely going to influence the achievement of the project goal of 'establishing and operating an effective water management system'.

17. **Internal and external communication strategy.** The internal communication system of the project was strong and effective. However, the external communication strategy and linkages have generally been weaker. The project did establish working relations with research and training organizations, and linkages with other development projects in the locality and regionally with agencies in the Mekong Region. Critically, however, linkages with national policy-making agencies including the Ministry of Agriculture and Rural Development (MARD) were weakened after the project was decentralized to the province, after which MARD ceased to be an active participant in the PCC. While the AMC did understand the importance of promoting these wider linkages, it appears the province was not ready for these 'outreach' initiatives. This is a distinct and serious weakness given the innovations made by the project and the relevance to national policies on water resources and irrigation management.

Impact and Sustainability

18. **Economic.** Benefits to the local economy are already being realised through flood control and improved conditions for crop cultivation (with some areas already under triple rice-cropping). Phase I planning projected an increase in the value of crop production per hectare through an increased cropping factor from 2.02 to 2.57 (from 2007 to 2010). The average cropping factor in the 4 year period from 2003 to 2006 was 2.21. In Phu Tan District, the value of crop production rose from VND 25 million to VND 40 million per hectare (60%) in the period from 2001 to 2005. This increase was mainly due to internal compartment dyke

construction. With completion of the major perimeter construction works these production figures will increase. As more training is provided, particularly in crop management and diversification, it is likely economic sustainability will grow.

19. **Environmental and social management funds.** The outcomes and impacts of the ESMF can be positively assessed in the following terms: (i) there has been effective targeting of poor households and of women under the various ESMF sub-projects and activities; (ii) the strong partnership approach in working with and through local government agencies, together with building cross-agency linkages and understanding around social and environmental concerns; (iii) strengthening the technical capacities of these agencies together with their skills in community development and facilitation; (iv) the integration of the ESMF with existing GOV policies and programs and the financial contribution made to these programs through the Fund; (v) improved environmental awareness and monitoring capacities amongst local government agencies as well as local communities; and (vi) the contribution this made to raising awareness around the larger project and building good relations with local government and the local communities.

20. Many of the ESMF sub-projects have been judged as effective and worthwhile by the counterpart agencies. The project made an effort in 2006 to 2007 to review, consolidate and scale-up the more successful sub-components of the ESMF. Given the diversity of things tried, it is understandable some of the sub-projects have not been conducive to wider application. This represents a considered process of reflection and learning. Sustainability of the ESMF sub-projects and activities will depend on whether the province and district authorities mainstream the suitable activities and continue to provide these services. However, future continuation of the ESMF itself – as an 'application based' funding mechanism that may be more widely applied within the local government system – is not assured.

21. **Environment.** Project impacts on environmental management and the physical environment of the NVN Island have been significant in a positive way. The project has made a concerted attempt to build environmental management and monitoring capacities within the counterpart agencies. It has also been successful at integrating an Environmental Management System with stronger accountability mechanisms into the overall NVN Scheme management arrangements. This has now been legislated by the province. The sustainability of these systems and new approaches will depend primarily on continued enthusiasm and commitment from the province leadership and concerned agencies, but the conditions for this are favourable.

22. The project has also made some headway in promoting an 'environmental ethic' amongst local government agencies and local communities, combined with supporting the introduction of improved systems of environmental management on the ground. Reference is made by many stakeholders to the improved environment on the NVN Island in recent years. However, the environmental challenges facing local authorities and communities in the Mekong Delta generally, and on the NVN Island particularly, are still considerable with respect to water quality, waste disposal and treatment and enforcing environmental regulations. Project experience also shows that a comprehensive approach needs to be taken to solving these issues.

23. **Gender equality and social equity.** While the project started off with a strong gender focus (embodied in a Gender Affirmative Action Plan) the ICR team has the impression that, over time, the attention given to gender equality in all aspects of the project was diminished. An indicator of this is that later project reports make little mention of on-going implementation of the Action Plan and the gender assessment given in the AMC's Activity Completion Report is inadequate. Similarly, in later project reports there has been limited follow-up of key social and

economic equity concerns, or the potential or actual impacts of the project in this regard. This includes, for example, lack of analysis of the changing economic situation and prospects of female-headed households and of landless households. This was highlighted as a priority in AusAID's independent review of Phase I. Given that the new water control regime and management arrangements will affect all households and social groups on the NVN Island, it is essential that this social equity focus should be maintained while introducing the Scheme.

24. **Overall sustainability.** Sustainability of the NVNWCP-II and of the NVN Scheme as a whole is obviously a major consideration for all partners given the strategic importance and complexity of the Scheme. The basic prospects for sustainability are undoubtedly good. An Giang Province has invested a considerable amount of financial, political and social capital in the NVN scheme that – to put it simply – this is a scheme that cannot be allowed to fail in the long run. The potential economic, social and environmental returns and benefits of the project are also such that these should generate sufficient on-going commitment to ensure sustainability. However, there are several outstanding issues that could potentially impact on sustainability.

25. **Technical**. The principal issue here is the stability and integrity of the physical scheme as a whole. This is a big issue for this project given the inter-locking nature of all the main elements of the scheme: if any one part should fail or not perform as required, this could have critical knock-on effects. It is likely that the sluices (construction of which has been funded by the AusAID project) will be maintained using acceptable O&M procedures and should not create risks. The perimeter ring-dyke presents the most significant risk because the structural quality and stability of the sections existing as a road before the Scheme was constructed are still to be fully tested. Even though construction and completion of the perimeter ring-dyke was agreed as a Province responsibility, this is a major sustainability issue for the Scheme and one that AusAID should address with An Giang PPC before the project closes.

26. **Institutional.** The scheme management arrangements and institutions are still evolving. In many respects they remain quite fragile. The overall Scheme Management Board and Irrigation Management Centre model seems strong. The Province is enthusiastic about the benefits this could bring. However, it will take some time for the local Compartment Management Boards to develop in whatever form is appropriate. It is possible that without the presence of the project the province and district authorities will find it hard to maintain the momentum of institutional change and revert back to the old water management systems at local level. This would not make the NVN Scheme in itself unsustainable. However, it would certainly impact on the high level of participation that is now occurring within the Compartment Management Boards.

27. **Financial.** The ICR team asserts the greatest risk to Scheme sustainability lies in the financing and budgetary systems that will apply after the project ends. A 10-year financial plan is currently being prepared by the Province. The ICR team believes this will provide a good starting point. The province intends that the majority of financing for operating and maintaining the scheme (at least initially) will come from irrigation water source fees from farmers in the area. This comes with the assurance that any short-falls in financing will be covered by the province budget. Critically, it appears that a thorough re-assessment of the affordability for farmers – and hence sustainability and equitability – of the proposed financing arrangements has not been undertaken. Over time the benefits of the Scheme will accrue to the wider community on the island, including non-farm households and urban residents. This suggests that these wider benefits should, in future, be reflected in financial commitments from the provincial budget.

28. Given this situation outlined above, the ICR recommends that a comprehensive 'beneficiaries' and 'ability-to-pay' study should be undertaken. This would provide information on what proportion of the O&M and replacement costs can and should be borne by the farmers with respect to the increases in household income, and how such proportions should change over time. Unless such a study is undertaken there is the chance that fee increases will continue to be pushed on to the farmers. This could create real equity problems for the Scheme and therefore inadvertently conspire against the Goal of the project. While the 10-year financial plan is in the right direction, we do not believe the Province currently intends to consider long-term financing along these equity lines.

End-of-project situation

29. To a large extent, the project has achieved the specific objectives and outputs under each of the 5 main components. As of September 2007 – the 11 newly constructed sluices under the AusAID project funding are 95% complete, while 4 of the 5 rehabilitation sluices have already been handed over. It is expected that all these project works will be completed by the end of 2007. The interior canal and dyke system is under on-going rehabilitation and this is likely to speed-up with the establishment of the remaining Compartment Management Boards. However, only around 40% of the perimeter ring-dyke is so far complete. This represents a major outstanding element of the overall scheme. The project has made considerable progress in formulating, introducing and creating a regulatory framework for the NVN Scheme management and operations. The continued relevance of the new institutional arrangements will depend on maintaining the momentum, particularly with respect to establishing the remaining Compartment Management Boards and providing follow-up support to strengthen their capacity. As clearly described by the Head of Compartment Management Board No.01 in Tan Chau District – "*The project has provided us with the organization like the foundations and walls and roof of a house. Now we need to make the interior furnishings to make the house complete".*

30. According to the original Goal, the project was to support the province to – "…establish and operate an effective water management system…" for the NVN Scheme. As it has turned out, it has not been possible to fully reach this point. Testing the system was initially planned as part of the project period. The construction delays and the growing complexity and ambition-level of the institutional arrangements have made this not possible. The project has, therefore, been only partly effective in terms of reaching the intended Goal. However, given the evolutionary nature of the project, the achievement of specific outcomes was always going to be a moving target. In a broader sense, the ICR team judges the project has made significant progress and achievements in relation to the overall Goal and Purpose.

Follow-up options

31. An Giang Province has developed an overall schedule for testing the 'hardware' and 'software' components of the NVN integrated water management system that will take place over a three year period from 2008 to 2010. In many respects, it can be said that a further – equally ambitious and challenging – phase of this initiative is only just beginning. The ICR team believes this is an appropriate point at which to close the project and hand-over full ownership to the province. At the same time, given the significance of this development partnership that has spanned 14 years, the ICR team is also thinks there is good justification for AusAID to maintain some form of appropriately designed assistance. The purpose of this future assistance would be to support An Giang Province to take the scheme forward to successful fruition.

32. A proposal has been put forward to AusAID by An Giang Province for a set of possible follow-up activities. The ICR team reviewed these suggestions and cross-referenced them with ideas put forward by other stakeholders during the mission. In general, there is some consensus on main priorities. In the opinion of the ICR team assistance to these priority areas should not be provided through an extension of the project modality. Rather, they would constitute a set of strategic inputs (ideally managed by AusAID directly) aimed at supporting the testing period, enhancing the sustainability of the project outcomes, and documentation and dissemination of the lessons and experience gained. These could be managed by AusAID Post and/or through the AusAID Mekong Water Resources Unit. Collaboration through the Water Resources Unit would have the advantage of helping to strengthen the linkages between An Giang Province and other agencies in the Mekong Region which would, in turn, facilitate wider lesson learning from this initiative. The proposals are as follows:

- Follow-up inputs during the initial testing period from a Water Resources Management Specialist to assist in reviewing, consolidating and scaling-up the institutional and management arrangements.

- Short-term inputs over a similar period from a Human Resource Development / Training Specialist to assist the province in designing and introducing a training program for the Compartment Management Boards, identified as a priority by all the local stakeholders.

- Provision of a limited amount of funding for other short-term TA inputs that may be requested by the province during the scheme testing period.

- Supporting the preparation of a publication and/or documentary film that documents the NVN Scheme and the achievements of the project. The purpose of this would be to produce a set of informative and attractive documentary products to disseminate the lessons and experience of the project to a wider audience including policy-makers at national level, other projects and programs, the general public, as well as for AusAID and its partners in Viet Nam and elsewhere.

- Conducting a formal Impact Evaluation of the project towards the end of the testing period in 2009 or 2010. The ICR believes this is warranted given the strategic importance of this particular initiative. The evaluation could be extremely informative and useful for the province in terms of providing a substantive analysis of the technical and economic performance of the NVN Scheme.

- Lastly, it is suggested that AusAID and An Giang PPC should co-organize annual NVN Workshops over the next few years to review the lessons and experience from the testing period. This would provide a context for reviewing these other inputs, as well as creating forum for maintaining the valuable engagement and dialogue between the partners.

1. INTRODUCTION AND METHODOLOGY

This Independent Completion Report on the Second North Vam Nao Water Control Project (NVNWCP-II) is based on a mission undertaken to the project area in An Giang Province from September 4th to 8th 2007. The specific objectives of the ICR as given in the Terms of Reference were two-fold (see Annex 5). Firstly, to report on the relevance, effectiveness, efficiency, impact and sustainability of the NVNWCP-II. Secondly, to make recommendations on viable options for enhancing the sustainability of the project outcomes.

The ICR began with a briefing session with staff of the AusAID office in Ho Chi Minh City. Meetings and field-visits in the project area included: (i) meetings with An Giang Province People's Committee (PPC), the NVN Scheme Management Board (SMB), Project Management Board (PMB), the Australian Managing Contractor (AMC) and with concerned provincial departments and agencies; (ii) meetings with the District People's Committees and technical sections from Phu Tan and Tan Chau districts; (iii) visits to 3 pilot Compartment Management Boards (CMBs) and Commune People's Committees; and (iv) site visits to selected construction works and Social and Environmental Management Fund (ESMF) activities. Round-up meetings were held with province and district representatives, with the AMC and with AusAID to present and obtain feedback and clarification on some of the main issues emerging from the ICR. The itinerary and list of persons met during the mission is given in Annex 6.

The ICR methodology was described in a Focus Paper prepared in advance of the mission, from which a list of strategic issues and specific questions covered by the mission are given in Annex 7. These issues and questions were derived from our initial reading of the project documentation and used as a checklist to guide the ICR meetings and field visits. The evaluation methodology comprised several main elements, summarized in this section. These elements were conceived primarily to come-to-grips with the highly dynamic context in which the NVNWCP-II was designed and implemented and for assessing overall quality and performance of the project.

1.1 Critical path analysis

As will be shown throughout this report, the NVNWCP-II has been an ambitious and challenging project to implement. This partly relates to the strategic significance and economic importance of the North Vam Nao Scheme to the livelihoods and well-being of the 300,000 or so residents in the project area and to the local government authorities. The high ambition level relates to the design complexity of the 'integrated water control and management system'. This is from both water engineering and institutional perspectives. The project design is also challenging in terms of the diversity of project components including construction management, capacity building and training, environmental management, social and economic development sub-components. Furthermore, the project had an extended gestation period and represents the culmination of a long-term engagement and commitment between AusAID and An Giang Province. This overall initiative has spanned 14 years (including the 1st and 2nd NVN projects).

Given the challenging design of the project, and the extended – and by many written accounts somewhat difficult – implementation process, one essential focus of the ICR has been to review the objectives of the project in light of its implementation history. This is in order to assess: (a) whether the assumptions made during project preparation on factors that would influence implementation were valid and adequately addressed; and (b) whether the decisions and modifications in approach and management arrangements made during the course of the project were sufficient to guide it towards successfully achieving the intended outputs and outcomes.

During the course the ICR mission, the validity of this approach was only strengthened. It quickly became clear that the project was embroiled in such a dynamic and evolutionary environment that attention to the issues of 'management', 'communication' and 'coordination' would be critical in assessing performance. This meant that close attention was given to Minutes of the Project Coordination Committee (PCC) meetings and other reports to trace:

- What implementation issues and difficulties were raised?
- Were quick and adequate responses made to these issues?
- How annual plans and risk management plans were developed and monitored?
- What roles were played by the key partners?

The positing of 'counterfactual scenarios' (i.e. what if, in situation X, a different decision or course of action had been taken) was used to shed light on whether alternative approaches would have led to improved or similar performance and outcomes.

1.2 Contextual analysis

The challenges faced by the NVNWCP-II were further compounded by the wider development context of rapid change. The project period saw significant changes taking place in the Mekong Delta Region including a complex mixture of economic, social, environmental and broader institutional factors. Amongst others, these include: (i) on-going rapid growth of the agrarian economy of the delta focused on commercial production for domestic and export markets; combined with (ii) limitations on the extent to which agriculture based livelihoods and incomes can continue to contribute to poverty reduction for the poorest sections of rural society due to the squeeze on basic productive assets; (iii) widespread 'rural industrialization' of the heavily populated delta provinces – with emerging environmental challenges and problems associated with increasing use of agro-chemicals, water quality, waste disposal etc.; and (iv) increasingly diverse and competing demands on both land and water resources.

Important institutional changes occurring at the same time include: (i) the on-going decentralization of State Management functions to the provincial government authorities under the GOV Public Administration Reform Program; (ii) delegation of the responsibilities for investment project management to the local authorities; (iii) renewed government commitments to enhance participation of local communities under the Grassroots Democracy legislation; and (iv) increasing private sector activity in public service provision (such as in water supply and agricultural inputs) which requires improved regulatory systems to be introduced and enforced.

It is notable that the interventions made by the NVNWCP-II intersect with nearly all these areas of significant change. A second focus of the ICR has therefore been to assess how effectively and appropriately the project has responded and adapted to these wider 'challenges' and 'opportunities' over time. This is to understand the bigger picture in which the project has been operating and the influence this had on the implementation strategy and outcomes.

1.3 Stakeholder assessment

As with most water resources management projects, the NVNWCP II involved many stakeholder groups. These have included: (i) the province, district and commune level government authorities; (ii) the agriculture and rural development, irrigation, natural resources and environment, education, banking, transport and construction sector departments and agencies; (iii) local communities, cooperative and different social beneficiary groups; and (iv) private sector construction companies. The introduction of a new water control systems results

in new types of interaction and institutional relationships between service providers and the various clients and user-groups. This was particularly strong with the innovative nature of the institutional arrangements that have been introduced for the NVN Scheme. The strongly competing demands on land and water resources in the Mekong Delta means that, almost inevitably, there will be 'winners' and some 'losers' to development interventions such as this.

Within the short time available for the mission, a third methodological focus of the ICR was to triangulate between the viewpoints of these various stakeholder groups on project performance and outcomes. This was to assess particularly: (i) the extent to which the project has successfully targeted and delivered benefits to the intended beneficiaries, including both women and men and the poorest sections of society; (ii) the effectiveness of the community consultation, public information and communication methods used to inform and involve these stakeholder groups; and (iii) the management of the project to identify the extent to which Vietnamese stakeholders, including both local government agencies and communities, have owned and participated in the institutional strengthening process.

1.4 Sources of information

The main sources of information for the ICR have included: (i) reports produced by the project including annual plans, 6-montly progress reports, technical reports etc.; (ii) available M&E data and reports; (iii) reports from the Technical Advisory Group (TAG) visits and other external reviews; (iv) minutes from the meetings of the Project Coordination Committee; (v) meetings and discussions held with the various stakeholder groups during our mission; and (vi) a review of secondary information sources, including GOV legislation etc.

A principal source of information and analytical reference point for the ICR should be the Activity Completion Report (ACR) prepared by the AMC. As stated in the ICR guidelines, the ICR should test the assumptions and conclusions made in the ACR with respect to project outcomes and impacts. A first draft ACR was made available to the ICR Team before the mission; however, this was considered to be sub-standard by AusAID and required extensive revision. Gaps in the first draft ACR made it much more difficult and time consuming to assess the project's results and achievements. The ICR team had to rely on a mountain of reports (data and analysis from which should have been summarized in the ACR) plus many interviews to 'dig down' to lower levels than should have been necessary. This took up time within an already short mission that should have been spent pursuing higher level strategic questions[1].

The lack of a draft ACR at the beginning of the mission limited the extent we could address certain key issues. For example, the project has undertaken a considerable amount of training (related to the Environmental and Social Management Fund and in project management). However, data from all these training activities is only partly summarized in available project reports, and inadequately analysed in terms of training outcomes and impacts. It was simply not possible for the ICR team to adequately research this as well as some other topics in the time available. There is an issue here as to whether AusAID should mobilise ICR missions before a draft ACR has been delivered to an acceptable standard, even if this means the ICR is delayed.

[1] The final draft Activity Completion Report was made available to the ICR team after the mission when writing-up our report.

1.5 Impact assessment

Due to delays in completing some crucial elements of the project – namely the construction works and testing of the integrated water management system – the ICR team believes firmly it is too early to make a full, defensible assessment of impacts. As indicated above, the ICR has instead focused on: the extent to which the project has achieved the intended 'outputs' and 'outcomes' as related to the design; and the sustainability of the project interventions and the water control system from institutional, financial and technical perspectives. Consideration has been given to the potential or indicative impacts, which are also analysed in the Activity Completion Report prepared by the AMC. We are of the opinion, however, that the NVNWCP-II is a project that warrants a formal in-depth Impact Evaluation in 2 or 3 years time when the water management system will be fully up-and-running.

1.6 Project follow-up options

As indicated by our Terms of Reference, the ICR is to make recommendations for enhancing the sustainability of the project. In this respect, the An Giang Province People's Committee has made a proposal to AusAID for a set of possible follow-up activities to the project, to support testing of the integrated water management system over the next few years. During the ICR mission, we initially set-aside this consideration, since the major aim of the ICR has been to assess the overall quality of the project as it was designed, and as amended part way through, to see what was achieved by completion date. Only then was the need for any further assistance and in what possible form considered, either to take the project achievements to another level or to complete strategic tasks.

1.7 Audience for the ICR

According to the new guidelines issued by AusAID in early 2007 on preparation of the ACRs and ICRs, it is understood that in future the ICRs should have more of an 'evaluative function' than in the past. It is also intended the ICRs will be published electronically and made available to the wider community of professionals implementing Australian aid. These new ICRs should therefore be a stand-alone document that can be read by an outsider without access to the ACR. This report has been written with a wider audience in mind – and in this respect we can say the NVNWCP-II provides a fascinating story that is rich in lessons and experience. At the same time, while we fully endorse the intention to make the ICRs publicly available, it should be recognized this presents some potential difficulties for preparation of the final ICR document.

Firstly, there are many situation-specific details and procedural matters regarding any project which need to be covered, but which would obscure the analysis when writing for a wider audience. Secondly, there may be issues of a sensitive or contested nature to one or more partners (such as the AMC or counterpart government agencies) that may not be appropriate to fully cover in a public document depending on the specific situation. This has not been the case specifically for the NVNWCP-II. However, this potentially makes criticism and quality ratings a difficult task since overall performance, or the performance of individual partners, may be downgraded due to a range of external factors which do not necessarily reflect on the performance of the individual partners.

1.8 Structure of the report

In order to present this analysis, it is necessary to understand the 'story-line' of this project – the ups and downs, successes and failures and how it evolved over time. Accordingly, Annex 1

provides a detailed 'project narrative'. The ICR team strongly urges the reader to consult this annex as it is important that all details of this complex and innovative project are understood when considering the project performance assessment, lessons learnt and suggested ways forward in later sections of the report. Section 2 provides a synopsis of the project narrative.

Sections 3 to 6 go on to assess performance of the NVNWCP-II in terms of its relevance, effectiveness, efficiency, impacts and sustainability. In doing so, we focus on a few key considerations (or retrospective indicators) under each heading. Where appropriate, these are given an overall weighting (Low – Medium – High) which, in turn, informs the assessment of overall quality of the initiative made in the following section (Section 7). Section 8 summarizes generic lessons with respect to the design, preparation, supervision and strategic monitoring of such multi-facted and institutionally complex initiatives. Lastly, Section 9 gives some recommendations from the ICR team on possible follow-up support and activities.

2. PROJECT NARRATIVE SUMMARY

2.1 The North Vam Nao Scheme

At the point at which the Mekong River reaches its vast delta the river divides to form a long interior 'island' shaped segment of land that straddles the border between Viet Nam and Cambodia. 'North Vam Nao' is a southern portion of this island located within An Giang Province, that is bounded by the anabranching[2] channels of the 'Tien' and 'Hau' rivers and by canal systems which divide it from adjacent parts of the island. North Vam Nao has a land area of 31,000 hectares. It is flat and low-lying, generally saucer-shaped with higher ground formed by natural levees on the banks of the rivers and lower ground in the centre of the island. In addition to the natural levees, there are constructed dykes around the edge of the island and along all the main canals. The population of the island is around 300,000 people. Administratively, it covers the whole of Phu Tan District in the south and parts of Tan Chau District in the north, with two district townships and 22 rural communes.

The fluvial hydrology and economy of North Vam Nao is dominated by the annual flood cycle of the Mekong River. The flood commences in July and peaks in September or October. Historically, in most years, the entire island was submerged except for elevated areas along the banks of the rivers and the higher dykes built along the canals. Flooding is a recurrent danger with huge economic costs, damaging crops and housing and transport infrastructure, as well as creating health problems. It was estimated that whereas large floods incur damage to a value in excess of VND 120 billion, the average annual damage was VND 18.32 billion per year. During the floods, many people had to be evacuated and living conditions in flood-free areas deteriorated due to over-crowding, lack of sanitation and incidence of waterborne diseases. Frequent flooding prevented the extent to which local farmers could predictably harvest a second annual rice crop. Temporary dykes were required to protect crops in many areas and their construction consumed land, labour and financial resources. The dry season gave rise to a different set of problems, including a lack of water for irrigation in the central communes on the island and the poor quality of canal water used for domestic supply.

The basic water engineering concept of the NVN Scheme involves raising and strengthening the perimeter ring-dyke around the entire island, combined with sluice gates set into the perimeter dyke to control the flow of water through canals in and out of the area, and raising and strengthening the dyke system along the internal canals. This will provide year round protection from river flooding as well as enabling the predictable supply and control of water for crop

[2] An anabranch is a section of a river or stream that diverts from the main course and rejoins later.

production and protection purposes. The potential economic and social benefits of the scheme for the 300,000 residents as well as for the provincial economy are large.

The overall scheme thus consists (or will consist when the entire system is complete) of three main groups of infrastructure:

1. The perimeter ring-dyke. This is being constructed by the provincial government, with funding for this representing the major portion of the 'counterpart funding' to the AusAID project. As of September 2007, approximately 40% of the ring-dyke is complete and this represents a major outstanding element of the scheme.

2. Sixteen major sluices and 39 culverts along the ring-dyke, construction or rehabilitation of which has been the major construction investment responsibility of the AusAID funded project. As of September 2007, the 11 newly constructed sluices are 95% complete, and 4 of the 5 rehabilitation sluices have already been handed over.

3. The interior canal and dyke network, which is progressively being up-graded by the local authorities and local communities, divides the area into 24 hydraulically defined crop production areas, also referred to as 'compartments'. Whereas there are 24 compartments, these are superimposed on the 22 administrative communes. Some compartments span two or more communes. Setting-up water management and coordination arrangements for this has become one of the main concerns of the NVNWCP-II through Participatory Irrigation Management (PIM) principles and approaches.

The canal network constitutes a 'public service' that is typical of the Mekong Delta – creating a water source for irrigation, domestic water supply, drainage, and as a local transport network. The government also tried in the past to provide a public flood control service, but this was always rather rudimentary. The new ring-dyke and sluices will make it possible to make this service effective. An additional advantage of the sluice system is that it offers possibilities to manage the water quality in the canal system, which is particularly welcome during the dry season when due to low river flow the water in many canal sections becomes stagnant. Controlled flooding of the system on a periodic basis will allow the deposition of organic sediment and nutrients onto crop land as well as flushing of the canals.

2.2 The AusAID funded project

The NVNWCP-II is – in the opinion of the ICR team – one of the more ambitious and innovative ODA projects in the agriculture and rural development sector in Viet Nam over the last decade. It has also been a challenging and at times difficult project to manage and implement. This is the first time an attempt has been made to develop an 'integrated water management system' of this type for parts of the lower Mekong Delta. In particular, the project had a high ambition level as evident in the innovative institutional changes that have emerged, over time, and which are critical to the success of the Scheme. The project design was challenging in terms of the diversity of project components including construction management, capacity building, environmental management, and social and economic development sub-components. It has also required a great deal of flexibility, not least being to adapt to the rapidly changing policy and economic environment in Viet Nam over the life of the project.

The project had its origins in concepts developed under the Master Plan for the Mekong Delta completed in 1993. This set out an agreed perspective for sustainable development of land and water resources in the delta. In 1992 the GOV requested Australian assistance for the flood

control project on the NVN Island. By that time, the local government had completed the canal network within the island and the GOV requested assistance for the larger program of perimeter works for the flood control system. In response to the initial request, the project had a long investigative phase, with the first pre-feasibility and design missions taking place in 1993 and 1994. GOA funding was approved in principle in 1996, followed by preparation of a project implementation document (in 1997), agreement on resettlement and compensation policies, and approval of the Project Design Document (PDD) for the first NVN Project in late 1998.

The NVN-I began in January 1999 and was expected to finish by 2003. At this time the project was under the Ministry of Agriculture and Rural Development (MARD) with funding from the central State Budget. After a year, however, AusAID conducted a review of the project because of growing concerns about performance. This review found the project was unlikely to achieve its goals under the existing arrangements and that significant changes would be required in technical engineering, institutional and resourcing aspects to reduce risks and improve prospects for sustainability. Following the review it was agreed to terminate the NVN-I in June 2000.

The current NVNWCP-II (2002 to 2006) had more thorough preparation. The revised PDD was completed in July 2001, the Subsidiary Arrangement was signed with the GOV in December 2001 and the project began in January 2002. The project was designed around two phases. Phase I (lasting 9 months) undertook a comprehensive water management study aimed at providing solutions to the design aspect of the Scheme – with the decision to proceed based on the results of this. This involved technical assessment of several engineering 'design options' together with an intensive process of stakeholder and community consultations. This formed the basis for selection of the most suitable Scheme design and preparation of an Integrated Water Management Plan. These Phase I planning activities were completed in December 2002. Following an independent review by AusAID the second phase was given the go-ahead in March 2003 (with the target completion date extended from January 2006 to September 2006).

During Phase II the project has progressed in three main work areas: (i) implementation of the Construction Plan; (ii) establishing the management arrangements for the NVN Scheme; and (iii) implementation of the Environment and Social Management Fund (ESMF). A significant and important change that occurred during the early period was that the responsibility for 'project ownership' and 'invesment management' was devolved from central level to the Province authorities. This enhanced local ownership but also necessitated an adjustment in the implementation arrangements, in addition to which GOV counterpart funds would now come from the provincial budget. To begin with, progress was slow across all components. The first substantive activities on the ground were the social and environmental sub-projects under the ESMF (see Annex 11). While the main delays were experienced in the program of construction works. Three main sets of factors contributed to these delays: (i) constraints and difficulties in procurement for design and construction; (ii) delays in the resettlement and compensation process; and (iii) delays in GOV counterpart fund allocations.

With the go-ahead from the province leadership, from mid-2003 onwards the project embarked on an intensive process of consultation with the local authorities and local communities to explore what might be the most appropriate management arrangements for the new Scheme. This was certainly an important turning-point for the project. The process was conducted in a highly participative manner and the system that began to emerge from this process has a modern set of institutional arrangements. These will give the farming communities a major say in how the Scheme is managed, and separate out the role of the 'owner' of the Scheme from the service providers which will maintain and operate the major elements on a contract basis.

In May 2004 the first comprehensive Technical Assistance Group (TAG) mission was made to the project following the independent review of Phase I in 2002[3]. This TAG mission quickly ascertained the gravity of the situation with respect to the constraints and difficulties in implementation, particularly the lack of counterpart funds and long delays in the construction schedule. This TAG mission concluded that unless these issues could be resolved it was questionable whether the project could continue. At the same time, the TAG mission identified areas in which the project had made significant and good progress. These included the sub-projects under the ESMF, capacity building and training for counterpart agencies, and advances in the introduction of the environmental management systems.

Evidently, the events around this time (in mid-2004) did much to alert all partners to the urgent actions needed to resolve these issues. An Amendment to the Subsidiary Arrangement was signed in August 2004 which included commitment by An Giang PPC to secure and make-available the required counterpart funding, which was subsequently forthcoming. Secondly, an agreement was reached by the next Project Coordination Committee meeting to allow greater flexibility in the procurement procedures to expedite the construction process. Thirdly, steps were taken to increase the regularity and effectiveness of the project coordination and external monitoring arrangements. This included more regular PCC meetings to allow quicker resolution of emerging issues, as well as more regular TAG visits for the remaining project period. These actions helped to turn-around the project towards quicker and more effective implementation.

From the latter part of 2004 onwards the speed of project implementation picked up across all components. Even so, by early 2006 it had became clear the construction works and the water management regime would not be completed by the planned closure date. By July 2006 overall construction progress on the AusAID funded works had still only reached 35%. Accordingly, the 10th Project Coordination Committee meeting in March 2006 agreed in-principle a proposal for a one-year extension to the project. This was endorsed by a TAG mission in August 2006 and subsequently approved. It was considered that a one-year extension would be sufficient to complete a majority of the sluices under project funding (which has turned out to be the case) even though assurances by the province that the perimeter ring-dyke would also be complete within this period have not transpired. The extension has allowed lesson learning from the ESMF as well as scaling-up the most successful of these sub-project activities.

In this latter period further work has been undertaken to strengthen the institutional arrangements for the Scheme. In particular, three pilot Compartment Management Boards were established in 2006 to test and introduce the practical management arrangements on the ground. Experience from this will be used to scale-up to the remaining 21 compartments. An important set of province and district regulations have been issued that define the structure and functions of the Scheme Management Board (SMB), the Irrigation Management Centre under DARD as the service provider, the Compartment Management Boards (CMB) as well as for the Environmental Management System. These arrangements are fragile as they are only now being fully introduced, but they do provide the basic operating protocols, organisational structures and systems required to take the Scheme forward to the testing phase over the next few years.

[3] In effect, this TAG mission in 2004 served as a mid-term review of the project. A separate Mid-Term Review was not undertaken, presumably because an in-depth independent review of Phase I had been conducted earlier.

3. RELEVANCE

3.1 Project Goal and Purpose

►Rating | High

The ICR team considers the basic relevance of the project remains as strong today as it was at the outset. This is both in terms of its potential contribution to the livelihoods and well-being of the 300,000 residents of the island and to the provincial economy. The project responded in design to a long established demand by An Giang Province. It has attempted to embrace all the required elements of sustainable development – economic, social, environmental – in its goal and purpose and component activities. The project has contributed to disaster preparedness, as well as being associated with reductions in poverty in the project area based on provincial statistics. It has also made good progress in raising environmental awareness and changed behaviours and introducing environmental management systems. In all these respects, the project can be shown to closely align with AusAID's country strategy and its key result areas.

3.2 Strategic steps in design and implementation

►Rating | High

The project had the advantage that it was able to build on the NVN-I project: this earlier phase had clearly observed deficiencies which had been well documented through the AusAID review process. The ICR team accepts that, as far as possible, these lessons were incorporated into the design for the NVNWCP-II. By expanding the focus to more fully cover social, environmental and institutional capacity building elements the overall relevance of the project was enhanced. The ICR team is strongly supportive of the two-phased approach adopted by the project. Phase I provided an opportunity to ensure an appropriate hydraulic scheme design was possible that took account of these wider objectives and allowed counterpart commitment to be developed and its depth and strength better evaluated. This appears to have responded to many of the shortcomings of the NVN-I. That an acceptable but quite different water control and management option was finally identified (and supported by a wide range of technical studies and the community consultations) shows the relevance of the phased approach; this went beyond the strongly stated principle in the PDD of the Scheme 'supporting a two crop regime, plus an annual flooding cycle', to a 'three crop cycle with controlled flooding every three years'.

3.3 Component structure and objectives

►Rating | Medium to high

The component structure and objectives (that were finally unified and agreed in 2004) represented a reasonable solution to the integration of these wider environmental, social and institutional aspirations[4]. However, one main weakness of the conceptual design is that there was only a weakly articulated link (at the 'outcome' level) between the deliverable 'outputs' and the overall Goal and Purpose. The latter emphasize the social, environmental and poverty alleviation aspects of the project. However, it was evidently still not clear at the outset in what specific ways the project should contribute to this within the available time. Similarly, the Goal seeks to help the province establish and operate an effective water management system, without a clear indication of how far the project should go along the road to achieving this by 2006/07. This makes it difficult for the ICR to assess whether the project has, in fact, achieved what it set out to achieve – irrespective of the fact that considerable achievements have been made.

[4] See Annex 1 (Section 4.2) and Annex 8 for a fuller analysis of these issues.

The project required that an M&E plan be developed to measure performance against goals, objectives and outputs. The AMC introduced a comprehensive 'output' monitoring system which the ICR team has viewed in part. The ICR team believes the project's 'outputs' were perhaps over-monitored and not enough time and intellectual rigor was given to analyzing and measuring broader 'outcomes.' The draft Activity Completion Report presents a list of higher-order achievements - including some outputs and some outcomes - against the Log-frame indicators (see Annex 13). However, it remains unclear how the AMC (or the counterpart agencies) assess or rate their own 'performance' in achieving sustainable outcomes vis-à-vis their understanding of the expectations made at the beginning of the project.

3.4 Aid delivery, fund flow and management arrangements

►Rating | Medium to high

The aid modality selected for the project involved a combination of: (i) technical assistance inputs through the AMC; (ii) capital works (construction) support through the Civil Works Trust Fund; and (iii) the Environmental and Social Management Fund implemented under guidance of the ESMF Board. The ICR team considers this to have been an appropriate set of fund flow and fund management arrangements, that were tailored to the design and needs of the project. Putting the Civil Works Trust Fund largely under the control and management of the province helped to increase local ownership and capacity, while maintaining necessary, essential safeguard of the co-signatory arrangements between the AMC and PMB. Operating the ESMF according to application-based procedures helped to widen the scope of these activities and to involve a wide range of agencies (which would have been more difficult if the ESMF had been implemented under a single counterpart agency); even though the continuation and sustainability of the ESMF modality is not certain. The Project Management Board, Project Coordinating Committee and other coordination bodies were also basically relevant and suited to the project design and purpose. However, the more critical issue in this regard is the effectiveness of these management and coordination mechanisms, as considered in Section 4.

3.5 Institutional arrangements for the NVN Scheme

►Rating | High

The project has introduced a modern and innovative set of institutional arrangements for management and operations of the NVN Scheme[5]. The ICR team is strongly supportive of this approach and the way it has been introduced. It reflects a concerted attempt to create a more participative management system that provides a clearer voice and coordination role for the farmers. This is aligned strongly to the project goal and purpose. The relevance of these institutional arrangements to the water resources and irrigation management reform agenda of the GOV at national level is high. In particular, the project has responded to (and in many respects been at the forefront of) innovative practices informed by the new thinking on Participatory Irrigation Management. They are also in line with broader GOV policies on public administration reform, decentralization and the promotion of grassroots democracy. The new institutional model is also clearly highly relevant to the needs of farmers and local communities in the area. This was made evident to the ICR team by the high degree of understanding and appreciation of the system as expressed by members of the 3 pilot CMBs with whom we met. The overall Scheme Management Board composition and associated responsibilities - such as for the Environmental Management System - demonstrates a good level of inter-agency

[5] These are described in Annex 1 (Section 5.3 & 6.3) and in Annex 10.

coordination that has been established. Relevance is also demonstrated in the high degree of ownership by the local government authorities.

3.6 Wider relevance to national policies and other provinces

►Rating | Medium

The ICR Team believes there is one aspect in which a broader interpretation of 'relevance' would suggest a somewhat lower rating. At this stage the project's experience and achievements are still largely contained within An Giang Province. Wider exponsure to and replication of the approach within the Mekong Delta provinces would add further to the project's relevance. This has not occurred to date and should be a priority as the NVN Scheme begins to produce results worthy of sharing with other provinces with similar challenges and contexts.

The decentralization of project management to the province undoubtedly improved responsiveness and local ownership. Efforts were made by the AMC and the TAG to maintain contact with MARD at central level and to keep MARD informed about the project (the TAG made several visits to MARD during the course of the project). Even so, the ICR Team believes that the project could perhaps have benefited from establishing stronger linkages to national policy-making processes and dicussion forums. This would have been to maximize the project's impact and relevance in sharing the significant achievements as well as practical lesson on project implementation. The AMC's Activity Completion Report recognizes that the NVNWCP-II was an early decentralised project. The project encountered difficulties in terms of the capacity of local institution and the extent to which they were empowered as decision makers. The ACR recommends that if further replication to other provinces is proposed, the appropriate national agencies should be fully involved in planning.

4. EFFECTIVENESS

One salient feature of the NVNWCP-II has been the dynamic context in which the project operated and the evolutionary nature of the project itself. This required a high degree of flexibility and innovation. This dynamic setting had major implications for risk management, project responsiveness and adaptability of the management and coordination mechanisms. This type of observation is frequently made about other development assistance projects. In the case of NVNWCP-II it is a critical consideration. While it is still too early to fully assess the project impacts, this aspect of 'effectiveness' is central to the ICR assessment of performance.

4.1 Project management, supervision and coordination

►Rating | Medium to high

To some extent, the difficulties and delays faced by the project were associated with the broader changes taking place in the institutional context of Vietnamese provincial government systems. While unforeseen at the time of project preparation in the late-1990s, the nature and speed of the administrative and decentralization reforms of the GOV had a major impact on project implementation. The decentralization reforms that took effect in the early period shifted the responsibility for investment management and mobilising counterpart funds to the Province. In assessing this situation, we should appreciate the extent of the adjustments this necessitated for the Province authorities, not only with respect to the NVN scheme, but also for all other investment projects. Delays in securing alternative sources of counterpart funding were evidently part of the larger task of realigning the province revenue and expenditure budget

sources. This was compounded by understandable caution on the part of the Province authorities in clarifying the new decentralized arrangements for investment project management.

In overall terms, it can be argued the project did respond in an effective way to changing needs and circumstances. Evidence of this is to be seen in the:

- Design changes and improvements that emerged out of Phase I
- On-going discussion and clarification of the component structure and objectives, and
- Revisions made to the Subsidiary Arrangement mid-way through.

Given the big problems and delays with procurement and construction that beset the project up until mid-2004, appropriate steps were eventually taken to resolve this situation.

Australian Managing Contractor – From our discussions with counterpart agencies there were no adverse comments about how the project was managed by the AMC. It appears that a majority of the requirements within the AMC's Scope of Services have been covered. This may not initially appear to be the case, given the crisis situation mid-way through the project, but the project design and evolutionary context meant that it was not possible for the AMC to resolve issues either independently or quickly. In this regard, the ICR team found no evidence that the delays could be attributed to AMC inefficiency. With respect to the sourcing and management of technical assistance inputs, this process seems to have been timely and effectively managed. The AMC was also conscientious in following-up and integrating the outputs of short-term TA personnel visits with the counterparts. With a few exceptions there were generally favourable comments about the quality and suitability of the selected experts.

Project Management Board – In general the PMB under DARD worked effectively as the key partner to the AMC and the point of intersection between the AusAID project and the broader NVN Scheme management arrangements. Several AMC reports noted the PMB was not given full decision-making powers (as initially written in the PDD) and this contributed to the delays in implementation. However, this would have been highly unusual in the Viet Nam context whereby critical decisions (as proposed by Project Management Units) are almost always referred to higher levels for approval. This serves as an important accountability mechanism even within decentralized management systems as well as serving to keep higher level authorities informed. The critical constraints faced by the project (in terms of counterpart funding shortages, resettlement and procurement procedures) required decisions to be taken across sectors and province departments. Thus they were of a higher-order than could realistically be resolved by the project management unit under DARD.

Project Coordinating Committee – Most stakeholders expressed the opinion that the PCC worked well as the main forum for coordination. Our review of the Minutes of the PCC meetings shows that all difficult issues were on the PCC agenda if not always resolved. A review of the risk management plans and Annual Plans does show that some issues seemed to escape early notice but this may be because of the criticality of the major counterpart funding, procurement and construction constraints under discussion. The decision made from 2005 onwards to hold more regular PCC meetings (combined with two new AusAID and An Giang PCC co-chairpersons at this time) evidently helped to resolve these issues and allow things to progress more quickly. It could be argued that AusAID should have taken a stronger role at an earlier stage to push for resolution of these issues. The AMC could not do this, its role was to define solutions at a technical level and bring outstanding matters to the PCC agenda. However, it does appear that solutions were found when there was an alignment of key people from both sides – this may be a lesson for the role of AusAID in these higher level coordinating groups.

Technical Advisory Group. The role of the TAG has been crucial, in terms of investigating and explaining the implementation constraints and proposing solutions. With the devolution of supervisory functions from AusAID headquarters to the country Post additional technical supervision and advisory inputs are required to support the Activity Managers. This is necessary when dealing with technical complexity and a wide range of disciplines in a project such as NVNWCP-II. However, the fact that a first comprehensive TAG mission was not undertaken until May 2004 (1.5 years after the independent review of Phase I) may have contributed to the situation whereby the emerging problems were not sufficiently highlighted to AusAID earlier.

The TAG mission from May 2004 itself recognized the need for more – "…regular supervision by technical specialists skilled in project management, particularly in the start-up phase. Pre-emptive actions can usually be taken to avoid implementation problems and, when these do occur, early corrective actions applied to avoid cumulative impacts that threaten project failure". This mission also noted that this – "…depends on the quality and continuity of TAG members. In this respect it would be worth AusAID considering periodic evaluation of the effectiveness of individual TAGs and the quality and contributions of its members". The ICR team believes it would have been beneficial for the TAG team to have included, from 2004 onwards, a water resources management / institutional development specialist. This would have allowed fuller coverage of the new concepts and directions the project was taking to scheme management.

In summary, these arrangements provided a logical management framework. However, the questions that must be answered in determining 'effectiveness' are whether all of these bodies were structured with the right mixture of skills for the job, whether emerging risks were identified early enough, and whether the responses were appropriate and timely. All these questions apply to the PCC, the AMC, the PMB under DARD, the TAG and to AusAID management. The following sections will examine specific issues related to this.

4.2 Risk management strategy

►Rating | Medium

Areas of risk were addressed through 'risk management plans' that were updated regularly by the AMC and attached to the Annual Plans. These were monitored by the AMC, PCC and the TAG. This appears to have worked reasonably effectively but a number of points can be made. Firstly, while the risk profile was based initially on the assessment made in the PDD, it appears that certain risks were not fully enough re-analysed at a later stage to update the plans. For example, the early work to undertake an 'institutional and policy review' (in Phase I) could have been extended to foresee potential constraints in the procurement and construction procedures (see the following section). Secondly, there are some factors that are given a 'high risk' in the plans but seem to sit for a number of years and not be addressed. The perimeter ring-dyke is an example. The stability of the ring-dyke was rightly identified as a 'project risk' in view of its potential impact on the safety and stability of the overall NVN Scheme. This was identified in the risk management plans for the last 3 years and elevated to one of the 5 key risks in the last plan (2006 to 2007). It can be asked why this was not pushed at the highest levels and followed-up more concertedly by the TAG and AusAID in view of its critical nature? Similar comments can be made about the emergency procedures for dyke over-topping (which it is anticipated according to the scheme design will occur in a 1 in 50 year flood). The ICR team believes that more attention could have been paid to the analysis and monitoring of these risks and that some remaining uncertainties would have been sorted out given this attention.

4.3 Procurement and construction management

►Rating | Low to medium

Project Component 4 – Engineering Design and Construction Management had the objective to – "…improve existing systems by which cost-effective, fit-for-purpose engineering designs are produced and by which tenders are let to competent contractors and how construction should be managed to ensure high quality." It is within this component, however, that all the major implementation problems of the project occurred. These were associated with three mains sets of factors: (i) constraints and difficulties in procurement for design and construction; (ii) delays in the resettlement and compensation process; and (iii) delays in counterpart fund allocations. Our review of the Minutes of the PCC meetings shows that these problems were always on the agenda, but it seems that for some time it was simply not possible for the province authorities and other partners to resolve them effectively.

There were a number of constraints in construction procurement that were only partly within the capacity of the AMC or the PMB to influence, or which took time to address and resolve[6]. These included:

- The inadequacy of the available design companies that resulted in delays completing quality designs. The AMC was aware of the shortcomings of the design companies that were selected and made efforts to strengthen their capacity; but this situation was symptomatic of the general dearth of suitably qualified and competent design companies.

- The rigidity of the Government's cost-norm systems and low unit cost ceilings for construction inputs. The AMC was determined to implement high quality construction that would have significant benefits over the long-term. Consequently, construction was delayed until agreements could be reached between the AMC, the PMB and the Department of Construction (DOC) on construction specifications and costs. The Activity Completion Report states that it was not until late 2006 that construction conditions changed and the DOC approved contract specifications at what the AMC considered 'market-price'.

- Thirdly, during this period, there was a construction boom throughout Vietnam which negatively impacted on the project in terms of the available construction companies. Many of the project works were small and in isolated locations and so were unattractive to larger experienced companies. The project often had to make do with inexperienced contractors with a weaker financial base. The AMC was flexible and resourceful dealing with this situation (packaging of works, making interim progress payments, increasing the number and quality of AMC site supervisors and providing guidance and expertise to weak contractors). Anti-corruption measures by the AMC also caused some construction delays.

Setting aside the difficulties faced by the province in mobilising counterpart funds (which needs to be considered as a separate but contributory factor), a critical question faced by the ICR team is whether more could have been done to anticipate the types of procurement bottlenecks that were encountered by the project. In particular, was sufficient attention given during project preparation to defining and mutually agreeing the ground-rules for procurement (including agreed exemptions and/or deviations from the GOV procurement regulations)? And thereafter, did the AMC and AusAID judiciously follow-up these issues and assist the province to develop and introduce a coherent set of procurement guidelines for the project?

[6] See Annex 9 and Section 5.2 for an elaboration on these constraints.

To qualify this discussion, many construction-related ODA projects in Viet Nam during the same period have suffered similar procurement difficulties, leading to long delays and slow disbursement. This is not only confined to ODA projects. Construction works under national projects and programs are also frequently well behind schedule, although often as a result of resettlement issues and contactor-liquidity rather than procurement. This wider contextual setting is not put forth as a justification. Rather, it is presented as an indication of systemic constraints that need to be addressed in project design to at least manage (if not fully resolve in advance) these procurement issues. The donor-funded projects which have grappled with this issue best are those which undertake detailed advanced analysis of the specific procurement requirements of the project. This usually leads to the preparation of procurement manuals that draw on GOV legislation and donor procurement guidelines as required. This is often coupled with the delivery of intensive procurement training for local staff at the outset of the project.

The AMC's Scope of Services does indicate that the AMC was to support the procurement process. However, it is remarkable that in none of the other main guiding documents for the project is anything other than passing comment made to procurement *per se*. For example, in the PDD, the only substantive reference to procurement is that – "Revised procedures for tender preparation, evaluation and award will be implemented to allow the AMC to provide technical assistance and to allow monitoring of performance of contractors…A database of contractor performance will be developed to assist in implementing higher quality standards…". Similarly, while AusAID's independent review of Phase I paid much attention to the scheme design parameters, it did not identify procurement specifically either as a risk factor or an essential process that would determine effectiveness. Furthermore, the Subsidiary Arrangement states only that An Giang DARD will – "Assure for quick approval of technical designs for the construction of water control schemes according to local regulations" and the province will use "…technical specifications produced under the World Bank/AusAID Water Supply Guidelines".

The ICR Team believes this was a critical oversight. From the outset this cluster of risks should have been clearly and thoroughly articulated. This would have made explicit how critically important procurement processes would be both to the scheduling and achievements of the project. In particular, given that the project intended to largely follow GOV procurement procedures and regulations (which was a bold decision and a novel approach at the time) this should have triggered and necessitated a much more thorough analysis of the strengths and weaknesses inherent in the existing GOV system. As indicated above, one activity under the AMC's Scope of Services was to make an institutional and policy review, and this could have been of value in identifying potential blockages in the procurement procedures and allowed an earlier intervention through 'issues management' rather than later 'crisis management'.

It is the viewpoint of the ICR Team that the NVNWCP-II approach to procurement emerges as the main weakness in preparation and early implementation of the project. This weak approach was to have a major impact on overall effectiveness and outcomes of the project. On the basis of the information available, this aspect should be rated as low to medium effectiveness. This is despite the fact that the project eventually overcame these difficulties and completed the construction works on time (in the extension period) and the evident high quality of these works.

4.4 Institutional arrangements for the NVN Scheme

►Rating | Medium to high

As indicated in previous sections, the ICR team is fully supportive of the innovative approach that has been taken to developing the institutional arrangements for management and operations of the NVN Scheme. The emerging system is highly relevant to the needs of the farming

community. Equally it is relevant to national policies on water resources and Participatory Irrigation Management. The potential long-term effectiveness of these arrangements is also high.

The key question that concerns the ICR team is to what extent the new approach – followed by the project from mid-2003 onwards – was in actual fact brought to the attention of the high-level stakeholders (the PCC, the TAG and AusAID itself)? It is expected new arrangements such as these (which require a 'cascading' series of institutional changes) were going to be time consuming to put in place. As such, these reforms were always going to be crucial to achieving the project goal. In particular, it is difficult to trace how these new arrangements were communicated in the early stages. There appears to be a gap of almost 12 months (from mid-2003 to mid-2004) during which concepts were developed with agencies on the ground. However, there appears to be little or no evidence that the significance of these changes was in fact communicated to the higher-level stakeholders. Against this backdrop, there were comments in the Annual Plans that implied these new developments were underway. If communicated effectively to the high-level stakeholders this would, we believe, have led to questions such as:

- What does this imply for the end-of-project situation?
- What does it imply for the achievement of project outputs and outcomes?
- What does it imply for possible reallocation of resources and Technical Assistance inputs (particularly for training) needed to support the new model?

In this regard, the ICR team believes there is some evidence to suggest the high profile issues regarding counterpart funding and delays in construction diverted attention away from these emerging and fundamental issues. There are two implications. Firstly, the 'ambition level' of the new institutional model exceeds that set out in the project design (which implied strengthening of existing arrangements). Or to put this another way, the 'outputs' given in the Log-frame do not adequately reflect or provide a basis for assessing the type of 'outcomes' that may be expected from this model. All of this should have been quickly entered into the risk matrix as the impacts on final project outcomes were obvious. This is not to suggest that the model being followed is inappropriate, we are supportive of it. Rather, it should have been recognized this was going to take longer than expected to put in place. In terms of project effectiveness this issue was clearly outside the scope of the Log-frame. Yet the project coordinating arrangements failed to see the significance in terms of changed risks and changed project outcomes.

4.5 Working relations between AMC and counterpart agencies

►Rating | High

It is clear that strong and collegiate working relations were created and maintained between the AMC and the provincial agencies and officials at all levels, combined with detailed activity and output monitoring, and transparent and effective day-to-day communication channels. In key elements of the project, the AMC adopted a facilitating role that was conducive to building up local ownership and capacity. We believe this is a good instance of 'development effectiveness' in areas important to AusAID such as in building productive partnerships, delivering Australia's aid program with excellence, promoting good governance, and an illustration of what can be achieved through dedicated commitment to change and close working relationships.

4.6 Consultation and participatory planning approach

►Rating | High

From early on, the AMC advocated and helped to introduce a highly participative approach to all activities. The precedent for this was established in the extensive consultations on the

Integrated Water Management Plan (during Phase I) and this was subsequently extended to management of the ESMF and developing the institutional arrangements for the Scheme etc. This was fundamental to the achievements made and in enabling the local authorities to come-to-grips with many difficult issues and embracing new concepts. Moreover, the project is to be commended on the very practical and applied approach to participation (as distinct from an ideologically or methodologically driven approach that characterises many development assistance projects). This highly participative approach helped to strengthen local ownership as well as creating goodwill amongst the partners and local communities. In overall terms, the benefits of this approach far outweigh the delays and risks mentioned earlier. This was also mentioned as one of the main lessons and achievements of the project by the Province People's Committee. The effectiveness of the project, in these terms, has undoubtedly been very high.

4.7 Training for capacity building

►Rating | Medium to high

Project Component 2 – Institutional Development had the objective to – "…coordinate all project activities such as they lead to institutionalizing in a range of line agencies in An Giang Province an acceptance of the benefits and principles of integrated water management". This included a wide range of training courses and workshops on project management and leadership skills, computing and language skills, construction management, resettlement, operations and maintenance, environmental management, community development and facilitation methods etc.

It should be noted that it has not been possible for the ICR team to strategically review how effective all this training has been. The draft ACR does not provide consolidated data on the number of courses or participants or the breakdown of participants according to institutional affiliation or sex-disaggregated data. The ACR also does not provide a full analysis of how effective this training has been (for example, by systematically comparing the capacity needs assessment with outputs achieved and counterpart comments as to the real gains achieved). Capacity building under the project has been extensive, but like many such initiatives outputs are measured as opposed to the outcomes in terms of improved performance on the ground.

While it is inherently difficult to measure the specific outcomes or impacts of training, all stakeholders consulted by the ICR team spoke highly of the quality and effectiveness of the training provided by the project. Much of this was 'hands on' training and it has been effective in improving technical capacities and skills across a wide range of agencies. At the same time, while many stakeholders mentioned that this training was very useful, far more was needed (or is needed in future). We are not sure what this implies – that the training done so far is not fully effective or that given the magnitude of the task only a portion of the needs have been met. This issue is discussed further in the section on impacts and sustainability.

4.8 Environmental and Social Management Fund

►Rating | Medium to high

The rationale put forward for the design of the ESMF strongly emphasizes the 'integrated' nature of the package of interventions in each sector and the 'synergies' that should exist between them[7]. For instance, between:

[7] See Annex 1 (Section 5.1 & 6.1) and Annex 11.

- Household financial management and business plan training > functional literacy training > improved credit supply and access for poor households > support for economic production models > increased household economic development.

- IEC training on environment > support for construction improved sanitation facilities for poor households and public places > construction training for local contractors to build these works > environmental monitoring by communities and local government agencies.

These are tried and tested principles of integration. However – to an external observer – it could initially appear that the ESMF contained a large number of 'good ideas' but a rather fragmented set of small-scale activities with only a weakly established link to the strategic content of the overall project. This raised an important question for the ICR team as to whether this wide range of small sub-projects distracted attention from the main task of constructing and then operating and maintaining a quite complex water management system?

On one hand, it can be argued that an integrated water management project such as this that covers a complete island, and which has a wide disparity in social and economic conditions, must include a specific socio-economic development and environmental dimension It is simply not sufficient to rely on the design and construction components to deal with key social and environmental issues 'along the way'. On the other hand, it can be argued that these many small-scale pilot projects, which used relatively little of the overall project budget, consumed a large amount of time and effort. A considerable amount of short-term Technical Assistance inputs were provided through the AMC for the various ESMF activities (that obviously required substantial time and overheads for the in-situ AMC staff to manage). Combined with this, the scale of activities under many EMSF sub-projects has been small (for example, while in Phu Tan District the Bank for Social Policies has an overall lending portfolio in 2007 amounting to VND 6.7 billion the project contribution to this is only VND 500 million).

In assessing the effectiveness of the ESMF, therefore, it is necessary to consider the 'added-value' and thereby the 'value-for-money' of the resources put into it (this also relates to project efficiency). In particular, we should differentiate between the scale of substantive benefits (for example, in terms of increased credit supply or number of economic models) and the broader aims of the Fund towards "creating and environmental improvement ethnic" and raising awareness and capacity around socio-economic issues connected to the broader scheme.

Our investigations revealed that in these latter terms the ESMF has done much to contribute to the wider objectives of the project. Inclusion of this component was reasonable and it was effectively managed. Whilst it was slow to start it did make sure that local government agencies and officials were aware that social and environmental dimensions are critical and the project was not solely a 'concrete and steel' project. It is also notable that many of the ESMF sub-projects have been judged as effective and worthwhile by the counterpart agencies.

The project is also to be commended on the efforts made in 2006 to 2007 to review, consolidate and scale-up the more successful sub-components of the ESMF. The project has clearly identified and strengthened those activities which can be mainstreamed within the provincial and district administrations. This has undoubtedly been a worthwhile and positive outcome of the decision to extend the project for a final year. That some of the sub-projects have not been conducive to wider application is understandable (given the diversity of things tried) and this represents a considered process of reflection and learning.

4.9 External communication strategy

►Rating | Low to medium

As suggested above, the internal communication system between of the project was strong and effective. However, the external communication strategy and linkages have generally been much weaker. The project did establish and maintain productive working relations with research and training organisations (for example, An Giang University and Can Tho University). Links were also established with other development projects in An Giang and nearby provinces, and regionally with other countries and agencies in the Mekong Region. It is also notable that information about the project was posted on the official An Giang Province Website from early on. Critically, however, linkages with national agencies and policy discussion forums appear to have weakened after the project was decentralized to the province.

The AMC did understand the importance of promoting these wider linkages and 'spreading the message' of the project but it seems the province was not ready for these initiatives until the latter stages. The 6-monthly Progress Reports from 2004 onwards identified the need to establish links with national policy-making agencies, but such efforts were deferred until the 9th PCC meeting in the second-half of 2005 at which it was decided that DARD should implement a NVN promotion program. Even so, a documentation and information dissemination strategy on the achievements, lessons and experience of the project has not materialized. This is a weakness given the innovations made by the project and the high degree of relevance to national policies on water resources and irrigation management etc. Province caution in this regard is understandable given the still fragile nature of the institutional arrangements and that the water management system has yet to be fully tested. However, at this point in time and in the future it will be important to disseminate these lessons more widely.

5. EFFICIENCY

5.1 Cost-effectiveness

A comprehensive economic and financial analysis was undertaken in Phase I of the project. According to the ACR, benefits that will be attributed to the project are summarized as follows: (i) a 10% increase in rice production to 309,000 tonnes or 84% of the gross value of agricultural production; (ii) an increase of approximately 13,500 tonnes in non-paddy crops (eg. maize, soybean and sesame) representing an increase of approximately 9% of the gross value of agricultural production; (iii) an increase in pig meat production (of 2,500 tonnes) and in duck production (of 1,100 tonnes), with the value of livestock-increased production amounting to approximately 7% of gross agricultural production; (iv) a 90% reduction in the value of paddy required to meet domestic consumption, which would indicate a marginal improvement in household food security; (v) savings in water management costs off-setting a 17% increase in on-farm production costs; (vi) reduced flood damage and infrastructure rehabilitation costs by an average VND 8,209 million per year; and (vii) a decline in the value of wild fisheries to one third of the 2000 catch (at VND 5,700 per kilogram this would result in a VND 22,800 million decline in the value of the wild fish resource, which may be offset by the increased demand for hired labour created by the 3rd rice crop and assistance to increasing livestock production).

When combined with total project costs, this benefit stream would generate: (i) an Internal Rate of Return of 22%; (ii) a Net Present Value at a discount rate of 12% of VND 170,536 million; (iii) an Economic Rate of Return of 25%; (iv) an Economic Net Present Value at a discount rate of 12% of VND 211,317 million; and (v) an overall benefit/cost ratio of 2.4:1. The positive

economic impacts of the project are long-term and will not accrue until the water management system is fully operational (estimated to be in 2009 to 2010).

A revised cost-benefit analysis was not undertaken as part of project completion, neither has the ICR been able to fully examine the detailed technical and economic assumptions in the above analysis. It is recommended, however, that a follow-up economic and financial assessment of the NVN scheme should be undertaken at a later stage (perhaps as part of a more formal Impact Evaluation when the scheme is fully operational). It is also recommended that a comprehensive 'beneficiaries' and 'ability-to-pay' study should be undertaken to inform the future scheme financing arrangements, in particular to ascertain what proportion of the O&M and replacement costs should be borne by the farmers, as well as to identify possible options for collecting fees from beneficiaries other than the farmers. This would reassess the assumptions made in the above analysis regarding affordability vis-à-vis the expected increases in productivity. Such as assessment should also have a strong social equity focus.

5.2 Value for money

The modifications to the NVN scheme that resulted from the Phase I design process necessitated an increase in the overall scheme cost to an estimated AU$ 35.7 million, significantly higher than AU$ 17.4 originally planned in 2001. The increased cost was mainly a result of the need for wider sluice construction and rapid inflation in construction material, labour and resettlement costs. AusAID and An Giang PPC both accepted the final design and cost estimates, agreeing that financing of the outer and inner dykes would be a parallel activity outside the project scope. This reduced the project costs to AU$ 28.4 million and resulted in a GOV contribution of AU$ 11.10 million and a GOA contribution of AU$ 17.30 million. The GOA contribution thereby increased from AU$ 12.96 million (in the Subsidiary Arrangement of December 2001) to a revised amount of AU$ 17.8 million (in the SA Amendment of August 2004).

No provision was made in the GOA contribution to account for in-country inflation. However, favorable changes in AU$ / VND exchange rate (the Australian dollar appreciated against the VND by around 60% over the life of the project) together with interest income from the Trust Fund account advances have covered the increases in construction costs due to inflation, some additional construction activities, as well as the extentions to the project completion dates. The GOA contribution of AU$ 17.8 million has remained fixed and will be the final cost amount. The final project costs are summarized in Annex 3.

The project invested considerable resources in international and national Technical Assistance personnel (including 20 international consultants of varying disciplines from community development to water modeling). The ICR team believes that the management and inputs of these TA personnel has, as far as we could assess, represented good value for money. There are a number of indications of this including: (i) the strong working relations established between the AMC and counterpart agencies; (ii) the efforts made by the AMC to actively follow-up and integrate the inputs made by short-term specialists; and (iii) the practical and applied approach taken to on-the-job training and capacity building. This approach became particularly useful for introducing new concepts and complex systems for improved water management.

6. IMPACT AND SUSTAINABILITY

6.1 Economic growth and poverty reduction

►Rating | High

The Activity Completion Report provides a range of information to support the indicative or initial impacts of the project. As explained in Section 1.5, the ICR team believes it is too early to make a full assessment of impacts until the physical scheme is completed and one or two years of operation have occurred (AusAID Post agreed with this viewpoint when discussing the ICR Focus Paper and methodology). Even so, benefits of the NVN Scheme to the local economy are already becoming apparent and the ACR gives a number of indicators for this, including:

- Already there are some areas of triple rice cropping. Phase 1 planning projected that an increase in the value of production per hectare will be achieved through an increased cropping factor from 2.02 to 2.57 (from 2007 to 2010). The average cropping factor in the 4 year period from 2003 to 2006 was 2.21. In Phu Tan District, the value of crop production rose from VND 25 million to VND 40 million per hectare (60%) in the period from 2001 to 2005. This increase was mainly due to internal compartment dyke construction and with completion of the major perimeter construction works these production figures will increase.

- From the ICR discussions with the three pilot CMBs there is strong enthusiasm for these benefits that will flow from the scheme. This will include direct economic benefits to farm households as well as secondary benefits to the local economy, through increased marketing and local labour opportunities on the third rice crop, thus possibly reducing the amount of time some labourers need to leave the province to obtain work.

- According to provincial statistics, the household poverty rate in the 4 poorest communes on the NVN island decreased from 15.5% in 2000 to 4.4% in 2004 (according to the old poverty line of MOLISA) and from 21% in 2005 to 17.4% in 2006 (according to the new poverty line). In Phu Tan District there has been a concomitant increase in the average monthly income from around VND 342,000 in 2001 to VND 473,000 in 2004.

- As pointed out by the ACR, these improvements cannot be attributed primarily to the NVN Scheme, but are indicative of overall improvements in living standards in the project area and the benefits of other provincial investment programs in basic social and economic infrastructure and services. It is notable that in Phu Tan District, in the period from 2001 to 2004, the proportion of households with sanitary toilets rose from 5% to 49% and the proportion of households with clean water supply rose from 50% to 60%.

Benefits to the local economy are therefore already being realised through flood control and improved conditions for crop cultivation. As more training is provided particularly in crop management and diversification, sustainable benefits should be even stronger. The role of the commune and district administrations is important in training and promoting new technologies, but these support capacities still need to be strengthened. At the same time, farmers are already showing innovation – and provided they retain the participation and self-management that the CMB approach provides, then it is likely that economic sustainability will grow.

6.2 Environmental and Social Management Fund

►Rating | Medium to high

The outcomes and impacts of the ESMF can be positively assessed in the following terms:

- There has been effective targeting of poor households and of women under the various ESMF sub-projects and activities;
- The strong partnership approach in working with and through local government agencies, together with building cross-agency linkages and understanding around social and environmental concerns;
- Strengthening the technical capacities of these agencies together with their skills in community development and facilitation;
- The integration of the ESMF with existing GOV policies and programs and the financial contribution made to these programs through the Fund;
- Improved environmental awareness and monitoring capacities amongst local government agencies as well as local communities;
- The contribution this has made to raising awareness around the larger project and building good relations with local government and the local communities.

Sustainability of the ESMF sub-projects and activities will depend on whether the province and district authorities mainstream the suitable activities and continue to provide these services. The prospects for scaling-up and continuation of some of the sub-projects is good (for example, with household financial management training, household sanitation and environmental monitoring).

However, future continuation of the ESMF itself as an 'application based' funding mechanism that may be more widely applied in the local government system is not assured. Even though some elements are designed to be self-sustaining (such as the revolving funds for household toilet construction) the fund has relied on top-ups from the project. This type of funding mechanism does not accord to the regular programmatic or sectoral budgeting procedures of local government. The 'application-based' procedures can be difficult for local authorities to manage (it is evident that the AMC played a critical role in supporting the screening and selection process as well as providing follow-up to ensure quality and transparency in implementation). Moreover, it can be argued that continued existence of the ESMF itself is not the most essential aspect when considering sustainability; what is more important is the continuation and further development of the improved practices introduced through the ESMF.

6.3 Environmental awareness and management systems

►Rating | High

Project impacts on environmental management and the physical environment of the NVN Island have been significant in a positive way. Again, until the scheme is operated for several years it is not possible to be definite about the efficacy of the environmental management systems or possible wider impacts. It is clear, however, that with a few exceptions, environmental issues have been handled in a comprehensive and effective way by the project. The environmental impacts and sustainability need to be considered from three different angles.

Firstly, the NVNWCP-II has made a concerted attempt to build environmental management and monitoring capacities within the counterpart agencies. It has introduced a strong process for

incorporating environmental management across the entire investment cycle from feasibility and design to construction and operations, and the AMC has performed well in introducing these new concepts and procedures. The project has also been successful at integrating the Environmental Management System with stronger accountability mechanisms into the overall NVN Scheme management arrangements, and this has now been legislated by the province. The role of the SMB is particularly significant as it will now provide annual reports to the PCC on how all environmental issues within NVN are managed. The sustainability of these systems and new approaches will depend primarily on continued enthusiasm and commitment from the province leadership and concerned agencies, but the conditions for this are favourable.

Secondly, the inclusion in the NVN scheme design of compartment flooding every three years balances out the impacts of the new 3 crop regime with the need to maintain soil fertility from natural flooding. Monitoring of soil fertility and run-off water quality will be a key part of the annual reporting program. A key factor influencing long-term sustainability of the scheme is whether the physical system works as planned (with no adverse effects) and that the 3 year flooding cycle is sufficient to maintain soil fertility. Only full-testing of the system will be able to determine whether these projections were accurate.

Thirdly, the NVNWCP-II has also made some headway in promoting an 'environmental ethic' amongst local government agencies and local communities. This was combined with supporting the introduction of improved systems of environmental management on the ground (for example, through the solid waste collection systems). Reference is made by many stakeholders to the improved environment on the NVN Island in recent years (for example, reduced waste deposited in the canals). However, the environmental challenges facing local authorities and communities in the Mekong Delta generally and on the NVN Island are still considerable with respect to water quality, waste disposal and treatment and enforcing environmental regulations. Project experience also shows that a comprehensive approach needs to be taken to solving these issues. For instance, while the project has supported the introduction of successful waste collection systems, the collected waste is still being dumped at open sites with considerable leakage and pollution problems (this represents a potential reputation risk for AusAID even though responsibility for the waste dumps was not assigned to the project).

6.4 Gender equality, social equity and civil rights

►Rating | Medium

Gender equality, equity and civil rights are considered here in terms of effectiveness of the project strategy to attend to these concerns, while this discussion also relates to impacts and sustainability. During Phase I the project undertook a Socio-economic baseline survey, technical studies that covered livelihood concerns of poor household (such as the status of wild fisheries for landless households). It also prepared a Gender Strategy and a Gender Affirmative Action Plan. The ICR team did not have time to review all these documents, but they appear to represent a thorough analysis made at the outset. AusAID's independent review of Phase I assessed the gender strategy and action plan and recommended a number of improvements to guide implementation, including: ensuring selection criteria for all committees set up by the project specifically include a call for women to be selected as members; and ensuring equal representation of women in all meetings and interviews as part of community consultations.

The Gender Affirmative Action Plan identified three focus areas, reported on as follows:

- *Training – to facilitate women's participation in training activities for local agencies.* There has been good participation of women in all ESMF training activities reaching 45% (see

Annex 11). The proportion female trainees under the Economic Development Strategy has been lower (36%) and for other types of training (8% reported in the ACR). The reason given for this in the ACR is because the pool of possible female trainees is relatively low in water management, environmental management and construction workers.

- *ESMF – to facilitate women's participation in selection and implementation of sub-projects*. The Women's Union has been active in facilitating various sub-projects under the ESMF. The ACR reports that in Phu Tan District the Women's Union played a key role in success of the revolving loan scheme, whereas in Tan Chau District this almost failed due to lack of participation of Women's Union. Apart from training, however, sex-disaggregated data for the direct beneficiaries of the ESMF sub-projects are not fully reported.
- *Water management – to ensure equal opportunity for female participation.* During the early consultations on the IWMP (in Phase I) a concerted effort was made to ensure gender equality in the community consultation meetings; however, sex-disaggregated data for the later consultation exercises are not compiled in project reports. With respect to representation on water management organizations, the ACR states that – "…no criteria have so far been adopted by the province to provide specifically for female participation in water management O&M". This issue was also identified by the ICR team with respect to composition of the 3 pilot Compartment Management Boards in which all the elected members are male. Efforts will need to be made in future to ensure equitable representation on the CMBs of both men and women and of the poorest households.

The ICR team has the impression that, over time, the attention given to gender equality in all aspects of the project was diminished. An indication of this is that in the later Progress Reports and Annual Plans little mention is given to on-going implementation of the Gender Affirmative Action Plan. The gender assessment given in the draft ACR is also limited and inadequate. The ACR simply reiterates already well-know conceptions of gender roles and inequality in Viet Nam (traditional male dominated decision-making role, household management role of women etc.) without any analysis of how the project has addressed such situations nor how they influence the water management arrangements either now or in the future.

Similarly, in later project reports there has been limited follow-up analysis of key social and economic equity concerns or the potential or actual impacts of the project in this regard. In particular, little evidence is available on the extent to which the project has reached specific social groups and poor groups. This includes, for example, analysis of the changing economic situation and prospects of female-headed households (quite substantial in number in the project area) and of non-landholding and landless households. This was highlighted as a priority in AusAID's independent review of Phase I. Given that the new water control regime and management arrangements will affect all households and social groups on the NVN Island it is essential that this equity focus should be maintained while introducing the Scheme. In summary, while the project started off with a strong gender focus, and there was effective poverty and gender targeting under the ESMF, this aspect can only be given a low rating given that these critical equity issues have seemingly not been fully assessed or documented at later stages.

At the same time, with respect to cross-cutting governance issues, civil rights have been strongly promoted by the project with positive impacts in four important ways:

- Firstly, through the high degree of community consultation and participation the AMC insisted upon during the water management studies to determine how the system should be designed, constructed and operated, with the beneficial impacts of this approach being acknowledged by the province.

- Secondly, through the ambitious institutional model for managing and coordinating the system which allows farmers, for the first time, to manage and coordinate activities within each compartment. This is a significant achievements in view of the fact that farmers view this as an important and direct response to their long held desire to 'have more say' (this point was emphasised in farmer discussions with the ICR team).
- Thirdly, through the resettlement procedures and processes that AusAID made as part of the Subsidiary Arrangement which appear to have had an significant impact in ensuring a fair system of negotiations and compensation repayments;
- Lastly, with respect to the resettlement process, the project has also made a good attempt to follow-up and ensure that alternative services and facilities are made available to the affected households, as well as promoting local labour opportunities on construction works funded by the project (with around 40% of the labour force on the 20 major works recruited locally).

6.5 Long term capacity of people and organisations

► Rating | Medium to high

Impacts of the project in terms of building capacities and skills have undoubtedly been high, although as indicated above it is still difficult to quantify these impacts. Amongst other topics, knowledge and skills have been effectively strengthened in overall project management, technical design and construction and contract supervision, environmental management, household economics, new business initiatives, community facilitation, farmer participation and self-management, and organisational management within counterpart agencies at all levels.

There are, however, two aspects of the project's training program we can comment on specifically which have a bearing on sustainability. The first is the extent to which the project helped to build-up institutional training capacity within the province to maintain a training program in support of further introduction of the NVN Scheme. Some training courses were commissioned from local training organizations (for example, O&M training provided by the Province Vocational Training College). Under the ESMF a concerted attempt was also made to work through Training-of-Trainers and one course (on household financial management) has been integrated with the regular curricula of the Vocational Training College. Apart from this, however, it appears that a majority of the training was provided on an ad-hoc basis either by consultants or AMC staff or local agencies. This approach was justifiable because it enhanced the integration and applied nature of the training. Time permitting more attention could perhaps have been given to building the capacity of the province training schools / colleges to provide training in new topics related to the NVN scheme operations and management in future.

A second related question is whether the training program was sufficiently adjusted to respond to the needs of the new institutional model for scheme management. This is particularly important with respect to the capacity of the Compartment Management Boards. So far, the 3 pilot CMBs have not received intensive training (apart from a number of workshops around their establishment). In the future, scaling-up the CMBs and increasing the depth and breadth of their knowledge and skills will depend on putting in place a more structured training program delivered through the province training schools or extension service. Similarly, further training will be required for the Scheme Management Board and district agencies in coordinating and assisting the CMBs. This emerges as one of the main outstanding elements of the scheme.

6.6 Partnership and cooperation

►Rating | High

In many respects this project has been a good model for how partnerships should be developed, both in terms of donor engagement with government, and in the day-to-day management relationships between the AMC and counterpart agencies. The project evolved at a time when the GOV was decentralising responsibilities for investment project management to province level and so the project became one of partnership between AusAID and An Giang Province. The various local stakeholders have therefore been more directly involved in managing and influencing the project, which would not have occurred so fully if the project had remained under central ministry control. Strong relations were created between the AMC, the PPC and DARD and between AusAID and province through the Project Coordinating Committee.

All this clearly had a positive impact on project implementation and on resolving the considerable challenges and problems faced by the project. It has also created goodwill for AusAID and this should not be discounted. In many respects the achievements of the project are only just becoming evident at completion. In some cases these achievements are fragile, while in others there is still work to be done. However, the strong goodwill should be very helpful in continuing the initiative under province direction – as evidenced by the clear plans and intentions that exist for testing the integrated water management system and mainstreaming some of the more successful sub-projects from the ESMF. A strong argument can be made to continue support in one form or another to cement these achievements and the new institutional arrangements for the scheme in whatever form they evolve.

6.7 Overall sustainability

► Rating | Medium to high

Sustainability of the NVNWCP-II – and of the NVN Scheme as a whole – is obviously a major consideration for all partners given the magnitude and complexity of the Scheme. Given the inter-locking nature of all the main elements of the Scheme, the major sustainability issue is that if any one part of the system should fail or not perform as required, this could have critical knock-on effects. This is a big issue for this project because not only are there major capital works that could degrade if not managed properly, but there are long lengths of levees and dykes that could deteriorate and affect the whole scheme. The institutional arrangements could not be adequately scaled-up or strengthened as required, the environmental management systems could be neglected, financial and budgetary frameworks could change so that O&M is not supported and farmers could be asked to pay more in fees than can be managed – to name a few of the concerns. All of these relate not only to Scheme sustainability but also to AusAID's 'sustainable' reputation. Thus, while the overall prospects for sustainability are good, at this point in time there are several outstanding issues that need to be considered.

6.8 Technical

The principal issue here is the stability and integrity of the physical Scheme as a whole. It is likely that the sluices will be maintained by acceptable O&M procedures and should not create risks. The perimeter ring-dyke presents the most significant risk because the structural quality and stability of the sections existing as a road before the scheme was constructed are still to be fully tested. This dyke is the responsibility of the province. The partnership approach to scheme construction resulted in the AMC's Scope of Services having no involvement with the ring-dyke other than to provide limited financial assistance to the PPC for assessment of the stability and

design characteristics. This issue is of concern as the project nears completion, as the risk management plans over the last three years have continually raised the issue of the – "capacity of the ring dyke to provide acceptable levels of flood protection". However, despite this issue having been in highlighted its stability is still unknown. This is a major sustainability issue and one that AusAID should address with An Giang PPC before the project closes.

6.9 Institutional

The new water management arrangements and institutions are still evolving. The Scheme Management Board and Irrigation Management Centre model seems strong and the province is enthusiastic about the benefits this could bring – as shown by the PPC decision in 2004 to dissolve the former Irrigation Management Company and to move towards a more commercial alternative to contracting O&M services. However, it will take some time for the CMBs to develop in whatever form is appropriate. A series of pilot years makes sense to see what works best and to progressively scale-up as experience is gained. It is possible that without the support of the project, the province and district authorities could find it hard to maintain the momentum of institutional change and revert back to the old water management systems at local level. This would not make the NVN Scheme in itself unsustainable but certainly would impact on the high level of participation that is now occurring within the CMBs.

The main outstanding elements are as follows: (i) establishing the remaining 21 of the 24 CMBs and developing their capacity in a range of skills such as planning, reporting and financing mechanisms; (ii) strengthening the capacity of the district administrations to support the CMBs; (iii) at scheme level, having water services delivery and O&M governed and provided through stronger performance related contract mechanisms; (iv) ensuring adequate long-term financing through an approved 10-year financing plan; and (v) ensuring effective management of environmental aspects through the EMS and through strengthening the auditing and oversight role that should be played by the Scheme Management Board. As assessed a project end, therefore, these institutional arrangements cannot yet be considered as sustainable.

6.10 Financial

As perhaps could be expected – the greatest risk to scheme sustainability lies in the financing and budgetary systems that will apply. A 10-year financial plan is currently being jointly prepared by DARD, the Department of Planning and Investment, the Department of Finance and the districts, which is a required output of the project. The ICR team did not see the draft plan, but based on meetings with all the above agencies the team is confident this will provide a good starting point for developing the longer-term financing framework and arrangements.

The province intends that a majority of financing for the scheme (at least initially) will come from irrigation water source fees from farmers in the area, with the assurance that any short-falls in future financing will be covered by the province budget. However, it appears that a thorough re-assessment of the affordability – and hence the sustainability and equitability – of the proposed financing arrangements for the beneficiary farmers has not been undertaken in preparation for this financing plan. There are several factors to consider in this respect.

Firstly, a fund allocation for O%M of 80% to province level and 20% to district / CMB level has been approved by the Province People's Council (while for other irrigation works in the province the funding ratio is set at 40:60). The higher allocation to province level for the NVN scheme is justifiable to maintain the main infrastructure works through contract arrangements with the IMC. However, this will increase the financial burden on the farming community. The

decentralization of asset ownership to the commune authorities under the scheme is also likely to increase the burden on farm households through the irrigation service fees.

Secondly, over time the benefits of the scheme will accrue to the wider community on the island, including non-farm households and urban residents, directly from improved flood control and in-directly through increased short-term employment opportunities stemming from wider introduction of the 3rd rice crop, improved transportation and increased market opportunities etc. This would suggest that these wider benefits should, in future, be reflected in financial commitments from the provincial budget to the scheme operations and maintenance.

Thirdly, farmers' ability-to-pay is dependent not only on the increased household income that may derive from increased crop productivity (as calculated in the initial scheme design and by AusAID's independent review of Phase I). The ability-to-pay is also associated with and co-dependent on a wide range of other types of (formal and non-formal) service fees and contributions that rural households have to pay for education, healthcare, other commune infrastructure and marketing services etc. In recent years a number of studies have been undertaken that reveal the prohibitive nature and extent of these fees and contributions levied on farm households (including a recent comprehensive study undertaken by MARD). Any changes or increases in service fees for O&M can therefore potentially have a major impact on wider household welfare conditions, particularly for the poorest rural households.

It is recommended that a comprehensive 'beneficiaries' study of the overall scheme should be undertaken, looking at beneficiaries now and in 5 and 10 years time. This would provide information as to what proportion of the O&M and replacement costs should be borne by the farmers, and how such proportions should change over time. In conjunction, an ability-to-pay study should be undertaken that would provide options for collecting money from beneficiaries other than the farmers (if such options exist) as well as showing how much the farmers can afford before and after productivity increases. Unless these studies are done there is the chance that fee increases will continue to pushed on to the farmers, and this will create real equity problems for the scheme and be against the goals set for the project. While the ICR team believes the present 10-year financial plan is in the right direction, we do not believe that the province currently intends to consider the long-term budgetary issues along these equity lines.

7. OVERALL QUALITY

This section summarizes overall quality of the initiative based on the foregoing analysis. It is necessary to be clear about the scope of the ICR assessment in this regard. This focuses on the quality of the AusAID funded project as a whole. It is not intended as an assessment of the inputs made or management provided by any of the individual partners (AMC, GOV counterpart agencies nor AusAID). As explained previously, given the strong partnership approach, and the inter-dependent nature of the project decision-making and coordination mechanisms, it is simply not possible or realistic to base this assessment on the actions of any one partner. Similarly, it is not intended as an assessment of the NVN Scheme as a whole, but rather of the specific contribution of the NVNWCP-II to achieving the broader goals of the scheme. The rating scale used in the assessment if as follows:

Definitions of Rating Scale:

Satisfactory (4, 5 and 6, above the line)
6 Very high quality
5 Good quality initiative; could have improved in some areas with minor work
4 Adequate quality initiative; could have improved with some work

Less than satisfactory (1, 2 and 3, below the line)
3 Less than adequate quality initiative; needed improvements in core areas
2 Poor quality initiative; needed major improvements in core areas
1 Very poor quality initiative; needed a major overhaul

►1) To what degree did the initiative achieve its objectives, and how well did they contribute to higher level objectives in the program strategy?	**5**

To a large extent, the project has achieved the specific objectives and outputs under each of the 5 main components. As of September 2007 – the 11 newly constructed sluices under the AusAID project funding are 95% complete, while 4 of the 5 rehabilitation sluices have already been handed over. It is expected that all these project works will be completed by the end of 2007. The interior canal and dyke system is under on-going rehabilitation and this is likely to speed-up with the establishment of the remaining CMBs. However, only around 40% of the perimeter ring-dyke is so far complete and this represents a major outstanding element of the overall scheme (even though not formally included under the NVNWCP-II).

Combined with this, an Environmental Management System has been introduced and accepted by the province that now brings environmental management into the design, construction, operations and monitoring phases. The EMS has been institutionalised with clear responsibilities set out for all relevant parties within the Scheme Management Board arrangements. Achievements under the ESMF have also been significant in terms of increasing environmental awareness and introducing sound environmental practices on the ground, and in terms of providing targeted forms of social and economic assistance to poor groups.

The project has made considerable progress in formulating, introducing and creating a regulatory framework for the NVN Scheme management and operations. However, these new water management arrangements and institutions are still fragile and evolving. The continued relevance of the new institutional arrangements will depend on maintaining the momentum, particularly with respect to establishing the remaining CMBs and providing follow-up support to strengthen their capacity. As clearly described by the Head of CMB No.01 in Tan Chau District – "*The project has provided us with the organization like the foundations and walls and roof of a house. Now we need to make the interior furnishings to make the house complete*".

According to the original Goal, the project was to support the province to – "…establish and operate an effective water management system…" for the NVN Scheme. As it has turned out, it has not been possible to fully reach this point. Testing the system was initially planned as part of the project period, but the construction delays and the growing complexity and ambition-level of the institutional arrangements have made this not possible. The project has, therefore, been only partly effective in terms of reaching the intended Goal. However, given the evolutionary nature of the project, the achievement of specific outcomes was always going to be a moving target; and in a broader sense it can be said the project has made significant progress and achievements in relation to the overall goal and purpose.

►2) How robust was the system to measure ongoing achievement of objectives and results?	4

The AMC introduced a strong activity and output monitoring system and in general project reporting has been detailed and of an acceptable standard. The project was successful at introducing environmental monitoring systems as part of the overall NVN Scheme management arrangements, as well as specific technical monitoring and community monitoring processes. Risk management plans were regularly up-dated by the AMC and in general this was effective, although some critical emerging issues were not fully enough re-analysed at a later stage (for instance, the implications of the more ambitious institutional model for the project completion schedule and outcome achievements). While output monitoring has been strong, the on-going assessment, analysis and documentation of broader outcomes have been weaker. This includes, for example, the analysis of impacts of the considerable amount of training conducted by the project. Capacity building has been extensive, but like many such initiatives outputs are measured as opposed to the outcomes in terms of improved performance on the ground. On-going assessment and analysis of gender equality aspects, and of the changing socio-economic situation of specific vulnerable social groups and the potential impacts of the NVN Scheme on these groups, has also not been fully maintained.

►3) How effectively was the initiative managed? To what degree did it provide good value for money?	4

In general, all the project management, coordination and supervision bodies and mechanisms (including the PCC, PMB, AMC and TAG) were logically structured and performed effectively. Mid-way through the project, considerable implementation difficulties and delays were experienced that made it questionable whether the project could continue. Appropriate steps were eventually taken by all parties to resolve this situation. These included increasing the regularity of the project coordination and external supervision arrangements, through more regular PCC meetings to allow quicker resolution of emerging issues, as well as more regular TAG visits. These actions helped to turn-around the project towards quicker and more effective implementation. Even so, the long delays in ensuring the release of GOV counterpart funds and in pre-construction and construction activities did have a significant impact on overall scheduling of the project and the extent to which the broader outcomes (in terms of testing the new system) could be fully realized even with two extensions to the project period.

An important feature of the project has been the strong working relationships that were established between the AMC and counterpart agencies with transparent and effective day-to-day communication channels. It can be said that without such close working relations, it would have been nearly impossible to resolve the implementation difficulties faced by the project. The presence of AusAID Post in Ho Chi Minh City with dedicated staff has undoubtedly facilitated these relationships, with a level of engagement that would not have been possible from Hanoi. In a broader sense, the ICR team considers this to have been a good example of 'development effectiveness' in areas important to AusAID such as in building productive partnerships, promoting good governance, and what can be achieved through dedicated commitment to change and close working relationships. The project invested considerable resources in international and national Technical Assistance. As far as can be assessed, this has represented good value for money in terms of the management and quality of the technical inputs made.

►4) How appropriate is the sustainability of the initiatives outcomes?	4

The basic prospects for sustainability are undoubtedly good. An Giang Province has invested a considerable amount of financial, political and social capital in the NVN Scheme that – to put it simply – this is a scheme that cannot be allowed to fail in the long run. The potential economic, social and environmental returns and benefits of the project are also such that these will generate sufficient on-going commitment to ensure sustainability. The project has paid close attention to ensuring the integration and sustainability of some key elements (including the Environmental Management System and some ESMF activities). This would suggest a higher Quality rating. However, at this point in time, there are several critical outstanding issues that could potentially have a major impact on sustainability, including: (i) the fact that the perimeter ring-dyke is not yet complete and has not been fully tested with respect to stability and safety; (ii) uncertainty over the long-term affordability and ability-to-pay amongst farmers to provide the major revenue source for on-going operations and maintenance of the scheme, and the equity of the intended financing arrangements; and (iii) the still fragile nature of the institutional arrangements particularly with respect to establishment of the remaining CMBs and provision of the required follow-up support to ensure they can and will fulfill their intended role.

►5) Was the initiative of the highest technical quality, based on sound analysis and learning?	5

The project was based on a strong process of analysis and learning, conducted jointly with the counterpart local government authorities, technical agencies and local communities, which has resulted in high quality outputs and outcomes. The design was based on a thorough analysis of the design faults and lessons from the earlier NVN-I and it responded to many of these shortcomings. By expanding the focus to more fully cover social, environmental and institutional capacity building elements the overall relevance of the project was enhanced. The two-phased approach to implementation was essential for enabling this joint learning process to evolve. Phase I provided an opportunity to ensure an appropriate hydraulic scheme design was possible, that took account of these wider objectives, and allowed counterpart commitment to be developed and its depth and strength better evaluated. The project is to be commended on the very practical approach to conducting stakeholder consultations combined with thorough high-quality technical studies that was introduced at an early stage. This approach was subsequently extended to the design and implementation of the ESMF and developing the institutional arrangements for the scheme. Good efforts were made consolidate and scale-up successful sub-components of the ESMF which represents a considered process of reflection and learning.

►6) Taking those five factors into account, what was the overall quality of the initiative?	4.5

8. LESSONS LEARNED

The relevance of the lessons and experience from the NVNWCP-II to national GOV policies on water resources and irrigation management has been highlighted above. The project and the province have gained considerable experience on how to go about introducing improved water control and Participatory Irrigation Management systems on a large-area basis that is relevant and applicable to other provinces both in the Mekong Delta and other parts of lowland Viet Nam. In particular, this includes practical experience on the integration of environmental management systems in all stages of the project cycle, the integration of community

consultations with the technical design process, and in the formulation of appropriate organizational and regulatory systems. These particular lessons are not repeated here, although one recommendation that can be made is that, at this point in time, efforts do need to be made to document and more widely disseminate these lessons.

Rather, this section concentrates on a number of generic lessons that have been gained from the NVNWCP-II on project preparation and implementation processes that may be of relevance to other AusAID initiatives both in Viet Nam and elsewhere. These are as follows:

1. The two-stage approach to project preparation, design and early implementation is clearly relevant for this type of complex initiative for which not all the answers are known in advance. The PDD set the framework for the more detailed design phase, which allowed counterpart capacity and commitment to be developed through the process. The danger with this approach, however, is that the design period is over-extended, with a lot of consultations and studies but not much happening on the ground. Elements should be built in, therefore, to allow some substantive activities to be started sooner, particularly in preparatory training and activities that will generate early benefits for the local communities and project beneficiaries. To some extent, the ESMF sub-project activities achieved this latter purpose.

2. We would go further to suggest that for projects such as this – which have complex institutional capacity building elements and objectives (that extend beyond the normal level of human resources and organizational development activities) there should be a third 'follow-up' phase. This is to provide assistance to embed the new institutional process and regulatory systems. It inevitably takes longer to build consensus around such institutional arrangements, and they require on-going application, review and adjustment to succeed. Had such a third-phase been built into the NVNWCP-II, we would not be in quite the same situation today whereby the new institutional arrangements for the NVN Scheme are only partially in place with a still uncertain future with respect to sustainability.

3. A third important lesson from the project concerns the monitoring of institutional change processes. The growing sophistication and evolutionary nature of the institutional arrangements for the NVN Scheme has, to a certain degree, impacted on the end-of-project situation and achievement of the overall Goal. At the same time, mid-way through the project, the TAG, PCC and AusAID were occupied with the nuts-and-bolts issues of counterpart funding and construction delays. The significance and implications of the emerging institutional arrangements appears to have not been fully communicated or evaluated at this stage. This does indicate the need for more sophisticated tools to identify risks and to analyse institutions from a strategic perspective. This also has implications for the composition of supervisory mechanisms such as the TAG. While there is a need for continuity in TAG composition over the life of a project, there is also the need for flexibility to bring in new areas of expertise as may be required by emerging issues.

4. Related to this, another lesson from the project is that in formulating the project objectives and M&E framework, special attention needs to be given to creating a good balance between 'output' and 'outcome' indicators (both of which should be measurable but also adjustable over time). Perhaps because of the long preparation, the NVNWCP-II fell into a situation whereby only outputs were defined in the PDD (which was more acceptable at that time) whereas nowadays donors are more concerned with defining and reaching development outcomes. At the same time, this project shows it is often not possible in advance to identify specific end-of-project 'institutional outcomes'. Even so, the NVNWCP-II is in many ways a perfect example of a 'process oriented' project – but the Log-frame and the M&E framework

have not provided an adequate basis for measuring this process or its outcomes. One solution to this would be to guide implementation through a set of 'interim outcome indicators' that would be mutually agreed, reviewed and adjusted on an annual basis. These would give measurable direction to the process (for example, a 'regulatory document will be issued by a certain date') rather than pre-determining the specific contents. All this may sound rather theoretical, but there are important lessons here in how to measure the progress and success of multi-dimensional initiatives such as this which have variable institutional outcomes.

5. Another important lesson from this project is that more attention needs to be given in advance to 'procurement systems'. This is especially when (as in the case of NVNWCP-II) the intention is to use counterpart government procurement regulations and procedures. As donors move towards harmonization and new forms of direct-budget support (or partial-budget support modalities), the need to be aware of the critical importance of procurement systems will only increase. Our distinct impression from the preparation of the NVNWCP-II is that procurement *per se* was generally regarded as an add-on and rather mundane matter as compared to the more interesting design aspects of the NVN Scheme. Whereas in fact it turned out to be the major constraining factor that had a substantial impact on overall effectiveness of the project. The importance of procurement lies not only in the nitty-gritty details (such as construction cost-norm systems and approval steps) which may cause bottlenecks or limit the introduction of higher quality standards. In a broader sense, public procurement policy and systems also have major implications on the 'flow of benefits' from public investment programs and hence on project outcomes and impacts. Procurement systems need to be investigated fully in project preparation and the 'ground rules' that will apply need to be clearly articulated and agreed in project documents.

6. Our last point concerns what may be called 'interface issues'. These are issues that are not directly within the scope of a project but which nonetheless can critically influence impacts and sustainability (and hence are not merely 'externalities'). In the case of NVNWCP-II this includes, crucially, the perimeter ring-dyke. It can be questioned why the commitments to construction and monitoring of the ring-dyke were not more fully elaborated in the project agreement, rather than being left (as appears to be the case) as an issue for general discussion? The same can be said about the waste disposal sites. While the project has done well in improving garbage collection systems and this has improved the overall environment, in a sense this has just shifted and concentrated the problem around the inadequately constructed and managed waste dumps. This was not assigned as a project responsibility. However, a strategy should have been agreed for how to deal with this during implementation. Interface issues are probably the biggest reputation risks for AusAID in the project. We suggest that such issues need to be more clearly identified during project design and preparation and made part of the mutual agreement and obligations.

9. CONCLUSIONS

With support from the AMC, an overall schedule has been put forward for testing the 'hardware' and 'software' components of the NVN integrated water management system that will take place over a three year period from 2008 to 2010 following completion of the major construction works. In many respects, therefore, it can be said that a further – equally ambitious and challenging – phase of this remarkable initiative is only just beginning.

The ICR Team does believe this is an appropriate point at which to close the project and hand-over full ownership to the counterpart agencies. The one-year extension enabled essential consolidation activities to be completed and the AMC's exit-strategy has, as far as we could

ascertain, been handled effectively. At the same time, given the significance of this development partnership that has spanned 14 years, the ICR team is also of the opinion that there is good justification for AusAID to maintain some form of appropriately designed assistance in future to support An Giang Province to take the scheme forward to successful fruition.

9.1 Possible follow-up activities

A proposal has been put forward to AusAID by the AMC for a set of possible follow-up activities to the NVNWCP-II. The ICR team reviewed these suggestions and cross-referenced them with ideas put forward by other stakeholders during the mission. In general, there is consensus on some main priorities, to which the ICR team would add a couple of suggestions. Our opinion is that these would not be provided through an extension of the project modality. Rather, they would constitute a set of strategic inputs (ideally managed by AusAID directly) aimed at supporting the testing period, enhancing the sustainability of the project outcomes, and documentation and dissemination of the lessons and experience gained. These could be managed by AusAID Post and/or through the AusAID Mekong Water Resources Unit. Collaboration through the Water Resources Unit would have the advantage of helping to strengthen the linkages between An Giang Province and other agencies in the Mekong Region which would, in turn, facilitate wider lesson learning from this initiative. The proposals are as follows:

1. Follow-up inputs during the initial testing period from a Water Resources Management Specialist to assist in reviewing, consolidating and scaling-up the institutional and management arrangements, particularly with respect to the CMBs. This could be through further short-term visits from the international O&M consultant who was instrumental in facilitating this process in recent years. The critical consideration, however, that any follow-up inputs should not disrupt or radically alter the direction the province is already taking, but to provide advice on strengthening the now-existing arrangements.

2. Short-term inputs over a similar period from a Human Resource Development / Training Specialist to assist the province in designing and introducing a training program for the CMBs focusing on managerial, technical, agriculture production and economic development knowledge and skills. The need for CMB training was identified as a priority by all the local stakeholders. The aim would be to develop a set of short-course units that would support the scaling-up process and would be delivered by the extension service and/or by the Province Vocational Training College. This training program would be adapted to the specific context and needs of the CMBs as well as to the learning requirements of the CMB members (many of whom are senior citizens with considerable practical knowledge and skills but with varying educational backgrounds and qualifications).

3. Provision of a limited amount of funding for other short-term TA inputs that may be requested by the province during the scheme testing period. For instance, this could possibly include technical water engineering inputs to review operations of the system, or financial planning inputs to support development of the long-term financing arrangements.

4. At an appropriate point in the near future, supporting the preparation of a publication and/or documentary film that documents the NVN Scheme and the achievements of the project. The purpose of this would be to produce a set of informative and attractive documentary products to disseminate the lessons and experience of the project to a wider audience including policy-makers at national level, other projects and programs, the general public, as well as for AusAID and its partners in Viet Nam and elsewhere.

5. Conducting a formal Impact Evaluation of the project towards the end of the testing period in 2009 or 2010. The ICR believes this is warranted given the strategic importance of this particular initiative. Comprehensive baseline data exist for all aspects of the scheme and project area which would make a combined quantitative and qualitative Impact Evaluation methodologically feasible and robust. Moreover, the evaluation could be extremely informative and useful for the province in terms of providing a substantive analysis of the technical and economic performance of the NVN Scheme.

6. Lastly, it is suggested that AusAID and An Giang PPC should co-organize annual NVN Workshops over the next few years to review the lessons and experience from the testing period. This would provide a specific context for reviewing these other inputs, as well as creating forum for maintaining the valuable engagement and dialogue between the partners.

.

Annex 1. Project Narrative

1. Project origins and early preparations (1993 to 1999)

The North Vam Nao project had its origins in concepts developed under the Master Plan for the Mekong Delta completed in 1993. This Master Plan, prepared by the GOV with World Bank and UNDP support, set out an agreed perspective for sustainable development of land and water resources in the delta. In 1992 the GOV requested Australian assistance for the flood control project on the North Vam Nao Island. By the early 1990s the local government had already completed the canal network within the island and the GOV was requesting assistance for the larger program of perimeter works to ensure the flood and water control system.

Australian support to this project was conceived alongside and as part of a broader program of assistance to the water resources management sector in the Mekong Delta, that has subsequently included several other AusAID urban and rural water supply and sanitation projects. In response to the initial GOV request, the North Vam Nao project had a long investigative phase, with the first pre-feasibility and design missions taking place in 1993 and 1994. GOA funding was approved in principle in 1996, followed by preparation of a project implementation document (in 1997), agreement on roles and responsibilities for resettlement and compensation, and approval of the final Project Design Document (PDD) for the first NVN Project in late 1998.

2. First North Vam Nao project (1999 to 2000)

The NVN-I began implementation in January 1999 and was expected to finish by 2003. At this time the project was under coordination of the Ministry of Agriculture and Rural Development (MARD) with funding from the central State Budget. After a year, however, AusAID made a review of the project because of growing concerns about performance. Following the Review it was agreed to terminate the project in June 2000. As noted in a later document, the review concluded that the project was – "…based on poor engineering, construction plans and construction management. It had inadequate levels of ownership and understanding at national and local government levels and it did not involve the beneficiaries in planning and implementation. The focus was on engineering. It did not have a balanced, multi-disciplinary approach to addressing environmental issues and the social and economic needs of the beneficiaries'[8].

As further explained in the PDD for the NVNWCP-II, the findings of the review of NVN-I were that – "…the project was unlikely to achieve its' goal under the existing arrangements and that significant changes would be required in institutional, technical and resourcing aspects to reduce risks and improve prospects for sustainability. The review mission recommended a new project design that incorporated these changes. The GOA and the GOV accepted the review mission findings. The new project has been designed and prepared based on the initial work undertaken by the review mission, and subsequent consultation and agreements. These shortcomings and the underlying causes have been well addressed in the present design…"[9].

In retrospect, it is sensible to raise the question: How did a project with an intensive preparation lasting 5 years apparently get the design so wrong and then ran into such difficulties immediately upon implementation? At least part of the reason for this is may be implied in the

[8] Independent Project Review Report on Phase I of the NVNWCP-II (December 2002).
[9] Project Design Document for the NVNWCP-II (December 2000).

above quotations – to do with the institutional context and demands of the project. Another reason may be that whereas an engineering-focused approach would have been more acceptable for projects initiated in the early part of the 1990s, by the end of the decade much more serious attention was being given by donors to the environmental and social impacts and benefits of such construction projects.

This is an important point: the ICR team believes there are corollaries in other aspects of the overall North Vam Nao project. For an engagement spanning 14 years (from 1993 to 2007) - during which time 'development thinking' has progressed and the concerns and priorities of donors have change - it is perhaps inevitable that aspects of the original design will become out-dated. As will be proposed in the following section, this is also evident in the Logical Framework for the NVNWCP-II in which only 'project outputs' are given, whereas today donors are also concerned with defining and assessing 'development outcomes'. For water resources infrastructure projects, it is especially at this output-to-outcome interface that institutional constraints can prevent a project from achieving higher level objectives. For example, while a project may successfully achieve infrastructure outputs (in terms of physical works constructed), there may be a range of institutional and managerial issues to overcome in ensuring sustainable operations and maintenance (O&M) systems are in place (outcomes). We will pick up this theme again in the following section when considering the formulation of the objectives of the NVNWCP-II.

It is important in evaluating the relevance and effectiveness of the NVNWCP-II that an assessment is made of the appropriateness of the project design. This is with respect to the policy and development objectives that were set at the time, and whether these represented a clear set of principles, project components and implementing directions upon which the AMC could effectively and efficiently operate. And central to the clarity of the PDD, is the degree to which lessons were taken from the apparently defective NVN-I. For example, whilst an AMC could efficiently administer a project, a flawed design that perpetuated previous failings could make the overall effectiveness and impact doubtful and the AMC performance given an inappropriate rating. This is highlighted here as a possible difficulty in this ICR if it is simply taken as a 'given' that the design for NVNWCP-II adequately addressed all the lessons from the earlier project, and that the design reflected the best possible approach not only for circumstances as then existed but as they have evolved over time.

3. Preparation and detailed design phase of NVNWCP-II (2000 to 2002)

AusAID completed the PDD for the NVNWCP-II in July 2001, the Subsidiary Arrangement was signed with the GOV in December 2001, and the AMC was mobilised in January 2002. The project was designed around two phases. Phase I (lasting 9 months) undertook a comprehensive water management study aimed at providing solutions to the design problems of the scheme – with the decision to proceed being based on the outcomes of the Phase I activities. The water management study included hydraulic modeling and assessment of several 'design options' that formed the basis for the Phase II construction plan and Integrated Water Management Plan. Phase I planning activities were completed in December 2002, and following an independent review by AusAID the Phase II was formally approved and given the go-ahead in March 2003 (with a revised target completion date extended from January 2006 to September 2006).

4.1 Scheme technical design and consultations

The basic aim of the NVN-I had been to construct engineering works that would defer flooding on the island to secure a second annual rice crop, and to establish a management system for this.

However, during preparations for NVNWCP-II a number of changes occurred which impacted on that objective and increased the complexity of the problems to be addressed.

Triple cropping – the local authorities and farmers in some higher parts of North Vam Nao sought to prevent flooding completely in order to allow three annual rice crops to be grown (while the remaining areas adhered to the earlier aim of protecting two rice crops). Initially, this option was cautioned against by AusAID technical advisors because of potential adverse environmental impacts (i.e. a build-up of agro-chemical residues in the enclosed area) and social impacts (i.e. reduced capacity of poor landless residents to capture wild fish that came with the regular flood, which would adversely affect their incomes and diets). While three rice crops would generate increased economic benefits to the area, these potential negative impacts would have to be monitored and managed. Declining fertility of soils in areas where three crops are grown meant that in some years controlled flooding would need to take place to maintain the inflow of organic sediment and this had to be built into the system design.

It was also realized that the construction of water control works was only part of a much more complex challenge to establish and operate an effective water management system which is sustainable. The engineering works being constructed with AusAID project assistance were only part of a broader complex of works constructed by various agencies from national, provincial and district levels, as well as local small-scale works by farmers. The local institutions with functional responsibility in water management lacked expertise in the design, construction supervision, management and operations of a more comprehensive water control system that was needed to meet the needs of multiple users and be sustainable.

To meet these varying and more complex needs, the project was realigned to focus more on – "strengthening participatory processes and capacity building for planning and management of a water control system that will be socially and environmentally sustainable and that will improve household livelihoods, and assist in alleviating poverty in the local community". The multi-objective approach put forward was one of "benefit maximization rather than cost minimization". This also required strengthening social and environmental monitoring and management systems to ensure social impacts were assessed and livelihood opportunities promoted, and to increase capacity to identify, prepare and implement environmental management plans. Hence it became a multi-faceted project with many disciplines and skills required to a much greater degree than the construction dominated NVN-I.

During Phase I the AMC embarked on an intensive process of consultation with counterpart agencies and local communities to gather ideas and inputs for the Integrated Water Management Plan (IWMP). As explained by the AMC at the time – "Success of the project is dependent upon relationship building, mutual understanding and transparency of purpose and strategy. To achieve this the AMC specialists… accompanied in most instances by the Project Management Board, have held 227 project related meetings including 56 trips to the NVN Island to conduct consultations… Three rounds of commune consultation meetings have been conducted… Round 3 involved 22 meetings attended by 720 people of which 301 were female. These meetings explained the IWMP and the necessary construction works… Other focus group meetings have been held, for example to develop detailed understanding of the special issues of the poorest people who live in the four central communes"[10].

Combined with this consultation process, 7 technical studies were undertaken to feed into the IWMP (including studies on water quality, soil fertility, fisheries, health, transport and hydraulic

[10] AMC Six-monthly Progress Report No.2 for 2002 (February 2003).

modeling) together with a Socio-economic Baseline survey. The hydraulic modeling studies assessed 9 water control design options that were derived by combining infrastructure development scenarios and operating regimes. These options were then evaluated and a preferred option selected. Water management objectives and options, based on the results of the commune surveys and the modeling studies, were then formulated put forward for discussion and agreement. The overall scheme design that emerged from this process had substantial differences from the original design. While that put forward in the PDD was based on the principle of the scheme 'supporting a two crop regime, plus an annual flooding cycle', the design was now geared around a 'three crop cycle with controlled flooding every three years'.

The project and the AMC are to be commended on this very practical approach to conducting stakeholder consultations combined with thorough technical studies that was introduced at an early stage. As noted by the AMC – "exposure to the technique has been an educational experience for many of the participants who had no prior exposure to multi-objective planning processes". The consultative approach undoubtedly got the project started on a good footing, as well as establishing a way of working with the local authorities and local communities that was to be maintained throughout the project. This approach was evidently highly appreciated by the counterpart agencies – this was specifically mentioned to the ICR team as being one of the main 'strengths' and 'lessons' of the project by the Vice Chairman of the Province Peoples' Committee as well as by other staff involved in the project.

The independent review of Phase I conducted by AusAID in November 2002[11] concluded that an appropriate water management option had been determined and the project should proceed to construction and implementation. The ICR team does not question this decision – it was based on a detailed evaluation by an expert team. However, in some senses the review created a more buoyant picture than perhaps was warranted. This can be summarised in three main respects distilled from the Review:

- It was over optimistic in its assessment of 'overall readiness' with respect to resettlement and other project management commitments and tasks assigned to counterpart agencies and maybe confused 'province enthusiasm' with 'actual capability' in this regard.

- It predicted farmers would have no real difficulty paying higher fees for the scheme operation and maintenance – "household income calculations indicate that most farmers can pay…". This is at odds with what the ICR team has heard from various sources as to what may be covered by the water source fee collections. In particular, the calculations made by the review were made in isolation from the wide range of other types of fees and contributions that farm household need to pay.

- The Review was somewhat superficial in its assessment of the proposed scheme management arrangements (confining this, more-or-less, to a 2 page analysis)[12]. At the time, the proposed arrangements were to include oversight by a Water Management Committee and day-to-day running of the scheme by the Irrigation Management Company. The review concluded that – "The proposed arrangement for management of the scheme has been agreed" and that "The combined functions of the WMC and IMC if implemented as planned should prove effective for overall management and day-to-day operation and maintenance services which are responsive to the needs of the beneficiaries…". This may have given a

[11] Independent Project Review Report on Phase I of the NVNWCP-II (December 2002).
[12] Annex IV (pp 25-26) – Independent Project Review Report on Phase I of NVNWCP-II

wrong impression to external observers, given the considerable amount of further work that has actually been required and undertaken by the project to introduced appropriate management and institutional arrangements for the scheme.

4.2 Formulation of the project components and objectives

At this point, it is useful to examine briefly the project objectives and component structure to see to what extent they mirrored the reality of the new and improved design of the NVNWCP-II. This is useful because the objectives (and specified outputs) should provide the bench-mark on which the ICR assesses performance and quality.

Table 1. Component structure of the project

Design Document (December 2000)	Subsidiary Arrangement (end 2001)	AMC Scope of Services (end 2001)	Agreed structure (2004 onwards)
C1: Project Management	C1: Project Management	C1: Project Management	C1: Project Management
C2: Engineering design and construction management	C2: Construction planning	C2: Institutional development	C2: Institutional development
C3: Water management and system wide operations and maintenance	C3: Construction management	C3: Project planning	C3: Project planning
C4: Environmental and social impact management	C4: Water management and system wide operations and maintenance	C4: Engineering design and construction management	C4: Engineering design and construction management
	C5: Environmental and social impact management	C5: Integrated Water Management Plan implementation	C5: Economic and social benefits through Integrated Water Management Plan implementation

Initially, there were significant differences in formulation between the PDD, the Subsidiary Arrangement with the GOV, and the Scope of Services assigned to the AMC (see Annex 8). While the PDD gave 4 components (project management; engineering design and construction management; water management and system wide O&M; and environmental and social impact management), in both latter documents this is increased to 5 components. However, there are big differences between the 5 components as described in the Subsidiary Arrangement (which have a continued focus on construction planning and construction management) and those in the AMC's Scope of Services (in which a new component on institutional development is first introduced). It appears remarkable that these differences were not noticed, given that these two documents were signed within one month of each other.

This issue was highlighted in progress reports of the AMC, in which it was recognized the Subsidiary Arrangement had been drafted prior to the signing date and reflected the earlier project design – "However, the finalised contract between AusAID and the AMC incorporated major changes to the detail and structure of the project components from those described in the design document, and hence also those described in the SA… This is an area of particular confusion to the Project Management Board…"[13]. The AMC was advocating an early revision of the Subsidiary Arrangement to resolve this issue; however, the amendment was not signed until August 2004 due primarily to the need to resolve parallel counterpart funding constraints.

[13] AMC Six-monthly Progress Report No.3 for 2003 (July 2003).

The detailed wording of the component objectives is interesting because it reflects the evolving discussion taking place around orientation of the project. This is particularly with respect to the environmental, social and economic development sub-components. While in earlier documents the wording is more (negatively) associated with "identifying" and "mitigating" any environmental and social problems and impacts associated with the scheme, later documents refer more positively to "environmental management" and "ensuring the poor can participate in project benefits". As noted by the AMC – "It was agreed in the 2003-2004 Annual Plan that the project purpose be refined to emphasize the benefits that might arise from improved water control, so that water management is recognized as a means to the end of poverty alleviation"[14].

In retrospect, this discussion around the component structure and objectives (and inter-alia about the Project Log-frame) can be assessed in different ways. On the one hand, it is valuable the discussion was taking place to clarify and mutually agree on the objectives; and the revised formulation of project components (from 2004 onwards) represents an acceptable solution. However, one main weakness of the Log-frame it that is does not clearly define the expected achievements of the project – particularly in terms of the expected institutional and socio-economic 'outcomes' (only 'outputs' are given for each component).

As it turns out, the Activity Completion Report presents a much simpler and easier-to-understand structure for what the project has actually done. Under the overall Integrated Water Management Plan (emerging from Phase I) the project has progressed in three main work areas: (i) establishing the water control management system; (ii) implementation of the construction plan; and (iii) implementation of the Environment and Social Management Fund (and associated Economic Development Plan activities). In the following analysis we will adopt this simpler presentation of the project components and activities.

4. Early implementation period (2002 to 2004)

5.1 Initiating the Environmental and Social Management Fund

The ESMF was designed in 2002 to 2003 and began in the second half of 2003. The objectives and guidelines for use the fund were detailed in an ESMF Procedures Manual, based on the broad description given in the PDD and more specifically on findings from the Socio-Economic Baseline in 2002. The overall objective was to – "…maximize the potential for social, economic and environmental improvements in the NVNWCP-II and to provide resources and capacity building to GOV agencies responsible for ensuring project benefits"[15]. The Fund was controlled by an inter-agency ESMF Board (under DARD) and the basic operating principle is that local communities and province and district agencies make 'applications' for obtaining support for sub-projects according to the guidelines and as approved by the ESMF Board. The activities of the fund have been directed towards three sectors, as shown in Table 2 below.

The ESMF documents refer to the underlying strategy of the Fund that includes: (i) provision of a comprehensive, integrated package of interventions in each sector; (ii) strengthening local programs and identifying and introducing best-practice approaches and models; (iii) garnering effective political support for new approaches at each administrative level through the process of needs analysis and proposal preparation; and (iv) participatory review and assessment workshops with all stakeholders to promote adoption of new approaches and methodologies. An

[14] AMC Six-monthly Progress Report No.3 for 2003 (July 2003).
[15] Final Report on the Environmental and Social Management Fund (August 2006).

overall evaluation of the ESMF is given in later sections. This section concentrates on the design aspects and early progress of the Fund.

In practice, some of the ESMF sub-projects were the first substantive activities introduced on the ground in the project communes during 2004. This was particularly under Objectives 1 & 2 including the household financial management, literacy and IEC training, water quality monitoring, introduction of the micro-credit facility, and some of the demonstration model. It is evident that this positively re-enforced the earlier contacts made through the consultations on the IWMP as well as extending community facilitation skills to a wider set of agencies.

Table 2. ESMF objectives and sub-projects

Objective 1: to improve the capacity and effectiveness of the local Hunger Eradication and Poverty Reduction Program (NTP-HEPR) delivery of services to the poor
• Household financial management training (including business plan development) • Literacy and numeracy training for the poor (adopting the ActionAID REFLECT approach) • Funding Micro-credit programs for the poor (through Women's Union and Social Policy Bank) • Technical skills training for the poor (in various topics) • On-the-job training and mentoring for local staff (HEPR agencies)
Objective 2: to develop an environmental improvement ethic together with ownership of environmental problems in the in the NVNWCP-II area
• Information, Education and Communication (IEC) skills training for local agencies • Establishment of water quality monitoring system (through DONRE) • Schools hygiene promotion program (through the Health and Education Departments) • Construction of sanitation facilities in schools, commune markets and other sites • Revolving loans scheme for household water-sealed toilets and sanitation (poor households) • Training of local masons and small contractors for toilet construction • Establishment and support for community environmental monitoring and management groups • Planning and implementation support for improved solid waste collection and management systems in communes and hamlets
Objective 3: to prepare farmers to take advantage of increased income opportunities in the NVNWCP-II area
• Strengthening accounting capacity of cooperatives • Demonstration models of the '3 Increase and 3 Decrease' program • Various technical training courses on crop diversification • Support for environmentally sound production models including clean fish rearing, biogas from pig waste and composting of organic waste • Market development and marketing.

Compared to the original ESMF plan, however, some activities were soon behind schedule. As noted by the AMC – "The delayed progress in construction works and water management had a negative impact on the ESMF economic component; it prevented the (early) mobilization of a farm extension program designed to help farmers introduce modern technologies to improve productivity. Fortunately, the strong progress with social sub-projects offset much of this impact". The AMC also noted that a main cause of early delays in implementation was the – "…unexpected length of time taken for both proposal preparation and for approval of these proposals by the ESMF Board. DARD had no previous experience in ESMF type activities which require a highly participative and integrated approach…. The project set out to address

this constraint and it took additional time to put in place the working mechanisms"[16] and that communes in particular "…had difficulties in completing proposals and needed assistance in particular in formulating objectives and monitoring indictors".

5.2 Construction plan implementation

The construction component was structured as a 'partnership' approach between AusAID and An Giang PPC. The AusAID project has assisted with evaluating the overall water management scheme, defining the rationale of possible construction components, financing sluice construction and rehabilitation, and a wide range of project management training. The province contributes towards the cost of the sluices and other works as specified, and takes full responsibility for undertaking resettlement and for funding and completing the construction of the perimeter ring-dyke. The AusAID funds for construction are managed through a Civil Works Trust Fund with the AMC and PMB as co-signatories. The technical design and construction works were to be undertaken by appropriate local agencies and companies (following GOV procurement practices and procedures) but the AMC was to have a major input to the efficiency and quality of these processes (in terms of AusAID's requirement for openness, transparency and effectiveness) as defined in the Scope of Services of the AMC.

The Construction Plan was submitted in March 2003. However, from the outset the project ran into considerable difficulties and delays in implementing the plan. The first major construction works were to be the 5 rehabilitation sluices for which the Feasibility Study had already been approved by An Giang PPC at the beginning of 2003. However, in October 2003, An Giang PPC informed AusAID that funds had been withdrawn awaiting central government funding. To fill this funding gap and allow work to commence on the 5 rehabilitation sluices, in November 2003 AusAID approved a temporary loan to the province of AU$ 650,000, following which the first sluice construction contract was signed in May 2004. The Feasibility Study for the new sluice construction works was approved in February 2004 (one year after the Construction Plan).

There were many inter-locking reasons for the construction delays and difficulties; these are listed in Annex 9. Only some of these reasons were within the capacity or mandate of the AMC to influence. Some were associated with the broader decentralization reforms of the GOV that were taking effect in the early part of the decade. These shifted the responsibility for investment project management and for mobilising counterpart funds to the province authorities (whereas the original project had been under MARD). Initially the province had great difficulty in securing the required funds which impacted on both counterpart funding for the project-supported sluice construction as well as the construction schedule for the perimeter ring-dyke; it was not until mid-2004 that this counterpart funding issue was resolved. With the decentralisation to provincial control it also appears that confusion and uncertainty arose as to what the province was entitled to do in order to adjust national policies to improve efficiency and to adapt them to local circumstances and the specific requirements of the NVNWCP-II.

The evolutionary nature of the policy setting and the perceived lack of flexibility in existing national and provincial guidelines and procedures for procurement, design and construction contrived to add delays to the construction schedule. This is particularly as the flood season meant that only 6 months per year were available for construction – somewhat small delays in the procurement process had the effect of pushing back construction to the following season.

[16] Similar experience has been gained from a range of other application-based funding instruments in Viet Nam with respect to the time taken to establish the selection criteria and management arrangements.

Delays in the resettlement and compensation process for land acquisition around the construction sites compounded this situation. According to the Subsidiary Arrangement between AusAID and An Giang PPC, the Resettlement Action Plans (RAP) had to meet higher standards of equity than previously applied. The principles and procedures for this were fully elaborated and agreed during project preparation; and this should be considered as a positive element of the project which has had positive outcomes. In practice, until the design had been established for each construction site, specific resettlement proposals could not be developed and negotiated. Following this, as with many other construction schemes in Vietnam, the resettlement and compensation process was in itself time-consuming to negotiate and agree with the households and communities concerned and the stricter procedures adderd to these delays.

The project was required in its early stages (under Output 2.1 of the AMC's Scope of Services) to conduct a comprehensive policy and institutional review, presumably to provide, in part, a perspective as to likely bottlenecks. This appeared in the early risk management plans as a way to overcome any deficiencies in current policies, institutions and capacities. This presents two linked questions:

- Was this policy analysis extensive enough to develop an understanding of the possible constraints that could impact on the construction plan and schedule?
- Or was it simply not possible to see where greater flexibility or adjustment was needed until later when the actual difficulties were encountered?

Reviews of current policies should go beyond just a listing of policies and content – they should explore likely risks and develop an 'issues management' response so that risks are minimised or removed. It is not clear to the ICR team whether this policy review was taken to these required depths of analysis. It is clear, however, that this situation placed a lot of emphasis on the AMC's ability to read emerging situations and project blockages, and to be able to facilitate these efficiently through the project coordination process.

5.3 Emerging institutional arrangements for the water management system

The project design placed a strong emphasis on building the capacity of local agencies at province level and below, such that the needs of multiple users could be incorporated into the on-going design, planning and subsequent operation and maintenance of the integrated water management system. Although not explicitly stated, this was an invitation to the AMC to follow a highly participative approach such that farmers and local communities were constantly consulted but in a way that allowed the local government administrations to work through emerging issues and to reach mutually agreed solutions.

As a first step during 2003 the project undertook a detailed review of the existing institutional arrangements for water management on the NVN Island[17]. This review came to the conclusion that a capacity building approach that increased water management skills across all relevant agencies but basically maintained the existing regime of 'state management of water resources' within the existing administrative system would not achieve the project's purpose of "…a coordinated water management model that will effectively manage environmental and social change…". Principally, the AMC considered that:

- The management arrangements were highly fragmented. Changes were needed that would base 'management units' on the hydraulically determined drainage boundaries (i.e.

[17] As described in a note on the NVN Water Management System prepared by the O&M Advisor (August 2007).

compartments) within the NVN island rather than relying, as then existed, on the administration boundaries at the district/commune levels.

- Formal mechanisms for soliciting and channeling customer feedback were absent. Farmers and local communities had no coordinated voice within such areas (with respect to either overall scheme management or local management issues) and there was a tendency for communes to act individually despite the advantages and needs of a coordinated approach.

- Incentives for good performance by the scheme operator were lacking and the use of customer fees was not transparent. There was a need to move towards engaging private rather than public sector agencies in services delivery to avoid conflict of interest between the 'regulator' and 'service providers'.

- Unless new approaches were developed for water management and environmental awareness through a highly participative process (allowing the communities and agencies to work through issues and come to agreed positions) then sustainable operations of the scheme, supported by fair and equitable budgeting and financial frameworks, would not occur.

With the go-ahead from the province leadership - from early 2004 onwards - the project set in motion an ambitious consultation process for exploring what might be the most appropriate new arrangements (see Annex 9). This involved establishing a Policy Advisory Board (PAB) that was intended to guide the process, and setting-up three Working Groups to investigate specific questions. These questions included:

- What might be the changed cropping patterns in the future due to the new water management system?
- Given the changed cropping pattern, what options for water services are required to meet these agricultural needs?
- What institutional structure would be required to meet these water service needs, and how will these new water service providers both be organised and funded?

Province and district water management workshops where held in mid-2004 to report on the Working Group results, out of which the future institutional and management arrangements for the scheme began to emerge. These steps were undoubtedly an important 'break-through' and turning-point for the project. As will be explained in later sections, the system that began to emerge has a modern set of institutional arrangements (although there is still much work to make-operational and clarify these arrangements). These will give the farming communities a major say in how the scheme is managed, and separate out the role of the 'owner' of the scheme from the service providers which will maintain and operate the major elements on contract basis.

The innovative nature of this approach needs to be considered in light of the fact that at central level the Ministry of Agriculture and Rural Development (MARD) was at this time (in 2004) only just beginning to put in place a framework for Participatory Irrigation Management (PIM), such that no official direction was available from central level on which to base the provincial-led policy change[18]. The relevance of the project approach was, however, clear with respect to the general orientation and directions set out by MARD in the Framework Strategy:

> "Local authorities should work out institutional arrangements for irrigation and drainage systems at different levels: for commune or inter-commune scale structures, it should

[18] MARD (December 2004) Framework Strategy on Development of Participatory Irrigation Management in Vietnam.

include water user organizations, preferably based on hydraulic boundaries, with full legal eligibility and named unconditionally. This will be an organization with financial autonomy… For large-scale irrigation and drainage systems, headworks, main canals and complex structures, these will continue to be managed by IDMCs [Irrigation and Drainage Management Companies]. Branch canals and structures on canals within commune or inter-communes will be transferred to water user organizations after having established the appropriate conditions. Decentralization principles will be applied…Regulations for system transfer from IDMCs to water user organizations will be required to ensure improved system performance after the transfer."

Moreover, while the Framework Strategy of MARD recognized that good models for PIM had been tested through a number of donor and NGO supported projects, these were mainly for small-scale systems (outside irrigation systems managed by the IDMCs), but that – "When the projects finished, the PIM models disappeared. Local authorities at different levels have not paid much attention to this issue, therefore, PIM models have normally failed to achieve expected outcomes". It goes on to note that for larger-scale systems (that may cover districts or provinces) little progress had been made in introducing PIM approaches. The innovative nature of the NVNWCP-II lies in both the scale at which it has attempted to introduce PIM as well as institutional integration with the broader water control and scheme management arrangements.

5.4 Stock-take of project progress

In May 2004 the first comprehensive Technical Assistance Group (TAG) mission was made to the project since the independent review of Phase I in November 2002 (although visits by individual TAG members had been made in the intervening period)[19]. The report from this TAG mission made a fairly strong assessment of the situation with respect to the delays in project implementation, particularly of the Construction Plan, and concluded that – "…the project is beset with serious problems that if not corrected quickly will likely result in project failure"[20].

The primary problem was the shortage of counterpart funding provided by the province, combined with a long delay in approving the Feasibility Study for Phase II construction works (approved in February 2004 a year after the Construction Plan had been submitted) without which the procurement for design and construction could not move forward. A second set of problems were the substantial delays in processing the Resettlement Action Plans, construction design and tender approvals. The TAG report noted that the construction schedule had become extremely tight and ambitious since – "There has been no significant construction under the project in the two dry seasons since Phase II began and just two dry seasons remain before closure…". The report also indicated that – "The engineering resources available to the project may now be insufficient for timely completion" but that "No problems can be seen at this stage with the standards of engineering design or construction works".

A third major issue raised by the TAG was that because the Amendment to the Subsidiary Arrangement, which had been submitted by AusAID to the An Gaing PPC, had yet to be approved by the province, in effect the project – "…is being implemented without the operational agreements necessary for efficient and effective implementation". Through consultation with the partners, the TAG report proposed a schedule for resolution of the counterpart funding and other issues and signing of the SA Amendment, with the proviso that if,

[19] In effect, this TAG mission in 2004 served as a mid-term stock take of the project. A separate Mid-Term Review was not undertaken, presumably because an in-depth review of Phase I had been conducted earlier.
[20] TAG Mission Report on NVNWCP-II Implementation phase (June 2004).

by July 2004 – "…progress is judged unsatisfactory the mission recommends that AusAID review its options for withdrawal from the Project".

While this TAG report was implicitly critical of the long time taken by the province authorities to resolve these issues, it also suggested that the AMC – "…has performed well considering their frustrations and efforts trying to overcome the difficult problems impacting the project". With regard to support provided by AusAID, the TAG report was somewhat more straight-forward in wording. While it was recognized that AusAID Post – "…has been very active supporting the AMC, the PPC and PMB to address these constraints" a number of systemic issue were raised. Firstly, it was suggested that the on-going devolution of responsibilities from AusAID headquarters to the country Post (in Ho Chi Minh City) had resulted in a marked increase in Post staff responsibilities and workloads. However, commensurate relief through additional staffing had not yet been provided. This posed constraints on regular and effective project oversight. Secondly, it was suggested that visits by the TAG were not as frequent and well integrated as they could be to assure quality implementation and effective monitoring. This was most evident during the critical start-up period when significant delays and difficulties need to be ironed-out.

At the same time, the TAG report identified areas in which the project had made significant and good progress. In particular, these included the environmental and social sub-projects under the ESMF as well as in capacity building and training for counterpart agencies. The report highlights the advances made in environmental management and awareness. These included: community-based environmental monitoring; strengthening the capacities of province analytical laboratories; and establishing and training the Environmental Management Group under DARD etc.). The TAG report notes the work put into developing the Environmental Management System (EMS), but argued that this was unduly complex and would need to be simplified to be incorporated into province practice and to cover the large number of Environmental Impact Assessments required.

Evidently, the events around this time (including the TAG mission itself) did much to alert all partners to the urgent actions needed to resolve the problems faced by the project. Firstly, the Amendment to the Subsidiary Arrangement was signed soon after in August 2004. This included commitment by the An Giang PPC to secure and make-available the required counterpart funding, which has since been forthcoming. Secondly, in 2005 an agreement was reached by the Project Coordination Committee to allow greater flexibility in the procurement procedures to expedite the construction process. This included the packaging of works to make them more attractive to contractors. Thirdly, steps were taken to increase the regularity and effectiveness of the project coordination and external monitoring arrangements. This included more regular PCC meetings to allow quicker resolution of emerging issues, as well as more regular TAG visits for the remaining project period. These actions helped to turn-around the project towards quicker and more effective implementation.

Given the urgency of these issues, it is perhaps not surprising that the TAG mission in May 2004 did not fully pick-up on the significance of the new institutional arrangements for the water management system that were being opened-up and explored by the project in the same period. The TAG report merely indicated that – "…participatory processes are being used to involve farm communities in scheme management decisions and farmers have begun to form coordinating groups within irrigation compartments…". Although this was covered in later TAG mission reports, as will be proposed in the following sections, this process was to increase the overall ambition level of the project as well as placing greater demands on the schedule and requirements for completion and testing the system.

5. Project consolidation and extension phase (2005 to 2007)

From the latter part of 2004 onwards the speed of project implementation picked up across all components. Even so, by early 2006 it had became clear the construction works and the water management regime would not be completed by the planned closure date. By July 2006 overall construction progress had still only reached 35% on the AusAID funded works. The delays in this period were less to do with procurement bottlenecks, but rather implementation difficulties, including: the continuing slow-pace of resettlement and compensation agreements and payments; slow construction by weak contractors some of whom became insolvent; and issues relating to construction supervision and quality control amongst others.

Accordingly, the 10th Project Coordination Committee meeting in March 2006 tabled and agreed in-principle a proposal for a one-year extension to the project. This was endorsed by a TAG mission in August 2006 and subsequently approved[21]. The TAG mission considered that a one-year extension would be sufficient to complete a majority of the sluices under project funding (which has turned out to be the case) even though assurances by the province that the perimeter ring-dyke would also be complete within this period have not transpired. The TAG mission recommended that an extension to the ESMF funding would allow for lesson-learning as well as scaling-up the most successful sub-project activities. It noted the advances made in the institutional and management arrangements for the scheme, and recommended that the extension would allow for a strengthening of these arrangements. Follow-up support for environmental management activities was also required to help put in place sustainable environmental management and monitoring system for the NVN Scheme. Moreover, there was sufficient funding available to cover these activities in the extension period without additional resources.

The ICR fully concurs with this decision to extend the project for a final year. This has allowed the AMC and counterpart agencies to reach a point of completion and handover of responsibilities that would certainly not have been possible or conducive by September 2006. In this section, we summarize these main consolidation efforts with respect to the ESMF and environmental monitoring, the institutional arrangements and construction outputs, as this is an essential prelude to the overall analysis of the end-of-project situation and sustainability.

6.1 Lesson learning and scaling-up successful ESMF activities

In August 2006 the AMC reported on results from the first phase of the ESMF (from 2003 to 2006)[22]. By this time the Fund had expended less than half that originally intended: around AU$ 400,000 (including assistant personnel costs, but not the substantial amount of short-term TA inputs under the AMC budget). Even so, the outputs of the ESMF in terms of the number of beneficiaries and people trained were quite substantial. The AMC report highlighted the successful targeting of poor communities and poor households, and of women in particular, and the cost-effectiveness of the ESMF. By that time approximately 4,000 people (45% women) had been involved in training and workshops, while around 13,000 households and individuals from the 22 project communes had been directly involved in the various activities. By the end of the project in 2007, there have been over 6,000 trainees (36% women) under the combined ESMF and Economic Development Strategy (EDS) training program, and over 20,000 beneficiaries of the ESMF (compared to an original target of around 15,500). A summary of the training outputs of the ESMF is given in Annex 11.

[21] TAG Mission Report on NVNWCP-II Implementation phase (September 2006).
[22] Final Report on the Environmental and Social Management Fund (August 2006).

In the extension period from November 2006 to September 2007, the project undertook a review of the ESMF with a view to scaling-up the more successful activities and promoting their integration with local government systems and services. It was found that some activities – even though they had been well received by the beneficiaries – were not conducive to scaling-up. For example, the functional literacy training (which adopted the REFLECT approach of ActionAID) was generally considered to have been a success, but was difficult to apply more widely because it does not conform to the pedagogic approach or curricula for adult literacy training of the Department of Education and Training (DOET). The actual number of trainees was limited (only around 300 people) which suggests that a more substantial program of training and advocacy would have been necessary to influence the strategy and content of the regular DOET program.

The scope for scaling-up other ESMF activities has been greater. It is beyond the scope of this ICR to assess all the ESMF sub-projects (these will be reported on by the AMC in due course), but three examples can be given of the more successful activities:

- The household financial management training courses (which targeted around 1,200 trainees in the first period including 54% women) have been successfully scaled-up through two main routes: (i) extending this service to 11 districts throughout the province through training-of-trainers courses for district staff (including 330 trainees from the Women's Union, Farmers' Association, district Agriculture and Rural Development Sections and some commune HEPR staff); and (ii) integrating this module in regular vocational training courses provided by the An Giang Province Vocational Training College.

- The program of revolving loans for construction of water-sealed toilets for poor households, combined with training local masons to construct the toilets, has also proved successful, and has been steadily expanded in the project area as well as to Chau Phu District. The Socio-economic Baseline conducted in 2003 accurately identified a growing demand for improved household sanitation, particularly amongst women, as household incomes and the number of people living in a flood-free environment increased. The project reports that the proportion of households in Phu Tan District with water-sealed toilets rose from 5% in 2001, 32% in 2004 to 42% in 2006. The strategy for targeting project financial and material assistance to the poorest households, combined with the efforts made towards sustainability through paying close attention to effective management of the revolving funds and increasing the capacity of local masons has been essential to the success of this activity.

- Many local stakeholders consulted by the ICR team gave a positive assessment of the improvements in environmental awareness and the environmental situation on the island. Improvements in the systems of solid waste collection through a cost-recovery approach have been combined the promotion of behavioral change – it is reported that around 50% of households in Phu Tan District are now paying regular waste collection fees, and there has been a noticeable decrease in the amount of waste deposited in the canals. The Department for Environment and Natural Resources (DONRE) is now undertaking regular Water Quality Monitoring with the local budget, for which technical management skills were enhanced by the project. Even so, it can be said that the environmental challenges faced by residents of the island and the local authorities are still significant and growing, as in all parts of the Mekong Delta; and this will require continued vigilance and introduction of modern systems of waste disposal and enforcement of environmental regulations.

6.2 Environmental Management Strategy

The project incorporated a strong environmental component that sought to create an Environmental Management Strategy (EMS) that would cover all elements of the project and create an on-going system and ethic for accountable management of the NVN natural resources. In many aspects of environmental and water resources policy the project has been developing locally-adapted solutions in the absence of a fully formulated legislative or regulatory framework at national level. Over the last decade, environmental and water resources policies in Viet Nam have been subject to an on-going process of review and revision. For example, the revised Water Law of the late 1990's identified a wide range of new approaches and setting-up a National Water Resources Committee in 2000 to guide reform[23]. However, it was not until around 2004 that the NWRC developed a strategic agenda for water resources reform and 2006 before a National Strategy on Water Resources (to 2020) was approved that fully identifies the direction for water efficiencies and for sustainable water use and management regimes[24].

In the past, the government agencies assigned responsibility for environmental monitoring have concentrated on monitoring according to technical standards only, rather than conducting compliance monitoring with powers of enforcement. While some form of environmental assessment has always been required, it is only recently that the regulations and standards for Environmental Impact Assessment (EIA) have been more consistently and rigorously applied. DARD and other agencies which are 'project owners' for water resources projects have traditionally not been required to accept responsibility for environmental compliance in either construction or operations of schemes. The NVNWCP-II has therefore had to increase capacity in EIA as well as setting-up the EMS that will guide the scheme in future.

The main steps that were taken towards this included:

- Setting up a framework document for the EMS (approved by AusAID in October 2004);
- Preparation of an EIA for the construction works under the project (endorsed by An Giang PPC in February 2005);
- Establishing an inter-agency Environmental Management Group (EMG) under DARD to oversee the process of preparing the strategy (established in August 2005);
- Preparation of a document detailing the EMS by the Environmental Management Group (submitted in June 2006);
- A formal province decision outlining the environmental management responsibilities with respect to the North Vam Nao scheme (through Decision No.2535 of the Province People's Committee in December 2006).

Decision No.2535 comprehensively defines the roles, responsibilities and reporting requirements of all relevant agencies at all levels. It creates a much more accountable system than previously existed and closely aligns with the project goal and purpose of effectively managing the environment as part of the sustainable management of NVN water control system as a whole. As such, this is an important element of the overall institutional arrangements for the scheme.

[23] Decision No.67/2000/QD-TTg (dated 15 June 2000) of the Prime Minister on the Establishment of the National Water Resources Council.
[24] Decision No.81/2006/QD-TTG (dated 14 April 2006) of the Prime Minister approving the National Strategy on Water Resources to 2020.

6.3 Progress towards consolidation of the institutional arrangements

As indicated at several points in this ICR, the institutional model for the NVN scheme management now being implemented is new. And 'new' not only to the province but also to Viet Nam. The province authorities and DARD agreed to move toward these new arrangements but pointed out - from the earliest stages - that this would not be an easy undertaking. Water management arrangements that existed at the beginning of the Project were complex. Any change would affect many stakeholders.

The AMC and DARD therefore opted for a highly participative approach that had four main stages: (Stage 1) definition of principles; (Stage 2) design of all elements; (Stage 3) putting the elements in place; and (Stage 4) trial-run of the management system (ideally as part of the physical trial of the system once all sluices and dykes are completed)[25]. Notwithstanding the predictable delays in following such a participative approach – with its very strong focus on obtaining local ownership - the project has achieved a range of impressive achievements.

In particular, an important set of province and district regulations have been issued that define the structure and functions of the Scheme Management Board (SMB), the Irrigation Management Centre under DARD as the service provider, and the Compartment Management Boards (CMB) amongst other decisions (see Annex 10). These arrangements are 'fragile' as they are only now being introduced on the ground, the operating protocols need to be fully developed and consolidated and these groups trained to fulfil their new roles and responsibilities. As of September 2007, Stages 1 and 2 have been completed and work is part way through for Stage 3.

There are clear reasons for these elements needing more time than others to be fully in place. So far, three 'pilot' CMBs have been established, using what are termed as 'temporary regulations'. A further 21 CMBs remain to be formed and the project has undertaken a study (as one of the final activities before closure), to review how these three pilots are performing and what lessons might be learnt. Introducing the CMB model has implications for power structures at commune level and cross-commune coordination; whereas there are 24 water management compartments, these are superimposed on 22 administrative communes and many of the compartments span two or more communes. An important discussion is therefore now taking place regarding the nature of the decision-making powers and responsibilities that should be afforded to the CMBs.

At present the CMBs are defined primarily as 'social organizations' – with responsibility for 'representation' (of the local community on the Scheme Management Board and for management of water resources within the compartment), 'supervision' (of local construction and maintenance works and water supply services provided by cooperatives on contract to the commune authorities), and 'coordination' (between communes and villages on the day-to-day scheduling and management of the water supply). One future option that has been tabled is that the CMBs would also be given a more specific economic management role (for instance, with powers to contract services). However, this is still under discussion, and it may be that the longer-term value of the CMBs will lie in strengthening their powers of representation and supervision. While transparent methods have been used for the election of local people onto the CMBs, it is notable that all members of the 3 pilot CMBs are male, and it will need to be ensured the boards are representative of the entire community including both men and women.

Secondly, further time is required for the introduction of effective contract management arrangements for scheme operations and maintenance with modern provisions for performance

[25] Note on the NVN Water management System prepared by the O&M Advisor (August 2007).

assessment and quality control. The leaders of the Department of Planning and Investment (DPI), the Department of Finance (DOF) and DARD recognize that moving the service provider (now the Irrigation Management Centre under DARD) to a more 'privatized' model would be an attractive way forward, but that this will need further discussion and consensus-building.

However, it became apparent during the ICR discussions that there remains a lot of uncertainty as to all these scheme management arrangements, particularly at the district, commune and CMB levels. This raises the question as to whether the extent and magnitude of these institutional changes, and the related capacity building needs, were fully understood when the project moved (around mid-2003) away from simply strengthening existing institutions, to the broader and more ambitious task of creating a whole new set of arrangements? This is turn raises some important secondary questions:

- Did the AMC sufficiently anticipate the ramifications and risks associated with this more ambitious approach?
- Did the AMC effectively communicate these to a wider audience including AusAID?
- Did the TAG missions quickly enough appreciate the scale of these changes and that the new arrangements would not be in place at project end?
- Should AusAID have foreseen possible impacts on project outcomes and achievements and was this affected by the devolution of responsibilities to the country Post?
- Or has the project achieved all that was possible in the light of these complexities and the fragility of the new institutions that will need to be further developed by the province?

Annex 2. Project Log-frame

Project goal: To assist An Giang Province establish and operate an effective water management system in North Vam Nao, which is socially and environmentally sustainable and benefits the local economy by assisting in the alleviation of poverty.

Project purpose: To demonstrate the economic and social benefits to the Vam Nao community, in particular environmental improvement and poverty alleviation, through a coordinated approach to water and land management (*revised AP 2003–04).*

	Project description	Verifiable indicators	Means of verification
1	COMPONENT 1 - PROJECT MANAGEMENT		
	To establish efficient and effective project management, planning and monitoring and reporting systems to ensure the achievement of the project purpose and goal.	• planning, management, monitoring and reporting systems functioning • project strategies developed to guide the implementation of the project • number of planning workshops, attendance (M/F) • minutes of PMB meetings (number of meetings, attendance (M/F) and documenting decision making process) • satisfaction of GOV with AMC performance • planned/actual achievement of outputs • endorsement of project strategies.	• Phase I Completion Report • annual project reviews • counterpart self surveys • project plans and reports • agency self assessments.
	Output		
1.1	Project management systems established	• financial management system functioning • office systems including asset register, report distribution, data storage procedures established • offices established and operational and equipment, vehicles procured.	• office procedures manual • assets register • procurement records • progress reports.

	Project description	Verifiable indicators	Means of verification
1.2	Project strategies developed and implemented.	• socio-economic baseline data compiled and analysed during the project • Communication Plan prepared. • project strategies prepared and endorsed • special purpose surveys identified and undertaken.	• Communications Plan • gender strategy/affirmative action guidelines • community consultative strategy. • Quality Assurance Manual • M&E Plan • PCC minutes • agency self assessments • community rapid appraisals.
1.3	Project reporting and meeting coordination.	• number of PCC, project steering committee and water • management committee meetings [attendance (M/F), purpose] • Project Inception Report completed and endorsed by PCC.	• minutes of PCC, PMB and WMC • Project Inception Report • Project Progress Reports • Project Consultation Database.
2	COMPONENT 2 - INSTITUTIONAL DEVELOPMENT		
	To co-ordinate all project activities such that they lead to institutionalising in a range of line agencies in An Giang Province, an acceptance of the benefits and principles of integrated water management, namely: extensive stakeholder consultation, decisions based on good data, and equitable outcomes that do not compromise vital ecosystems or the socially disadvantaged.	• key local agencies demonstrating commitment, acceptance and institutionalise the benefits and principles of integrated water management • regular coordinating meetings • community consultative process endorsed • IWMP endorsed by PPC and PCC • assessments through counterpart self assessments and community rapid appraisals.	• IWMP • project training plan • minutes of PMB meetings PCC minutes • agency self assessments • community rapid appraisals • Stage 1 Completion Report • Final Completion Report.

	Project description	Verifiable indicators	Means of verification
	Output		
2.1	Local water management institutions operational capacity improved.	• roles and responsibilities for analysed, agencies for capacity building identified • project co-ordination needs identified • TNA and project training plan, incorporating design and construction training plan, • prepared and training undertaken • number and percentage (M/F) of provincial agency staff trained in system planning, management, coordination, engineering, monitoring and evaluation, financial management and O&M • percentage of staff trained assessing training as useful against agreed rating scale.	• report on Institutional Review and analysis • TNA and training plan • Project Progress Reports • project training and consultative databases.
3	COMPONENT 3 - PROJECT PLANNING		
	To undertake studies, collect and analyse data in order to produce an integrated water management plan, from which will also be produced a construction plan for flood mitigation purposes.	• data, studies and analysis completed and used to produce an IWMP and a construction • degree of agency and community consultation [number, type, purpose, attendance (M/F)] • endorsement of specialist sub-studies' findings • endorsement of IWMP and Construction Plan by PCC • endorsement of resettlement action plan.	• specialist sub-study reports • IWMP • construction plan • resettlement action plan • agency self assessments • community rapid appraisals.
	Output		
3.1	IWMP and associated modelling	• specialist sub-studies conducted and used to optimise operation of proposed IWM system • study findings incorporated into IWMP and Construction Plan • number of trainees (M/F) in MIKE 11 and software transferred to selected agency • degree of agency and community consultation [number, type, purpose, attendance (M/F)].	• TORs for specialist sub-studies • studies reports • modelling study tour report • IWMP • reports on workshops and participatory meetings, project consultation database • agency self assessments • community rapid appraisals.
3.2	Resettlement action plans developed and implemented	• review of resettlement training completed • resettlement action plans finalised and endorsed PCC • resettlement specialist or agency engaged and support provided.	• report on resettlement training • final resettlement action plan • translated resettlement reports • specialist monitoring reports.
3.3	Environmental management plans developed	• EMP1, including EIA, completed and endorsed that	• Environmental Management Plan 1

	Project description	Verifiable indicators	Means of verification
		identifies mitigating measures to address environmental impact of construction and operations • EMP2 completed and endorsed • site-specific manuals prepared, distributed and used.	• Environmental Management Plan 2 • site specific environmental management plans and manuals • annual review of EMP procedures.
3.4	Construction Plan developed	• Draft Construction Plan prepared (incorporating IWMP, community consultation, modelling studies, resettlement and EMP1) • Final Construction Plan prepared and endorsed by PCC.	• Draft Construction Plan • Records of agency and community consultation • Final Construction Plan • PCC minutes.
4	COMPONENT 4 – ENGINEERING DESIGN AND CONSTRUCTION MANAGEMENT		
	To improve existing systems by which cost effective, fit-for-purpose engineering designs are produced, by which tenders are let to competent contractors, and by which construction is managed to result in facilities that both meet purpose and specification.	• systems and procedures for training, design preparation, and review and approval processes developed, endorsed and implemented • degree of agency and community consultation [number type, purpose, attendance (M/F)] including training workshops and consultative meetings • construction of culverts, sluices, dykes and bridges to schedule and specified standard (quality).	• reports on systems and processes • construction and capital works plan • community consultation reports • agency self assessments • community rapid appraisals.
	Output		
4.1	Training systems prepared and training conducted and training evaluated.	• TNA completed and training plan as per Output 2.1 • number and percentage (M/F) of staff trained to undertake design and construction functions required for water management and flood • number and percentage (M/F) of staff trained in contract management and site supervision • number and percentage (M/F) of staff trained in O&M procedures including handover and warranty period processes for culverts and sluices • percentage of staff trained assessing training as useful against agreed rating scale • training system in place.	• training procedure manual/system • training records and training evaluation reports.

	Project description	Verifiable indicators	Means of verification
4.2	Designs prepared, reviewed and approved.	• PCC and PMB approval of design preparation process • design companies/institutes selected and feasibility study completed • technical review documents.	• feasibility study • TOR for design company • records of contractor selection • payment certificates • technical review documents • final designs.
4.3	Construction of new sluices, rehabilitation of existing sluices and culverts.	• Civil Works Trust Fund account established • AusAID, DARD and stakeholder approval for implementation of recommended works • construction undertaken according to schedule and standard specifications (quality) • OH&S incidents recorded and followed-up.	• Civil Works Trust Fund account records • pre-qualified contractor performance records • AusAID/DARD approved construction schedule • construction contracts • site supervisors records • progress payment records.

	Project description	Verifiable indicators	Means of verification
5	COMPONENT 5 – INTEGRATED WATER MANAGEMENT PLAN IMPLEMENTATION		
	To implement the agreed integrated water management plan, and provide examples of mitigation measures through an environmental and social fund.	• water management control system and system wide procedures developed and implemented for organisational structures, operations and maintenance procedures, monitoring procedures and financial management • degree of agency and community consultation [number, type, purpose, attendance (M/F)] including training workshops and consultative meetings • review and assessment of system effectiveness • endorsement system procedures for operational environmental monitoring • system-wide procedures (operation procedures, maintenance procedures, financial plan) • WMC agreement for operating, maintaining and administering the works • WMC operating in accordance with role.	• documentation from participatory training workshops • documentation of community consultation • system-wide procedures • operation procedures manual • maintenance manual • financial plan • WMC minutes • agency self assessments • community rapid appraisals.
	Output		
5.1	System operations procedures developed, agreed and implemented.	• participatory training workshops with agencies and communities to develop system operational procedures undertaken [number and percentage (M/F) of local agency staff and community trained; percentage of staff trained assessing training as useful against agreed rating scale.] • pilot testing of operating procedures • operational procedures manual produced and distributed.	• operational procedures manual • project training records • annual effectiveness review reports from water institutions agency • agency self assessments • community rapid appraisals • WMC minutes.
5.2	Maintenance system developed and implemented.	• participatory training workshops with relevant agencies to develop maintenance procedures undertaken [number and percentage (M/F) of local agency staff and community trained; percentage of staff trained assessing training as useful against agreed rating scale] • resource and equipment requirements identified and equipment procured • maintenance procedures manual produced and distributed and updated annually.	• maintenance manual • documentation from workshops, participatory meetings and community consultation • annual effectiveness review reports from water institutions agency • project training records • community rapid appraisals • WMC minutes.
5.3	Financial Management Plan developed for system operations and maintenance.	• workshop on annual revenue needs for water management conducted	• report on workshop on annual revenue needs • financial management plan

	Project description	Verifiable indicators	Means of verification
		• financial management plan developed and endorsed.	• project training records • community rapid appraisals.
5.4	Local environmental monitoring systems strengthened.	• needs analysis for DOH and DOSTE to conduct and laboratories upgraded • monitoring programs designed.	• needs assessment report • report on laboratory upgrade • monitoring programs documented • monitoring reports • published results of monitoring.
5.5	Environmental and Social Management Fund Established (ESMF).	• ESMF for local sub-projects established with Selection Panel and Secretariat • sub-project selection criteria (including gender affirmative action guidelines) and procedures established • sub-projects implemented.	• ESMF procedure/system manual • ESMF Board Regulations • ESMF Board meeting minutes • ESMF financial reports • ESMF records – proposals, monitoring and evaluation • annual review of ESMF.

x.

Annex 3. Final cost summary

Type of payment *These figures compare actual inputs to the original contract schedule of payments*	Phase 1 acquittal ($)	Total project Phase 2 expected ($)	Total contract estimated ($)	Difference (funds unspent) ($)
Milestone/monthly				
Technical assistance	2,906,595.00	5,722,569.00	8,629,164.00	
Lump sum project costs	601,879.00	445,945.00	1,047,824.00	
Total	**3,508,474.00**	**6,168,514.00**	**9,676,988.00**	**0**
These figures show actual payments to date by AusAID and the unspent amounts				
Reimbursable costs				
Meetings in Canberra	2,611.00	0.00	2,611.00	0.00
Resettlement capacity building transport costs	0.00	3,373.45	3,373.00	0.00
Training components	69,350.00	232,911.88	302,262.00	0.00
Short-term travel	74,002.00	135,261.00	209,263.00	0.00
Start-up costs	35,469.00	0.00	35,469.00	0.00
Wind-up costs	0.00	6,960.00	6,960.00	0.00
Counterpart allowances	0.00	0.00	0.00	0.00
Study tours	0.00	16,505.94	16,506.00	0.00
Resettlement committee performance allowance	0.00	8,035.31	8,035.00	0.00
Design review	0.00	11,314.50	11,315.00	0.00
Mike 11 additional model runs	0.00	0.00	0.00	0.00
Other studies	0.00	39,783.76	39,784.00	0.00
Water management training	0.00	20,000.00	20,000.00	-15,000.00
Mekong Delta study tour	0.00	0.00	0.00	0.00
Subtotal	**181,432.00**	**474,146.00**	**655,578.00**	**-15,000.00**
Procurement and repairs				
Procurement	30,042.00	124,099.46	154,142.00	0.00
Procurement fee	1,299.00	4,899.98	6,199.00	0.00
Refurbishment of existing NVNWCPI supplies	9,774.00	0.00	9,774.00	0.00
Subtotal	**41,115.00**	**128,999.44**	**170,115.00**	**0.00**
Sub-studies - various	98,870.00	0.00	98,870.00	0.00
ESMF Funds Trust account (funds transferred)	0.00	834,500.00	834,500.00	-21,500.00
Civil Works Trust Fund (funds transferred)	271,949.00	6,115,397.00	6,387,346.00	0.00
Total	**4,101,840**	**13,721,557.00**	**17,823,397.00**	**(36,500.00)**

Annex 4. Comments on the Activity Completion Report

The ICR comments on the Activity Completion Report prepared by the AMC focus on key aspects that we think are missing from the report or which need to be strengthened. This includes some data gaps as well as parts of the report in which a deeper analysis is needed.

1) In overall terms, the report provides a fairly functional account and assessment of the project. However, it does not give a real sense from the AMC's perspective of the achievements made nor of the real challenges faced and how these were overcome. Some useful tables are included that summarize achievements. However, these should be integrated and supported by the text in a way that makes it clear to what extent these have reached (exceeded or fallen below) the expectations made at the beginning of the project.

2) In relation to this, it would be useful to have a greater level of critical 'self-evaluation' on the part of the AMC. There are many sections in which mention is given to constraints posed by the external environment (for example, changes and difficulties in the government construction procedures, approval processes etc.). Together with this, it would be informative to know how the AMC assesses its own performance in terms of influencing this situation, resolving difficulties, identifying and mobilising solutions etc.

3) The use and integration of M&E data is generally weak throughout the report. Firstly, a section or annex should be included that clearly summarizes the main elements of the M&E system. Secondly, summary tables or an annex should present the consolidated M&E data and results with explanation. Thirdly, perhaps most importantly, a clear indication should be given as to the sustainability of the M&E systems – which aspects are likely to be maintained by the Province in the future, which not, which are necessary etc. This is particularly important with respect to Environmental Monitoring.

4) The analysis of training outputs and outcomes is weak. An annex is given which lists all the training conducted under the ESMF / EDS activities. But no data are given on all the project management and other types of training provided by the project. Together with this, some assessment and explanation does need to be made on the effectiveness of all this training. This is a major omission from the draft ACR.

5) The gender assessment is also weak and inadequate. It is suggested that more explanation should be given about how the Gender Affirmative Action Plan was implemented. Which aspects of gender equality was the project able to influence and which not, and what were the reasons for this? Combined with this, some analysis should be made on the potential impacts of the introduction of the new water management system from both gender and social equity perspectives. Are there sections of society on NVN Island that will potentially be adversely affected by the new arrangements? If so, what can be done about this?

6) The project has undertaken a process of lesson learning, consolidation and scaling-up the more successful ESMF sub-project activities. But no indication of this is given in the report. The ACR needs to document the ESMF more fully to demonstrate the strengths and weaknesses of this component. It would also be informative to include short boxes and case-studies and data summary to give a better flavor of these ESMF activities.

Annex 5. ICR Terms of Reference

North Vam Nao Water Control Project II
Independent Completion Report
September 2007
TERMS OF REFERENCE

BACKGROUND

The goal of the North Vam Nao Water Control Project II (NVN II) is to establish and operate an integrated water management system in North Vam Nao island of An Giang Province that is socially and environmentally sustainable, helps reduce poverty, and improves livelihoods.

The objective of the Project is to strengthen the capacity of provincial agencies in the An Giang Province to plan, operate, and maintain an integrated water control system in North Vam Nao that is efficient and effective and meets the requirements of multiple users. The Project is expected to benefit farmers by delaying the onset of flooding, securing the harvest of the second rice crop, and providing for a third harvest.

The Project was approved for commencement of Phase I, design phase, from January 2002 to February 2003. Due to the risks made apparent by its predecessor, North Vam Nao Project I, the Project was subjected to an independent review at the end of Phase I to determine whether to proceed to Phase II, implementation phase. The independent review was undertaken in November 2002, whose findings supported a decision to proceed to Phase II. In March 2003 the Parliamentary Secretary approved continuation of the project and an increased budget; Phase II commenced immediately afterwards.

The Project aimed to achieve its objectives through implementing the following components:

(i) Construction and rehabilitation of water control structures based on the conceptual water management plan;

(ii) Building the institutional capacity for an effective water management system; and

(iii) Facilitate the uptake of the benefits of the new water management system by the local communities by addressing the socio-economic constraints of the poor, particularly health, environmental and economic issues. This is mainly done through the Environmental Social Management Fund (ESMF).

In parallel with the Project, the An Giang Provincial government was responsible for the building and upgrading of the ring dykes around the North Vam Nao Island. The ring dyke system is integral to the water management scheme promoted by the project. The GOV pledged to fulfill this responsibility in parallel with the Project; however, they requested that the building and upgrading of ring dykes be considered outside the scope of the Project.

The Project was scheduled to complete in September 2006. However, due to various delays in the infrastructure construction program, in August 2006, a one-year extension was approved to allow the project to finish on 30th September 2007.

The total value of the project is approximately AUD 32 million, in which the total approved Australian investment is AUD 19.1 million.

Currently, it can be envisioned that by the project closing date of 30th September 2007, the Project will have achieved the following:

- All infrastructure works (16 sluices and 4 groups of culverts) will be 100% completed, with the exception of 1 or 2 sluices where only minor works remain but the structures will still be operational.
- Progress on establishing the integrated water management scheme is more difficult to judge. At the moment it can be argued that achievement of this component is harder to quantify due to the following two factors: (i) the water management scheme has changed since its inception at the

time of project design from one based on existing institutional arrangements to one which requires major institutional changes; and (ii) the integrated water management scheme cannot go into full operation before all the infrastructure is completed.

- Various socio-environ-economic subprojects have been carried out and have achieved certain positive outcomes. These include improved livelihood opportunities for a number of poorer beneficiaries, improved sanitation, increased environmental awareness and practice within the target communities.
- The ring dykes are yet to be completed. The An Giang Provincial government has pledged to complete these works by the project closing date. However, it appears that the Gob's earlier estimate of December 2007 for ring dyke completion is more realistic.

The AusAID-engaged Technical Advisory Group (TAG) has also recommended that after the completion of the Project, AusAID should conduct a follow-up intervention to provide technical assistance to the initial trial operation of the scheme. The purpose of this support would be to fine-tune the scheme to ensure that it will continue to operate effectively and sustainably. It is envisioned that this follow-up support would last for 12 months.

OBJECTIVE

The objectives of the North Vam Nao Project Independent Completion Report (ICR) are two-fold:

a. To report on the relevance, effectiveness, efficiency, impact and sustainability of the North Vam Nao Water Control Project II, with particular reference to lessons learnt from this intervention, and
b. To make recommendations on viable options for enhancing the sustainability of the project outcomes.

SCOPE OF SERVICES

The ICR team will be provided with the relevant project documents prior to the commencement of the in-country mission and receive an in-country briefing on arrival in Ho Chi Minh City from the AusAID Activity Manager (Ms Nghi Dung). The Team will:

- Review and assess selected project reports and other necessary records/ information available to validate the performance data presented in the project Completion Report, eventually producing an Appraisal Note on the AMC-drafted CR setting out clearly any revisions or additional work to be undertaken by the AMC.
- Prior to the in-country mission, produce a Focus Paper for the mission covering the approach to undertake the ICR, an outline of program for site visit, a summary of issues and major points for consideration.
- Meet with the NVN Australian Team Leader (ATL) in-country. The ATL will provide a detailed briefing on project implementation including achievements and lessons learnt. The discussion should focus on the issues outlined in the Focus Paper and agreed with AusAID.
- Conduct field visits of project sites and meet with appropriate counterpart officials and project stakeholders. It is strongly recommended that the Team conduct a stakeholder workshop to discuss project implementation issues, benefits, strengths and weaknesses.
- Present at a mission debrief with AusAID and the Project team in Ho Chi Minh City, including preparation of a Note of Findings.
- Produce an ICR in accordance with the Guidelines.

The "Preparing Completion Reports for AusAID – Interim Guidelines" document attached to this TOR provides specific requirements and guidance on the actual content, methodology and format of the ICR for the Team.

DURATION AND PHASING

The North Vam Nao ICR mission will take place in-country from 4th September to 10th September 2007. A detailed schedule of meetings will be prepared by the AusAID Activity Manager and the Project Team Leader in consultation with the Team and made available to the team before the mission commences. Proposed approximate timing for the mission is:

- 2 days travel time;
- 2 days of desk literature review prior to mission;
- 3 days for the Team Leader and 2 days for the second team member to prepare the Focus Paper and the Appraisal Note on the CR;
- 7 days of in-country activities, and
- 5 days for Team Leader and 3 days for the other team member for production of the ICR.

TEAM SPECIFICATION

The North Vam Nao ICR Team will be comprised of two consultants and one AusAID staff.

a. The Team Leader (TL): responsible for directing, coordinating and managing the assignment, including the submission of the ICR to AusAID. The TL will have: (i) demonstrated experience in implementing development assistance activities that aim at rural development and institutional capacity building; and (ii) demonstrated experience in the monitoring, evaluation and assessment of development assistance activities.

b. The second team member: will have demonstrated knowledge on water resource management and river basin management, with an emphasis on water for irrigated agriculture. This team member should have particular knowledge and experience within the Mekong Basin.

c. The third team member: the AusAID Mekong Water Resources Unit Manager will have in-house knowledge of other AusAID-funded water management initiatives in the Mekong Basin, as well as experience of undertaking ICRs of water-sector activities.

The AusAID Activity Manager (Ms Nghi Dung) will accompany the ICR team, as necessary, to facilitate any issues that arise.

The North Vam Nao ICR team members will be responsible for:

- Finalising all international travel;
- Liaison with AusAID Ho Chi Minh City Post (Ms Nghi Dung) for preparation/ finalisation of the work program and meetings schedule prior to the mission;
- Initial planning and review of relevant documentation as listed at 7 below;
- Coordination among team member on specific tasks during the mission, managed by the team leader; and
- Cooperating with AusAID to present and discuss the mission's Aide Memoir.

REPORTING REQUIREMENTS

The ICR team will produce the following reports according to the timeframe specified in the table of Section 5:

a. **Collated comments** on the draft Activity Completion Report;

b. **A Focus Paper** for the mission covering the approach to undertake the ICR, an outline of program for site visit, a summary of issues and major points for consideration;

c. **An Aide Memoir** at the completion of the mission prior to departure from Ho Chi Minh City;

d. **An Appraisal Note** on the ACR; and

e. **An ICR** in the format outlined in Attachment **A.**

The ICR should be based on 'Preparing completion reports for AusAID – Guidelines' (Attachment A). It should be no more than 25 pages long plus annexes. The ICR should be a stand-alone document that can be read by an outsider without ready access to the Project Completion Report. The ICR's target audience is the community of professionals implementing Australian aid, all of whom need credible, independent advice on the results of past efforts. This community includes such stakeholders as AusAID staff and management, counterpart governments, contractors, multilateral organisations, other donors, NGOs and universities. Accordingly, ICRs are published electronically.

The submission of draft ICR should be within three weeks of the Team's debriefing. The final ICR report should be submitted within 5 working days upon receiving feedback from AusAID

The TL will have the principal responsibility of preparing and submitting the reports as required with consultation and contribution of other team member.

These documents should be sent electronically. The draft reports will be marked as draft and will have the revision date on the cover. Hardcopy report will be made available to AusAID upon request. AusAID will have ownership of all reports.

Annex 6. Itinerary and list of persons met

Tuesday, Sep 4th, 2007.	
Meeting with An Giang PPC and relevant provincial departments.	
Huynh The Nang Nguyen Bao Trung DoVu Hung Vu Van Loat Mai Van Lap Phung Thanh Son	Vice Chair, An Giang PPC Expert, An Giang PPC Vice Director, An Giang DARD / Director NVN SMB Vice Director, NVN SMB Vice Director, NVN SMB Head of 1 division, NVN SMB
Wednesday, Sep 5th, 2007.	
Meeting with AMC – Team Leader (Bill Matthews)	
Meeting with An Giang DARD & NVN SMB	
Nguyen Van Phuong Tran Quang Vien Ngo Dinh Si	Director, An Giang DARD Secretory/Coordinator, NVN SMB Planning Section, DARD
Meeting with An Giang DPI.	
Le Van Phuoc Huynh Van Hien Do Nguyen Nam Truong Ngoc Hung	Vice Director, An Giang DPI Manager, General Division, DPI Director, Appraisal Centre, DPI Expert, Appraisal Centre, DPI
Meeting with An Giang Irrigation Sub-Department	
Pham Van Le Vuong Huu Tien	Manager, Irrigation Sub-Department Vice Manager, Irrigation Sub-Department
Field trip (all field trips were accompanied by Le Tan Can – AMC)	
Meeting with Compartment Management Board No.1 (Tan Chau District)	
Giang Van Phuoc Le Van Dung Vo Van Nam Nguyen Ngoc Dien	Head, CMB 1 Vice Head Vice Head Secretary
Meeting with Tan Chau District People's Committee and sections	
Nguyen Phuoc Hung Tran Van Dung Nguyen Ngoc Hung Dang Hong Tam Tran Huu Nghia	Vice Chair, DPC Vice Head, Infrastructure Construction Board Vice Head, District Agriculture and Rural Dev. Section Vice Chair, Le Chanh Commune People's Committee Vice Chair, Phu Vinh Commune People's Committee
Thursday, Sep 6th, 2007.	
Meeting with Compartment Management Board No.18 (Phu Tan District)	
Le Thanh Dung Nguyen Van Hue Le Thanh Hung Truong Be Nam	Chair, Phu Tho Commune People's Committee Head, CMB 18 Member, CMB 18 Member, CMB 18
Meeting with Phu Tan District People's Committee and sections	
Truong Hoang Trong Bui Thi Hien Nguyen Van Hong Nguyen Anh Tuan Nguyen Huu Toi Chau Nguyet Luan Nguyen Thanh Phong	Vice Chair, DPC Chair, Women's Union Head, Infrastructure Construction Board Director, Social Policy Bank Head, District Agriculture and Rural Development Section District Education Section Expert, DPC

Pham Van Vu Le Thi Mai Thanh Nguyen Tan Duy	Vice Head of Office, DPC Expert, DPC Expert, DPC
Meeting with Phu Thanh Commune and Compartment Management Board No.10	
Truong Cong Thao Vo Van Cua Nguyen Van Liem	Vice Chair, Phu Thanh CPC Head, CMB 10 Member, CMB 10
Friday, Sep 7th, 2007.	
Meeting with Department of Finance	
Tran Van Nam Pham Huu Khiem	Vice Director, DOF Manager, Investment Division
Meeting with Department of Construction	
Mai Anh Dung Nguyen Van Don Le Hoang Minh	Vice Director, DOC Director, Appraisal Center, DOC Vice Director, Appraisal Center, DOC
Meeting with Department of Natural Resources and Environment	
Pham Ngoc Xuan	Manager, Environment Division, DONRE
Meeting with Province Women's Union, Bank for Social Policies, DOH, DOLISA	
Pham Hong Dung Tran Thi Kim Chi Nguyen Thi Thanh Quang Nguyen Kim Huong Huynh Huu Loc	Head, Preventative Health Centre Head of Office, Women's Union Vice Director, DOLISA Head of Vocational Training Section, DOLISA Vice Director, Bank for Social Policies
Meeting with PPC and relevant stakeholders	
Nguyen Bao Trung DoVu Hung Tran Van Nam Truong Hoang Trong Nguyen Phuoc Hung Huynh Van Hien Vu Van Loat Phung Thanh Son Mai Van Lap Nguyen Ngoc Hung Tran Quang Vien Ngo Dinh Si Vo Hoang Dan Pham Ngoc Xuan Nguyen Phuoc Nghi Dung Bill Matthews	Head of Infrastructure Board, PPC Vice Director, An Giang DARD / Director NVN SMB Vice Director, DOF Vice Chair, Phu Tan DPC Vice Chair, Tan Chau DPC Manager, General Division – DPI Vice Director, NVN SMB Head of 1 division, NVN SMB Vice Director, NVN SMB Tan Chau District Agriculture and Rural Dev. Section Secretory/Coordinator, NVN SMB Planning Section, DARD Vice Director, Transport Department Manager, Env. Division – DONRE AusAID Activity Manager AMC Team Leader

Annex 7. ICR questions and issues

STRATEGIC ISSUES

Institutional change assessment:

- The project Goal and Objective emphasize the social, environmental and poverty alleviation aspects of the project. Was the project essentially about using infrastructure to promote poverty alleviation? Hence were the new water management arrangements an 'add on' or an agreed essential part of the project? Were there differences in understanding here between the partners?

- The project Logical Framework does not clearly reflect what is now expected from new water management institutional arrangements. More explicit reference is given to these in the revised log-frame (as given in the draft ACR) – but why were these not more clearly anticipated or articulated in the original documentation?

- The project goal seeks to help the province ' …establish and operate an effective water management system…'. Effective implies implementation and sound operation; was the intention to help create an effective, operating water management system or simply to move toward this?

- Were effective complementary water management / institutional arrangements meant to be an outcome or merely was the intent to start down this process?

- The final outputs/outcomes have only gone part this way; should additional or alternative adjustments have been made during the project to reflect this?

- Level of counterpart support for the project at output, component, purpose and goal levels (i.e. extent to which understanding of project relevance was shared) – there remain many areas where counterparts have not been able to make necessary changes; was this properly anticipated in design? Did the design intend to go this far in terms of outcomes?

- Capacity building is a critical part of the project – did the slow progress in implementing the new water management arrangements mean that the capacity building approach was not appropriate or sufficient?

- What is the extent to which lessons were learned from past projects on institutional capacity building requirements or approaches?

- Was project design adequately informed by past problems – for example the difficulty in getting changes to GOV administrative practices? Has this impacted on the final outcomes?

- Given that the project placed major obligations on the counterparts regarding construction management, administration and financing and as it progressed, major requirements for regulatory change in water and irrigation management (all of which impact on relevance, effectiveness and sustainability) how much consideration was given to achievability of these developments in project preparation? Were these assumptions reasonable at the time?

- Were the key assumptions, especially concerning financial and technical capacity of counterparts, and commitment, reasonable at the time?

- How clear and formal were commitments for ensuring on-going financial, management and technical sustainability?

- What can/should be done to strengthen the conversion of the outputs into impact in terms of the project goal and purpose, particularly relating to '…an effective water management system'?

Contextual analysis:

- The extent to which the analysis made as part of project preparation and design was superseded by changing circumstances and priorities that necessitated changes in the project approach and implementation strategy.

- While at the time of project preparation in the late-1990s and early-2000s, the nature and speed of the administrative and decentralization reforms of the GOV could not have been fully foreseen, these have undoubtedly impacted on implementation, and need to be assessed in terms of how effectively the project has responded to them.

- The extent to which the Environmental and Social Development Fund (ESMF) sub-components and activities have contributed to local socio-economic development needs, priorities and processes in an appropriate and effective way.

- The monitoring, understanding and response to broader environmental trends and changes taking place in the region and project localities (e.g. vis-à-vis water quality and pollution control).

- The extent to which the project has linked-up with broader national and regional policy, legislative and regulatory frameworks (e.g. GOV policies on integrated water resources management, regulatory frameworks provided by the Mekong River Commission etc.).

- The efficacy of the project M&E system, how lessons were learned and extracted from early implementation experience, and acted upon in following plans and implementation.

- The integration and coordination between project components (hardware and software components) and the scheduling and delivery of project inputs and resources to achieve the intended outputs and outcomes of the project.

Stakeholder assessment:

- The extent to which the project has successfully targeted and delivered benefits to the intended beneficiaries, including both women and men, under the ESMF;

- The relevance and effectiveness of the project coordination and communication, community consultation and participation, and public information mechanisms;

- The management of the project to identify the extent to which Vietnamese stakeholders, including both local government agencies and communities, have owned and participated in the institutional strengthening process;

- The degree of convergence of opinion between different stakeholder groups on the extent to which the project has successfully addressed and delivered it intended outcomes.

COMPONENT SPECIFIC QUESTIONS

Component 1: NVNWCP II project management

To use efficient and effective project management strategies and promote these in the stakeholder agencies such that the strategies are used for on-going management of related projects and adopted in other projects

Topic / issue	Questions
Effectiveness of coordination and communication	• The project has necessitated involvement and coordination between a large number of counterpart agencies – how was such a large number managed effectively? • Did the 'project' management bodies and coordination mechanisms work effectively – e.g. PCC, PMB and Policy Advisory Board (PAB)? • Did all participants contribute appropriately? • Were any relevant stakeholders excluded? • What other means of communication were used and were stakeholders satisfied? • How effective was the communication system? Was communication effectively maintained? Did it inhibit speedy decision making? • Were the wishes and needs of the counterparts respected as to changes to the project? Were these viewpoints evaluated? • Was the project considered to be demand driven (by the counterparts) or supply driven (by the AMC) – e.g. the push to privatise water service delivery – was it too big a step in one go? • The draft ACR states that DARD and AMC had different views as to the design of the new water management arrangements – what were these? Did the adopted design reflect a compromise that impacted on the effectiveness of the outputs? • How effective has the policy discussion, technical and administrative back-stopping and support provided by AusAID been in terms of the timeliness and effectiveness of this support?
Effectiveness of risk management	• Were all risks, including those identified after the project started, adequately identified and managed? • Were these addressed through a logical process with the various stakeholders (PAB, PMB, PCC & PPC)? What did and didn't work? • Were the perceptions of risks and the means of managing them shared by all stakeholders or was the AMC left to sort this out? • How effective was the process of monitoring in providing early warning of problems, identifying needs for change etc.?
Effectiveness of monitoring	*For the scheme management system:* • To what extent has the project put-in-place a comprehensive – but manageable and affordable – monitoring system to support operations of all aspects of the scheme in the future? • Which agencies are responsible for this, both at scheme management level and who will collect data on the ground? • To what extent has the project assisted province agencies to link-up with and make use of broader monitoring frameworks and systems (e.g. environmental monitoring under Mekong River Commission)? • Where will the main responsibilities for environmental monitoring

	and enforcement lie in the future (Environmental Monitoring Group under DARD, DONRE…)? *For the NVN project:* • Were the Log Frame indicators considered to be a useful and sound measure of achievement, quantitatively and qualitatively? Are they more output driven rather than outcomes? • What did the indicators show as regards achievement? • Are there other issues regarding achievement that are not shown by the rather broad Log Frame indicators? • The response to indicators is often that a "report is submitted" – was a mechanism put in place by the project to systematically review monitoring reports and results with all concerned stakeholders so that they could be validated and acted upon?
Changes to the project during implementation	• What were the reasons for the changes made during the course of the project? • Were these related to design faults, emerging issues and/or issues that were poorly managed that required change? • Were these changes agreed and facilitated by all relevant stakeholders? • Were changes implemented satisfactorily? • What were the implications in terms of overall achievement of the project goal and purpose? • Did they reflect issues that could have been identified earlier? In particular, did they reflect foreseeable problems with the initial design?

Component 2: institutional development

To coordinate all project activities such that they lead to institutionalizing, in line agencies in An Giang Province, an acceptance of the benefits and principles of integrated water management

Topic / issue	Questions
Effectiveness of approach to capacity building	• Was the quality of training satisfactory? • How was feedback provided on training? • Were there adequate attempts made to assess training effectiveness as opposed to numbers trained? • How effective has been the training for farmers in 'compartment management' (business and water issues) when only 3 compartments are in some form of operation? • Reorientation for the IMC that may be required to operate as a 'commercialised' unit? • Capacity building for SMB – has it developed strategic skills in asset and financial management?
Capacity building achievements	• What have been the most successful and least successful elements of training provided by the project? • Has capacity been built in a relevant and cost effective way? • What lessons can be drawn from the performance of key stakeholders with regard to capacity building? • Did these stakeholders exhibit changed attitudes and practices?

Institutional sustainability	• The new arrangements require major attitudinal changes at the government and farmer / commune levels and also the emergence of competent private sector service providers – has the project expected too much in having these new arrangements accepted and implemented? • The water service providers are aimed at private contractors yet all the expertise lies within government (IMC) – should a 'commercial' model be first followed that starts by making IMC 'business units' of the supervising government agency that operate through 'shadow contracts' to deliver water? Would this be more readily be accepted and ease implementation? • What options are there for improvement in institutional sustainability so as to safeguard the outputs of the project? • For example, more time to research options, more training, more lesson-learning from practical examples, more expert legal / water management advice on the appropriate regulatory framework?
Human resource sustainability	• Is it accepted that the sustainability of improvements in Human Resource skills development at all levels of government and farmer organisations is real? • Is the level of training for compartment management adequate bearing in mind only three compartments are 'operating'? • What options now exist to ensure that HR impact is sustained? • Should this involve revised institutional approaches to strengthen support for training programs? • Should AusAID be asked to support a transition phase to help training and consolidate new skills?

Component 3: Project planning – Integrated Water Management Plan Implementation

To undertake studies, produce an integrated water management plan and construction plan and thereafter to update the plans undertaking additional studies to ensure sustainability and incorporating innovation

Topic / issue	Key questions
Stakeholder involvement in IWMP preparation	• Did the project help introduce and facilitate a broad-based, inclusive and transparent process for preparation of the IWMP? • How effective was this process? What were the short-comings? • What were the main points of 'discussion', 'disagreement' and 'contention' during the plan preparation process – at both the community / compartment management level, and at the higher management and policy levels? • How were these issues addressed and resolved? • Was public information provided to local communities and the general public before, during and after the plan preparation process? • If so, what communication methods were used for this? Was the effectiveness evaluated? • Has information on the project and on the scheme been publicly posted in the project communes and to local communities?
Regulatory system	• *Project documents indicate a large number of water management reforms that need to be accepted and adopted by local authorities as a measure of success…*

	• How many of these have been formally approved by PCC and, where necessary, converted into practical guidelines? For example: • Approval for establishment of the SMB and specific regulations regarding its powers and functions? • Approval for establishment of the CMBs and specific regulations regarding their rights and obligations vis-à-vis the commune authorities and local communities? • Cross-commune coordination mechanisms and/or jurisdictional realignment of commune boundaries to fit compartment boundaries? • Decisions regarding the powers of representation of the CMB and other members on the SMB? • Steps towards introducing contract services for scheme management (current and future status of the IMC)? • What time scale will be required for formulation and approval of the major outstanding elements of the regulatory system? • Should the project have included more support as to how to legally create and regulate the new arrangements (this seems to have been left to the province yet it is a fundamental piece of work in terms of impact and sustainability)? • To what extent has national legislation provided a clear basis for formulation of the specific provincial regulations for this type of scheme – or are national regulations lacking? • Have other donors such as World Bank been consulted, as much work has been done in this area?
Financing plan and financial sustainability	• The province has yet to devolve financial control to the SMB and is requiring a 10 year financial plan to be developed – does this mean that greater devolution of control and management will not go down to the lowest appropriate level? • What could be the reasons for this? Will they impact on the desired outcomes of the project? • Could the problems have been better anticipated at the design stage or subsequently during implementation? • Should the project have spent more time on financial modelling and sustainability issues? • What funding sources are being considered for the 10 year financial plan – state budget resources, province revenue, agricultural taxes and/or user-fee systems? • What impact will the removal of the voluntary labour contributions have on scheme operations and maintenance? • What options now exist for improved financial sustainability?

Component 4: Engineering design and construction management

To improve existing systems by which cost-effective, fit-for-purpose engineering designs are produced, by which tenders are let to competent contractors, and by which construction is managed which result in facilities that meet purpose and specification

Topic / issue	Questions
Resettlement action plan	• *Resettlement issues were first considered during initial project preparation in 1999 and subsequently during redesign of the NVNWCP II. Yet resettlement and compensation is cited in many reports as one major factor causing construction delays…* • What were the specific reasons for this (these are not adequately explained in available documentation)? • Was this simply due to administrative delays and counterpart funding shortages? • What was the nature of the resettlement and compensation requirements? Who was involved – farm households, or trading households (with stronger voice) along the ring dyke close to water and road vehicular access points? • The PDD states only a limited number of households would be involved? What were the actual figures? • Should resettlement issues have been more fully analysed earlier, including social and governance aspects? Were the social dynamics and potential impacts of the project adequately analysed in project preparation? • Was communication and dialogue with those to be resettled adequate? • Could AusAID or the AMC have made a positive difference to this?
Construction procurement	• *Weaknesses in the GOV regulations on procurement, long appraisal and approval procedures, limited availability and inability of the project to attract quality contractor companies etc. are cited as major factors causing construction delays…* • All construction projects in Vietnam are subject to these constraints to some degree – so to what extent are they valid explanatory factors in this situation? • Should the problems of weak contractors been recognized earlier and alternative procurement strategies proposed? For example, would packaging of schemes and higher order procurement have been more effective in attracting higher quality contractors nationally? • Would this have led to more efficient civil works completion? • Should the weak contractors have been removed quicker? • Should AusAID have put more effort into proposing and agreeing 'ground rules' for procurement procedures, contractor eligibility and quality standards with the PPC before the project started? • Were / are AusAID's own procurement regulations adequate to handle this type of construction procurement – given that it was under the management of the counterpart agencies?
Waste disposal and treatment	• Environmental TAGs indicate that leakage from the waste disposal sites threatens project acceptance at the farmer and village level – was this issue studied appropriately in project preparation?

	• Why were the designs insufficient? Appropriate technology for waste disposal is well-known, but can be costly – was it simply a lack of sufficient financing? • Is this issue now being adequately addressed? Will it remain a problem after the project concludes? • Will it be seen as an AusAID failure?
Counterpart inputs	• Was the development of a project so reliant on counterpart agency factors and responses to achieve impact based on reasonable assumptions about those factors? • Could the risks such as the dyke construction progress have been better managed?
Technical sustainability	• At the scheduled end of the project, the project will not be operational in parts of Stage 3 and all of Stage 4 (a trial operation season) and the management arrangements will not have been fully implemented. Does this mean that the project is "not technically and administratively sustainable"? • Should theses problems have been anticipated and, if so, how? • What steps can be taken at this stage, if any, to improve the situation and protect the investment made so far?

Component 5: Economic and social benefits through Integrated Water Management Plan (IWMP) implementation

To implement the agreed IWMP through sustainable O&M and environmental management whilst ensuring the poor can participate in project benefits

Topic / issue	Questions
"key policies and systems for sustainable scheme management developed, agreed and implemented"	• See Component 3 above (regulatory systems)
Environmental and Social management Fund	• What are stakeholder viewpoints on the relevance and effectiveness of each sub-component and activities under the ESMF – from the perspective of local communities / beneficiaries as well as the province / district authorities and departments? • Which sub-components have been most successful and which less successful? What are the reasons for this? • What has been the primary purpose of the ESMF? Was it to increase household management capacity (through the integration of literacy, credit management skills etc.) and/or was it intended to have substantive impacts on incomes and poverty? • Specifically regarding credit supply – was this primarily intended to introduce improved models for S&C and increase skills, or was it intended to significantly contribute to lending supply? What proportion of the overall portfolio of the Bank for Social Policy lending does the project funding constitute? • What have been the combined and aggregated benefits (impacts?) of the different sub-components and activities at community level – as assessed by local people? • Which elements of the ESMF will be continued by the province in the future? How will these be further developed and financed?

Economic growth and poverty reduction outcomes	• How assured and sustainable are the links of the project to improved economic growth and poverty reduction? • This is a fundamental goal of the project design – so will new initiatives and environmental monitoring that link to improved productivity be maintained after the project? • What might be done to improve the effectiveness of these links?
Impact on gender equality	• Are there any identifiable links with gender equality in terms of the impact of the project at the farm household and commune level? • Has the project, in terms of its implementation and especially in terms of management of human resources, adequately safeguarded and promoted principles of gender equality?
Environmental monitoring, impacts and sustainability	• Are the environmental monitoring and management systems introduced considered sustainable? • Are they affordable and can they be resourced with sufficient staff and facilities in future? • Under the IWMP – which agency or agencies will have formal responsibility for environmental monitoring and enforcement (DONRE, SMB, others)? • Will these agencies only have powers and responsibilities for compliance monitoring, or will they have powers of enforcement (e.g. to determine flushing of the system as required)? • Will DONRE maintain monitoring to ensure environmental impacts are kept under control (e.g. the waste dump problems)? • What will be the role and responsibilities of the Environmental Monitoring Group (EMG) under DARD in future?
Extent of overall sustainability	• Are the doubts expressed in the ACR concerning many aspects of sustainability shared by all relevant stakeholders? • Should these issues lead to concerns such as the adoption, or otherwise, of the new administrative and regulatory arrangements for the water management system have been identified earlier and acted upon? • How have other donors reacted to similar problems where regulatory change is desired for large scale water control schemes (e.g. the WB Mekong Delta Water Resources Project)? • Are these sustainability issues considered to be serious matter for overall project success? • Do these issues reflect risks that should have been better managed either in design or implementation? If so, how? • What steps can now be taken by stakeholders to improve sustainability?

Annex 8. Component structure and objectives

Project Design Document (December 2000)	Subsidiary Agreement (December 2001)	Scope of Services for AMC (2001)	Agreed Structure (2004 onwards)
C1: Project Management. The objective is to provide efficient and effective project management, planning, monitoring and reporting systems.	**C1: Project Management:** The outcome of this component is efficient and effective project management, planning, monitoring and reporting systems provided.	**C1: Project Management.** The objective is to establish efficient and effective project management, planning, monitoring and reporting systems to ensure the achievement of the Project purpose and goal.	**C1: Project management.** The objective is to use efficient and effective project management strategies and promote these in the stakeholder agencies such that the strategies are used for ongoing management of related projects and adopted in other projects.
C2: Engineering design and construction management. The objective is to improve the technical capacity of a range of line agencies in An Giang Province to plan and implement a program of construction of facilities for flood control and water management in the NVNWC project area which protects the socio-economic and biophysical environment.	**C2: Construction planning.** The outcome of this component is improved technical capacity of a range of line agencies in An Giang Province to plan the construction of facilities for flood control and water management in the NVNWC project area in a way that mitigates any negative socio-economic and environmental impacts.	**C2: Institutional development.** The objective is to coordinate all project activities such as they lead to institutionalizing in a range of line agencies in An Giang Province, an acceptance of the benefits and principles of integrated water management; namely extensive stakeholder consultation, decisions based on good data, and equitable outcomes that do not compromise vital eco-systems or the socially disadvantaged.	**C2: Institutional development.** The objective is to coordinate all project activities such that they lead to institutionalizing, in a range of line agencies in An Giang Province, an acceptance of the benefits and principles of integrated water management; namely extensive stakeholder consultation, decisions based on good data, and equitable outcomes that do not compromise vital eco-systems or the socially disadvantaged.
C3: Water management and system wide operations & maintenance. The objective is to establish a coordinated approach to water management and system wide procedures for operations and maintenance in the project area.	**C3: Construction management.** The outcome of this component is an improved technical capacity of a range of line agencies in An Giang Province to implement a program of construction of facilities for flood control and water management in the NVNWC project area.	**C3: Project planning.** The objective is to undertake key sub-studies, collect and analyse data in order to produce an Integrated Water Management Plan (IWMP), from which will also be produced a Construction Plan for flood mitigation purposes.	**C3: Project planning.** The objective is to undertake studies, produce an integrated water management plan and construction plan and thereafter to update the plans undertaking additional studies to ensure sustainability and incorporating innovation.

C4: Environmental and social impact management. The objective is to improve the capacity of local institutions in An Giang Province and beneficiaries on North Vam Nao Island to identify and mitigate, if necessary, any environmental problems and develop an effective environment management plan which will be sustainable in the longer-term.	**C4: Water management and system wide operations and maintenance.** The outcome of this component is a co-ordinated approach to water management and system wide procedures for operations and maintenance in the project area established.	**C4: Engineering design & construction management:** The objective is to improve existing systems by which cost-effective engineering designs are produced and construction is managed to result in facilities that both meet purpose and specification.	**C4: Engineering design and construction management.** The objective is to improve existing systems by which cost effective, fit-for-purpose engineering designs are produced, by which tenders are let to competent contractors, and by which construction is managed which result in facilities that both meet purpose and specification.
	C5: Environmental and social impact management. The outcome of this component is an improved capacity of local agencies in An Giang Province and beneficiaries on North Van Nao to identify and mitigate any environmental or social problems and develop an effective environment and social management plan which will be sustainable in the longer term.	**C5: Integrated Water Management Plan implementation.** The objective is to implement the agreed Integrated Water Management Plan (IWMP) and provide examples of mitigating measures through an Environment and Social Management Fund (ESMF).	**C5: Economic and social benefits through Integrated Water Management Plan implementation.** The objective is to implement the agreed Integrated Water Management Plan through sustainable operations and maintenance and environmental management whilst ensuring the poor can participate in project benefits.

Annex 9. Factors contributing to construction delays

From 2005 / 2006 Annual Plan:

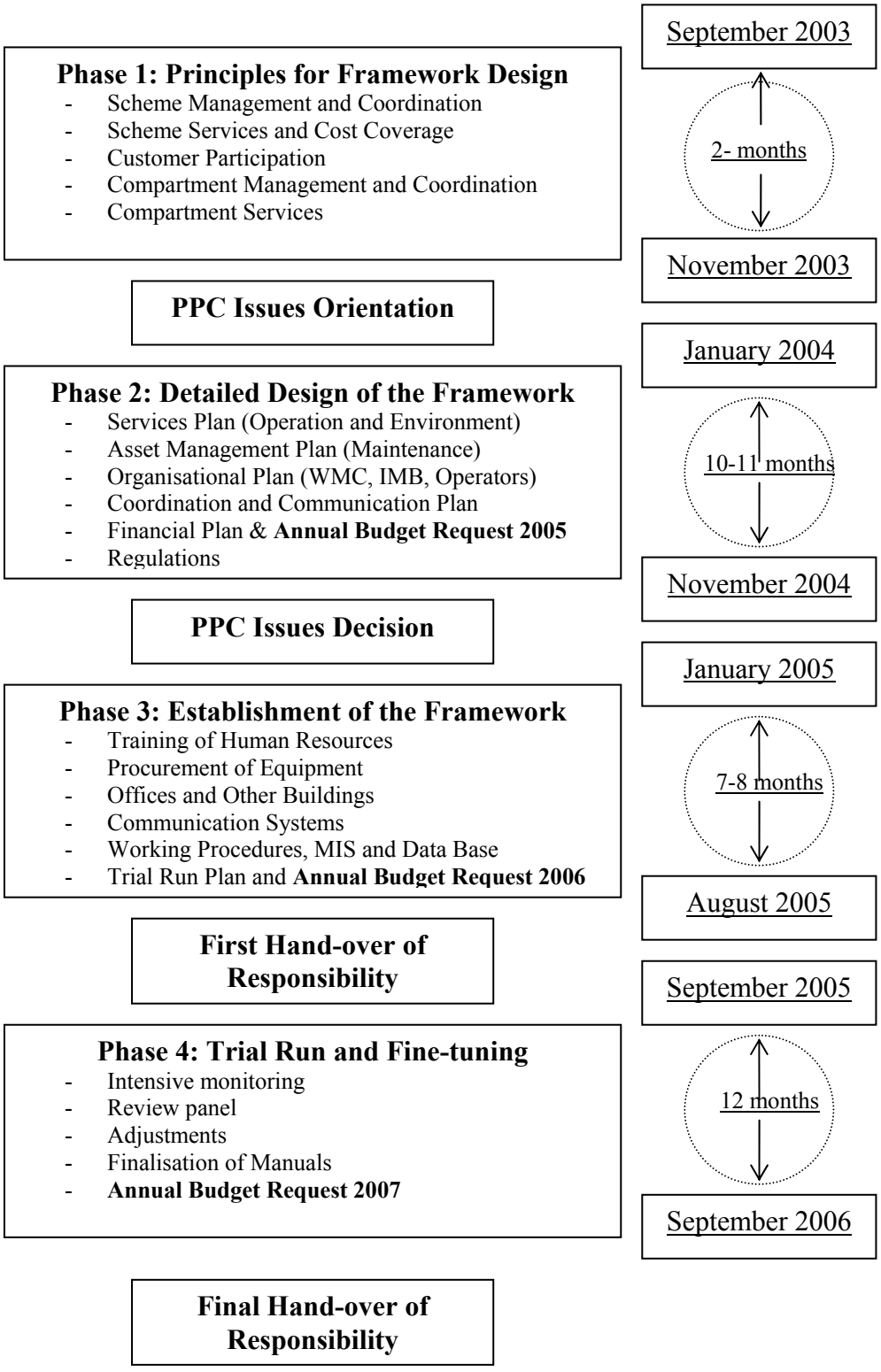
Construction delay	How arising	Solution	When applied
1. Lack of counterpart capital funds	The Independent review of December 2002 raised the GOV estimated contribution from A$4.43m to A$10.46 which provided a massive budgetary hole to the An Giang Government	An Giang PPC sought National Government budget assistance for capital works funding	GOV approved funding support to An Giang PPC and PPC subsequently provided an assurance in May 2004 that all capital funding was now assured. Funds borrowed were repaid Mar'05
2. Delay in approval of Project Feasibility study	The Feasibility study was submitted by HEC2 in January 2003. Central government funding was required. Therefore MARD endorsement of the NVN feasibility study was needed. Detailed design cannot commence until the Feasibility study is approved	AMC and AusAID provided support for PPC and made a joint mission to MARD after which MARD gave endorsement in October 2003. local stakeholder agency endorsement followed.	PPC approved the Feasibility study in February 2004
3. Delay in approval of Amendments to NVN Subsidiary Arrangement	The PPC was reluctant to proceed with the project until the GOV had endorsed the changes to the SA	PPC forwarded the SA amendment to the MPI for endorsement on 12 February 2004	PPC signed the SA amendment in July 2004
4. Delay in signing contract for detailed design	This was caused by the delay in approval of the project feasibility study. This delayed the signing of the contract from February 2003 to June 2004	AMC facilitated the project feasibility study and asked HEC2 to commence the detailed design before the contract was signed by the PMB. Some work was done by HEC2 before the contract was signed	Four detailed design packages were approved for direct appointment of the PPC in April 2004 Detailed design contracts were prepared and signed in June and July 2004
5 Delays completion of the detailed designs	Because of the delay in signing the contract for detailed design with HEC2 the design team assembled was diverted to other work such that the NVN project work was deferred until after the other work was finished	AMC sought HEC2 assistance to give the NVN project priority; understandably to little avail	The detailed design was delayed some months with final designs all submitted in November some 2 – 3 months later than scheduled
6. Delays in processing detailed design and bidding action plan approvals, selected tender approval for the 4 rehabilitation sluices	Completion of the feasibility study and detailed designs for the 4 rehabilitation sluices was reasonable. Delays commenced in the appraisal process from August 2003 and this phase took some 4 months longer than the regulated times. This delayed the intended contract awarding dates from December 2003 to May – July 2004	In October 2004 the PPC withdrew project funding for rehabilitation of sluices. This delayed the approvals process. AMC organised a meeting with AusAID resulting in AMC being authorised to lend funds to An Giang PPC for construction of 4 sluices. There were further delays in approval of the selected tender when the price is	PPC issued a NVN Project approvals process regulation in July 2004 that provided for an improved approvals process.

Construction delay	How arising	Solution	When applied
		over the regulated amount. In March 2004 AMC prepared a complete report on the problems experienced with the approvals process. AMC requested PPC to organise meetings with the approval agencies to speed up the processes.	
7. Delays approval of recommended tenderer	A new issue has arisen when less than 3 tenders are received. This is associated with difficult work for which unit rates have been cut back by the approval agencies	AMC and PMB organised a stakeholder meeting on 17 Mach 2005 to review lessons learned from the PCC regulation issued in July 2004. The PPC is considering streamlining approvals where limited tenders are received and/or the prices are higher than their approvals.	PPC will issue their decision in April 2005.
8. Delays in processing variations to detailed designs	When construction is confronted by an issue not envisaged in the design the contractor stops work while the BOQ is changed and a variation is negotiated.	A partial solution is that the PPC has agreed that design of the variation can proceed on direction of the PMB/AMC.	Applies since March 2005
	This has had the effect of extending the construction time for a sluice from 8–9 months to 12–16 months.	To fully solve this issue requires the PPC to agree to the recommendations of the stakeholder meeting held on 17 March 2005.	PPC will issue their decision in April 2005

From 2006 to 2007 Annual Plan:

Cause of construction delay	Impact of construction delay	2005-06 Annual plan completion date	Delay (months)
2005 works			
Detailed designs were late in completion	-Delay in the supply of footprints for resettlement. All footprints were received by October 2005 -Delay in submission for Appraisal. All detailed designs were submitted by November 2005	September 2005	two months late
Tendering and award of contracts	The number of tenders received was less than required to permit opening the bids. All tenders were awarded from August 2005 to January 2006. Phu Hiep received no suitable tender and was deferred for inclusion in a 2006 package	Award of all contracts from Jan to June 2005	about eight months late
Resettlement and full site hand-over	Sites were cleared progressively: Phu Lac- August 2005; Phu Binh- still not clear 31 March 2006; Muong Chua-January 2006; Bung Binh-March 2006	March 2005	five months to over 12 months
2006 works			
Detailed designs were late in completion	Delay in supply of footprints for resettlement. All footprints supplied by July 2006 -Delay in submission for Appraisal. All detailed designs were submitted by August 2005	January 2005 20 May 2005	six months three months
Tendering and award of contracts	Although tendering commenced late, the process was expeditious. All tenders let by January except: Phu Binh was re-tendered due to the initial tenderer unable to satisfy bank guarantee conditions. Phu Vinh is in the process of re-tendering due to the contractors lack of finance to maintain adequate progress and the contract has been cancelled.	Award of all contracts between August and December 2005	one month generally with the exceptions listed
Resettlement and site hand-over	RAP 3 approval delayed until 13 January 2006 Sites not fully handed over by 31 March 2006	15 September 2005 31 October 2005	four months late over five months

Annex 10. Participatory process for scheme management model



Annex 11. ESMF sub-project activities and training outputs

Training topic	Women	Men	Total
1. ESMF Training (2002 to 2006)			
Household financial management	593	498	1,091
TOT for household financial management training	92	74	166
Pig raising techniques	140	34	174
Clean fish raising techniques	63	298	361
Gender sensitivity	81	52	133
Industrial garment production	17	0	17
Credit and savings	55	2	57
Communications (IEC)	192	272	464
Toilet construction training for workers	15	93	108
Management of revolving loans for toilet construction	6	17	23
Other technical training	206	206	412
REFLECT literacy training	124	169	293
Economic development strategy	3	22	25
ESMF workshops	307	522	829
Total	**1,894 (46%)**	**2,259 (54%)**	**4,153**
2. ESMF Training (2006 to 2007)			
TOT for household financial management training	137	193	330
Biogas training for pig-raisers	10	101	111
Toilet construction training for workers	2	41	43
Total	**149**	**335**	**484**
3. Environmental development strategy training (2005 to 2007)			
Various topics	**192**	**1,357**	**1,549**
TOTAL	**2,235 (36%)**	**3,951 (64%)**	**6,186**

Annex 12. List of Province decisions on the NVN Scheme management

DARD / PPC Decision No.347	07/05/2004	Establishment of the Policy Advisory Board for water management framework – NVNWCP
PPC Decision No.1779	12/09/2006	Establishment of Management Board for the NVN Scheme
PPC Decision No.2997	21/09/2006	Temporary regulation on organization and activities of the Compartment Management Boards
PPC Decision No.2000	10/10/2006	Establishment of the local NVN station affiliated to the Irrigation Management Centre
PPC Decision No.54	29/12/2006	Regulation on organization and management of the NVN Scheme Management Board
PPC / DARD No.20	05/01/2007	Guideline for provision and use of the management, exploitation and irrigation works' protection services in NVN Scheme
PPCouncil Resolution No.06	13/07/2007	Resolution on irrigation fee rate, water fee (fee of water source use) between province budget and district budget for land area in the NVN-WCP
PPC / DARD No.791	26/07/2006	Guidelines on financial publicity of funds originating form the state budget and funds originating from people's contributions in NVN scheme
PPC Decision No.2726	16/08/2007	Establishment of editing group for 10 year financing plan for NVN
PPC Decision No.44	27/08/2007	Regulation of decentralizing management and exploitation of works under the NVN Scheme

.

Annex 13. ACR summary of higher-order achievements against the Log-frame

Source: Activity Completion Report prepared by the AMC (October 2007)

Activity description	Log frame indicators	Achievements
Project goal: To assist An Giang Province establish and operate an effective water management system which is socially and environmentally sustainable and benefits the local economy by assisting in the alleviation of poverty	Percentage poverty reduction in four poorest communes in NVN vs. province (use national poverty levels data).	In the four poorest communes, poor households reduced from 15.5% in 2000, to 4.4% in 2004 (province wide: 8.4% to 3%) and (under the 2005 poverty levels) from 21% in 2005 to 17.4% in 2006 (province wide: 12% to 11%). *
Project objective/purpose: To demonstrate the economic and social benefits to the NVN community, in particular environmental improvement and poverty alleviation, through a coordinated approach to water and land management.	Improved agricultural production	Agricultural production in three typical year-round cropping compartments increased from 30 to 44 million VND/ha, from 2000–05. †
	Decreased flood damage in Phu Tan District	Data sourced post 2007 is required to accurately assess this indicator.
	Percentage Phu Tan District cropping diversified (percentage of crop area other than paddy)	Diversification has remained static around 3%. †
	Improved use of sanitary toilets in Phu Tan District.	The percentage of households using sanitary toilets increased from 5% in 2000 to 42% in 2006.
Component 1—NVNWCPII project management: To use efficient and effective project management strategies and promote these in the stakeholder agencies such that the strategies are used for ongoing management of related projects and adopted in other projects.	Progress vs. plan (percentage expenditure).	TA expenditure at 30 September 2007 is estimated at A$9.6 million, 99% of planned. CWTF expenditure at 30 September 2007 is estimated at A$5.7 million, 85% of planned, due to slow progress in construction claims. ·#
Component 2—Institutional development: To coordinate all project activities such that they lead to institutionalising, in line agencies in An Giang Province, an acceptance of the benefits and principles of integrated water management.	Capacity built in water resources management.	In December 2006, 39 specific water management policies and systems for sustainable scheme management had been developed, agreed on and implemented·
Component 3—Project planning: To undertake studies, produce an integrated water management plan and construction plan and thereafter to update the plans undertaking additional studies to ensure sustainability and incorporating innovation.	Resettlement Action Plans (RAPs) developed and implemented. Environmental management system and local monitoring system capacity developed.	PPC approved RAP3 in January 2006. AMC submitted RAP4 to AusAID in June 2007. DARD has adopted the NVN ongoing Environmental Management System (EMS) and agreed to continue NVN environmental monitoring.

Component 4—Engineering design and construction management: To improve existing systems by which cost effective, fit-for-purpose engineering designs are produced, by which tenders are let to competent contractors, and by which construction is managed which result in facilities that both meet purpose and specification.	Engineering designs prepared reviewed and implemented. Rehabilitation construction of five sluices carried out on schedule to agreed quality New jointly funded works construction of 11 sluices carried out on schedule to agreed quality. New GoV funded work comprises the ring dyke upgrading.	Engineering designs 100% completed. Four rehabilitation sluices handed over. Phu Vinh at 70% all works will be completed in 2007. Quality is acceptable. By 30 September 2007, completion of 11 sluices was 95% overall. Quality is acceptable. By 30 September 2007 GOV dyke construction work reached around 40% complete.
Component 5—Economic and social benefits through IWMP implementation: To implement the agreed IWMP through sustainable O&M and environmental management whilst ensuring the poor can participate in project benefits.	Key policies and systems for sustainable scheme management developed, agreed and implemented. ESMF and EDS established and implemented as indicated by actual number of beneficiaries and subproject expenditure compared to planned.	Five key regulations were issued. One remains to be formalised. Policies 90% agreed, 80% of mechanisms agreed, and 30% implementation in progress. Key ESMF beneficiary numbers (July 2007): Potential target = 15,500 Actual number of poor and near poor beneficiaries = 20,312.

* GOV income poverty levels 2000–05: 100,000 VND/person/month; 2005–10 projected: 200,000 VND/person/month.

† The project impact on poverty reduction will be more assessable after significant completion of the compartment dykes, which is a prerequisite for a shift to more intensive and higher value production systems.

\# Reasons for delays: weak cash position of contractors, security issue at the peak of the construction season, and slow resettlement.

Annex 14. Main project reports

Milestone reports

	Document code
Annual Plan 2004	EW1016-AP-003
Environmental Management System	EW1016-EMS-001
Environmental Management System Updated	EW1016-EMS-002
Environmental Social Management Fund Procedure Manual	EW1016-ESMF-001
Annual Plan 2005	EW1016-AP-004
Annual Plan 2006	EW1016-AP-005
Environmental and Social Management Fund Final Report	EW1016-ESMF-002

Routine reports

	Document Code
Six-monthly Progress: Report No. 4	EW1016-SMR-004
Six-monthly Progress :Report No. 5	EW1016-SMR-005
Simplifying Monitoring Tool/Six Monthly: Report No. 6	AusAID report format
Simplifying Monitoring Tool/Six Monthly: Report No. 7	AusAID report format
Simplifying Monitoring Tool/Six Monthly: Report No. 8	AusAID report format
Six-monthly Progress :Report No. 9	EW1016-SMR-009
Six-monthly Progress :Report No. 10	EW1016-SMR-010

Other reports

	Document code
Construction Plan	EW1016-CP-001
Communication Strategy	EW1016-CS-001
Review of design & construction approval process in ODA projects under Vietnamese legislation system	EW1016-DCA-001
Economic Development Strategy Summary Report	EW1016-EDS-001
Environmental Evaluation Final Report 2006	EW1016-EER-001
Report on Environmental Impact Assessment	EW1016-EIA-001
Environmental Management Plan No. 2	EW1016-EMP-002
Environmental Monitoring Report, January–December 2004	EW1016-EMR-001
Financial Analyst (International)— Visit Report	EW1016-FAR-001
Financial Analyst/M&E Specialist—Fourth Visit Report	EW1016-FAR-002
Fisheries Report— Input 2	EW1016-FR-002
Investigation of Vietnamese gate design, construction and operations & maintenance practice	EW1016-GFP-001
Gate Specialist Report	EW1016-GSR-001
Project Inception Report	EW1016-IR-001
Integrated water management plan Volume 1—Main report	EW1016-IWMP-001 (Volume 1)
Integrated water management plan Volume 2—Sub-study reports	EW1016-IWMP-001 (Volume 2)
Integrated water management plan—Final main report	EW1016-IWMP-002
Monitoring and Evaluation Plan	EW1016-MEP-001
Monitoring and Evaluation Report to December 2004	EW1016-MER-001

	Document code
Monitoring and Evaluation Reviewer (International)— Visit Report	EW1016-MER-002
Financial Analyst and Monitoring and Evaluation Specialist Third Visit	EW1016-MER-003
Monitoring and Evaluation Report No. 2	EW1016-MER-004
Monitoring and Evaluation Report 2007	EW1016-MER-005
Rural development— Micro enterprise findings and recommendations	EW1016-MFR-001
Monitoring of Resettlement and Compensation RAP 2—Volumes 2a & 2b (Phu Hiep, Bung Binh, Muong Chua, Phu Bih and Phu Lac sluices)	EW1016-MRC-001
Combined project strategies	EW1016-PS-001
Project Implementation Plan	EW1016-QZ-001
Project quality plan	EW1016-QZ-002
Health, Safety and Environment Management Plan	EW1016-QZ-004
Resettlement Policy, Framework & Activities Review Report	EW1016-RRR-001
Socio–Economic evaluation of project affected persons, RAP 1—Volumes 2a and 2b	EW1016-SEE-001
Report of Visit 1 (O&M report No1, April— May 2003)	
O&M Report No.2	
O&M Workshop Report in Phu Tan and Tan Chau District	
Report of visit 4 (O & M report No.4, Feb— Mar 2004)	
Report of visit 5 (O & M report No.5, May— Jul 2004)	
Report of visit 6 (O&M Report No.6, August— September 2004	
Compartment Production Plan Report	
Report household financial management training programs during 2003–06 and Implementation Plan to 2010 in An Giang Province	
Environmental Monitoring for 2005	
Environmental Monitoring for 2006	
Environmental Capacity Building— Assignment Completion Report Final 2006	