Final Evaluation of SRV 0038 – Rural Development in Coastal Areas of Trieu Phong District, Quang Tri Province

Evaluation Report

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Government of Norway **Government of Vietnam**

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September 17th 2007

PEM CONSULT
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Map of Vietnam with Location of Project

List of Abbreviations and Acronyms

CPC	Commune´s Peoples Committee
CTA	Chief Technical Advisor
DARD	Department of Agriculture
DPC	District Peoples Committee
DPI	Department of Planning and Investment (at Province level)
ET	Evaluation Team
EGV	Eco Garden Village
GON	Government of Norway
GOV	Government of Vietnam
HRD	Human Resources Development
n.a.	Not applicable
NOK	Norwegian Kroner. (Norwegian Currency)
NORAD	Norwegian Agency for Development Aid
PMU	Project Management Unit
PPC	Provincial Peoples Committee
SC	Steering Committee
TA	Technical Advisor
TOR	Terms of Reference
VND	Vietnam Dong. Vietnamese Currency. 1 US$ = 16.000 VND
World Vision	American International NGO working with Poverty Alleviation in Thrieu Phong District

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1. Executive Summary

1.1 Introduction

The overall objective of the Project is to improve the living conditions of the people, especially the poor, in seven coastal Communes of Trieu Phong District. The strategy was to apply an integrated concept to area development for sandy costal lands, developed over many years by Vietnamese specialists. The strategy was suppose to be implemented in a participatory approach working within the framework of the Vietnamese administrative system at District and Province level and with the full participation in planning and implementation of the people of the seven Communes through the Commune's Peoples Committees(CPCs).

The project consists of five components with nine sub-projects:

Component 1: Economic Development and Income Generation
Sub-project 1.1 Income generation with emphasis on poor households in seven Communes
Sub-project 1.2 Relocation of poor villagers to Eco Garden Villages

Component 2: Environmental Rehabilitation
Sub-project 2.1: Drainage canals and sand dykes
Sub-project 2.2: Protective forest on sandy soil to prevent sand dyne movements
Sub-project 2.3: Soil improvement through planting of nitrogen fixing plants

Component 3: Rural Infrastructure
Sub-project 3.1: Construction and upgrading of rural roads
Sub-project 3.2: Construction of low-voltage electronic power distribution networks

Component 4: Economic Infrastructure
Sub-project 4.1: Construction and upgrading of 7 primary schools and teachers accommodation
Sub-project 4.2: Training of District-, Commune-, and Project staff, and training of beneficiaries

Component 5: Project Management

According to the Terms of Reference (TOR) the purpose of the Final evaluation is to:

1. Verify to which degree the Project objectives have been achieved, including poverty, gender and environmental issues
2. Verify relevance, effectiveness and efficiency of the objectives, purposes and activities of the Project in relation to the overall development of the District and Province as outlined in their annual budgets and socio-economic development plans
3. Estimate the sustainability of the results achieved in the medium-and long-term
4. Assess whether the Project has made a sustainable impact in the coastal areas of Trieu Phong District during the implementation phase or whether there is a need for a follow-up of the Project, which could include technical assistance to the development of pro-poor aquaculture

The methodology of the Evaluation Team has been to assess the physical structures through inspection of the quality, price, use, durability and sustainability of the maintenance organisation established. The

institutional and financial sustainability of the institution responsible for maintenance was established through interviews with the responsible government officers.

The capacity building (sub-project 4.2) and the economic development and income generation sub-projects 1.1 and 1.2 was assessed through direct visits and interviews with the poor rural households, focus group discussions and subsequent verification of information through discussion with the responsible government officers at the seven Communes, DPI and staff of the PMU.

This executive summary presents the assessment of the Components and Sub-projects against the evaluation criteria. The Project Management is assessed using a self assessment by PMU staff of its strength and weaknesses as the point of departure. Finally, a summary of conclusions and recommendations are presented.

1.2 Assessment of the Components and Sub-projects

An assessment of the components and sub-projects against the evaluation criteria is presented below:

Component/ sub-project	Relevance	Efficiency	Im-pact	Effecti veness	Sustaina bility	Assessment
1.1 Economic development and income generation						
Scrimp Hatchery	Very low. The ecological conditions are only good in Trieu Phuóch Commune	Low	Low	Low	n.a.	The final arrangement seems OK, but should be monitored closely by the seven Communes and DPI in order to ensure that the work is relevant for the Project target beneficiaries
Fish ponds	High in ECO villages. Not so relevant for poor in 2 Communes without Eco villages because poor households have insufficient land and capital	medium	High for 2-3 species	Mediu m	High	The development of models should be continued because the team seems to have developed an effective approach to identification and dissemination
Crops	High	High	High	High	High	The varieties introduced enhances food security of the poor
Animal husbandry	High	High	High	High	High	The development of models should be continued and should include the development of options for fodder production, also as a cash crop
1.2 Eco-villages						
443 poor households provided with land (1 ha) with house (electricity and water incl.), fish pond, trees, seeds, pigs and training	The Concept is very relevant in five of the seven Communes where new land has been developed for farming and aquaculture, but should be further developed to include all eligible poor households, and social services like kindergarten and sanitation	High	Medi-um	Medi-um.	High	More poor households could have been included by increasing the budget or reducing the size of holding. Benefits could have been higher if the funds per household had been optimised. The package could have been more relevant of sanitation and child care facilities had been included. The benefits could have been increased considerably if the contents of the package had not been reduced due to shortage of funds due to high investment cost of drainage canals, rural roads and shrimp hatchery.
2. Environmental Rehabilitation						
Eight drainage canals	Very high	High quality and compe-titive price.	Very high	High	High	Perhaps a design issue in one of the structures, which has been damaged during 2006 flooding
Sand dyke	Very relevant	High quality and compe-titive price	Very high	Very high	Medium. Need for re-inforce-ment	The feasibility of reinforcement and at the same time developing the sand dyke into an all-weather access road should be determined by a social cost-benefit analysis.
Protective Forest	Very high	Very high	Very high	Very high	High	A plan of management of the area including sustainable harvesting should be developed

Soil fertility improvement	Very high. Humus depth 30 cm after 4 years	Very high	Very high.	Very high	Very High	The soil fertility programme should be repeated and replicated in new areas
3. Rural Infrastructure						
Roads	Very high	Very high	Very high	Very high	High	The roads are of better quality than roads constructed by other programmes and even durable during the last 3 food seasons.
Electricity	Very high	Very high	Medium	Medium	High	Electricity is an important economic infrastructure of importance for further economic development and at present it is affordable to the poor.
4. Education and Training Rural Infrastructure						
4.1 7 Primary schools	High	High	Very high	Very high	High	The new structures facilitate an improved primary education system and the schools provide shelter during severe flooding. The schools have been certified as meeting the National Standard.
4.2 Training of staff	Medium	Medium	Medium	Low	Medium	A comprehensive Training Needs Assessment was never undertaken and HRD activities seem to have been ad hoc and rather incomprehensive.
4.3 Training of beneficiaries	High	Very high	High	High	High	A training needs assessment should be part of the introduction of new models

1.3 Assessment of the Project Management

The overall management responsibility has rested in a Project Steering Committee reporting to the Government of Norway (GON) and the Government of Vietnam (GOV) through the agreed official channels.

The Project has been implemented by the District on behalf of the Provincial Peoples Committee (PPC) and with the full involvement of the people's institutions at the Community Level in the planning, design, implementation and monitoring of Project Activities. The management and implementation has been in accordance with Vietnamese and NORAD regulations and procedures. This has also been the case with respect to Financial Management.

The daily management has been the responsibility of a relatively small and therefore relatively efficient Project Management Unit headed by a National Project Manager, Project Director, who was assisted during the first 2 years by an International CTA and a Vice Director. After the first 2 years the CTA and Vice Director were discontinued and international Technical Assistance (TA) was provided by a Technical Advisor Income Generation Specialist, the input of whom was gradually reduced over the last three year implementation period. The PMU have consisted of relatively young, energetic but also inexperienced District staff on deputation to the project. Its competence and efficiency has grown during Project implementation and important lessons have been learnt.

The overall impression is of an efficient team dedicated to the fulfilment of the Project Objectives.

1.4 The Evolution of the Project in Relation to Poverty Alleviation

The table below present the project cost by sub-component and activity. When we compare the expenditure figures with the original budget included in the Government to Government agreement we can see that the focus has been slightly changed from Economic Development and Income Generation directly for the benefit of the poor, to improved environment and infrastructure which would provide a

general facilitating environment.[1] This development was identified as a short coming in the mid-term review report of 2003, but it has obviously been too late to significantly improve the situation.[2]

Table 1: Project Expenditure[3] by Component

Components/Sub-projects	Expenditures (VND)	Per cent
1. Economic Development and Income Generation	**12,760,169,094**	**14.3**
1.1 Aquaculture Development/Shrimp Hatchery and Small Husbandry	5,440,579,136	6.1
1.2 Establishment of 12 EGFV	7,319,589,958	8.2
2. Rehabilitation of Environment	**16,034,988,137**	**18.0**
2.1 Construction of Drainage Canals and Sand Dykes	10,484,571,360	11.8
2.2 Plantation of Protection Forest on Sandy Soil	3,828,241,697	4.3
2.3 Improvement of Soil on Sandy Area	1,722,175,080	1.9
3. Improvement of Infrastructure	**27,100,700,938**	**30.4**
3.1 Construction and Up-grading of Rural Roads	24,174,335,588	27.2
3.2 Construction of Low Voltage Grid for EGFV and old villages	2,926,365,350	3.3
4. Education and Training	**17,353,488,649**	**19.5**
4.1 Up-grading Primary Schools and Dormitories for Teachers	12,051,499,865	13.5
4.2 Capacity Building for PMU, Leaders of Communes and Villages; Training	5,301,988,784	6.0
5. Coordination, Technical Assistance and Project Evaluation	**15,661,473,136**	**17.6**
5.1 Coordination, Management and Technical Assistance (International Advisor)	15,313,040,736	17.2
5.2 Project Evaluation	348,432,400	0.4
6. Tendering Costs	**127,270,400**	0.1
Total Expenditures	**89,038,090,354**	**100.0**

In total 62 per cent of the funds has been used to finance Component 2 and 3 plus sub-project 4.1 Primary Schools. The cost of construction related activities – including the cost of the Shrimp Hatchery – is 69 per cent of the total cost. Direct support to the poor (sub-project 1.2 is only 8.2 per cent) has been under-funded, in spite of the reorientation from 2003 and onwards simply because funds had already been committed to construction activities[4].

It is the impression of the Evaluation Team that the benefit/cost ratio of the Project from the perspective of the poor (the target group) could have been improved significantly by increasing the allocation to sub-project 1.2 by say 50 per cent.

The additional funds for economic development and income generation could have been used in order to:

1. Include all the eligible poor farmers of the five relevant Communes in the programme (it would have required only a marginal reduction in the size of landholding from say 1 ha to 0.8 ha;
2. Ensure that the fishponds could be implemented in order to optimize the benefits to the farmers. This would have required a specific design in each Eco Village Garden, which took into consideration the

[1] The direct comparison is not so easy because some sub-projects have been shifted from one component to another component in the course of implementation, while other sub-projects have been dropped because they were considered non-feasible.
[2] The report published in September 2003 suggested that modifications be made in order to focus more directly on assisting the poor and have a more flexible approach in order to take into consideration the variations in ecology and socio-economic conditions of the seven Communes. As a result animal husbandry was introduced and more aquaculture models were tested and disseminated.
[3] Expenditure by end June 2007
[4] The original project document of May, 1999 prepared by Quang Tri DPI allocated 40 per cent of the budget of NOK 45 million to component 1: Economic Development and Income Generation, while only 48 per cent was allocated for component 2: Environmental Rehabilitation and component 3 Rural Infrastructure including rural roads, primary schools, electricity, drilled wells, drainage canals and teachers Accomodation.

local environment. An appropriate design would enable the poor families to operate the fish pond on an all year basis. The cost increase would have been marginal.

3. Add some capital for animal husbandry as working capital. Keeping pigs and poultry have proven to be a highly profitable enterprise for poor farmers, but the income can be increased manifold when farmers have access to adequate working capital for example to feed the piglets for 3-4 months instead of selling them when they are very young for 25 per cent of the price;
4. Include sanitary latrines which would have improved the general health situation and increased the productivity of the poor families, and
5. Include pre-schooling facilities which would have freed labour power of the poor young families to work more hours on their land or on non-farming activities.

An increase in component 1.2 by 50 per cent would only have increased the total budget by 3 per cent, but it would have increased the benefits to the poor households many times and have increased the fish and the animal production in five of the seven Communes considerably.

1.5 Summary of Observations, Conclusions and Recommendations

The observations, conclusions and recommendations of the Evaluation Team (ET) are presented in Chapter 9. The most import conclusions and recommendation are summarised below:

1. The concept has generally been proven successful and very relevant for five of the seven communes. I can be replicated in Communes with similar ecological conditions and should therefore be well documented for the benefit of others. It is ***recommended*** to prepare a booklet and a video.

2. The concept has not been relevant for the Communes of Xã Triêu Dô and Xã Triêu Phuôc. It is therefore ***recommended*** to set aside funds in the District Budget to assist in the preparation and implementation of a poverty strategy with focus on animal husbandry and non-farming activities supported by relevant extension services and vocational training

3. The relevance, efficiency and effectiveness can be further enhanced by broadening the package supplied to poor households and by extending the services to all poor households in the five relevant Communes. It is ***recommended*** that Department of Planning and Investment (DPI) prepare a Project Document for a three year extension of the Project with focus on the following elements:

   - further strengthening of the sand dyke and construction of a gravel all-weather road on the top;
   - the settlement of additional poor households in Eco Garden Villages;
   - the deepening and further protection against flooding and silting-up of existing fishponds;
   - the development and dissemination of more relevant crops, aquaculture, animal husbandry and non-farming income generation models such as fodder productions and agro, fish and forestry processing small enterprises;
   - the inclusion of sanitary latrines and access to kindergarten in the Eco Village Package

4. The management and implementation strategy has been very efficient and effective and has contributed to capacity building for implementation of rural development projects at institutions at all levels. It is ***recommended*** that GOV and GON consider supporting the Project with a 3 year extension phase. It is ***recommended*** that a possible extension be implemented through PMU with part time staff cooperating with local consultants and local research institutions and universities and

with assistance on request from an international part time Rural Development and Income Generation Advisor.

2. Background

The GOV and the GON has cooperated in a Rural Development Project (the Project) focusing on the poor in seven Coastal Communes in Trieu Phong District of Quang Tri Province. The Project was presented in a Tentative Project Document prepared for the Peoples Committee of Quang Tri Province by the Department of Planning and Investment (DPI) dated May, 1999. This document formed the basis of the Government to Government Agreement signed 10th November 2000. The project period was originally planned for four years from early 2001, but was subsequently extended till August 2007. The budget was NOK 45 million /equivalent of Vietnam Dong (VND) 85 billion of which the GON provided 80 per cent as a grant and the GOV provided the remaining 20 per cent.

The overall objective of the Project is to improve the living conditions of the people, especially the poor, in 7 coastal Communes of Trieu Phong District. The strategy was to apply an integrated concept to area development for sandy costal lands, developed over many years by Vietnamese specialists. The strategy was supposed to be implemented in a participatory approach working within the framework of the Vietnamese administrative system at District and Province level and with the full participation in planning and implementation of the people of the seven Communes through the Commune's Peoples Committees (CPCs).

A midterm review was undertaken in May 2003. The report published in September 2003 suggested that modifications to the concept be made in order to make it more directly focussed on assisting the poor and make it more flexible in order to take into consideration the variations in ecology and socio-economic conditions of the seven Communes. This resulted in a shift in orientation towards capacity building and development of different "models" for income generation for the poor from the original ideas of shrimp and subsistence crop production to animal husbandry and already proven models for aquaculture such as tilapia, sea bass, grouper and grass carp.

2.1 Description of the Project and its Evolution during the Implementation

The Project document prepared by DPI of Quang Tri Province for the Peoples Committee is a well prepared document, which include a thorough description of the natural conditions, the socio-economic situation and the policy and institutional context.

Seven Communes of the very poor Trieu Phong District of the Quang Tri Province are identified as the "Project Area". Low agricultural productivity and primitive costal fisheries are identified as the main reason for the relatively high level of poverty. Due to water constraints for irrigation and low fertility of the soils it is only possible to harvest one crop per year, and neither the traditional rice varieties nor the new hybrid ones can do well. The stable crops in five of the seven Communes are sweet potatoes and cassava both grown mainly for subsistence. The availability of seeds, fertilisers, pesticides and extension service is generally poor. Due to primitive boats and fishing technologies the income from coastal fisheries is very limited, and many young men from the 7 Communes migrate to urban centres like Ho Chi Minh City to look for employment, while women are making ends meet by engaging in petty trade.

The Project document of May 1999 proposed to drastically change this unproductive natural environment through a combination of (i) rehabilitation of the environment, (ii) development of agricultural land and fish ponds, (iii) development of rural infrastructure such as roads, schools,

electricity and shallow wells, and support to training and crop, aquaculture and animal husbandry production of the poor after being resettled on the newly developed land on plots of approximately 1 ha of land.

The following sub-project ideas are presented in the Project document but it is made clear that each proposal has to undergo a thorough feasibility study before it is decided to implement:

1. Construction of semi-intensive tiger shrimp breeding pond
2. Migration of poor families to sandy areas to be developed for farming and fish farming – Ecological Gardens (see 8 below)
3. Investment in improved soil fertility
4. Allocation of Credits to the poorest households
5. Construction of farms: rice seed farm and shrimp breeding farm
6. Protective afforestation
7. Dug wells and drilled wells for clean water supply
8. Construction of Drainage Canals and Sand Dyke (this is based on a successful experiment carried out in Quang Tri 1992-95 called: "Improvement of Ecological Environment of Sandy Area", which documented that sandy soils could be converted into cultivated land by combining agroforestry and aquaculture after draining and protection of the area).
9. Rehabilitation and upgrading of rural roads
10. Construction of Primary Schools
11. Construction of Power Supply for Seven Communes and new Ecological Villages
12. Income generation for poor households
13. Institution Building through training of beneficiaries and staff of implementing institutions
14. Project Coordination
15. Technical Assistance

The following indicative budget was included in the Document

Indicative Budget as per Project Document	VND	Per cent
1. Economic Development and Income Generation	**27.915.000,00**	40%
1.1 Aquaculture	10.100.000,00	
1.2 Ecological gardens for 450 poor households	6.750.000,00	
1.3 Improvement of soils	2.600.000,00	
1.4 Revolving Credits	4.600.000,00	
1.5 Rice variety and stock shrimp seed farm	3.865.000,00	
2. Rehabilitation of Environment	**7.000.000,00**	10%
2.1 Afforestation	3.500.000,00	
2.2 Drilled wells for clean water	500.000,00	
2.3 Drainage water canals and sand dyke	3.000.000,00	
3. Improvement of Infrastructure	**25.900.000,00**	38%
3.1 Rural Roads	16.100.000,00	
3.2 Primary Scools	7.800.000,00	
3.3 Electricity	2.000.000,00	
4. Institution Building	**2.000.000,00**	3%
4.1 Workshops	300.000,00	
4.2 Training for staff	1.000.000,00	
4.3 Training for beneficiaries	400.000,00	
4.4 other	300.000,00	
5. Project Coordination	**3.785.000,00**	5%
5.1 Short term consultancies	1.000.000,00	
5.2 Operational costs	1.600.000,00	
5.3 Office	700.000,00	
5.4 Equipment	250.000,00	
5.5 Others	235.000,00	
6. Technical Assistance	**2.400.000,00**	3%
Project Grand Total	**69.000.000,00**	100%

The Project started by having the PMU contract Consultants to undertake feasibility studies and design studies of the major infra-structure works and after some delays the construction of the drainage canals, a 12.3 km sand dyke, the rural roads, and the primary schools started during 2002 and 2003. The cost of these investments exceeded the first estimates grossly as shown in the table below[5]:

Budget and Actual Expenditure VND	budget	Per cent	Actual Expenditure	Per cent
1. Economic Development and Income Generation	**27,915,000,000**	40%	**12,760,169,094**	14%
1.1 Aquaculture (shrim hatchery)	10,100,000,000		5,440,579,136	
1.2 Ecological gardens for 450 poor households	6,750,000,000		7,319,589,958	
1.3 Improvement of soils	2,600,000,000		moved to item 2	
1.4 Revolving Credits	4,600,000,000		not implemented	
1.5 Rice variety seed farm	3,865,000,000		not implemented	
2. Rehabilitation of Environment	**7,000,000,000**	10%	**16,034,988,137**	18%
2.1 Afforestation	3,500,000,000		3,828,241,697	
1.3 Improvement of soils			1,722,175,080	
2.2 Drilled wells for clean water	500,000,000		not implemented	
2.3 Drainage water canals and sand dyke	3,000,000,000		10,484,571,360	
3. Improvement of Infrastructure	**25,900,000,000**	38%	**39,152,200,803**	44%
3.1 Rural Roads	16,100,000,000		24,174,335,588	
3.2 Primary Scools	7,800,000,000		12,051,499,865	
3.3 Electricity	2,000,000,000		2,926,365,350	
4. Institution Building	**2,000,000,000**	3%	5,301,988,784	6%
5. Project Coordination and TA	**6,185,000,000**	9%	**15,661,473,136**	18%
Project Grand Total	**69,000,000,000**	100%	**89,038,090,354**	**100%**

In particular the cost of item 2.3 drainage canals, item 3.1 rural roads, and item 3.2 primary schools seems to have been underestimated in the indicative budget of the Project Document of May, 1999.

The increased cost of Project coordination and technical assistance is partly due to the extension of the Project implementation period by 2.5 years from 2000 to 2004 to August 2007.

The steering committee decided to drop some sub-projects – like the revolving credit, and the drilled wells for water supply, while other elements like 1.1 income generation from aquaculture and animal husbandry had to be reduced because of limitation of funds. In stead the design for the houses in the Eco Garden Villages was revised to include a well for each house, and the amount has been included in the budget for the sub-Project 1.2 Eco Garden Villages.

The Project Final Report date August 2007 prepared by the PMU for the Peoples Committee of Quang Tri Province explains the change in the Project focus in this manner[6] :

"....In the initial phases of the Project there was too little emphasis on poverty alleviation with poor households as direct beneficiaries. The Project had too much focus on infrastructure and general socio-economic development of the area and at household level people articulated other needs and problems than those identified as priorities by the Project. Therefore the last phase of the Project was designed to be strictly "need-based". It was further agreed that "the needs" of the actual beneficiaries would be based on authentic beneficiary consultations. From 2005 the Project facilitated an income generating programme in aquaculture and small-husbandry, which provided encouraging results and opened the eyes of the authorities of the big potential for economic development especially in diversified aquaculture. This programme only has worked two years, which isn't sufficient to get the activities fully

[5] The direct comparison is not so easy because some sub-projects have been shifted from one component to another component in the course of implementation, while other sub-projects have been dropped because they were considered non-feasible.
[6] Project Final Report, PMU, Thrieu Phong District, August 2007.

integrated in the daily practices of the family households, and in spite of lack of funds RIA1 and the provincial government intend to continue the efforts in aquaculture"……

The Project, which was actually implemented, excluded some of the initial sub-projects, but the interrelated five components and a total of 9 sub-projects were maintained as follows:

Component 1: Economic Development and Income Generation
Sub-Project 1.1 Income generation with emphasis on poor households in seven Communes
Sub-Project 1.2 Relocation of poor villagers to Eco Garden Villages

Component 2: Environmental Rehabilitation
Sub-Project 2.1: Drainage canals and sand dykes
Sub-Project 2.2: Protective forest on sandy soil to prevent sand dyne movements
Sub-Project 2.3: Soil improvement through planting of nitrogen fixing plants

Component 3: Rural Infrastructure
Sub-Project 3.1: Construction and upgrading of rural roads
Sub-Project 3.2: Construction of low-voltage electronic power distribution networks

Component 4: Economic Infrastructure
Sub-Project 4.1: Construction and upgrading of 7 primary schools and teachers accommodation
Sub-Project 4.2: Training of District-, Commune-, and Project staff, and training of beneficiaries

Component 5: Project Management
The initial Budget of the Project of NOK 45 million was adequate to cover the increased cost in VND as well as the extension of the Project in time because of a revaluation of the NOK against the VND. The extension of the Project increased the cost of Project management, but actually the spending in the last 3 years of the project period was very moderate as shown in the table below:

Project funds spend by year 2000-2007		
Year	Total (VND)	Per cent
2000	5,110,760,830	6%
2001	15,071,222,575	17%
2002	18,213,119,071	21%
2003	16,947,586,890	19%
2004	13,179,484,599	15%
2005	11,814,747,356	13%
2006	5,605,088,201	6%
2007	1,800,000,000	2%
Total	**87,742,009,522**	100%

2.2 The Terms of Reference, the Evaluation Team and its Programme

In order to enable the GON and GOV to evaluate whether the chosen approaches are sound and sustainable and whether the resources made available to the Project has been used in an appropriate and efficient way it was decided to undertake an evaluation.

According to the Terms of Reference (TOR) the purpose of the Final evaluation is to:[7]

1. Verify to which degree the Project objectives have been achieved, including poverty, gender and environmental issues
2. Verify relevance, effectiveness and efficiency of the objectives, purposes and activities of the Project in relation to the overall development of the District and Province as outlined in their annual budgets and socio-economic development plans
3. Estimate the sustainability of the results achieved in the medium- and long-term
4. Assess whether the Project has made a sustainable impact in the coastal areas of Trieu Phong District during the implementation phase or whether there is a need for a follow-up of the Project, which could include technical assistance to the development of pro-poor aquaculture

The achievement will be assessed against the criteria of (i) relevance, (ii) efficiency of implementation, (iii) effectiveness in achieving the objectives, (iv) impact – to the extent that it is measurable, and finally (v) the sustainability of the benefits and of the institutions, which are meant to continue to generate benefits.

The Embassy of Norway contracted the following Evaluation Team:

- Team Leader and Institutional and Rural Development Specialist: Associate Professor John Carlsen
- National Consultant and Rural Development Specialist, Dr. Do Thi Minh Duc
- National Consultant and Rural Infrastructure Specialist, Mr. Le Doan Phach

The evaluation took place from Friday 23rd July to 3rd August 2007. The methodology and approach applied during the field work was participatory. The following team appointed by the Districted participated in the evaluation:

- Ms. Phuoc, Vietnam Women´s Association
- Mr. Y, District Economic Infrastructure Division.
- Mr. Hao, District Agriculture Division

At the end of the Field Work the Evaluation Team presented its observations, findings and conclusions in a Debriefing Note and a Debriefing Meeting with participation of the seven Communes, the DPI and the PMU. The meeting agreed to the major findings and recommendations, which have therefore been included in the Executive Summary of this draft evaluation report.

In the evening on Thursday 2nd August a debriefing was also conducted in Hué with Mr. Leiv Landro and Mr. Chin of the Norwegian Embassy in Hanoi. The representatives from the embassy suggested that clear recommendations with justification of the proposed 3 year extension be included in the evaluation report without referring to any particular source of finance.

The draft report was submitted to the Norwegian Embassy and to PMU on August 24th 2007, and the comments from PMU was received on September 13th 2007. They are included in full in Annex 7.

The Evaluation team has corrected the factual misunderstandings pointed out by the PMU and have assessed the comments to the analysis and conclusions. We have included the comments and explanation

[7] Please refer to Annex 1.

given by the PMU in the only instance where the information differ from the information collected by the Evaluation Team during the field work in order to give the reader an the full picture and an opportunity to judge for themselves.

2.3 The Methodology and Approach of the Evaluation

In order to collect information for the evaluation and to verify information collected, the team interviewed beneficiaries as well as non-beneficiaries in the seven Communes and conducted focus group discussions. The Evaluation Team had meetings with Commune leaders, representatives of consultant companies contracted to design the major works, and District and PMU staff directly involved in implementation.

Each of the seven Communes was visited by the Evaluation Team and in each Commune the following programme was followed:

1. Meeting with the Chairman, the Vice Chairman, and the Project responsible officer of the Commune in order to get information about the natural and socio-economic situation with particular focus on the poor families, on income generation opportunities and constraints to development;

2. Briefing by the Commune regarding the activities and results generated by the Project in this particular Commune, and the recommendations by the Commune regarding sustainability and the generation of additional benefits;

3. The physical inspection of works, such as afforestation, soil fertilisation, drainage canals and sand dyke, rural roads, schools and fish ponds;

4. Interviews with poor households which moved to the Eco Garden Villages; 2-3 families were interview in each of the five Communes with Eco Gardens;

5. Interviews with poor households which was not selected to move to the Eco Garden Village; we interviewed 2-3 households in each Commune, and they were used in the evaluation as the “control group”.

6. In five of the Communes the female members of poor households were then facilitated in a focus groups discussion regarding the positive and less positive aspects of the Project and its mode of implementation;

7. Interviews with poor households in 2 Communes, which did not have land for Eco Garden Villages;

8. Interviews with farmers who participated in the pilot testing of different Aquaculture Models;

9. After the interviews with households the field visits were concluded with a short debriefing meeting with the Commune leaders. The purpose of this meeting was to double check information received, and to verify data;

10. Finally, the information collected was verified in discussions with PMU and District professional staff.

The programme of the ET, a list of people met, and a list of documents consulted by the Evaluation Team are attached as Annexes 2-4.

3. Assessment of the Four Components and Sub-Project

3.1 The Project Design and its Evolution

3.1.1 The General Relevance and Efficiency of the Project Design

In general the Project design, the implementation strategy and its management has been very relevant, efficient and effective. It is very relevant for many Coastal Communes with similar environmental and socio-economic conditions. Therefore it should be well documented, so that the experiences can be used for the planning of development in other Communes where similar challenges exist.

It is recommended that a video and a booklet be produced to that the lessons learnt can be made available to the many poor coastal Communes, which are facing the same environmental and socio-economic conditions.

The Project goal is to improve living conditions of the people, especially the poor, in 7 coastal Communes of Trieu Phong District, which is in line with and supporting the Vietnamese Government's hunger eradication and poverty reduction endeavours as well as the Peoples self-help efforts. Poverty eradication and environmentally sustainable development is also the main objective of Norwegian development assistance.

The Project design focussed on the problems of low productivity of the poor families and identified the poor as the major target group for the income generation as well as for the relocation into 0.5 – 1 ha farms in Eco Garden Villages. It focused on currently unutilized, barren and sandy area between the villages and the coast by making use of its land and supply of fresh groundwater for vegetable farming. The area is flooded during the rainy season and subject to drifting sands during the dry one and not used for living or farming. By creating a system of drainage canals, planting protective forests and improving the soil conditions the Project has demonstrated that it can be made suitable for vegetable farming, certain livestock and poultry production and fish pond farming. Together with the building of access roads, electrification and the drilling of deep wells, the land has been developed for so called Eco Garden Farms, a concept that has been successfully tested in this Project.

During the Project phase, 443 households has been provided with farming land in sizes of 0.5 - 1.0 ha, surrounded by a protective hedgerow of tall trees planted on a flood protecting dyke, a drilled deep well, electricity and with funds for construction of a house, a fish pond and for livestock and poultry keeping. Funds were also made available for purchases of seeds, seedlings, fertilizers and pesticides during the first season. Each of the 12 settlements would be surrounded by common grazing/farming land on improved soil. An integral part of the package was a set of training courses in eco-garden farming, which the settlers were expected to participate in before they settled in. Settlers would be provided with land use rights after the initial five year period.

An important aspect of the Eco Garden Villages is that the new settlements maintain their relationship with the old village and that they belong to the same Commune.

Each settlement, which contain from 15 to 35 households, is directly linked to an old village nearby and the settlers was selected from among the poor households with no or little land, with at least one household member of working age. Households headed by single women have been given preference.

In this way the settlers have been able to rely on support from relatives and friends in the old village and remain part of the old village's social network.

Another important element in the design of the Project has been the improvement, upgrading and construction of new roads to provide all villages with all-season access to the major markets in the area. This has improved the households' ability to bring their products and produce to nearby markets and get a significantly better price. It has also been a significant safety improvement in case of general flooding of this generally flood-prone area. During such natural disasters the families can seek shelter at the two-storey new schools. These are an equally important long term improvement in the educational opportunities for the young people of the seven Communes, which have received new buildings and provision of furniture, equipment and education materials through the Project.

The implementation of this Project design has been very efficient because it was decided to implement through the existing institutional and political structures at Province, District and Commune level. This has made it possible to identify and assist the poor in a cost-effective manner.

The Project has chosen an approach of working with and within the established political system of Trieu Phong District and Communes, thus avoids building a separate parallel structure. Most staff working for the Project is therefore seconded staff from the District and the Commune administrations. In many ways they will thereby continue their normal functions and, when their duties finish, they return to their regular functions and take their Project experience with them.

The Project therefore has given special emphasis on decentralizing Project implementation to various departments at District/Commune levels and target groups.

The Steering Committee (SC) provided guidance to the Project and ensured the Project achieved its goals. It approved the semi-annual progress reports and reviewed the annual work plans and budgets before these where finally approved. The SC members included the Project's stakeholders, who in practice were actively involved in the implementation of the Project. Particularly, chairman of the SC was the Vice-chairman of PPC, Vice-chairmen of the SC were the chairman of Trieu Phong District Peoples Committee (DPC) and the Director of the DPI and its members were Director/Vice Director s of Department of Agriculture (DARD), DoF, DoST and VBARD.

3.1.2 The Shortcomings of the Project Design

While the overall assessment is that the Design has been very relevant and the implementation strategy relatively efficient, we have to add that this is not the case for two of the seven Communes which did not have land for Eco Garden Villages. In these two Communes the initial Project design did not have any elements, which directly could improve the situation of the poor.

It was realised rather late, that the poor mainly benefitted from the Eco Gardens, with its potential for enhanced agricultural and aquaculture, while aquaculture models of income generation was not relevant for the poor in the two Communes without Eco Garden Villages – namely Xã Triêu Dô and Xã Triêu Phuôc, simply because poor households in these two Communes do neither have adequate land nor capital to engage in aquaculture. After 2005 the Project realised this bias against the poor and the potential to assist the poor through support for animal husbandry. In particular the introduction of pigs has been very successful – especially when adequate fodder in the form of crop residues has been available.

So, in summary it can be concluded that the design of an integrated package of four components and an implementation strategy to work with and through the local institutional structures to address the economic problems of the poor has been very successful in five of the seven Communes, and elements of a successful strategy has gradually emerged for the last 2 of the Communes.

However, the potential of this concept has not as yet been fully exploited as we will see in the subsequent chapters.

3.2 Component 1: Economic Development and Income Generation

3.2.1 Sub-Project 1.1: Promotion of Aquaculture/Shrimp Farming and Small Scale Husbandry

Description of Project Outputs, Activities and Inputs
According to data supplied by the Project supervisor on aquaculture, the Project funded 56 models in aquaculture, 11 models in husbandry and one shrimp nursery. The group of beneficiaries is estimated to be 1,200 households with 6000 people.

The 56 aquaculture models mentioned above can be categorized in the following groups[8]:

- Successful (45): farmers has raised fresh-water species as normal carp (ca chep, ca tre), sea-bass (ca trem), and tilapia (ro phi)
- Un-successful (8): farmers tried unsuccessfully to raise mud crabs, and clams
- On trial (3): farmers are raising grouper, apparently very successfully.

The Project has supported the farmers in improving their water management; introducing fish varieties adapted to local conditions, and to plan the production cycle including provision of fodder. Through extension service, the Project has encouraged farmers to diversify their farming systems and to use sustainable and more economical production methods.

The Project encouraged farmers in Eco Garden Villages to get more involved in small husbandry through supplying piglets, fodder, giving production knowledge and skills. In particular the keeping of sows for production of piglets has proven very profitable and successful for poor female farmers.

The inclusion of the shrimp hatchery in the Project was based upon the assumption that the raising of tiger prawns would be a suitable model for farmers of the area, but this assumption proved to be wrong. It was difficult to control diseases and this kind of aquaculture seemed to require too much capital and to be too risky to be relevant for poor farmers. This sub-project is assessed as not relevant.

Relevance
The shrimp hatchery is assessed as not relevant for the poor households of the seven Communes.

Aquaculture is a new activity to farmers, especially to poor farmers. The Project area has a good potential for aquaculture, and the Project has just implemented some models as trials which are expected to succeed.

[8] For more detailed self assessment by the Project fisheries officer please refer to Annex 5.

The small scale animal husbandry (pig, poultry and cattle raising) is an important supplementary source of income; moreover, small husbandry supplies manure to soil improvement.

Quality, Efficiency and Effectiveness

The approach to aquaculture development has been experimental and has included networking with the agricultural university of Hue and other local institutions, which has provided specialists upon requests from PMU. But knowledge and experience from other countries and institutions in the region has not been used in a systematic manner and contacts to institutions outside the Province have been minimal and ad hoc. As a result the experiments have not been based upon best international practices.

The trial and error approach, while very educative for the staff involved, have not resulted in the best results in the most cost effective manner.

The beneficiaries are the poor households in the eco villages, who all have fish ponds. Unfortunately, the benefits are not fully realized. The explanation for this differs according to the source of information.

According to the beneficiaries interviewed by the Evaluation Team the reason is that the fish ponds were not constructed in as deep as they had expected. They had understood from the information they received that the fish ponds would have depth which would have enabled the households to cultivate fish throughout the year. In their interpretation the Project decided to reduce the depth of excavation due to shortage of funds.

The explanation provided subsequently in the PMU comments to the draft evaluation report states:

" the fish ponds were deep enough at the beginning, but the sandy areas are characterized by sand encroachment every year, while the people do not have enough money for dredging, therefore the fish ponds have been becoming shallow in following years. However, households who worked hard had good results. The fact that a number of households could raise fish in 6 months per year only depends on particular areas. Ponds situated in low area can raise fish all year round. On the contrary, ponds in high area can raise fish one season only (This is specified by natural factors). It is necessary to mention that there was no original design at all. At the very beginning, each pond was only 500m2 large with the purpose to water the garden and create micro-climate. Later on, they were converted into fish ponds."…

In the assessment of the Evaluation Team what matters is that the ponds are (no longer) of an optimal depth and as a consequence they dry up during the dry season. As a result the poor farmers can only grow fish in the 6 months of the rainy season. Obviously, this has minimized the benefits to the farmers, and it has had a negative influence on the effectiveness of this sub-project and of the Project as such.

Some of the better off households of the Eco Garden Villages have invested in completing the fish ponds by further excavation as per the original design. The result is very impressive. These households can harvest fish every week throughout the year and in this way get an important contribution to the diet and cash income of the family.

The introduction of animal husbandry started very late (2005) but has proven the most successful approach to poverty alleviation. This sub-project can be further developed by including new species of animals, drawing upon proven models from other countries in the region, and by including fodder production/processing as an additional activity for the poor.

The design of the 4 ha shrimp hatchery facility was based upon a standard design and the construction was completed in 2005. The total cost was VND 5.4 billion - equivalent of approximately 6 per cent of the total project budget. In its first two years of operation from 2005-2006 staff was employed and trained and the hatchery was managed by a Management Board. During 2006 many trials were conducted and 35 million larvae was produced and sold to other Provinces. But it was realized that the staff did not have the management skills required to make full use of the facility, which has therefore subsequently been transferred to a Research Institute RIA 1 - under the Ministry of Fisheries.

This appears to be a sustainable solution, but when the Evaluation Team visited the hatchery it did not find any management staff on site, and there did not seem to be many relevant activities ongoing. It is a risk that this facility will not be fully utilized for the benefit of the District due to inadequate management and operational funds. It is recommended that the District closely monitor the operations in order to ensure that the people of the seven Communes benefit from the operations of the RIA 1 activities.

Impact
While the impact of the shrimp hatchery is still to be felt, the impact of the aquaculture and the animal husbandry have been very significant for the poor families, many of whom have increased their income per year with a factor 2-3 and therefore have moved out of poverty. The increased income is used for improving the nutritional and thereby the health situation of the family, and also to ensure that the children get more education, than what would other wise have been the case.

Sustainability Issues
The benefits generated for the poor households are assessed to be irreversible and sustainable. The reason is that they are based upon new knowledge and skills, and improved access of the poor households to land and water resources.

Lessons Learnt
The following are lessons learnt from this sub-project:

- When poor households get access to land, water and appropriate models for aquaculture and animal husbandry they can move out of poverty and enhance the livelihood in the course of 3-4 years.
- The development of successful aquaculture models have been based upon local traditional varieties, while intensive and more high yielding varieties have been unsuccessful perhaps because the knowledge of the local specialist about the conditions required for successful development has been limited. More should be done in the future to include the international knowledge on best practices in high value aquaculture in the research and extension work.
- The establishment of the shrimp nursery consumed a big investment; however it is too big for local service to manage. So far the investment is not effective (The survey showed that small hatcheries run very well and most of fingerlings for farms were supplied by them).
- Small scale husbandry and aquaculture were under-funded.
- Local species adapted better to small scale husbandry and aquaculture, while hybrid species do not, because of extreme natural conditions.
- It is necessary to foresee risk of models and to ensure that the risk is not carried by the participating farmers but by the Project.

Conclusions and Recommendations

The shrimp hatchery was not relevant to six of the seven Communes and it was a good decision to transfer it to the management of Research Institute RIA 1. Its operation should be monitored closely so that it is ensured that the seven Communes will benefit.

The approach to the development of relevant models for Aquaculture has only recently become effective. The ongoing work should be continued and strengthened through support for networking with regional and international research institutions when relevant.

The increased emphasis on animal husbandry has been a great success. The work should be continued in order to include more models which integrate crop and animal husbandry production in accordance with ecological farming principles. Also non-farming activities such as fodder production and other processing of agro, forestry and fisheries products in small rural enterprises could be considered along with the required vocational training.

3.2.2 Establishment of Eco Garden Farming Village Areas

Background

The Eco Garden Village model has a long history in Vietnam, as a model developed for the densely populated plain areas. Dr Hoang Phuoc, the former Director of Quang Tri Irrigation Department had great contribution to the establishment of the Eco Garden Village model in sandy zones in Quang Tri. The desert sandy land of Quang Tri was divided into small plots surrounded by protection plantation to prevent sand-flow and to keep water. In each plot for a household, there is a hedgerow and fish pond as in the traditional small holding with a vegetable garden, a fish pond and a pigsty. Prof. Nguyen Van Truong helped to establish an Eco Garden Village in Trieu Van and based upon the lessons leant the Concept has been tested in large scale in the Project, with 443 households relocated to plots in 12 villages.

Description of Project Outputs, Activities and Inputs

The Project prepared the land for 443 poor households to be relocated as settlers in the 12 new Eco Villages. Each plot was fenced with trees and supplied with a small house with a drilled well and electricity. The plot was also prepared for aquaculture with the digging of a fish pond.

Each resettled household has been allocated a plot of land of 0.5 – 1.0 ha, and most of them received their Land Tenure Certificate (the “Red Book”) (except Trieu Son Commune), which gives them the right to use the land. The Project supplied each household with construction material worth 10 million VND for house building; 1 million VND for well digging; 1 million VND for fish pond digging and / or

for seeds (optional). In addition those of the households being defined as poor received food worth 1 million VND to support them during the first months of the resettlement process. Poor households thus receive a total individual "package" worth 13 million VND while other households - just above the poverty line - received 12 million VND each.

The Project made contracts directly with the Dong Ha Cement Factory to buy cement at chip price and provided to households. The households bought other materials themselves such as brick, tile, sand and gravel, etc. and informed the Project for payment. Concerning the design for the house, the Project had standard design (i.e. minimum level). Those households who like to make **bigger** houses had to finance **more** out of their pockets."

This flexible system of was a great advantage for the beneficiaries. However, they had to accept to build their houses according to a certain design and standard set by the Project. The houses often cost 15-17 million VND to build.

In addition the families were supplied with seeds and seedling and finally they were also given training in fish farming. After 2005 the Project realized that more had to be done in order to enhance the income generation of the poor families and therefore a model of pig keeping was introduced. Families were given a 10 week old sow which through artificial insemination would give birth to 10-14 piglets. These could be sold after a few weeks for approximately VND 100.000 or they could be raised for 4 months (to a weight of 40 kg) and be sold for approximately VND 400.000.

The package was considered very beneficial for the poor families and when the Peoples Committee of the Communes informed the households about this opportunity, as many as 956 registered. The selection was based upon a few simple criteria such as (i) the income of the family (the majority had to be below the poverty line), (ii) the number of hands (the development of the Eco Garden Plots required substantial input of family labour), and (iii) the gender of the head of the household. Priority was given to female headed households.

The table below presents the characteristics of the relocated families in the five Costal Communes of Trieu Pong District.

Characteristics of Relocated Households and Impact on Poverty

Commune	No. of EGVs	No. of House holds registe-red	No. of House holds reloca-ted	No. of Female headed house holds	No. of poor house holds	No. of House holds out of poverty	Number of households relocated by year					
							2002	03	04	05	06	07
Trieu Trach	3	346	116	22	51	50	51	34	8	12	11	
Trieu Son	3	150	80	5	49	29		80				
Trieu Van	3	187	118	36	60	21	25	21	21	26	19	6
Trieu Lang	2	192	83	6	56	25	45		24			14
Trieu An	1	81	46	6	25	6		46				
Total	**12**	**956**	**443**	**75**	**241**	**131**	**121**	**181**	**53**	**38**	**30**	**20**

Source: Phan Van Hao, Supervisor for EGV and soil improvements, Agricultural Division of Trieu Phong District.

Relevance

The relevance of the sub-project moving 443 families - most of them very poor - into Eco villages is very relevant in five of the seven Communes.

But the relevance could have been even higher if the following issues had been considered:

1. All eligible poor families in the five Communes should have been included. Actually, 956 families poor families had applied, but only 443 families were accommodated. This would of course have required a larger budget allocation, or perhaps a reduction in the size of plots of land made available for each poor family, but the benefit - cost ratio of this additional investment would have been very high. The Project Final report mentions that the District is now considering allocating additional funds in order to relocate more poor families to the Eco Garden Villages. This would substantially enhance the relevance of this sub-project.
2. The fishponds should have been implemented in order to optimize the benefits to the farmers. This would have required a specific design in each Eco Village Garden, which took into consideration the local environment. An appropriate design would enable the poor families to operate the fish pond on an all year basis. The cost increase would have been marginal.

3. The Project should have undertaken to facilitate that the 443 households were made aware of existing credit facilities implemented by the Vietnamese Women´s Association of the District.
4. The provision of services should have included sanitary latrines (in accordance with the National Policy on Rural Water Supply and Sanitation), and facilities for the day care of young children; these are services to which the poor had better access in the old villages from where they relocated. So the fact that these services were not included in the Project package actually resulted in a reduction of welfare for the poor families.
5. The inclusion of more and well tested models for income generations related to aquaculture, animal husbandry and non-farming activities such as handicraft and small scale enterprises. This could include fodder production based upon local materials, processing in order to add value to fish and animal husbandry products, and vocational training for business development.

Quality of Implementation and Results

The structures and the extension support of the Project and the Commune staff appear to have been timely, of high quality and this has resulted to a high quality outcome of this sub-project. It appears that the implementation through the local institutions and with the full participation of local interest groups such as the Vietnamese Farmers Association and the Vietnamese Women's Association has had a very positive effect.

As a result the Evaluation Team assess that the sub-project has delivered "value for money" and that the efficiency, impact and effectiveness has been relatively high compared to other rural development projects in Vietnam.

According to the Project records based upon the assessment of the five Communes as many as 121 house holds have improved their economic status so that they are now classified as above the poverty lines. Due to the production and selling of cash crops such as ground nuts and water melons, and the selling of fish and piglets and pigs many poor households have doubled their income and improved their food security from increased production of cassava, sweet potatoes and local varieties of vegetables.

Sustainability
The results in the form of benefits generated for the 443 families are considered sustainable. All the families interviewed have been able to initiate a positive process of increased production, income savings and investment in crops, fruit trees, aquaculture, and animal husbandry. They all had relevant plans for their further improvement of the livelihood of their families.

Conclusions and Recommendations
The Eco Village Concept has been proven very successful and should be further developed (i) partly in order to include all the eligible poor families in the five Communes and (ii) partly to further enhance the benefits from improving and extending the sub-project to include more relevant models of income generation for the poor through training and improve extension services.

3.3 Component 2: Rehabilitation of the Environment

3.3.1 Construction of Drainage Canals and Sand Dykes

Description of Project Outputs, Activities and Inputs

Building of drainage canals and a sand dyke has been identified as a necessary intervention for agricultural development of the Project area. The function of drainage canals and dykes is to stop moving sand and its encroachment and to protect the crop and, as a result, to establish the ecological conditions for setting up ecological gardens and the afforestration programme in the sandy area.

The drainage canals are constructed in order to (i) protect the sand area against submergence during the rainy season; and in order to (2) prevent the water from flowing into the rice fields and causing encroachment of sands.

The function of the sand dyke is to separate the sandy area from the field area to prevent sand from encroaching towards houses and rice field. The sand dyke will:

- prevent water with sands from flowing into plain area causing encroachment;
- prevent wind from blowing moving sands towards the fields; and
- improve the environment, and breaking winds and storms by help of trees planted on dyke.

The Project has constructed 8 drainage canals of 27.8 km long and 1 system of sand dyke of 12.3 km long. The original estimated cost was 3.000 billion VND, but the cost estimate of the feasibility study approved by DPI was almost four times higher, namely 11.323 billion VND. The actual expenditures has been somewhat lower, namely 10.385 billion VND.

The construction of drainage canals and a sand dyke in such conditions like those of this Project is very complicated. A specific design manual for structures of this type is still not available in Vietnam. The survey, design and execution of construction for drainage canals and the sand dyke in this Project have been done in a comprehensive way by specialized consultant companies selected through tender. Lessons of failure from the previous similar structures as well as knowledge, experience and comments from experts and stakeholders presented at a series of seminars and meetings, have been taken into consideration. Supervision was carried out by professional consulting companies, PMU and the Support Group of the villages/Communes.

The construction of the eight drainage canals and the sand dyke has drastically changed the ecology of the area. It has resulted in curbing flooding in sandy area and drifting sand. Approximately 9,000 ha have been secured from seasonal flooding, and 3,000 households have been secured from flooding. Around 240 ha of new land have been reclaimed for cultivation.

Relevance

The Project area is located on low coastal land which is flooded during the rainy season. The capacity of land is limited to only one crop per year at present. Moreover, annual flooding can cause failure to crops as well as slow down the process of conversion of coastal sandy land into cultivable area. Increasing the cultivable area for local people is the first priority in the local poverty alleviation strategy, and it is therefore a correct strategy of the Project to support the design and construction of drainage canal systems and sand dykes in the Project area.

Quality

Drainage canals and sand dykes, by their nature, are very complicated structures in the conditions of sandy soils. Great efforts made by all Project stakeholders as presented above have resulted in a good quality of structures. Some severe floods have occurred since those structures were put into operation. In general they have proved reliable except for the case of the embankment of Khe Chung Canal near the bridge in Trieu Van Commune, where a portion of embankment lined with prefabricated concrete tiles was damaged during the very fierce typhoon with the international name Chan Chu in 2006.

Efficiency, Impact and Effectiveness

The canals constructed under the Project have shown that they are able to contain floods, mitigating crop losses and increasing production. This will have a positive impact not only on the villages where land for paddy and subsidiary crops has been cultivated for a long time, but also on the coastal sandy lands where the Eco Garden Villages are located. The number of beneficiaries of the drainage canals and the sand dyke, as estimated by PMU, comes up to 30,000 people.

Through the last flooding seasons the sand dyke has proved to be very effective. Besides, it is found that apart from the initial purpose of use, the sand dyke can be used as the sole inter-commune system and even inter-district communication means, when all the roads are submerged during heavy floods.

The sub-projects are assessed as efficiently implemented and effective in terms of impact compared to the investment cost.

Sustainability Issues

The main issue of sustainability of infrastructure works in general and of drainage canals and sand dykes in particular is their proper operation and maintenance. Regulations on Maintenance for those structures have been issued based on the community participation principle. The Project has provided necessary training to the Communes on the related topics of maintenance and reparation. In the cases

where expenditures for reparation cannot be totally covered by the Communes the latter apply for assistance from District/Province budget. This is the case of the damage on the drainage canal at Khe Chung Canal of Trieu Van Commune where the Commune has been provided 15 million VND by the District for its reparation. Such mechanisms seem to be effective to ensure the sustainability of the building structures.

Lessons Learnt
Two important lessons have been learnt in this sub-project:

1. Reclamation of sandy soil in Central Vietnam is a very complicated issue. The Project is a successful example of combining achievements of a series of Research & Application and Research & Experiment studies in this regard;
2. For such very complicated structures like drainage canals and the sand dyke in this Project the participatory approach is very effective in ensuring their quality.

Conclusions and Recommendations
The drainage canals and the sand dyke are very effective in keeping flooding and sand encroachment under control in the Project area.

It is recommended for their good impact to be enhanced by completing the comprehensive drainage system with diversion dykes as well as a network of secondary and tertiary (fish-bone) canals, being carried out by the settlers.

Discussions should be conducted among consultants and agencies concerned and PMU to improve the canal embankment structure taking into account the case of damage to the embankment of Khe Chung Canal in the flood season of 2006.

It is recommended to further strengthen the sand dyke to improve its strength and at the same time for it to be able to serve as the sole inter-district communication means in heavy floods. For this purpose a very rough estimation shows that the investment required is of VND 5.5 billion, VND 7.5 billion and VND 11.3 billion for the options of gravel, asphalt and concrete dyke surface respectively, but a comprehensive study should be carried out to formulate a full proposal.

3.3.2 Planting of Protective Forest

The planting of trees on the sand, especially in the conditions of sandy soil of Trieu Phong District, is very difficult, but at the same time it is a very important measure for environment rehabilitation as identified in a series of studies and experiments. Tree planting have been done in two different ways in the Project:

1. Trees planted to fence the settlements:

Trees are planted in order to improve the soil fertility. By reducing wind speeds in the home gardens, the trees keep the sand particles in place and also reduce the evaporation from the ground, thus making the moisture in the soil last longer. This directly contributes to the fertility of the soil for cultivation. This type of tree planting is considered as part of the Eco Garden Village sub-project.

2. Establishment of forests:

The planting of trees in plantations is a different matter. The objective is soil protection of an area located at some distance away from the new settlements. The planted forests increase forest cover, curb

sand encroachment, protect the soil on which they grow from erosion by wind and rain, and as a result, contributes to sustainable agriculture development. Besides, they will be beneficial to public works such as roads and canals and preserve the environment.

Forests have been planted by the villagers with saplings and training on technique of nursery and planting forest tree provided by the Project. They have been paid based on the number of survived trees with the conditions that survival rate should reach at least 75%.

The set up target in Work Plan is "Planting of 914 ha of protective forest in sandy area". But the actual total area of planted forest on sandy soil under the Project is 858 ha, less than the target. The reason is that some areas identified for tree planting were not suitable due to the conditions of moving sand dunes. Thus, trees were repeatedly planted but it resulted in failure.

Relevance

Without tree planting the transformation of the area into agricultural land would not have been possible. Protective forests improve the ecology of the area and enhance the agriculture development and thereby improve the livelihood of the people of the area. The interim report of 2003 argues that the Project should have experimented with the planting of different species, and this has therefore been done during the last three years. It should be mentioned that farmers are also experimenting with different species of trees on their private land where some have planted fruit trees near their houses such as banana, papaya, lemon and mango trees.

Efficiency, Impact and Effectiveness

The efficiency, impact and effectiveness of the sub-project have been very high. The trees were planted by local labourers hired in the villages and this has ensured that employment was created locally and that the survival rate of tree seedlings was higher than 80 per cent with successful trials of various crops. Compared to neighbouring forests planted under other projects, for instance the "Programme 661", the survival rate and quality of planted trees by the Project is much higher.

Together with the drainage canals and the sand dyke protective forests have curbed drifting sand, and significantly reduced sand and wind damage.

The impact of the forest plantations are that 40 villages (28 old and 12 new villages) are now protected against drifting sand dunes. The number of beneficiaries is about 20,000 people. The humus from decomposed leaves can be used as fertiliser; cut branches during maintenance of forests can be used as firewood or sold to the chip-board manufacturers as raw materials. When the forest is mature it can be harvested and the trees can be sold to paper pulp or paper manufacturers. It is estimated that 800 families are benefiting from firewood from the Project plantations.

Sustainability Issues

The selected species of tree to plant, i.e. acacia, has proved to be reliable and have not been attacked by insects like in the cases of other species in other locations. When tree plantations have been well established and are growing well they are unlikely to experience sustainability problems. When the plantations are mature for cutting (mainly in the form of thinning because they are classified as "protection forests"), the potential income derived from such cutting is more than adequate for the replacement of the trees cut. In other words, the resource created is, when managed well, able to reproduce itself.

Like other infrastructure items provisions on maintenance of protective forests are embraced in the Regulations on Maintenance issued by the Communes concerned, so far they have been implemented in a satisfactory way. Moreover a major part of forest plantations are close to the road and population centres where villagers have for a long time been engaged in planting forests on sandy areas; their experience is also an important factor with regard to the sustainability of this sub-project.

Lessons Learnt

Technical lessons learnt from this sub-project relate to the protection effects, suitability of various species of trees, the planning of forests and planting techniques. But the most important lesson leant is that the participatory approach - the involvement of the villagers - has resulted in a high survival rate and more benefits being generated for the people living near the plantations.

Conclusions and Recommendations

The sub-project has been very successful in contributing to the conversion of sandy coastal area of Trieu Phong District into a cultivable farming area.

The present maintenance system should be continued, but ways and means to increase the value of the forest produce should be considered and included in a participatory forest management plan. This is done in similar publicly owned plantations in many developing countries these years.

3.3.3 Soil Improvement

The white sandy soil of the Project area has a very low fertility. In order to improve the conditions for food production on these soils the Project provides support in two ways: firstly, by integrating inputs for soil improvement into the whole package for establishing of Eco Garden Villages, and secondly, as mere support to the cultivation of the sandy soils itself.

Increased fertility of the sandy soil is achieved by increasing the amount of organic material in the sand and by the addition of fertilisers, especially in order to increase the contents of phosphorus. In addition, successful experiments in improving soil by growing vegetable crops, especially those collecting nitrogen from the atmosphere, such as beans, were also applied to this soil improvement sub-project.

The support from the Project lasts for 3 years in providing organic material (green fertilisers) to the home gardens close to the new houses. It has encouraged the settlers to grow crops such as ground nuts which provide residues rich in nitrogen (in which the soil is originally very poor) and water melons which provide much green matter.

The Project has also provided inputs for cultivation of sandy soils as a stand-alone project activity by supporting improvement of the fertility of the sandy soil. In this case, the households participating obtain small plots of land, on average about 0.25 ha. The contribution from the Project comes as inputs, for example in the form of seeds or green manure, which the farmers can mix into the soil, thus improving its organic contents resulting in enhancing its fertility and water retention capacity.

The majority of selected plots for this case are adjacent to residential areas; some of these are surrounded by windbreak established by previous projects. The entire area targeted for improvement comprises whitish sandy soil on level terrain free from inundation and covered with natural vegetation. Agricultural crops introduced to improve soil fertility are ground nuts, beans, onions, and water melons. These have all been tested successfully.

The Project had planned for soil improvement of 520 ha in the sandy areas; the result reached is 523 ha of sandy soil now used for agricultural purposes, 25 % increase in agricultural production, equal to 80% of productivity compared with other areas and around 1,000 farm households with 3,000 farmers benefiting from the improved soil.

Total expenditures are 1.722 billion VND.

Relevance
This Sub-Project is highly relevant. It increases the fertility of the sandy soils, thus contributes to the goal of making sandy areas cultivable which in its turn will reduce the poverty of the inhabitants.

Efficiency, Impact and Effectiveness
The sub-project has achieved the following results:

- 523 ha improved sandy soil now used for agricultural purposes,
- 25 per cent increase in agricultural production,
- A productivity increase of the soil which is now equal to 80 per cent of the productivity of other areas in the District, and
- Approximately 1,000 farm households with 3,000 farmers benefiting from the improved soil.

The cost of the sub-project has been 1.722 billion VND and the assessment of the Evaluation Team is that this sub-project based upon ecological farming and soil improvement principles have been very efficient and effective.

Sustainability
The support from the Project leading to increased fertility of the sandy soils should be seen as an initial investment enabling the settlers to earn a decent return from the land by their own efforts. If they remain on the land and continue to cultivate in accordance with ecological principles the enhanced soil fertility can be sustained.

Lessons learnt
Land Reclamation in the specific conditions of coastal areas of the Trieu Phong District can succeed when based upon a combination of comprehensive studies, creative application of technical research, practical experiments, and a participatory approach involving the farmers in the implementation.

Conclusions and Recommendations
The sub-project "Soil Improvement in Sandy Area" has been very successful in developing the fertility of the soil in the Project area. The use of ecological principles in farming should be further developed by fully integrating crop production, aquaculture and animal husbandry. The local research institutions, the extension service and the local popular organisations such as the farmers' association should be supported by the District to enhance cooperation for enhanced ecological production.

3.4 Component 3: Improvement of Rural Infra-structure

3.4.1 Construction and Upgrading of Rural Roads

Road construction is an important part of the Project, especially in such conditions of a vast white moving sand area as in Trieu Phong District. For the Project to be viable, adequate access should be in place for bringing in goods from outside and for transporting local produce to the market as well as for

the public services like education, healthcare to be easily accessible for the people living in the Project area.

The establishment of Eco Garden Villages also requires roads. At the outset of the Project roads were badly needed as necessary conditions for transportation of building materials and equipment to the construction sites. Some roads even play a role as flood diversion dyke, like the road Cho Can - Ben Ca passing Trieu Son and Trieu Lang Communes.

The roads constructed by the Project have been designed in accordance with the Vietnam National Design Standards on Highways, based upon information regarding traffic volumes from a traffic survey carried out in 2001. Construction and supervision work has been carried out by professional consulting and construction companies selected through competitive bidding in conformity with current regulations. Relevant test of construction materials were made in certified laboratories in conformity with national codes and standards.

PMU has succeeded in involving the community into all phases of the sub-project from the early stage including for inspection work, up to the commissioning, acceptance-hand-over stage.

All those factors have resulted in high quality of constructed roads and bridges.

The result is that 14.7 km of asphalt road and 34.2 km of gravel road have been completed. Due to shortage of funds the planned and designed road Van Phong-Dong Bao in Trieu Son Commune could not be built. The work includes the rehabilitation of two concrete bridges of a length of 57.4 metre. The total expenditure is 24.174 billion VND.

Relevance

Before the Project, travelling and transportation of goods in the Project area could only be done on foot. People had to walk on hot sand in the dry season or wade in water during the rainy season in order to pass from the costal villages to the main roads in the District. The lack of roads in the area constrained the access of the population in the costal villages to markets and to the public services such as education and healthcare. In general, the poor communication conditions were an obstacle to the economic development of the area. Therefore, the sub-project on road building is very relevant and one of the priorities in any growth strategy for such a coastal area.

Efficiency, Impact and Effectiveness

The high quality of the roads and bridges constructed by the Project was proven through some recent flooding seasons. Compared to similar roads constructed last year with the assistance of Asian Development Bank the Project roads appear to be of superior quality and maintenance standard with a smooth surface and without potholes.

The initial budget of the 1999 Project document had estimated the cost of road construction at 16.000 billion VND. The actual expenditure based upon competitive bidding has been 24.174 billion VND. Nevertheless, the investment is assessed as very efficient, with a very high positive impact on the economic development of the area, and as being therefore very effective.

The number of beneficiaries is estimated at 40,000 people, all of whom get all-year access to schools and markets. It is assessed that 50 per cent of the farmers' rice fields have improved road access as the result of the sub-project.

The roads have provided convenient access to the Eco Garden Villages. The families now have access to markets for production inputs and goods which now can be transported to villages by big trucks thus reducing the transportation costs. This means that goods coming into the villages from various sources may be purchased at an estimated 10 per cent lower price on average.

The new roads make it possible for the local producer to fetch better prices for his/her produce, especially perishable aquatic products. Local people used to sell these in small amounts at low prices, carrying them with bamboo poles to local markets. Now they can sell at higher prices to purchasers with big freezer trucks, or they can bring the produce by bicycles or motorbikes to urban markets where they fetch a higher price – e.g. Dong Ha markets, 12-20 km away.

Secondary school pupils living far from schools now can travel by bicycles. This has reduced the number of children who have to quit school due to difficult access. Good roads ensure also safety for school-children going to school in the flood season.

Rural roads already constructed have had a marked impact on settlements along the roads. People have already settled along some of these roads, and access to the area has improved considerably.

The asphalt road from Cho Can to Ben Ca, passing Trieu Son and Trieu Lang Communes has great impact on fisheries development and has opened up the area for local tourism by providing excellent access to the beach at Trieu Lang.

Sustainability Issues
The major issue of sustainability, as for other infrastructure items, is maintenance.

The District administration is responsible for maintenance of the District road (asphalt roads Cho Can - Bo Ban and Cho Can - Ben Ca), while the rural gravel roads are to be maintained by the Communes. This responsibility seems to be well accepted by the people because the Project has addressed their needs and been implemented in a participatory manner. They consider the maintenance of roads, as for other infrastructure items in the Project, something they are doing for themselves, and therefore they are positive about participating in maintenance work.

The Regulations on Maintenance issued by Commune authorities place great attention on Road Maintenance and identify the responsibilities for related stakeholders.

The Evaluation Team assess the roads as sustainable through the existing maintenance arrangements.

Lessons Learnt
Rural access roads constructed with the use of local labour and with a locally based maintenance organization are crucial for economic development in general, and can play an important role in poverty alleviation when the poor are provided with means of productions such as productive lands and practical and productive skills.

Conclusions and Recommendations
The sub-project “Construction and Upgrading of Rural Roads” has been successfully implemented.

Attention should continue to be paid to road maintenance, both regular routine maintenance and periodic maintenance, should be continued and funding constraints for that, especially in the cases of a poor Commune should be addressed by the District and Commune authorities.

3.4.2 Electricity Distribution Network

In low sandy areas with drought during the dry season and flood during rainy season, electricity plays a key role, especially for drainage and irrigation systems for cultivation and for semi-processing of agricultural and fisheries products. Besides, people also need electricity to get access to important information through mass media like radio and television, for example on production techniques, market prices, weather forecast, etc. as well as to create better learning conditions for school-children.

This sub-project includes construction of low-voltage electric power distribution grids to new village areas and old villages without power. It includes the installation of: (i) 7.9 km of 22 kV transmission line, (ii) 14.5 km of 0.4 kV transmission line, (iii) 9 transformer stations of 50 kVA and one of 100 kVA, and (iv) new local power for 443 households.

The Da Nang Research Centre for Electricity and Electronics, under the Da Nang University has carried out the design and supervision for the electricity system in accordance with the relevant specifications.

All related regulations on investment and construction management as well as public procurement have been followed during implementation.

In the construction process some problems occurred due to inadequate coordination among related activities. For instance delay in site clearance and road construction caused problems for transportation and installation of electrical poles; but the interventions by PMU solved the problems after some time.

The Provincial Electricity Authority has inspected and commissioned the completed lines and taken them over for operation and maintenance. The Electricity Authority collects money from consumers, based on a main electricity meter in each village. The village headman then collects from each household based on readings of each individual household meter.

Relevance
The sub-project is highly relevant. The power supply system has been very important in relation to land reclamation activities and enhanced production and living conditions for the poor. In general rural electrification is an important prerequisite for economic development in rural areas.

Efficiency, impact and effectiveness
The design, construction and supervision work in this sub-project was implemented by professional entities with participation of the community in monitoring. In spite of some initial delays the sub-project has been well implemented and the impact on economic development in the area is very significant. The sub-project is assessed as very effective in contributing to poverty alleviation by generating general economic development in the area and contributing to agricultural and fisheries development.

The sub-project has been constructed with total expenditures of 2.942 billion VND, being a little higher than the original estimate of some 2.000 billion VND but considerably lower than the estimate of the feasibility study of 7.32 billion VND.

The number of beneficiaries is estimated at 4,000 people including all the households in Eco Garden Villages and some other neighbouring households, institutions and small enterprises and shops.

Sustainability Issues
The operation and management of the power supply is the responsibility of the Provincial Electricity Authority and so far it has been properly implemented. An important factor is that the population considers electricity a very crucial service for the livelihood of people living in the Project area. Therefore they respect and act in accordance with all the Operation and Management Regulations and Rules of the Electricity Authority.
The existing power tariff is assessed as adequate for the maintenance and normal operation of the system.

Lessons Learnt
Like from other infrastructure sub-projects the most important lesson to be learnt is that implementation through the existing responsible technical bodies with the use of the national and local regulation and a

participatory approach involving the beneficiaries in monitoring of activities on the ground are key pre-conditions for its success and effectiveness.

Conclusions and Recommendations
The Sub-project "Construction and Upgrading of Electricity system" has been successfully completed of good quality and at a reasonable cost.

In order to ensure sustainability attention should be paid continuously to operation and maintenance.

3.5 Component 4: Education and Training

3.5.1 Construction of Primary Schools

Description of Project outputs, activities and inputs
Prior to the Project, primary schools in the seven Communes were all in bad conditions (easily broken, leaky and easily flooded) and were short of classrooms and basic facilities like desks, benches, light, etc. All primary schools had to operate with three-shift classes. Families, the Education Department and the local authorities were all worried about the access to and the quality of education. Since the Communes are poor in a poor District of a poor Province, the funds for education were very limited. This is the reason that the "Construction of Primary Schools" has been included as a sub-project.

The sub-project includes construction of 7 primary two-storey schools, each with 8 class-room, office, library, toilet, playground, fence and gate. Around 4,500 pupils are benefiting from new improved facilities.

The design of schools was carried out by the Research and Design of Schools, under Ministry of Education and Training in Hanoi applying approved standard designs. This same Institute was also responsible for preparing tender documents.

Modifications have been made to the technical solution in constructing a reinforced concrete deck on top of the 1st floors to serve as a refuge for pupils, teachers and people in the area in case of floods.

During the implementation process it was decided to include the construction of accommodation for teachers, one block of small simple accommodation per each school in order to improve their living conditions. The teachers are from other Districts and Provinces and have to come to work in Trieu Phong District due to non-availability of local teachers. The sub-project has constructed 7 blocks with 43 apartments for 250 teachers.

The construction and supervision work was undertaken by construction companies selected through competitive bidding in conformity with current regulations.

Relevance
The increased capacity of the new schools, improved physical environment and better hygiene and safety together with improved living conditions for teachers have contributed to enhancing the quality of education for the children of this poor area. This is especially significant for the poor families. It is in line with the objectives of the poverty reduction Project, and the policies of Vietnam and Norway.

Efficiency, impact and effectiveness

The construction of seven primary schools have been very efficient, it has improved the access to education, and its effectiveness in relation to the overall objective of assisting the poor have been high. However, while the access has been improved the quality and relevance of the curriculum to the improvement of the living conditions of the poor has not been addressed in the sub-project. This appears to be a lost opportunity.

The building of a school is less complicated than construction of drainage canals and roads (site clearance, negotiation for compensation, etc., is not so complicated for a school building). Schools with proven standard design skilfully applied to the local conditions have been constructed by contractors selected through competitive biddings. Moreover, families, whose children are attending school, have actively taken part in site selection, site preparation and other related activities including supervision work - all this has contributed to the achieved high quality of school buildings and teachers apartments.

Seven high quality new schools and seven apartment blocks with 43 apartments are benefiting approximately 4,500 students and 250 teachers. The buildings have been constructed with total expenditures of 14.375 billion VND, which are an increase compared to the original budget estimate but considerable less than the feasibility study approved estimate. This sub-project has proved very effective in improving the conditions for the quality of education (new schools have received certificate of National Standard School issued by the Ministry of Education and Training). But the Project has not attempted to make use of the facilities for enhanced education of relevance for the sustainability of the benefits of the Project. This could have taken the form of education in the new models for income generation in crops, agroforestry, aquaculture and animal husbandry integrated as elements in ecological agricultural development. Such topics could have been introduced into the curriculum in the science classes.

The location of some of the new schools has also improved the access for many families. Previously, many households (for instance those in Trieu An Commune) used to travel a long distance to take their children to school, costing a lot of time, energy and affecting their economy and life. Now their children can go to the school by themselves. Moreover, in some Communes, old primary schools are now used for secondary schools, thus reducing the number of secondary students who have to stop schooling because of not having bikes to travel a long distance. In the immediate period, thanks to schools with good quality, the pressure on households to contribute financially for maintenance and repairs will be less.

Sustainability Issues
Among the infrastructure items the sustainability of schools is best ensured. The contribution by the Parents Association is very important. Maintenance and repair has been carried out properly. Representatives of the Parents Association in Trieu Phuoc confirmed their dedication to continue to take responsibility for maintenance also financially, and the “Regulations on Maintenance” establish the fees that students’ parents should contribute. Poor families can contribute in-kind.

Lessons Learnt
Participatory approach, again, is a lesson of success, which can be drawn from this sub-project.
Creative application of standard design is another lesson to be learnt.

Conclusions and Recommendations
The sub-project “Construction of Primary Schools” has been very successful, but the Project could have made use of the opportunity to use this educational facility to disseminate general knowledge regarding principles of ecological and sustainable farming to the coming generations of farmers.

It should be considered to involve educational institutions, teachers and students more actively in projects of this nature in the future.

3.5.2 Training of Staff at District and Commune Level

The target group of this sub-project is staff involved in the implementation of the Project at PMU, Commune and village level. We assume that the objective has been to equip the staff with the necessary knowledge and skills required to implement the Project, but we cannot be certain because a comprehensive Training Needs Assessment and Human Resources Development Plan has not been prepared.

Description of Project outputs, activities and inputs

According to the Project Final Report the following activities have been undertaken:

- Seven workshops with participation of 350 staff
- 12 seminars with participation of 600 staff, and
- 18 study tours to Provinces in Vietnam with participation of 375 staff.

The Project has conducted training in

- Aquaculture
- Small husbandry
- Soil improvement
- Improved Pest Management
- Gender issues and economic management at household level.

And approximately 1.180 leaders at all levels and from mass organisations have been trained in:

- Project management
- Community development
- Basic computer science
- Extension skills
- Maintenance of constructions works.

According to the Project Final Report the outcome of this training is:

- Approximately 90 per cent of the District, Commune and village level leaders and staff are applying the acquired skills in their work
- Project work plans integrated into District and Commune work plans in the whole District
- 11 community learning and information centres established and operational in the villages.

Relevance

The relevance of the training of staff has been high, but it is difficult to assess the relevance of the individual components. Was it really necessary to arrange 18 study tours to other Provinces in Vietnam, and if so what exactly has been the outcome and benefits of this activity.

Efficiency, Impact and Effectiveness

Judging from the overall quality of the implementation of the Project it appears that the training of staff has achieved the planned impact and has been effective. The cost of training for staff and beneficiaries and the cost for short-term international consultant (from 2005-2007) amount to 5,301 billion VND, equivalent to 6 per cent of the total project cost. This appears to be a reasonable level of spending, but without a

Training Needs Assessment, a Training Plan, and a Training Impact Assessment it is not possible to access the effectiveness of this sub-project.

The staffs of the PMU agree to the statement of the Evaluation Team, that training of staff has been ad hoc and incomprehensive.

Sustainability
When knowledge and new skills are being used they will normally be sustained, so there is no issue of sustainability.

Lessons learnt
In the absence of a Training Needs Assessment linking the knowledge and skills of staff to the needs of the Project to be implemented it is not possible to assess this important capacity building component.

Conclusions and Recommendations
The sub-project is very relevant but its implementation has not been in accordance with best practices.
A possible extension of the Project should include the preparation of a Training Needs Assessment, a Training Plan and a Training Impact Assessment.

3.5.3 Training of Beneficiaries

The target group of this sub-project is the poor households being the targeted beneficiaries of the Income Generation sub-product 1.1 and the Eco Garden Village sub-project 1.2.

Description of Project outputs, activities and inputs
The training needs were assessed as part of the various income generation models and the plans for the establishment of Eco Garden Villages.

Training was conducted in one day workshops and training sessions, by the local leaders and extension workers and specialist, and taking place at the Project established local training centres.

458 training courses were conducted in relation to extension, economic management, mother-children health care, maintenance of construction works, etc. Approximately 17,600 training days were conducted (numbers of days spend by participants). Households were trained in:

- Aquaculture
- Small husbandry
- Soil improvement
- Improved Pest Management
- Gender issues and economic management at household level.

Relevance
The households interviewed by the Evaluation Team all stated that the training had been very relevant.

Efficiency, Impact and Effectiveness
Judging from the performance of the beneficiaries the training has been effective. We do not know how much of the funds were spend on training of trainers and the direct training of beneficiaries, (the expenditure shown in the accounts is a modest amount of 696.2 million VND for training of beneficiaries), but the trainings seems to have been very efficient and the impact has been very

significant. Perhaps there is a need for refresher training after some time and to extend the training to new areas when new models of income generation is introduced. The Evaluation Team suggests that the trained extension workers be given additional training so that they are capacitated to fulfil new training needs of the beneficiaries.

Sustainability
The knowledge and skills provided to the poor farmers are assessed as sustainable.

Conclusion and Recommendations
The training of poor households appears to have been very effective. With the new knowledge and skills they have been able to make use of their resources to improve their living conditions significantly. Many households have more than doubled their incomes in 3 years and approximately 30 per cent of the Eco Garden Village settlers have been able to jump the poverty line.

4. Assessment of the Management of the Project

4.1 The Approach to Project Identification and Design

The Project has been identified by the Peoples Committee at the Province with the technical support of its responsible planning authority, the Department of Planning and Investment.

The design is based upon several years of research and experimentation with the challenge of turning the infertile white sandy soils in many Coastal Communes into cultivatable land through land development based upon ecological principles.

Once the Project funds had been secured by the grants from GON and GOV the sub-projects were further developed through the conduction of feasibility studies by professional local consultant companies.

In this process, the implementation of the infra structure sub-projects were given priority and as a result funds were committed to an extent, which required relative reduction in the component 1 dealing with income generation for the poor. Some elements - like the revolving credit fund, had to be dropped, and the extent of free services provided to the households moving into the Eco Garden Villages - had to be reduced. On the other hand some elements were added to the Eco Garden sub-project. For example the initial plan to make 39 deeply drilled central wells for water supply was changed into the provision of shallow drilled wells for each household, and included in the budget of sub-Project 1.2: Eco-garden villages.

4.2 The Implementation Strategy

The implementations strategy has been phased. First the pre-conditions in terms of the environmental conditions and the rural infra structure were established, and subsequently models of income generation for the poor and the related trainings were conducted, and finally poor people were assisted to move to Eco Village Gardens.

Implementation has been through local institutions at village, Commune and District level. Staff were capacitated and trained as trainers in order to ensure that the Project was implemented in a genuine participatory manner.

4.3 The Organization and Management of the Project Implementation

The Project has been implemented by the District on behalf of the Provincial Peoples Committee and with the full involvement of the people institutions at the Community Level in the planning, design, implementation and monitoring of Project Activities.

The management and implementation has been in accordance with Vietnamese and NORAD regulations and procedures. This has also been the case with respect to Financial Management.

The overall management responsibility has rested in a Project Steering Committee reporting to GON and GOV through the agreed official channels.

The daily management has been the responsibility of a relatively small and therefore relatively efficient Project Management Unit headed by a National Project Manager, Project Director, who during the first 2 years was assisted by an International CTA and a Vice Director. After the first 2 years the CTA and

Vice Director were discontinued and international Technical Assistance (TA) was provided by a Technical Advisor Income Generation Specialist; the input of whom was gradually reduced over the last three year implementation period.

4.4 Technical Assistance

According to the Project Final Report the expatriate Technical Assistance (TA) input to the Project consisted of a two-year post from 2002 to 2004 of the Chief Technical Advisor (CTA). From 2005 until the end of the Project the position was changed to half-time and focused on income-generation and capacity building activities.

It should be emphasised that the Evaluation Team did not meet the CTA nor did it meet his half time successor so we are unable to undertake an assessment of this very important component of the Project.

However the general impression based upon information provided by the Norwegian Embassy and the staff of the PMU is that the arrangement with a half-time advisor with specific Terms of Reference related to the development of income generation for the poor and with animal husbandry as a new focus area has functioned very well and probably more effectively than the arrangement with a CTA.

4.5 Assessment of the Project Organisation and the Implementation Strategy

The PMU have consisted of relatively young, energetic but also inexperienced District staff on deputation to the Project. Its competence and efficiency has grown during Project implementation and important lessons have been learnt. The overall impression is of an efficient team dedicated to the fulfilment of the Project Objectives.

The implementation strategy based upon the total involvement in design, planning and supervision of the Project by people and the relevant institutions of the seven Communes has functioned very efficiently, has developed local capacity and has been effective in generating the very positive outcome of this Project.

The Evaluation Team facilitated a SWOT self assessment by the PMU. The outcome presented in Annex 6 is generally agreed by the Evaluation Team. The Team summary of the SWOT of the PMU is presented below:

Strength	**Weaknesses**
Dedicated staff on deputation has provided flexibility and integration into the local government structure at Province, District and Commune Level;	PMU staff has been relatively young and inexperienced in such matters as Tendering and Supervision of major works;
The staff has been learning from experience, and have today developed considerable experience, and networking partners for aquaculture in particular.	The staff has had little exposure in relation to income generating activities and lacked practical experience in networking for identification of relevant models of Aquaculture and Animal Husbandry for Income Generation.
Opportunities	**Threats**
The experience gained and the network established can be further developed in order to generate more and more profitable models of income generation for the poor;	If PMU is discontinued and/or if District and Commune institutions are not provided with budgets to extend the support to the income generation of the poor, the full potential of the "Concept" will not be exploited;
If the PMU is continued it is an effective mechanism for mobilising government specialists to work on	The physical structures is of good quality and requires a minimum of maintenance, but if funds are not made

deputation on part time in order to meet specific needs identified for further development in the seven coastal Communes.	available by the District and the Communes, then maintenance costs can not be covered and the area will start to deteriorate.

5. The Relevance of the Project

The criteria of relevance of a development programme according to the agreed definition measures to what extent a Project or programme is in accordance with the policies, priorities and strategies of the donor and the recipient government, and to which degree it address the key problems of the area it is meant to assist.

The objective of the Project is very relevant in the context of Norwegian as well as Vietnamese development policies and the Project was a priority of the Province, District and the seven Communes.

We have seen that the Project concept is very relevant for five of the seven Communes, while it had little to offer in terms of poverty alleviation for the Communes of Xã Triêu Dô and Xã Triêu Phuôc.

The relevance does not include the construction of the Shrimp Hatchery. This sub-project is not relevant for poor farmers of the seven Communes because of the need for land and investment capital, the correct ecological conditions, and the high risk of diseases in shrimp farming.

We have also seen that the relevance could have been higher if more attention from the outset had been given to component 1 and capacity building for the poor households for income generation in a wider spectrum of crops, aquaculture, animal husbandry and non-farming activities.

We have observed that the relevance could have been higher if the Project had:

- Developed an effective poverty alleviation strategy for all seven Communes
- Included all eligible poor households in the five Communes with Eco Garden Villages
- Implemented the sub-project 1.2 with an appropriate design (and implementation) of the fishponds and had assisted the poor households to become members of local savings and credit institutions
- Included a sanitary latrine in the provision of water for the Eco Garden Village house in accordance with the National Policy on Rural Water Supply and Sanitation
- Included social services to the poor households which moved to Eco Garden Villages such as kinder garden

We assess that the Project is generally very relevant. However, the relevance can be further enhanced by extending sub-projects 1.2 and sub-project 4 for an additional period of 3 years and by allocating the necessary additional funding.

6. The Efficiency of the Project

The Project has been implemented very efficiently. The implementation strategy of making use of existing institutions at Village, Commune, District and Province level, and to staff the PMU with

District staff on deputation from line departments has proven to be a very efficient way to combine capacity building and implementation of a rural development project.

The use of government competitive tender procedures for the contracting of local consultant and construction companies has secured competitive prices, and the involvement of the population in the seven Communes in monitoring has resulted in high quality and durability of physical structures.

The Project has been less efficient in developing suitable income generation models for the poor. More could have been achieved by involving international expertise in this area from the start of the Project in order to ensure that best international practices could have been accessed.

7. The Impact and Effectiveness of the Project

The impact of the environmental protection and rural infrastructure components of the Project has been to drastically transform the ecology of the area from white sand and infertile soils to a green area covered with trees in plantations, on roads and dykes and on Eco Garden Village plots. The transformation is very visible and the important impact has been the development of new cultivatable land, which has enabled 443 poor families to resettle and to initiate a process of gradually improving their living conditions.

Through a number of interviews with poor households the Evaluation Team has been able to assess the impact of the Project on the livelihood both for people who moved to the Eco Garden Villages and for poor households who has remained in the old village.

It is important to understand that all households - not just the poor - have benefitted from the Project. All have benefitted from the general improvement of the environment, from the new roads and from the seven primary schools. These improvements have resulted in a general improvement of the economic conditions of the seven Communes and have resulted in a general increase in welfare.

The poor households which were not offered to resettle in the Project period was given special attention in other poverty programmes implemented by World Vision and we understand that the District intends to further develop the number of plots in Eco Garden Villages, so that more poor families can be resettled.

The major beneficiaries are the 443 households which resettled in the Eco Garden Villages. They received a package worth 12-13 million of VND and have invested it in means of production and income generation which through hard work over a period of 3-4 years has enabled the most prosperous to increase incomes by a factor 2-3, and (according to PMU statistics) have enabled almost 30 per cent of the households to move out of poverty.

But it takes hard work (many hands in the family) and access to additional capital from either loans or income from work outside the District to make the full use of the potential of the Eco Gardens.

In summary, the Project has been rather effective in achieving its objectives, but the Evaluation Team finds that the effectiveness of the Project can be considerably improved by extending component 1.2 Income Generation for the Poor households, and the related component 4.2 on training of beneficiaries.

An extension of the Project by say three years which addresses the remaining constraints of the poor households and develops additional models of income generation for the poor and at the same time provide the necessary inputs in form of training, will have a very high return to the investment in terms of poverty alleviation and economic development in general.

8. Assessment of the Sustainability of the Benefits of the Project

The physical structures are assessed as of high quality and appropriate maintenance systems have in all cases been established. Only shortage of funds for maintenance of roads and buildings is a risk.

The Shrimp Hatchery was not well conceived because it is not relevant for the poor farmers of the seven Communes. It has therefore been a good idea to hand over the facilities to IRA 1, which has now become a regional fisheries research institution under the PPC of Quang Tri Province.

The concept of Eco Garden Villages has now proven itself in five of the seven Communes and poor households as well as the District are eager to develop more land into Eco Villages and land is still available. Hence, it is the assessment of the Evaluation Team that the development is both sustainable and irreversible.

Farmers in the existing Eco Garden Villages will continue to invest in improvements which will result in higher productivity and higher incomes. The extension services has the necessary capacity to support the process, and the farmers have the capacity to continue extending their knowledge and skills related to integrated ecological farming.

9. Summary of Conclusions and Recommendations

The table below summarises the observations, conclusions and recommendations of the Evaluation Team.

Subject	Observation	Conclusion	Recommendation/Action
The Concept	Has generally been proven successful.	With due consideration for lessons learnt it can be replicated in similar ecological environments.	Prepare documentation in the form of Book/Video which guides the PPCs and DPC´s in the planning, design and implementation of similar projects.
The Adoption of the Concept to the 7 Communes	The Concept is not relevant for 2 of the Communes.	An appropriate Commune poverty eradication strategy should be developed through a participatory and bottom-up planning process.	District to allocate funds for next years development plan.
Design and implementa-tion of construction activities	Quality high and in accordance with prescribed standards and procedures. Uncertainty about some features of one of the drainage canals.	A professional and thorough assessment of the physical structures would form a logical conclusion of this part of the Project.	The District to undertake an assessment of the situation with the assistance of a local consultant company. Based upon the consultant's study the DPC should prioritise its support to development activities in the 7 Communes.
Design of economic development component	Generally fine, but Shrimp Hatchery and under-funding of ECO villages was a mistake. ECO villages should have been designed so that all eligible poor families could be relocated and so that	This has reduced the generation of the potential benefits to the poor significantly. ECO villages should have been designed so that all eligible poor families could be relocated and so that adequate funds was available for construction of fish ponds and for provision of " working capital"	Consider to provide additional budget to the further refinement of the ECO village model over a 3 year extension of the Project with focus on improved social services and support for income generating activities for the poor making use of international, national

	adequate funds was available for construction of appropriately designed fish ponds and for provision of "working capital".	and social services like kindergarten, and sanitary latrines.	expertise to adopt best international practices to the ecological and socio-economic conditions of the 7 Communes. Include the special poultry model for poor households, fodder production, and non-farming activities in the income generating activities and offer adequate training for beneficiaries.
Implementa-tion model	The implementation through the existing institutions in the District and Province has been a great advantage, but it has also had limitations, mostly with regards to the use of "best international practices" to project design and income generation.	The identification of proven and profitable income generation "models" in crop production, aquaculture, animal husbandry and not the least in integrated approaches to pro-poor "Organic Farming" should have been given more attention in the design phase of the Project. More funds should have been allocated for this line of activities during the second phase of the Project from 2004-2007.	
Management model	The model appears to have been very efficient but the ET has been unable to assess the utilisation of the international TA due to lack of information.	The model has been effective. More should have been done to develop participatory impact monitoring with direct involvement of the poor. This would have complemented the Project Management Information System based upon the weekly reporting and planning meetings and enabled the PMU to address inefficiencies in design and implementation of sub-project more expediently.	DPI to support Districts and Communes to develop beneficiary involvement in impact monitoring of rural development projects and programmes
Relevance	The Project is generally very relevant, but not all the poor have been assisted and the direct assistance to the poor have been under-funded	The Relevance can still be enhanced by extending sub-projects 1.2 and sub-project 4. (training of extension staff and beneficiaries for income generation)	GOV and GON to consider to extent the Project with a 3 year extension phase. Implementation through a PMU with part time staff cooperating with local consultant and local research institutions and universities.
Efficiency	Generally very high	The implementations strategy and management model should be replicated in an extension phase	Use same strategy and implementation model in a possible extension phase but contract an international consulting company to provide guidance and know-how in specific fields upon requests from PMU
Effectiveness and Impact	Less than optimal for reason presented above	There is a need and justification for a three year extension of the Project.	DPC to prepare Project Profile for three year extension by September 1st 2007. GOV and GON to undertake joint appraisal of the District proposal by November 2007.
Sustainability	The structures and the benefits generated for the poor households are sustainable	Operation & Maintenance responsible institutions function well as long as the repair needs are "normal". Natural disasters can result in damage which is beyond the capacity of the local institutions.	Supervision of maintenance institutions in order to ensure that they have adequate resources

Annexes

Annex 1: Terms of Reference

TERMS OF REFERENCE
FOR THE FINAL EVALUATION OF SRV 0038 – RURAL DEVELOPMENT IN COASTAL AREAS OF TRIEU PHONG DISTRICT, QUANG TRI PROVINCE

1. Introduction

The Project for Rural Development in the Coastal Areas of Trieu Phong District is a rural development project jointly funded by the Government of Vietnam and the Government of Norway. The Project came into operation in early 2001 and will run until August 2007 based on an Agreement signed by the two Governments 10th of November 2000. The Project is focused on the coastal areas of Trieu Phong District in Quang Tri Province.

The overall objective of Project is to improve living conditions of the people, especially the poor, in 7 coastal Communes of Trieu Phong District, which is in line with and supporting the Vietnamese Government's hunger eradication and poverty reduction endeavours as well as the people's self-help efforts.

A detailed work plan and budget is prepared and approved every year by the Steering Committee.

Total Project budget was Norwegian Crones (NOK) 45 million, of which NOK 36 million (80%) was contributed by the Government of Norway and NOK 9 million (20%) by the Government of Vietnam. A detailed presentation can be found in the Project Document.

2. Objective of the Final Evaluation

The general objective of the Final Evaluation (FE) is to enable the competent authorities of the Government of Norway and the government of Vietnam to evaluate whether the chosen approaches are sound and sustainable and whether the resources made available to the Project has been used in an appropriate and efficient way. The purpose of the FE is to:

1. Verify to which degree the Project objectives have been achieved, including poverty, gender and environmental issues
2. Verify relevance, effectiveness and efficiency of the objectives, purposes and activities of the Project in relation to the overall development of the District and Province as outlined in their annual budgets and socio-economic development plans
3. Estimate the sustainability of the results achieved in the medium-and long-term
4. Assess whether the Project has made a sustainable impact in the coastal areas of Trieu Phong District during the implementation phase or whether there is a need for a follow-up of the Project, which could include technical assistance to the development of pro-poor aquaculture

3. Methodology of the Final Evaluation

The FE shall be carried out in a participatory way to ensure that all the relevant stakeholders are heard during the mission. The FE will invite a small team of stakeholder representatives to participate in its work through out the evaluation. The intension is to ensure that all relevant information is shared so that findings and conclusions become consensus based. The small 2-3 person team of local stakeholders could include one representative from DPI, DARD and Vietnamese Women's Organisation.

The team will familiarise themselves with all the relevant material on the area and on the Project. The team will meet the Embassy prior to the field visit. The purpose of the meeting is to check that the team is familiarised with materials and the schedule for the Project area is well planned. During the visit in the Project area, the team will collect information by organising small stakeholder workshops on specific themes to discuss results and by interviews of PMU, international project adviser and individuals as required.

The FE team will be responsible to summarise and compile the analysis, regarding the findings of the team as well as the findings of the stakeholders of the Project. The team shall organise meetings with:

- The Ministry of Planning and Investment;
- The Provincial Department of Planning and Investment;
- The authority of Trieu Phong District;
- The beneficiaries in Trieu Phong District;
- Community-level meetings.

The Project Management Unit will organise the meetings and visit as requested by the embassy and the team leader of the mission.

5. Evaluation Issues

The following general issues should be considered by the mission:
i) Policy support measures (Priorities, commitments of initiatives that support the Project's chances of success)
ii) Institutional aspect (Institutional capacity, quality and motivation of staff, participation from target groups)
iii) Financial/economic conditions (Level of financing available to cover operations, maintenance etc. Cost-benefit situation)
iv) Technological factors (Choice or adaptation of technology relative to local conditions)
v) Socio-cultural factors (Integration of the Project into society. The impact of the Project on various groups. Issues of poverty alleviation, gender, income generating etc.)
vi) Environmental factors: (Degradation or improvements in the local environment. The use of resources and the sustainability of such utilisation)

As a conclusion, the Final Evaluation should answer the following questions:

Which are the key factors ensuring or endangering the sustainability of the results of the Project? What are the main risks in terms of sustainability? What should be done in order to minimise the sustainability risks?

The following specific issues should be considered by the mission:
i) How well has the project identification, formulation and planning been coordinated with local administrative practices? (Is the Project personnel familiar with Provincial and District budgets and socioeconomic plans? Does the Project Management Unit share adequate information on budgets and plans for coordinating Project activities with local activities? Has the positioning of international TA been efficient and relevant? Does the Project Implementation Strategy adequately build upon the use and further development of local administrative systems and with the participation of all relevant stakeholders?)
ii) Does the Project utilise and enhance transparent local administrative mechanisms? (Does the Project facilitate competitive and transparent procurement? Does the Project liaise with all relevant administrative departments in Quang Tri Province and Trieu Phong District? Does the Project provide information on its mandate locally in Vietnamese? Does the Project utilise and enhance the skills of current administrative personnel instead of replacing it with external personnel? Have there been any renovations/positive changes, and added value brought about by the Project, in the working methods, thinking, knowledge of the local authorities and other stakeholders and how about the future trends?)
iii) What is the likely impact of the various Project Components with regard to the achievement of the overall objective of the Project?
iv) What is the quality of the infrastructure works like? The Project includes a number of activities creating infrastructure. The quality of the products should be assessed. In particular the team shall verify if the products are professionally, technically and scientifically of good quality, and if the products are being used efficiently by the intended beneficiaries?
v) Assess the relevance and sustainability of Income Generating Activities
In 2005 the Project imposed new income generating activities in small husbandry and aquaculture. Have there been any positive changes and added value brought about by the component? Are there any lessons learned? How about future needs?

5. Evaluation Team
It is expected that the Final Evaluation team will comprise of one international consultant (team leader) and two local experts with the experience to address all aspects of the assignment. In addition, the team includes a professional interpreter. It would be expected that the team would cover the following fields of experience:
i) Administrative reforms, participation and local governance in Vietnam;
ii) Understanding infrastructure development from the perspective of sustainable investments in rural Vietnam;
iii) Cross-cutting issues: gender, environment and good governance;
iv) Management, administration and evaluation of development co-operation project.

The general requirements for the Final Evaluation team are good knowledge of rural development, knowledge on the internationally recognised best practices in the field and good knowledge of the local conditions.

In addition the team leader is required to have the following qualifications and experience:
- Familiarity with and experience in international development co-operation projects
- Proven practical experience in project reviews

- Comprehension of Income Generating Activities and rural infrastructure works
- Ability to analyse and synthesise and to write clear reports
- Fluency in English

In addition the local experts are required to have the following qualification s and expertise:
Understanding monitoring and evaluation;
Institutional contacts at District and provincial level

6. Timetable

The mission is expected to be completed within 20 working days. The timetable is as follows:

Day Activities

1-2 Desk study
3 Travel day (International consultants)
4 Gathering of consultants, visit to Donor's office in Hanoi, briefing and collation of documentation
5 Travel to Quang Tri (air), accommodation arrangements, meeting with PMU, DPI participants
6 Briefing on project situation for each component by PMU. Briefing on the PMU structure. Discuss and approve work plan for field work. Various courtesy and work visits, tour of project area
7-13 Field work
14 Debriefing with PMU in Quang Tri – Travel to Hanoi
15 Visit to Donor's office, presentation of preliminary findings and discussion.
16 Travel day (International consultants)
17-19 Preparation of Draft Report
Comments on Draft report
20 Completion of Final Report

7. Reporting

- A summary note covering preliminary conclusions and findings will be given to the Provincial Department of Planning and Investment, the Project Management Unit and the Embassy in Hanoi at the end of the field mission

- The draft report is to be submitted in English; no later than three weeks after leaving the Project area, in 2 copies each to the Embassy and PMU.

- The final report in English is to be submitted no later than two weeks after receiving comments on the draft in 4 copies each to the Embassy, NORAD and PMU.

Annex 2: Programme of the Evaluation Team

Date	Activity	Key persons met
21 July	International consultants arrive in Hanoi. Final Evaluation Team Building meeting in Hanoi.	
23 July	Meeting at the Norwegian Embassy.	Mr. Landro (Counsellor) Tran Trong Chinh (Adviser)
	The team travels to Hue and to Dong Ha, Quang Tri.	
24 July	Meetings with the PMU in Quang Tri. Briefing and discussion, planning of programme for the Evaluation Team's visit.	* Doan Minh Phong (Project Director) * Nguyen Trong Tuyen (Project Supervisor) * Phan Thi Minh (Accountant) * Nguyen Van Dinh (Interpreter)
	Meeting with the DIP Trieu Phong.	* Hoang Van Quang (Chairman of Trieu Phong DIP) * Doan Minh Phong (Project Director) * Nguyen Trong Tuyen (Project Supervisor) * Phan Thi Minh (Accountant) * Nguyen Van Dinh (Interpreter)
	Study visit around the Project area.	* Nguyen Trong Tuyen (Project Supervisor) * Phan Thi Minh (Accountant) * Nguyen Van Dinh (Interpreter)
25 July	Meeting PRA Group for Evaluation, Trieu Phong.	* Tran Thi Phuoc (Chair of District Women's Union) * Cao Xuan Y (Infrastructure Division) * Phan Van Hao (Agricultural Division) * Nguyen Trong Tuyen (Project Supervisor) * Nguyen Van Dinh (Interpreter)
	Trieu Van Commune: Meeting the CPC.	* Bui Huy Dinh (Chairman, Trieu Van CPC) * Tran Dinh Thanh (Officer in charge of project in Trieu Van CPC)
	Visiting and interviewing households in Trieu Van Commune.	* Tran Thi Nga (Farmer) * Hoang Thi Quyt (Farmer)
	Discussing with group of households.	* Ho Thi Giao (Farmer) * Hoang Thi Quyt (Farmer) * Hoang Thi Yen (Farmer) * Bui Thi Toan (Farmer) * Ho Thi Tung (Farmer) * Bui Thi Manh (Farmer)

	Visiting the Trieu Van Primary School.	
	Visiting forestry plantation.	
	Visiting the roads and canals.	
26 July	**Trieu Trach Commune:** Meeting the CPC.	* Truong Duy (Chairman of Trieu Trach CPC) * Nguyen Phieu (Vice Chairman of Trieu Trach CPC) * Le Van Dien (Officer)
	Visiting and interviewing households in Long Quang Eco Garden Village.	* Tran Thi Ngu (Farmer) * Le Thi Ngoc (Farmer)
	Discussing with group of households.	
	Visiting the Trieu Trach Primary School.	
	Visiting their forestry plantation.	
	Visiting the roads and canals.	
27 July	**Trieu Son Commune:** Meeting the CPC.	* Nguyen Ngoc Quoc (Chairman) * Nguyen Huu Trung (Vice - Chairman, Officer in charge of the Project) * Nguyen Huu Tanh (Vice-Chairman of Communal People's Council) * Tran Thi Phuoc (Chair of District Women's Union) * Cao Xuan Y (Infrastructure Division) * Phan Van Hao (Agricultural Division) * Nguyen Trong Tuyen (Project Supervisor)
	Visiting and interviewing households in Trieu Son Commune.	* Tran Vien A (Farmer) * Tran Xuan Vung (Farmer)
	Discussing with group of households.	* Tran Van Mao (Farmer) * Tran Xuan Vung (Farmer) * Tran Vien A (Farmer) * Tran Vien B (Farmer) * Tran Cong Moi (Farmer)
	Visiting the Trieu Son Primary School.	
	Visiting their forestry plantation.	
	Visiting the roads and canals.	
	Meeting in Women's Union of Trieu Phong District.	* Ms. Phuoc (Chair) * Ms. Ha (Vice - Chair) * Ms. Thao (member of executive committee)
28 July	**Trieu An Commune:** Meeting the CPC.	* Pham Xuan Hiep (Chairman) * Tran Trong Tam (Officer in charge of the Project) * Tran Thi Phuoc (Chair of District Women's Union)

		* Cao Xuan Y (Infrastructure Division) * Phan Van Hao (Agricultural Division) * Nguyen Trong Tuyen (Project Supervisor)
	Visiting and interviewing households in Trieu An Commune.	* Vuong Thi Ranh (Farmer) * Le Van Tho (Farmer)
	Discussing with group of households.	
	Visiting the fish pond.	
	Visiting their forestry plantation.	
	Visiting the roads and canals.	
29 July	Meeting evaluation team.	
30 July	**Trieu Lang Commune:** Meeting the CPC.	* Dang Thanh Binh (Chairman) * Tran Thi Phuoc (Chair of District Women's Union) * Cao Xuan Y (Infrastructure Division) * Nguyen Trong Tuyen (Project Supervisor) * Nguyen Van Dinh (Interpreter)
	Visiting and interviewing households in Trieu Lang Commune.	* Vo Doan (Fisherman) * Nguyen Huu Tho (Fisherman) * Nguyen Cong Thanh (Farmer)
	Discussing with group of households.	* Nguyen Huu Tho (Fisherman) * Nguyen Xuan Tam (Fisherman) * Pham Van Hong (Fisherman) * Nguyen Thin (Fisherman) * Hoang Van Canh (Fisherman)
	Visiting the Trieu Lang Shrimp Nursery	
	Visiting their forestry plantation.	
	Visiting the roads and canals.	
	Meeting with Staff of the Project.	* Doan Minh Phong (Project Director) * Nguyen Trong Tuyen (Project Supervisor) * Phan Thi Minh (Accountant) * Nguyen Van Dinh (Interpreter) * Cao Xuan Y (Infrastructure Division) * Bui Van Truc (Supervisor) * Nguyen Ngoc Duc (Supervisor) * Ho Quoc Thang (Supervisor) * Le Thi Quynh Sa (Supervisor) * Nguyen Thi Nhat Uyen (Supervisor) * Pham Van Hao (Supervisor) * Nguyen Ngoc Hung (Supervisor)
31 July	**Trieu Do Commune:** Meeting the CPC	* Vo Van Nguu (Chairman) * Tran Duc Nien (Vice - Chairman) * Hoang Van Chien (Secretary)

	Quang Tri Investment & Construction Consultancy JSC Quang Tri Construction & Transportation Consultancy JSC	*Nguyen Van Can Director *Le Hoang Nguyen Chief of Design Department *Tran Binh Trong Director * Nguyen Anh Tuan Project Engineer
01 Aug	**Trieu Phuoc Commune:** Meeting the CPC.	* Nguyen Van Vui (Vice - Chairman)
	Visiting the Trieu Phuoc Primary School.	*Nguyen Hoai An Headmaster *Truong Minh Duc Head of Parents Association *Tran Quang Khuong Teacher, Member of Parents Association
	Visiting the fish pond.	Households breeding sea bass.
	Visiting Quang Tri Department of Planning and Investment	* Thai Xuan Lam (Director) * Tran Trung Hieu (Officer of Economic Division) * Nguyen Trieu Thuong (Vice - Chair of Economic Foreign Affair Division)
02 Aug	Meeting with PMU and beneficiaries	* Bui Huy Dinh (Chairman of Trieu Van Commune) * Tran Dinh Thanh (Officer) * Truong Quang Hung (Chairman of Trieu Phuoc Commune) * Nguyen Van Vui (Vice - Chairman of Trieu Phuoc Commune) * Nguyen Ngoc Quoc (Chairman of Trieu Son Commune) * Nguyen Phieu (Vice - Chairman of Trieu Trach Commune) * Tran Trong Tam (Officer of Trieu An) * Dang Thanh Binh (Chairman of Trieu Lang Commune) * Ho Quoc Thang (Supervisor of aquaculture) * Nguyen Ngoc Hung (Supervisor of forestry) * Cao Xuan Y (Supervisor of infrastructure) * Nguyen Ngoc Duc (Supervisor of irrigation) * Phan Van Hao (Supervisor of EGG) * Doan Minh Phong (Director of Planning and Investment)

		* Hoang Tan Trung (Head of Foreign Economic Relation Division of DPI)
	Evaluation Team leaves Dong Ha to Hue.	
	Meeting Norwegian Embassy in Hue.	Mr. Landro (Counsellor) Tran Trong Chinh (Adviser)
03 Aug	Evaluation Team leaves Hue to Hanoi.	
	International consultants leave Hanoi.	
	Draft final sent to Norwegian Embassy, Hanoi.	
	Final report sent to Norwegian Embassy, Hanoi.	

Annex 3: List of People Met

Mr. Landro, Counsellor of the Norwegian Embassy
Tran Trong Chinh (Adviser) - Norwegian Embassy

Doan Minh Phong, Project Director, PMU in Quang Tri
Nguyen Trong Tuyen (Project Supervisor), PMU in Quang Tri
Phan Thi Minh (Accountant), PMU in Quang Tri
Bui Van Truc (Supervisor)
Ho Quoc Thang (Supervisor of aquaculture)
Le Thi Quynh Sa (Supervisor)
Nguyen Thi Nhat Uyen (Supervisor)
Phan Van Hao (Supervisor)
Nguyen Ngoc Hung (Supervisor)
Nguyen Anh Tuan Project Engineer
Nguyen Ngoc Hung (Supervisor of forestry)
Nguyen Ngoc Duc (Supervisor of irrigation)
Nguyen Van Dinh (Interpreter)

Hoang Van Quang (Chairman of Trieu Phong DPC)
Cao Xuan Y (Officer of the Infrastructure Division, Supervisor of infrastructure)
Phan Van Hao (Officer of the Agricultural Division, Supervisor of EGV)

Bui Huy Dinh (Chairman, Trieu Van CPC)
Tran Dinh Thanh (Officer in charge of project in Trieu Van CPC)
Tran Thi Nga (Farmer) in Trieu Van Commune
Hoang Thi Quyt (Farmer) in Trieu Van Commune
Ho Thi Giao (Farmer) in Trieu Van Commune
Hoang Thi Quyt (Farmer) in Trieu Van Commune
Hoang Thi Yen (Farmer) in Trieu Van Commune
Bui Thi Toan (Farmer) in Trieu Van Commune
Ho Thi Tung (Farmer) in Trieu Van Commune
Bui Thi Manh (Farmer) in Trieu Van Commune

Truong Duy (Chairman of Trieu Trach Commune People's Committee - CPC)
Nguyen Phieu (Vice Chairman of Trieu Trach CPC)
Le Van Dien (Officer of Trieu Trach CPC
Tran Thi Ngu (Farmer) in Trieu Trach Commune
Le Thi Ngoc (Farmer) in Trieu Trach Commune

Nguyen Ngoc Quoc (Chairman) of Trieu Son CPC
Nguyen Huu Trung (Vice - Chairman of Trieu Son CPC, Officer in charge of the Project)
Nguyen Huu Tanh (Vice-Chairman of Communal People's Council)
Tran Vien A (Farmer in Trieu Son Commune)
Tran Xuan Vung (Farmer in Trieu Son Commune)
Tran Van Mao (Farmer in Trieu Son Commune)
Tran Xuan Vung (Farmer in Trieu Son Commune)

Tran Vien B (Farmer in Trieu Son Commune)
Tran Cong Moi (Farmer in Trieu Son Commune)

Ms. Tran Thi Phuoc (Chair of Trieu Phong District Women's Union)
Ms. Ha (Vice - Chair Women's Union of Trieu Phong District)
Ms. Thao (member of executive committee, Women's Union of Trieu Phong District)

Pham Xuan Hiep (Chairman of Trieu An CPC
Tran Trong Tam (Officer in charge of the Project)
Vuong Thi Ranh (Farmer) in Trieu An Commune
Le Van Tho (Farmer) in Trieu An Commune

Dang Thanh Binh (Chairman of Trieu Lang CPC
Vo Doan (Fisherman in Trieu Lang Commune)
Nguyen Huu Tho (Fisherman in Trieu Lang Commune)
Nguyen Cong Thanh (Farmer in Trieu Lang Commune)
Nguyen Xuan Tam (Fisherman in Trieu Lang Commune)
Pham Van Hong (Fisherman in Trieu Lang Commune)
Nguyen Thin (Fisherman in Trieu Lang Commune)
Hoang Van Canh (Fisherman in Trieu Lang Commune)

Vo Van Nguu (Chairman of Trieu Do CPC)
Tran Duc Nien (Vice - Chairman of Trieu Do CPC)

Hoang Van Chien (Secretary of Trieu Do CPC)

Nguyen Van Can, Director of Quang Tri Investment & Construction Consultancy JSC
Le Hoang Nguyen Chief of Design Department, Quang Tri Investment & Construction Consultancy JSC
Tran Binh Trong , Director of Quang Tri Construction & Transportation Consultancy JSC

Nguyen Van Vui (Vice - Chairman of Trieu Phuoc CPC)
Nguyen Hoai An, Headmaster of Trieu Phuoc Primary School.
Truong Minh Duc, Head of Parents Association
Tran Quang Khuong, Teacher, Member of Parents Association, Trieu Phuoc Primary School.

Households breeding sea bass.

Thai Xuan Lam (Director of Quang Tri Department of Planning and Investment)
Tran Trung Hieu (Officer of Economic Division, DPI)
Nguyen Trieu Thuong (Vice - Director of Economic Foreign Affair Division, DPI)
Hoang Tan Trung (Head of Foreign Economic Relation Division of DPI)
Tran Binh Thanh (Officer, DPI)
Truong Quang Hung (Chairman of Trieu Phuoc Commune)
Nguyen Van Vui (Vice - Chairman of Trieu Phuoc Commune)

Annex 4: List of Documents Consulted by the Evaluation Team

Year Title

1999-2000

1. Working contents. Project Rural Development in the coastal area in Trieu Phong District.
2. Quang Tri Province. Quang Tri Peoples Committee, Planning and Investment Department with the Norwegian Royal Embassy, April 1999.
3. Tentative project document for rural development in the coastal area. Trieu Phong District, Quang Tri Province. The Peoples Committee of Quang Tri Province, May 1999.
4. Agreement between the Government of the Kingdom of Norway and the Government of the Socialist Republic of Vietnam regarding rural development in the coastal area of Trieu Phong District, Quang Tri Province. Signed in Quang Tri, 10 November 2000.

2001

5. Agreed minutes from the first semi-annual meeting on 20th March 2001. Signed in Quang Tri, 20 March 2003.
6. 2001-2005 work plan. “Rural Development project in rural areas” project in Trieu Phong.
7. District, Quang Tri Province. Government of the Socialist Republic of Vietnam, Peoples Committee of Quang Tri Province, the Government of Norway and the Norwegian Embassy, August 2001.
8. Agreed minutes from the second semi-annual meeting on 4th September 2001 Signed in Quang Tri, 4 September 2001.
9. The Assignment of short-term consultant for Quang Tri rural development project in Vietnam. Final report by Centre for Rural Development, Hue University of Agriculture and Forestry, Hue, October 2001.

2002

10. Environment impact assessment. Sub-project: Development of aqua cultivation/shrimp cultivation. EIA Implementing Organization, Hue University of Sciences, Hue, April 2002.
11. Agreed minutes from the third semi-annual meeting on 22nd April 2002. Signed in Quang Tri 25 April 2002.
12. 2002 Work Plan, adjusted after annual meeting 22 April 2002. Project for rural development in coastal areas of Trieu Phong District, Quang Tri Province. Government of the Socialist Republic of Vietnam, Peoples Committee of Quang Tri Province, The Government of Norway and the Norwegian Embassy, June 2002.

2003

13. Review of the current accounting and financial management system.
14. Mid-term review May 2003. Final Report, September 2003. CMI. Bergen, Norway.
15. Pre-Mid Term Review; Assessment of Infrastructure Investments and Procedures. Prepared by GICON AS September 2003.
16. Report on activities and orientations for the shrimp nursery. DPC Trieu Phong August 2005.

2005

17. Report on Visit to Project Area of NORAD Project SRV 0038: Rural Development in the Coastal Area of Trieu Phong District, Quang Tri Province. Niels Svennevig, SINTEF Fisheries and Aquaculture.

2006

18. Identification mission “support to aquaculture development and poverty reduction In Quang Tri Province, Vietnam”. Niels Svennevig, Sintef fisheries and aquaculture. May 2006.

2007

19. Final report. Rural development in coastal area of Trieu Phong District Project, Quang Tri Province, July 2007.

Annex 5: Models of aquaculture in Trieu Phong

Commune	No. of Models	Fish	Crab	Clam	Self- Evaluation
Trieu Do	7	- Sea bass: 2 (*2006) - Tilapia: 3 (*2006+2007) - Thaclac:1 (*2007)	- 1 (*2006)		- Successful - Successful - On trial - Unsuccessful
Trieu An	10	- Raising fish spawn: 2 (*2005-2006) - Carp: 3 (*2005-2007) - Grouper: 1 (*2007) - Tilapia: 2 (*2005-2006)	- 2 (*2006)		- Successful - Successful - On trial - Successful - Unsuccessful
Trieu Trach	10	- Raising fish spawn: 3 (*2005-2006) - Carp: 5 (*2005-2007) - Tilapia: 1 (*2006) - Thaclac: 1 (*2007)			- Successful - Successful - Successful - On trial
Trieu Son	12	- Raise fish spawn: 7 (*2005-2007) - Carp: 5 (*2005-2007)			- Successful - Successful
Trieu Phuoc	8	- Thaclac: 1 - Carp: 2 - Sea bass: 1	- 3 (*2005-2006)	1 (*2007)	- Unsuccessful - Unsuccessful - On trial - Successful - Unsuccessful
Trieu Van	5	- Carp: 5			Successful
Trieu Lang	4	- Carp 4			Successful
Total	**56**	**49**	**6**	**1**	

Source: Nguyen Thi Nhat Uyen (Supervisor of Aquaculture of the Project) 7/2007
*: Timing for starting models.

Annex 6: SWOT Assessment of Management and Implementation Strategy by PMU

I. Strengths:

- Organizational and managerial structure is suitable and well organized.
- Project plan is based on the actual needs of people, taking ideas of people into account from planning, selection of households and supervision of the constructions' quality.
- Project activities have been implemented according set objectives and targets.
- Financial management is well organized.
- Creation of employments for people in project areas, helping hunger eradication and poverty reduction.
- Establishment of infrastructure, providing conditions for socio-economic development
- Suitable forest plantation, improvement of soil and ecosystems
- With due support from NORAD, qualified experts have been hired for assessment and adjustments during implementation of sub-projects
- PMU members are qualified with enthusiasm.

II. Weaknesses:

- Salary of project staff is too low, which cannot attract good human resources.
- Construction works have been commissioned, but plan for maintenance is not yet been defined.
- Models in different fields is still little in quantity, not diversified in terms of varieties and replicated.
- Focus on economic development and creation of income for EGV is not yet enough.
- Establishment of shrimp hatchery has not yet met the expected objectives.
- Many fields which can speed up the process of poverty reduction, which have not yet exploited and brought into full play.
- Potential of aquaculture (along coastline) of the area is big, but not yet fully exploited.
- Capacity of project stakeholders is still weak.
- Soil improvement is not maintained (due to lack of capital but this is a necessary activity)
- Construction works were not implemented in a synchronous way.

Annex 7: Comments to Draft Evaluation Report by PMU

Page	*Line*[9]	*Original Statement*	*Comments*
2	11 fr. B	"Seven....."	Eight
4	1 fr. T	Table 1: Project Expenditure by Component	Please update the table with data up to 31 August 2007 if found necessary.
4	4 fr. B	Footnote No. 3	This may be misunderstood. The cancellation of 126 ha shrimp ponds is completely justified, while according to the opinions of the ET, the construction of the shrimp hatchery is included in construction items, so, the construction of 126 ha of shrimp ponds has nothing different (i.e. it should be included in constructions)
8	3 fr. T	Budget and Actual Expenditure VND 1.1 Aquaculture 1.5 Rice variety and stock shrimp seed farm	Actual Expenditure 1.1 Aquaculture (shrimp hatchery) 5,440,579,136 1.5 Rice variety farm.....not implemented
8	1 fr. T	"The cost of these investments .....in the table below:"	The comment should not be made like this because following reasons: 1. As stated in previous part, the component 1 accounts for 40% (Project Document) and includes the construction of a 126 ha shrimp pond (10.1 billion VND), which is a construction item rather than direct support to the poor. It was good that the Project has cancelled this item; otherwise it would lead to the same situation like the shrimp hatchery. 2. Some other factors should be taken into consideration such as the depreciation of VND. Therefore, it needs to exclude inflation when making comparison.
8	19 fr. B	"- like the revolving credit and the drilled wells for water supply, ..."	It is transferred from the initial plan to make 39 deeply drilled central wells for water supply to small scale drilled wells for each household, which was included in the budget of sub-Project 1.2: Eco-garden villages.
8	9 fr. T	"not implemented"	The shrimp seed farm (shrimp hatchery) was implemented.
8	26 fr. T	"The steering committee.....the drilled wells"	It is transferred from the initial plan to make 39 deeply drilled central wells for water supply to small scale drilled wells for each household, which was included in the budget of sub-Project 1.2: Eco-garden villages.
9	8 fr. B	Project funds spend by year 2000-2007	Please update the table with data up to 31 August 2007 if found necessary

[9] Showing line from top (fr. T) or from bottom (fr. B).

14	11 fr. T	..."the Project funded ...56 models in aquaculture, one model in husbandry..."	11 models in husbandry
15	10 fr. T	"The beneficiaries.... as such".	The reality is different. The fish ponds were deep enough at the beginning, but the sandy areas are characterized by sand encroachment every year, while the people do not have enough money for dredging, therefore the fish ponds have been becoming shallow in following years. However, households who worked hard had good results. The fact that a number of households could raise fish in 6 months per year only depends on particular areas. Ponds situated in low area can raise fish all year round. On the contrary, ponds in high area can raise fish one season only (This is specified by natural factors). It is necessary to mention that there was no original design at all. At the very beginning, each pond was only 500m2 large with the purpose to water the garden and create micro-climate. Later on, they were converted into fish ponds.
15	8 fr. B	"RIA 1 - under the Provincial Department of Fishery".	RIA 1 - under the Ministry of Fishery.
17	12 fr. B	"The project purchased.....VND to build."	The Project made contracts directly with the Dong Ha Cement Factory to buy cement at chip price and provided to households. The households bought other materials themselves such as brick, tile, sand and gravel, etc. and informed the Project for payment. Concerning the design for the house, the Project had standard design (i.e. minimum level). Those households who like to make **bigger** houses had to finance **more** out of their pockets."
28	5 fr. T	"the estimate of the feasibility study of 732,000 billion VND"	"the estimate of the feasibility study of 7,32 billion VND"
31	19 fr. B	"The cost of training for staff and beneficiaries amount to 5,301 billion VND"	"The cost of training for staff, beneficiaries and the cost for short-term international consultant (from 2005-2007) amount to 5,301 billion VND"
32	13 fr. B	"696. 2 billion VND."	696.2 million VND
33	13 fr. T	"... and drilled wells had to be dropped..."	It is transferred from the initial plan to make 39 deeply drilled central wells for water supply to small scale drilled wells for each household, which was included in the budget of sub-Project 1.2: Eco-garden villages.
37	9 fr. B	"They received ....worth 12-13 billion VND..."	12-13 million VND

vii	18 fr. T	"Nguyen Huu Tam (Vice-Chairman, Officer"	Nguyen Huu Tanh (Vice-Chairman of Communal People's Council)
ix	23 fr. B	"Tran Binh Thanh (Officer)"	Tran Dinh Thanh (Officer)
xi	11 fr. T	Pham Van Hao (Supervisor)	Phan Van Hao (Supervisor)
xi	5 fr. B	"Nguyen Huu Tam Vice-Chairman of Trieuj Son CPC, Officer"	Nguyen Huu Tanh (Vice-Chairman of Communal People's Council)