

QUANG NGAI RURAL DEVELOPMENT PROGRAM (RUDEP) - PHASE 2

Infrastructure 2003-2004



VIETNAM-AUSTRALIA

Prepared for

AusAID

Australian Embassy
8 Dao Tan Street
Ba Dinh District,
Hanoi, VIET NAM

6 October 2004

42443858

Prepared by

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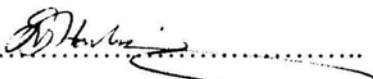
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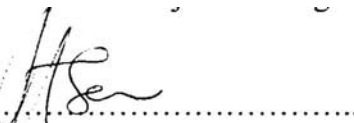
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Date: 6 October 2004
Reference: 42443858
Status: Final

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Acronyms

AusAID	Australian Agency for International Development
ASAS	Australian Small Assistance Scheme
ATL	Australian Team Leader
CCG	Commune Contact Group
CP	Commune Peoples Committee
CPO	Communications and Promotions Officer
DC	District Contact Group
DDOs	District Development Officers
DPC	District Peoples Committee
DPI	Department of Planning and Investment
GOA	Government of Australia
GOV	Government of Viet Nam
IEO	Infrastructure and Environment Officer
O&M	Operation and Maintenance
PMB	Commune Program Management Board
PDA	Participatory Development Adviser
PMU	Program Management Unit
PPC	Provincial People's Committee
QN	Quang Ngai
RUDEP	Quang Ngai Rural Development Program
VAT	Value Added Tax
VTL	Vietnamese Team Leader

Summary

In the year 2003 – 2004, RUDEP funded 10 projects in 5 communes, Duc Phong, Pho Chau, Hanh Phuoc, Nghia Tho and Son Hai besides two two-year projects in Tinh Tho commune.

Those projects were chosen by local people through PC/PA/PS meetings and were implemented accordance with the democratic regulations from design phase to operation phase.

RUDEP and CCG formed 10 Activity Groups (AG) for 10 projects. Each AG had to contribute to the project like give comments for the design, supervision the construction and a very important task is instructing and encouraging people in operation and maintenance of the project.

In order to help the AG to do the above task, IEO trained the AGs in supervision and O&M.

IEO, DDO, and PDAs also helped the CPMB in implementing the project

1 Introduction

1.1 RUDEP

RUDEP is funded by the Australian and Vietnamese Governments. The inputs comprise a financial commitment of A\$30MILLION from the GOA and A\$3MILLION from the GOV.

RUDEP is located in the coastal province of Quang Ngai in central Vietnam. Quang Ngai was identified as a sustainable location for rural development due to the Province's high percentage of rural poor, slow economic growth, and limited previous Official Development Assistance.

The target groups for RUDEP are poor communes in Quang Ngai Province.

There are 4 components: Income Generation, Capacity Building, Small Scale Infrastructure and Monitoring & Evaluation.

In the Small Scale Infrastructure component, RUDEP provides assistance for commune-based small-scale infrastructure that will enhance income generation capabilities of households.

These projects are identified by local people through PPP. Local people have the right to comment on the design, supervise the construction and responsible for the O&M.

1.2 PPP and Selection of Projects

1.3 RUDEP Infra Steps

According to RUDEP Infrastructure Regulation approved by PPC, there are two kinds of infrastructure project: over 100milVND cost and under 100milVND cost projects. As described below:

1. **Review PC/PA/PS**
RUDEP, CCG, DCG
2. **Identify Propose and Agree on Project**
RUDEP, CCG, DCG
3. **Form Project Management Board (PMB)**
CCG, DCG, CPC, DPC
4. **Form Activity Group (AG)**
CCG, DDO, beneficiaries
5. **Prepare O&M plan**
CCG, IEO, DDO, beneficiaries
6. **Environment Impact Assessment**

- IEO
7. **Appointment Investment Report Consultant**
PMB
 8. **Prepare Investment Report (IR)**
Consultant, PMB
 9. **Submit IR to DPC and RUDEP**
PMB
 10. **Appraisal of Investment Report**
RUDEP
 11. **Approval of Investment Report**
DPC
 12. **Appointment Design Consultant**
PMB
 13. **Preparation of Design and Cost estimate**
Designer
 14. **Discuss Design with Activity group**
PMB, RUDEP, AG, Designer
 15. **Submit D&C to DPC**
PMB
 16. **Approval of Design and Cost estimate**
DPC
 17. **Select 2 or 3 potential Construction Contractors**
PMB
 18. **Meeting between Cons. Contractors and Activity group**
PMB, DDO, AG, and Contractor
 19. **Appoint Cons. Contractor**
DPC
 20. **Choose Supervision Consultant**
PMB
 21. **Sign construction and supervision contracts**
PMB
 22. **Construction**
Contractor, Supervisor, PMB, AG, RUDEP
 23. **Inspection and Handover**
Contractor, Supervisor, PMB, AG, RUDEP
 24. **Warranty Period**
Contractor, Supervisor, PMB, AG, RUDEP
 25. **Final Inspection**
Contractor, Supervisor, PMB, AG, RUDEP

With an under 100milVND cost project, we don't have to do the Investment Report. So we just go through 21 steps, as above except the steps involved to do the Investment Report. But the Design and Cost Estimate must be appraised by RUDEP before DPC approves.

2 Infra Projects

2.1 Project List

1. Lam Thuong Kindergarten – Duc Phong – 113.3mil VND – 26/02/04-13/07/04
2. Van Ha Market – Duc Phong – 350.8mil VND – 16/03/04-27/08/04
3. Da den Road – Pho Chau – 263.6mil VND – 10/02/04-26/07/04
4. Cay Gia Dam – Pho Chau – 65.1mil VND – 17/02/04-26/07/04
5. Hoa Vinh Full-day KG – Hanh Phuoc – 162.5mil VND – 12/03/04-26/07/04
6. Hoa My Kindergarten – Hanh Phuoc – 63.8mil VND – 23/02/04-28/06/04
7. An Chi Dong Kindergarten – Hanh Phuoc – 64mil VND – 23/02/04-28/06/04
8. AC Dong - AC Tay Road – Hanh Phuoc – 68.6mil VND – 23/02/04-28/06/04
9. Lang Lanh - Lang Trang Road – Son Hai – 363.2mil VND – 09/01/04
10. Cau Phen Irrigation Canal – Nghia Tho – 350.9mil VND – 06/11/03-31/05/04

3 Details of Each Project

3.1 Lam Thuong KG – Duc Phong

Expected benefit/rationale

The Lam Thuong Kindergarten was being used to serve about 100 children.

The old kindergarten was previously a primary school, including 2 deteriorated classrooms without playground, toilet and fence, so a new kindergarten with enough facilities is necessary for this area.

No. of beneficiaries

According to the CPC and the Head master of the kindergarten, the new kindergarten will serve nearly 100 children after being constructed, and may be more if other parents see the changes of existing kindergarten.

Achievement

With 115mil VND, Lam Thuong village has a new kindergarten including a 50 sq.m classroom, a concrete playground, a toilet with water supply system and the fence.

At this time, the kindergarten is used for the whole day to serve nearly 100 children, a class in the morning and another in the afternoon.

Issues

In the original design, the water source was a bore. The contractor had a lot of difficulties in making that bore because that area is a rocky area. After discussion, CPMB requested RUDEP to fund for a well. The cost of that well is more than 6 times of the cost of a bore.

ATL approved the request and paid for that construction directly in cash.

3.1.1 Duc Phong Market – Duc Phong

Expected benefit/rationale

The old market included a 50 meter square main building and 2 rows of shops with total area of 84 sq.m. Those building were deteriorated badly. Other shops were temporarily made by bamboo and thatch.

Furthermore, the ground of the market was lower than the around area 0.6-0.7m without a drainage system. So this market was always flooded in the wet season. It was very polluted.

At the moment, the number of sellers in this market is about 65, 35 of them have good businesses, selling vegetables, fish, meat, agricultural products, ready made clothes, cloth, household goods, etc.

CPC hopes there will be more businessmen coming to the market when it is upgraded.

No. of beneficiaries

Nearly the whole commune and some from neighbour communes.

Achievement

With more than 350mil VND, a market was constructed with a main building, a management house, a concrete ground with drainage system, a toilet with water supply system and 4 row of floors of outdoor shops.

Up to date, there are more than 130 people registering to hire a shop in this market.

3.1.2 Da den Road – Pho Chau

Expected benefit/rationale

There was only way to get in the centre of Vinh Tuy village. This road is long and in bad condition. The local people used to use the track called Da Den Road to go out the village. This track is shorter than the main road.

The track went on the local garden, there were very steep sections. The local people just can walk or ride a motorbike on this track.

The new dirt road of 5.0m wide can help local people carry their products to market and bring materials home by small truck or trailer, So the transportation is easier makes commerce better.

No. of beneficiaries

The people in Vinh Tuy village.

Achievement

The road is 1.85km long, 5.0m wide dust road with 4 culverts.

Issues

The road was not designed to be protected by grass for the verge and the embankment, especially at both ends of culverts.

The design was not checked properly by District Industry Department, the length of the deepest culvert is not suitable to the road. So the road above the culvert is easily eroded in the wet season.

3.1.3 Cay Gia dam – Pho Chau

Expected benefit/rationale

The field around this dam in Area no.6, Hung Long village could not be used in the dry season because there was no water source.

The local people used to make a temporary dam in Hung Long stream in order to store the water for irrigating in the dry season. But that dam didn't work well. The farmers didn't have enough water for the dry season. And furthermore, this dam had to be done annually.

The new dam is used to solve the above problem.

No. of beneficiaries

There are about 28 farmers who have the land need to be irrigated by the water source from that reservoir.

Achievement

A new dam was constructed with 10 m wide and 19 m long. The water gates are 2x2.0m. People can walk cross the dam by a 1.2m wide concrete slab.

This dam helps to store water to irrigate 11 ha of paddies and 6.0 ha of crops.

Issues

There was no issue in construction of this project.

3.1.4 Hoa Vinh Full Day Kindergarten – Hanh Phuoc

Expected benefit/rationale

The existing kindergarten system in Hanh Phuoc is badly deteriorated. There was no place for the children whose parents have to work whole day to stay. The local people suggested a full-day kindergarten.

There were three classrooms, previously belonging to a primary school. They were not used because they were deteriorated badly. The CPC and the Leader of Kindergarten system suggested upgrading those classrooms to be a full-day kindergarten.

No. of beneficiaries

The full-day kindergarten serves the locals in Hanh Phuoc commune. As designed, this kindergarten can serve 30-50 children each year.

Achievement

After being upgraded, a full-day kindergarten has 3 classrooms with ceramic tile floor, tin roof and plastic ceiling; a concrete playground; a kitchen; a toilet and the fence, equipment for the classroom, dining room, bedroom and kitchen.

In the first open year, this kindergarten received about 100 children. The teachers of this kindergarten had to re-organize in order to receive all the children who want to stay there.

Issues

This is an upgrade project so there was some additional works needed to be done. The designer didn't predict the items needed to be repaired properly. It took more time for the consideration of additional work.

The Counterpart seemed not to be cooperate in this situation. They didn't discuss with the AMC staff on making decisions. They gave their own comments directly to the Contractor and CPC.

The CPC didn't check the site carefully; there were some troubles in allocating the kitchen and the toilet for the new kindergarten. In order to fix the problem, the kitchen and the toilet were not constructed at a convenient place. The contractor didn't have enough capacity to finish the work on time.

3.1.5 Hoa My Kindergarten – Hanh Phuoc

Expected benefit/rationale

The old kindergarten collapsed in the flood. This kindergarten is serving the children in Hoa My village. There are about 20 children going school.

No. of beneficiaries

The people of Hoa My village.

Achievement

The new kindergarten including a classroom with equipment is used a half day to teach about 25 children.

Issues

There was no issue in this project.

3.1.6 A Chi Dong Kindergarten – Hanh Phuoc

Expected benefit/rationale

There was no kindergarten in this area. The children had to go to the next village to class.

No. of beneficiaries

The children in An Chi Dong village.

Achievement

The new kindergarten including a classroom with equipment is used a half day to teach about 25 children.

Issues

There was no issue in this project.

3.1.7 An Chi Dong - An Chi Tay Road – Hanh Phuoc

Expected benefit/rationale

There was only a track to cross this village. This track was very narrow and rough, especially it was very muddy in the wet season.

People wished to have a road that could be used all year round so that they could carry their crops home easily.

No. of beneficiaries

The people in An Chi Dong / An Chi Tay hamlets

Achievement

The road is about 500m long, 6.0m wide with 2 culverts. The traffic is now better. Children can easily walk to school. Farmers can carry their crops home by trailer. The transportation between 2 villages An Chi Dong and An Chi Tay is easier.

Issues

Because there was no compensation for the land used for road construction, the road was not constructed properly in some sections. Some local people don't want to lose their land, so the side drains are not wide enough.

3.1.8 Lang Lanh Road – Son Hai

Expected benefit/rationale

Son Hai is the raw material area of Cassava Processing Factory. The farmers there mainly plant cassava.

The area between Lang Lanh and Lang Trang village is full of cassava but there was no road to bring the product to the factory. People used to carry by manpower. That took a lot of time and power.

Furthermore, they like to have a road connecting 2 villages not only for their transportation but also for communication among themselves.

No. of beneficiaries

Mainly, the beneficiaries are the farmers who have land along the road. But the others also use the road to go between 2 villages.

Achievement

A dust road of 2.9km long, 5 m wide with 11 spillways and 2 culverts.

Issues

The design of the road was not done properly because the budget was limited but the road is too long.

The designer didn't survey the geology of that area. There are some sections are not stable especially in the rain.

A culvert was not allocated at suitable places so it may work ineffectively.

There are two places need the spillways. The slope of the road is too high so the side drains may be not stable, even the road surface. This road needs to be improved.

3.1.9 Cau Phen Irrigation Canal – Nghia Tho

Expected benefit/rationale

The last field of the commune was not irrigated for 4 or 5 years because of a break in the irrigation canal.

That break was repaired 3 times by the District but it was damaged just after one flood.

The farmer wished to have the water so that they can change from sugarcane and cassava to rice cultivating.

No. of beneficiaries

The area hoped to be irrigated after the canal is upgraded is about 50ha.

Achievement

The canal is 1,462m long including 3 sections:

- The first section from Km0 + 000 to Km0 + 179: reinforced concrete frames and ungrouted riprap.
- The second section from Km0+179 to Km0+386: unlined canal with a water gate for the flood.
- The last section from Km0+386 to Km1+436: unlined canal.

The local people in Nghia Tho commune now can irrigate their fields with the water from this canal. Nghia Thang commune also will continue to construct the canal to take the water from this canal for irrigation.

Issues

At first the design was over budget and unreasonable. After discussing, the designer cancelled some items, changing from concrete to biology. So the cost was going down more than a haft.

Anyway, the design was not sufficient. There was no access way for cross drainage. And the outlet of water gate is not reasonable.

So this project is needed to be improved the following year.

4 Lessons Learnt and Recommendations

- The designs were not made properly for some projects. It's necessary to have a closer cooperation between the Designer, CPMB and RUDEP to find a good solution for each project.
- The time of preparing IR, D&C was also too long. It may be the consultant was busy or hasn't got enough capacity. CPMB must be careful in choosing a Design Consultant. They should ask for the assistant of District Engineer.
- The time for approval was also too long. This needs the help of DCG.

- The cost of the projects in every commune was very small. But the time for preparing was too long, especially for the project cost more than 100mil VND. Should the step of preparing the Investment Report be cancelled?

In my understanding, in order to make an IR properly the designer has to make a design first to get the cost of the project. So why we don't do the D&C estimate directly?

Furthermore, the IR used to ask for permission for construction and budget but our projects are always approved by PPC and their fund is set before implementing them.

- The contractors are usually the local companies or they have a close relation to the CPC. There were some signs of collaborating between the Employer and the Contractor. It's very difficult for the Supervisor to fulfil his duty.
- The Supervisors are usually from the Provincial Consultant Companies. That means it's difficult for them to be present on site regularly. The CPMB should try to find a Local Consultant or they should hire one Supervisor to inspect all of their projects being implemented at that time (if applicable). They should also ask the assistant of the District Engineer to inspect the construction.
- The O&M has not been implemented properly. Some local people haven't got their self-awareness to protect a common asset. CPMB should assign the person to take care of all these works.

Limitations

URS Australia Pty Ltd (URS) has prepared this report for the use of AusAID Quang Ngai Rural Development Program in accordance with the usual care and thoroughness of the consulting profession. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this report. It is prepared in accordance with the scope of work and for the purpose outlined in the Program Design Document.

The methodology adopted and sources of information used by URS are outlined in this report. URS has made no independent verification of this information beyond the agreed scope of works and URS assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to URS was false.

This report was prepared during October 2004 and is based on the conditions encountered and information reviewed at the time of preparation. URS disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

Annex 1: Pictures of the Projects

DUC PHONG MARKET

- Main building: 324 reinforced concrete structure, brick wall, tin roof with steel trusses and concrete floor
- Management House: 20 sq.m, brick wall, tin roof, plastic ceiling, cement tile, and wood door/windows
- Toilet: 18 sq.m
- Concrete ground: 900 sq.m, with drainage system
- Concrete floor for outdoor shops: 210 sq.m



LAM THUONG KINDERGARTEN

- Construction Area: 532 sq.m
- A Classroom: 70 sq.m, tin roof, tin ceiling, ceramic tile floor, and wooden doors and windows
- A toilet: 10.5 sq.m, with water supply system
- Concrete playground



LANG LANH ROAD

- A dust road: 2,911m long, 5.0m wide
- Culverts: 1 ϕ 100 and 1 ϕ 75
- Spillways: 6 spillways 6.0m wide, 2 spillways 8.0m wide
- Design load: H13 – XB60



A CHI DONG KINDERGARTEN

- A 50 sq.m classroom, tin roof, plastic ceiling, and wooden doors/windows with electricity system and equipment



HOA VINH FULL DAY KINDERGARTEN

- Three upgraded rooms: a classroom, a bedroom and a dining room, 51 sq.m / room, tin roof, plastic ceiling, ceramic tile floor, wooden windows/doors and electricity system
- A new kitchen: 30 sq.m, tin roof, plastic ceiling, cement floor, and wooden windows/door with glass
- A toilet, a concrete playground, and the fence



HOA MY KINDERGARTEN

- A 50 sq.m classroom, tin roof, plastic ceiling, and wooden doors/windows with electricity system and equipment



A CHI DONG – A CHI TAY ROAD

- A dust road: 510m long, 6.0m wide
- Culverts: 2 culverts 1 ϕ 75
- Design load: H13 – XB60



CAU PHEN IRRIGATION CANAL

The canal is 1,462m long including 3 sections:

- The first section from Km0 + 000 to Km0 + 179: trapezoidal shape, 2.6m bottom wide, reinforced concrete frames and ungrouted riprap
- The second section from Km0+179 to Km0+386: trapezoidal shape, 2.6m bottom wide, unlined canal with a water gate for the flood.
- The last section from Km0+386 to Km1+436: trapezoidal shape, 0.5m bottom wide, unlined canal



DA DEN ROAD

- A dust road: 1,846 m long, 5.0m wide
- Culverts: 2 culverts 1 ϕ 75, 2 culvert1 ϕ 100
- Design load: H13 – XB60



CAY GIA DAM

- A concrete dam 10.0m wide and 4.9m long with 2x2.0m water gates
- A stilling well 6.0m long
- A front and a back apron 3.0m long
- A gabion outer apron 2.0m long
- A walking reinforced concrete slab bridge 1.2m wide on top of the dam



Annex 1

Pictures of Projects