



Royal Government of Cambodia

LABOUR-BASED CONTRACTORS PROGRESS SURVEY



Results of a Survey on Contractors Trained in
Labour-Based Construction and Maintenance Methods

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Trained in Labour-Based Construction and Maintenance Methods

By

Chhieu Veyara and Dara Johnston

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Executive Summary

The ILO Upstream Project has trained or assisted the training of 22 contractors in labour-based rural road construction and maintenance. This training program supports the Royal Government of Cambodia's decision to maximise the use of the private sector for the development of Cambodia. Originally, these contractors were referred to as small-scale contractors, however the results of this report suggest that small-scale may no longer be an accurate description of many of the contractors. Therefore, they are referred to simply as contractors in this report.

This survey was carried out in mid 2001 on the contractors and clients involved in the labour-based rural infrastructure works. It aims to improve the conditions for contracted rural infrastructure works to the benefit of the contractors, the clients and ultimately the rural population.

The survey updates a previous survey conducted in July 2000. This survey involved 19 of the 22 contractors trained in Labour-Based Appropriate Technology (LBAT) and many of the clients who have employed them. The remaining three contractors were out of reach during the survey period.

The survey focuses on progress made in contracting rural works and the problems and constraints confronted by contractors and clients when carrying out their contractual obligations. The survey assesses the capacity of the contractors in work experience gained, asset growth, both financially and physically and the extent of their workload. Some important findings were:

- The number of trained LBAT contractors has grown to 22.
- LBAT contractors are now active in 11 provinces.
- The average increase in the contractors productive assets is 102%.
- The total increase in productive assets for 19 contractors is estimated to be US\$1,853,500.
- As contractors gain experience, their volume of work also appears to increase more rapidly.
- From mid 2000 to mid 2001 the median workload for 11 contractors was US\$220,500 and the average workload per contractor was US\$301,810.
- From mid 2000 to mid 2001 the volume of work undertaken by 11 contractors was US\$3,319,906. This is an increase of US\$2,282,606 since 1998-1999, an average increase of 220%.
- MRD programs financed through ADB loans provide the contractors with most work at 33.2%.
- Government programs including SEILA, Social Fund and TRIP provide contractors with 78.2% of their workload.
- Newly trained contractors have invested significantly in the equipment needed to compete for LBAT works, within months of training and during their first contract.
- Most work done by the contractors is classified as building and 36% is on roads or related activities.

Several improvements were found since the last survey. These include:

- Better adherence to work specifications and fewer arbitrary changes to the designs during construction.
- Longer and broader tender notification.

- Flexibility by the clients permitting the contractors to rent equipment, or use appropriate equipment and submit joint bids.
- Fairer unit rates.
- Improved work site supervision.
- More tender material is available in Khmer.

Contractors and clients identified four major areas where further improvements are needed:

- System of notification for applying for works.
- Access to work and the selection process.
- The timeliness of payments.
- The need for further training.

The results of the survey are encouraging. Improvements in the contracting environment are being made. The training interventions have been effective and the market and opportunities for contracted rural works are expanding.

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Abbreviations

ADB	Asian Development Bank
BoQ	Bill of Quantities
CARERE II	Cambodia Area Rehabilitation and Regeneration Project
DRR	Department of Rural Roads
EFRP	Emergency Flood Rehabilitation Project
H.E.	His Excellency
ILO	International Labour Organisation
LBAT	Labour Based Appropriate Technology
MRD	Ministry of Rural Development
NGO	Non-Government Organisation
NIT	Notification of Invitation to Tender
PRDC	Provincial Rural Development Committee
PRIP	Provincial Rural Infrastructure Project
PDRD	Provincial Department of Rural Development
PIU	Project Implementation Unit
PPM	Provincial Project Manager
RIIP	Rural Infrastructure Improvement Project
SEILA	RGC Poverty Alleviation Project supported by CARERE II
TRIP	Tertiary Road Improvement Project
UNDP	United Nations Development Project
ZOA	Dutch Refugee Agency

Introduction

One of the capacity building targets of the ILO's Upstream Project is to "increase the capacity of the private sector by training contractors to carry out rural infrastructure works using LBAT¹." Twenty-two contractors have been trained by the project or in collaboration with other organizations to date, see appendix IV. In early 2000, a survey was conducted to ascertain the progress of the trained contractors and the problems encountered by the contractors and their clients. In mid 2001, a second follow up survey was conducted to update the previous study. The second survey also assesses the capacity of the contractors in terms of work experience gained, increase in, assets both financial and physical, the extent of the workload undertaken, as well as identifying the major clients of the contractors and detailing the diversification of the works.

Scope of Study

This survey extended into new provinces where a number of new contractors have been trained or where the previously trained contractors have expanded their operations. Therefore, in addition to the original seven provinces of Kandal, Takeo, Kampong Cham, Kampot, Prey Veng, Svay Rieng and Siem Reap, the second survey was also undertaken in Kampong Thom, Kampong Chhnang, Battambang and Banteay Meanchey provinces. See map below.

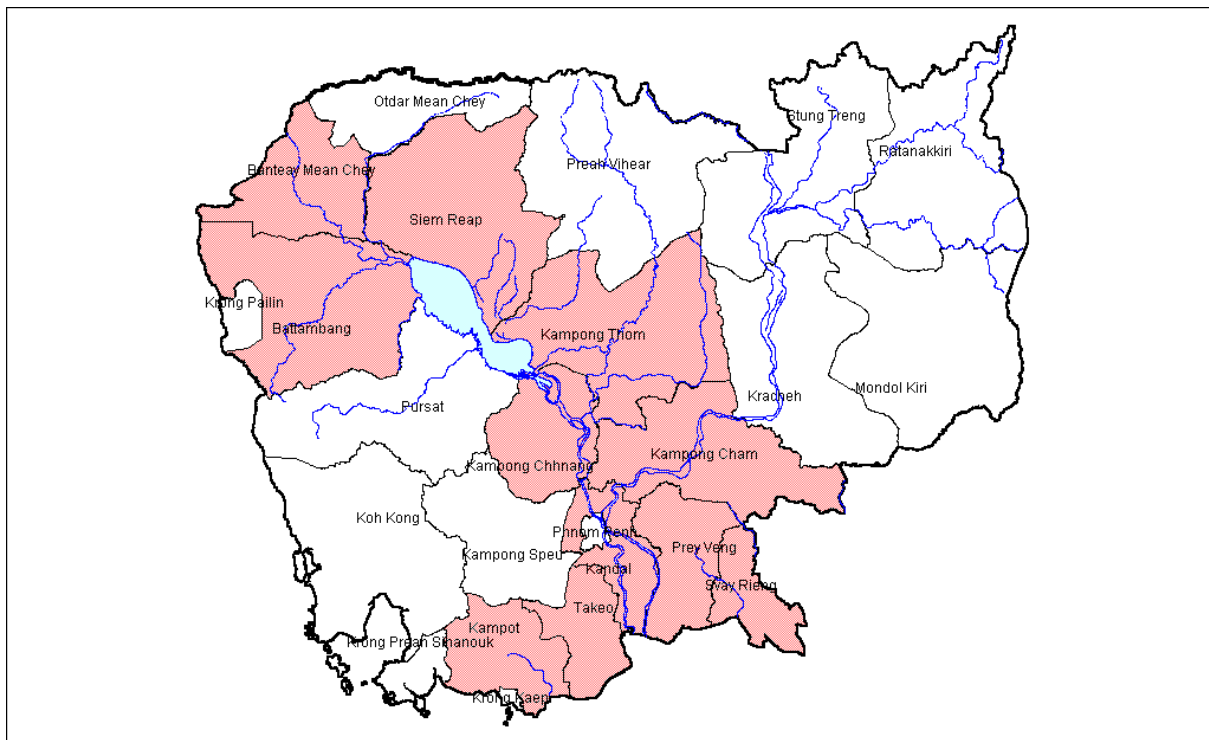


Figure 1: Coverage Area of Survey

¹ ILO - Cambodian Labour-based Rural Infrastructure Program, Upstream Project Briefing Paper, July 2001, ILO CMB/97/M02/SID, Phnom Penh, Cambodia
Labour-based Contractor Progress Survey

Thirteen of the sixteen contractors trained since 1998 and the six new contractors trained earlier this year participated in the survey. Twelve representatives of various client organisations also participated. These included the provincial project managers of the Project Implementation Unit (PIU) of the Ministry of Rural Development/Asian Development Bank/ Rural Infrastructure Improvement Project (MRD/ADB/RIIP), the directors of the Provincial Department of Rural Development (PDRD), SEILA, CAREERE II and ZOA representatives. The two original survey questionnaires were revised based on the experience gained from the previous study and are included as appendix 4 and 5.

The findings recorded herein are the results of the survey. Therefore, except where stated, the opinions are those of the respondents. They do not represent the opinions of the ILO Upstream Project or the Ministry of Rural Development. Suggestions from the ILO Upstream Project are presented in the recommendations at the end of the report.

Survey Findings

The survey findings presented below are divided into three categories:

1. Improvements noted since the first survey.
2. Progress of the contractors.
3. Current problems and constraints.

Improvements Noted since the First Survey

The following improvements were found from the previous survey:

- The frequent and substantial changes to technical designs and work specifications during implementation noted previously have decreased.
- In general, tender notices are posted earlier to allow more time for viewing. On average, this has increased from one week to two weeks. In some provinces, the announcements are not only placed on the clients' notice board, but are also advertised nationally through newspapers, local radio/TV and at other public places. These practises vary from client to client.
- Clients were reported to be more flexible about the requirement for contractors to own their own equipment. Many clients permitted the contractors to rent necessary equipment.
- Some clients have permitted contractors to submit joint bids.
- No complaints were received about the unit rates being too low and not reflecting market prices. Most works were awarded through competitive bidding. It was reported that the bids submitted by the contractors were often below clients' estimates.
- Appropriate haulage equipment has been permitted to bring in good quality materials, where site materials have been unsuitable or in short supply.
- On all sites, it was reported that instructions were given through the site supervisor. This has lead to better co-ordination between the contractor and the clients' staff.
- Some progress was reported in translating tender documents into Khmer, for some client organisations. However, most tender documents are still in English, but this was not reported as a major problem.

Progress of the Contractors

The survey results have been divided into the following topics for analysis and discussion:

- ◇ Capacity and assets of contractors.
- ◇ Work load of contractors.
- ◇ Market share of contractors and distribution of works by clients.
- ◇ Type of works implemented by the contractors.

Capacity and assets of contractors

This part of the survey assesses the contractor assets, which include capital, equipment, staff and annual financial turnover, i.e. the total income the company earned in a year. Since most of contractors do not have financial accounting systems in place, it is difficult to measure the exact profitability of the firms. All contractors stated a firm commitment to continue in their current line of business and believed that they were currently making a profit. More detailed information about contractor's staff and equipment is in appendix 3. This report measures contractors' capacity by their physical and financial assets as reported by the contractors. Table 1 below shows the changes in value of the contractors productive assets from the start of their business to the present.

Code *	Starting Asset Value (US\$)	Starting Year	Asset Value 2001 (US\$)	Increase (US\$)	Total Increase (%)	Average Increase per Annum (%)
C-1	50,000	1998	200,000	150,000	300	75
C-2	250,000	1998	280,000	30,000	12	3
C-3	40,000	1998	120,000	80,000	200	50
C-4	40,000	1998	75,000	35,000	88	22
C-5	25,000	1998	37,000	12,000	48	12
C-6	100,000	1998	160,000	60,000	60	15
C-7	300,000	1998	350,000	50,000	17	4
C-8	30,000	1996	150,000	120,000	400	67
C-9	25,000	1998	40,000	15,000	60	15
C-10	40,000	1998	50,000	10,000	25	6
C-11	7,000	1997	25,500	18,500	264	53
C-12	150,000	1998	190,000	40,000	27	7
C-13	50,000	1998	68,000	18,000	36	9
C-14	50,000	1994	200,000	150,000	300	38
C-15	10,000	1995	100,000	90,000	900	129
C-16	5,000	1993	50,000	45,000	900	100
C-17	600,000	1998	1,000,000	400,000	67	17
C-18	20,000	1996	80,000	60,000	300	50
C-19	30,000	1991	500,000	470,000	1,567	142
Total	1,822,000		3,675,500	1,853,500	102	

* Codes are used to protect the confidentiality of the information provided by the contractors. Each C is a contractor.

Table 1: Change in Contractors Asset Value

Contractors' asset value has steadily increased by an overall average of 102 per cent since they began work. This increase in assets varies from a low of 12 per cent to a high of 1,567 per cent.

It is interesting to note that generally the contractors who have been in business longer have a higher annual asset increase than those who have just started. This is presented graphically below.

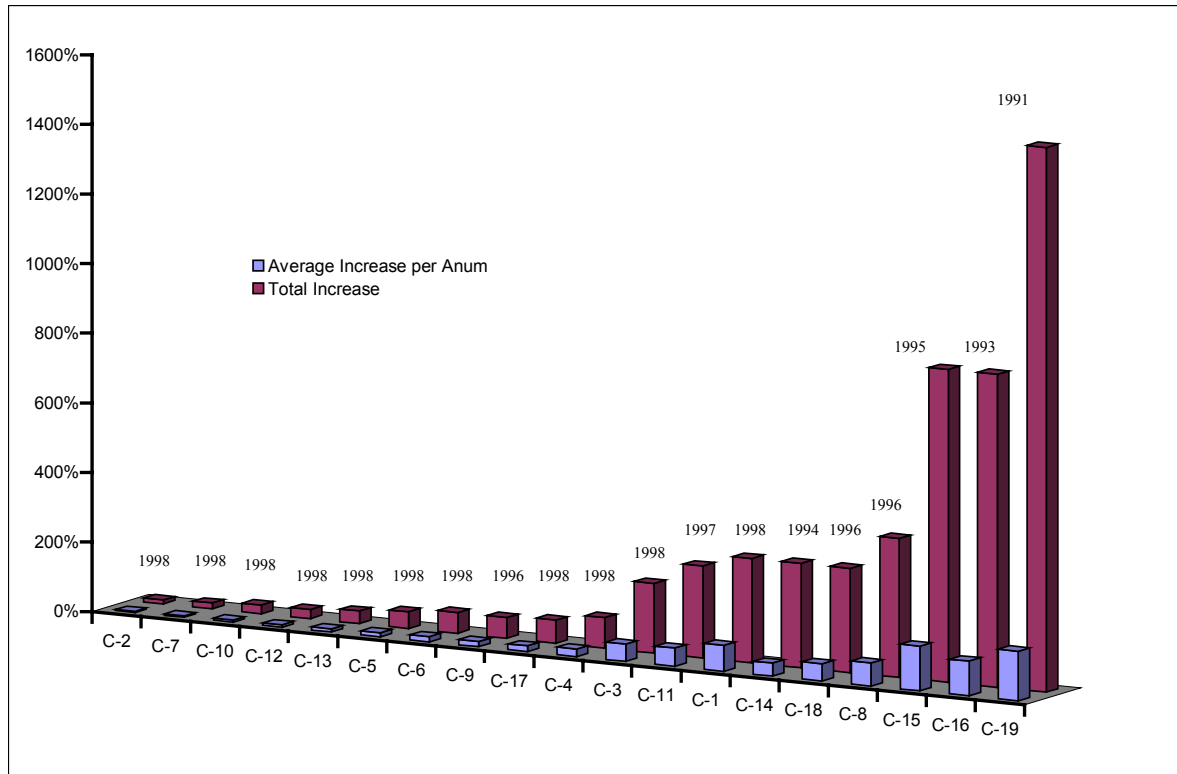


Figure 2: Change in Asset Value

Work load of contractors

Table 2 below indicates the total value of contracts won by eleven of the nineteen contractors in the year 2001 and the works carried out in the year 2000. Appendix 1 has the figures for all contractors. It is possible to compare the results of the first survey for eleven of the nineteen contractors. The six new contractors were of course not included in the first survey, and data from two of the old contractors is not complete for the four years under analysis, so only eleven contractors are compared here. Table 2 shows the increase in the works done by these 11 contractors.

Code	Value of work done annually (US\$)					
	Value of work done annually (US\$)			Percent Change		
	1998-1999	1999-2000	2000-2001	1998-2000	1999-2001	1998-2001
C-1	20,000	30,000	389,050	50	1,197	1,845
C-2	10,300	121,955	220,500	1,084	81	2,041
C-3	28,000	131,500	547,000	370	316	1,854
C-4	64,000	69,200	216,016	8	212	238
C-5	33,000	56,200	56,000	70	0	70
C-6	100,000	130,000	214,800	30	65	115
C-8	120,000	300,000	715,000	150	138	496
C-10	50,000	77,255	196,600	55	154	293
C-11	45,000	51,550	67,940	15	32	51
C-12	487,000	571,000	581,000	17	2	19
C-13	80,000	190,000	116,000	138	-39	45
Total	1,037,300	1,728,660	3,319,906			
Maximum	487,000	571,000	715,000	1,084	1,197	2,041
Median	64,000	130,000	220,500			
Average	94,300	157,151	301,810	67	92	220
Minimum	10,300	30,000	56,000	8	-39	19

Table 2: Contractors Annual Turnover

The total volume of work done by the 11 contractors rose from \$1,037,300 in 1998 to \$3,319,906 in 2001. The median amount of work for the 11 contractors increased from \$64,000 in 1998 to \$220,000 in 2001. On average, the volume of work done by the contractors has increased by 220 per cent over three years, with all of the contractors increasing their work over the three years.

There was a definite increase in the workload, but there is a large difference in the maximum and minimum volumes. One contractor in particular is increasing his workload more quickly than the others as shown in figure 3 below.

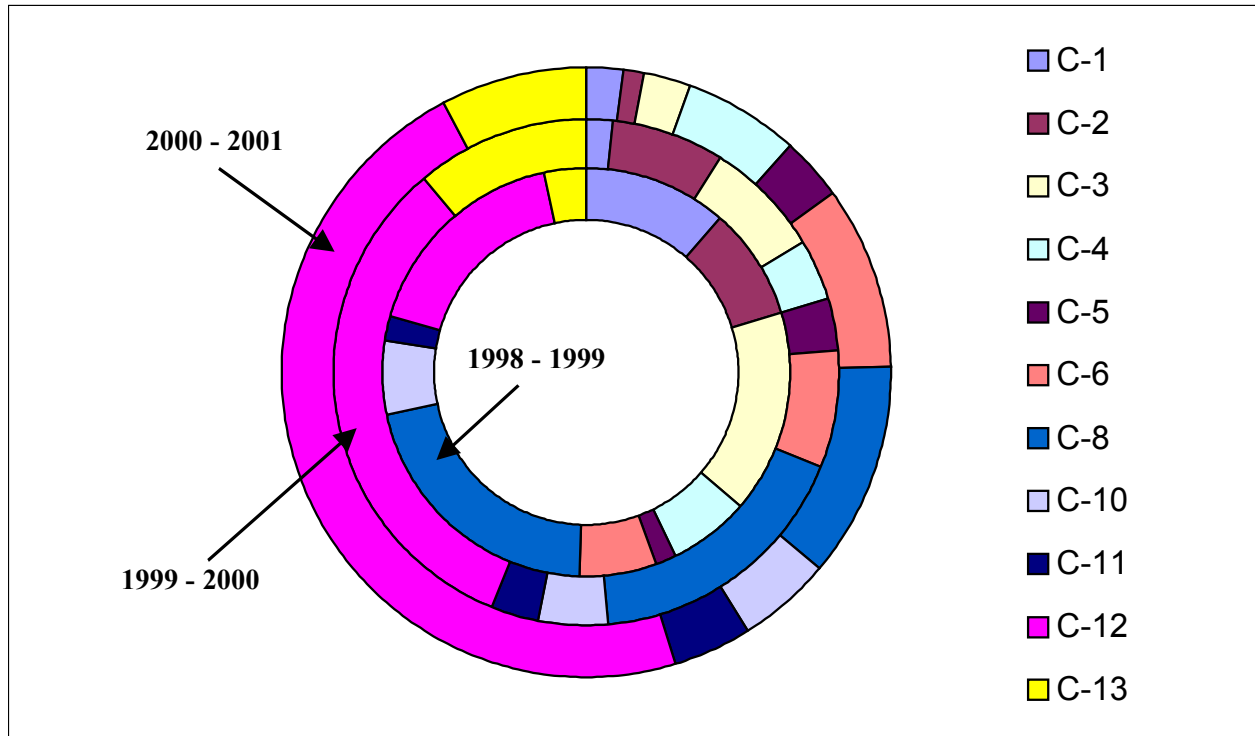


Figure 3: Comparison of Contractors Workload 1998 – 2001

Relative market share of contractors and distribution of works by the clients

Table 3 below shows the relative market share among the contractors varies from one per cent to 23 per cent of the work carried out by the 19 contractors in 2001.

Figure 4 below shows the relative distribution of work among the clients. It shows that the MRD/ADB/RIIP and the MRD/ADB/Emergency Flood Rehabilitation Project (EFRP) provide 34 per cent of the workload. Other government work accounts for a further 32 per cent. However, this last figure is somewhat misleading. One contractor was awarded a contract from the Ministry of Youth and Sport for building construction. This contract is worth \$1.2 million and has skewed this figure. Figure 4 also illustrates an important point, that the contractors are not dependent upon their main training organisation - the ILO Upstream Project - for work.

SSC Code no.	Clients									Totals	% of Total
	Government Agencies	ADB/MRD/RIIP & EFRP	International Agencies	SEILA	Private Sector	ILO	Social Fund	TRIP /MRD	Local NGOs		
C1		\$150,050			\$53,000			\$126,000	\$60,000	\$389,050	6%
C2		\$88,000		\$50,500				\$82,000		\$220,500	4%
C3		\$547,000								\$547,000	9%
C4		\$141,794	\$22,300			\$51,922				\$216,016	3%
C5		\$14,000							\$42,000	\$56,000	1%
C6		\$149,800					\$36,000		\$29,000	\$214,800	3%
C7	\$150,000	\$130,000	\$120,000		\$14,000					\$414,000	7%
C8		\$715,000								\$715,000	11%
C9		\$61,890								\$61,890	1%
C10	\$1,800		\$12,000	\$139,400	\$7,400	\$36,000				\$196,600	3%
C11					\$1,500	\$66,440				\$67,940	1%
C12	\$307,000		\$250,000			\$24,000				\$581,000	9%
C13				\$36,000	\$28,500	\$51,500				\$116,000	2%
C14	\$85,800		\$153,000		\$4,200		\$70,000		\$50,300	\$363,300	6%
C15	\$82,000		\$44,800	\$76,500	\$22,000					\$225,300	4%
C16	\$30,000		\$20,300	\$12,500			\$101,000			\$163,800	3%
C17	\$1,370,000	\$84,000								\$1,454,000	23%
C18				\$28,794	\$55,000					\$83,794	1%
C19				\$40,000	\$100,000	\$40,000				\$180,000	3%
Totals	\$2,026,600	\$2,081,534	\$622,400	\$383,694	\$285,600	\$269,862	\$207,000	\$208,000	\$181,300	\$6,265,990	
%	32.3%	33.2%	9.9%	6.1%	4.6%	4.3%	3.3%	3.3%	2.9%		

Table 3: Market Share for Contractors in 2000-2001

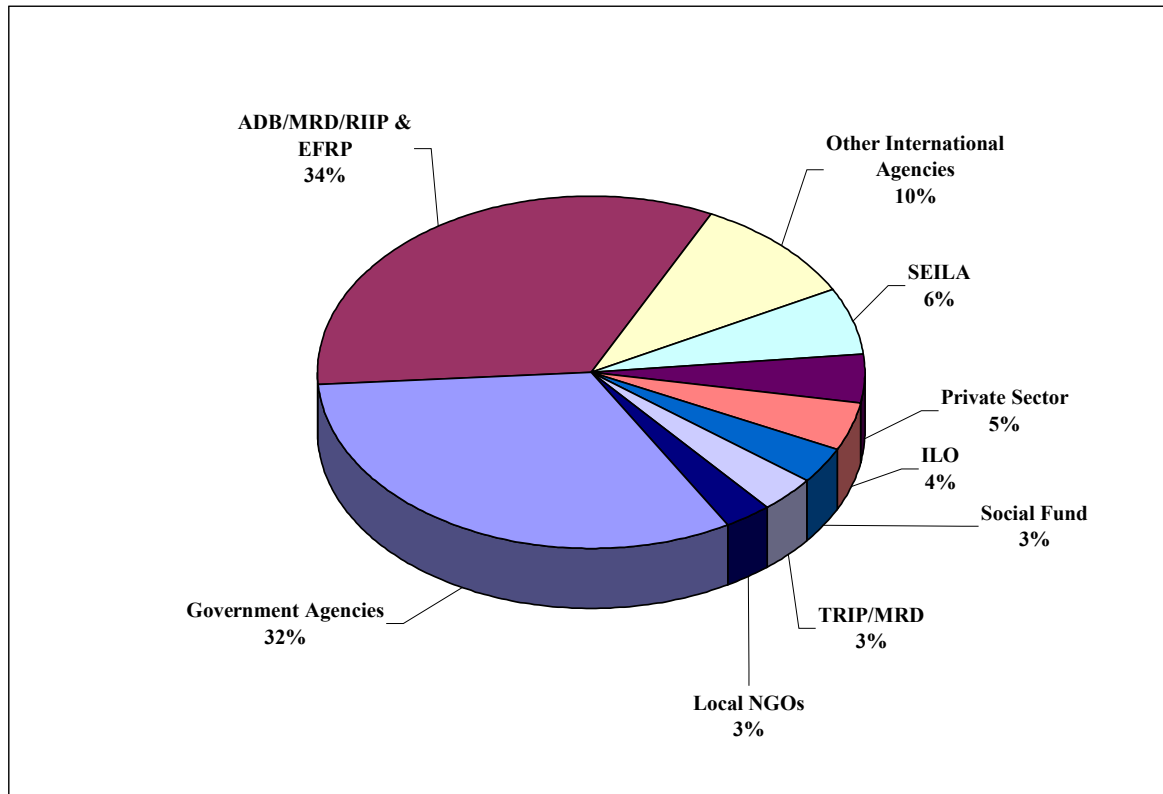


Figure 4: Works Distribution by Client

In June 2001, the six newly trained contractors in Banteay Meanchey and Battambang were given trial contracts to start them as LBAT contractors. SIELA and the Provincial Rural Development Committee (PRDC) supported five contracts and ZOA supported one. The ILO provided 12 – 44 per cent of the resources for these trial contracts through the transfer of equipment to the contractors using hire purchase contracts. Four of the new contractors purchased earth compaction equipment after signing the works contracts. This is a good indication of their intention and commitment to stay in the construction business. The following table details the equipment that was purchased by the newly trained contractors.

Othe r Code	Type	Brand	Quantity	Unit Price (US\$)	Cost (US\$)
A	Ride on roller	Komatsu 4 ton	1	5,000	5,000
	Plate compactor	Honda	2	500	1,000
B	Roller	Sakai Roller S700	1	1,800	1,800
C	Roller	Sakai Roller S400	1	1,700	1,700
		Sakai Roller S700	1	2,000	2,000
D	Ride on roller	Komatsu 4 ton	1	1,750	1,750
Total Investment					13,250

Table 4: Equipment Purchased Privately by Newly Trained Contractors in July 2001

Type of work implemented by contractors

From the survey results, six main categories of work are evident. Table 5 below shows the details of the type of work done by each contractor.

Code	Type of Work							Total
	Roads	Water Crossing Structures	Markets	Buildings	Equipment Rental*	Irrigation	Others	
C-1	\$126,000	\$18,050		\$192,000			\$53,000	\$389,050
C-2	\$192,500				\$28,000			\$220,500
C-3	\$188,000	\$97,000	\$127,000	\$135,000				\$547,000
C-4	\$49,229	\$69,530		\$22,300	\$74,957			\$216,016
C-5		\$14,000		\$42,000				\$56,000
C-6	\$49,000	\$36,000	\$61,000	\$68,800				\$214,800
C-7				\$14,000	\$130,000	\$270,000		\$414,000
C-8		\$35,000	\$180,000	\$500,000				\$715,000
C-9	\$61,890							\$61,890
C-10	\$37,800	\$94,400		\$57,000	\$7,400			\$196,600
C-11	\$66,440				\$1,500			\$67,940
C-12	\$24,000			\$557,000				\$581,000
C-13	\$51,500	\$8,000		\$28,500		\$28,000		\$116,000
C-14	\$20,000			\$163,300		\$180,000		\$363,300
C-15	\$180,500	\$22,800		\$22,000				\$225,300
C-16	\$12,500	\$60,000		\$91,300				\$163,800
C-17	\$222,000	\$32,000		\$1,200,000				\$1,454,000
C-18	\$18,760	\$10,034			\$55,000			\$83,794
C-19	\$40,000				\$140,000			\$180,000
Totals	\$1,340,119	\$496,814	\$368,000	\$3,093,200	\$436,857	\$478,000	\$53,000	\$6,265,990

Labour-based Contractor Progress Survey
including material (later) supply

Table 5: Type of Work by Contractor

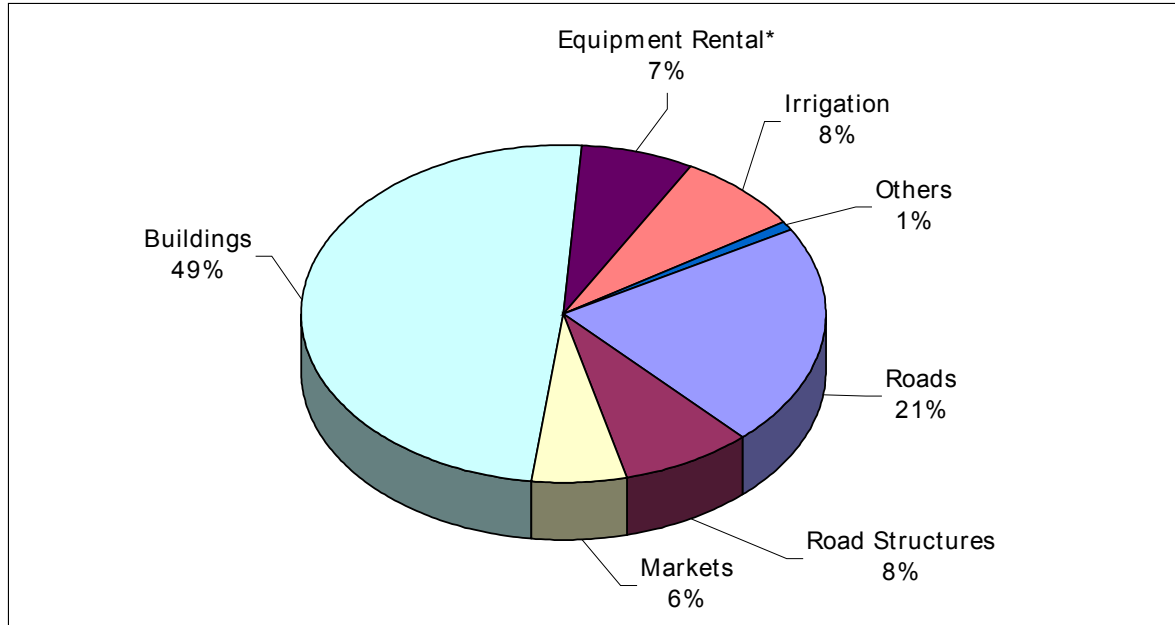


Figure 5: Types of Work

The figure above shows that building work accounts for almost half of all the works done by the contractors. Roads and related activities account for 36 per cent of the work. The figure for building work includes two large contracts of \$1.2 million and \$0.5 million awarded to two contractors.

The type of work contracted by each client is also an interesting result of the survey. Government agencies (other than those funded by ADB), international agencies and local Non Government Organisations (NGOs) mostly employed contractors for building work. This was particularly true of the local NGOs. The ADB/MRD projects have an almost equal division between buildings and road activities, with the remaining 20 per cent being for market construction. The ILO, SIELA and Tertiary Roads Improvement Programme (TRIP)/MRD projects are almost all road related works. The type of work by client is shown below in table 6 and figure 6.

Type of Work	Clients									Totals
	Government Agencies	ADB/MRD/RIIP & EFR	International Agencies	SEILA	Private Sector	ILO	Social Fund	TRIP /MRD	Local NGOs	
Roads	\$273,800	\$473,244	\$35,000	\$185,260		\$192,815		\$180,000		\$1,340,119
Water crossing structures		\$230,990	\$9,800	\$125,434		\$34,590	\$96,000			\$496,814
Buildings	\$1,542,800	\$806,800	\$407,600	\$45,000	\$68,700		\$41,000		\$181,300	\$3,093,200
Markets		\$368,000								\$368,000
Equipment Rental*		\$202,500			\$163,900	\$42,457		\$28,000		\$436,857
Irrigation	\$210,000		\$170,000	\$28,000			\$70,000			\$478,000
Others					\$53,000					\$53,000
Total	\$2,026,600	\$2,081,534	\$622,400	\$383,694	\$285,600	\$269,862	\$207,000	\$208,000	\$181,300	\$6,265,990

* including material (laterite) supply.

Table 6: Type of Work by Client

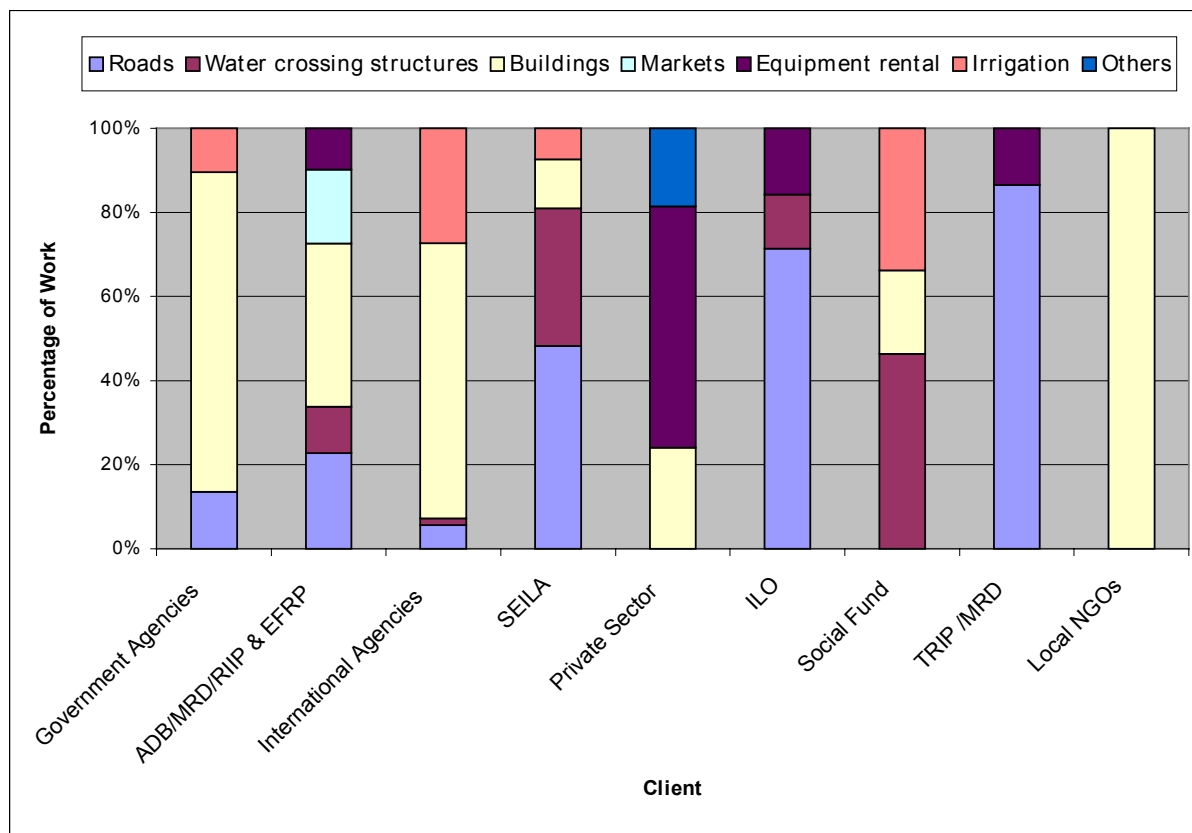


Figure 6: Work Division by Client and Type

Current Problems and Constraints

The contractors identified the following areas where they would like to see improvements. The responses and views of the clients are also recorded here.

- ◇ The notification given for applying for work.
- ◇ Access to work and the selection process.
- ◇ The timeliness of payments.
- ◇ Labour issues.
- ◇ The need for further training.

Notification given for applying for work

It was found that notification of work varied depending upon both the client and the nature of the work. For example for haulage, which is often a major work, some clients will advertise the work in national newspapers. Other works, like rural road construction and maintenance, construction of culverts, bridges or market improvements, are usually announced at a local level.

Most contractors would like to see further improvements in the “Notice of Tender.” They report that by the time they eventually get to know about the works, the time remaining is too short to prepare a bid properly.

Clients on the other hand feel that bid announcements have improved considerably since the first survey. Some clients' representatives stated that besides displaying announcements on the notice board at their office, they have broadcast them on local television and radio and posted the announcements in public places. Most major clients have extended the duration of notice from one week to two weeks, depending on the nature of the works to be carried out. They feel that most contractors are satisfied with the announcements made.

Access to work and the selection process

The survey found that most clients still prefer the force account system to the contracting system. They indicated that the force account method has produced better results in cost efficiency, quality of works and time saving.

Some contractors report difficulties in obtaining bidding documents from clients in some provinces. The bid evaluation and selection process was one of the major problems raised by the contractors during the survey. Contractors have mixed feelings on this process. Sometimes the clients final decision in determining the winning bid does not seem justified according to the contractors understanding of the selection criteria. Contractors stated that contracts are generally awarded to the lowest bidder, but sometimes the lowest bid is rejected without apparent reason.

Some contractors would like to see improved transparency in the system of awarding contracts. According to these contractors, works are sometimes awarded to the same people, even when their bids are higher. During the survey, one contractor reported that his bid was rejected when his price offered was much lower than the one selected. The contractor stressed that he could complete the work at the quoted price but his bid was not considered.

For most of the major clients the evaluation and selection process is an internal management affair and is confidential. Thus, details of the selection process cannot be disclosed to persons unless they are officially concerned with the process. Most clients' representatives confirmed that the work was usually awarded to the lowest bidder.

A noteworthy point was the response to the survey question: "How do you find the bid price compared to the engineer's estimate?" Most clients answered that the price offered by bidders was lower than the engineers' estimate. One client suggested that this was because they usually added an extra ten per cent to the estimated costs. This is to ensure the quality of construction, as contractors sometimes reduced quantities of construction materials when carrying out the works and to allow for increases in the price of materials, labour etc.

Payments

Many contractors reported late settlement of payment after the works have been completed. Specifically they reported that the amount is often large and the time taken for payments ranges from three months to over a year. The contractors pointed out that the terms and conditions of payment in the contract agreements for client organisations were broadly acceptable. However, the problem lies with the fact that they are not being adhered to. Some contractors reported that they

were forced to borrow money because of this problem. Contractors were usually able to borrow from relatives for a short period without paying interest. This is a common practice in Cambodia. However, a few had to borrow money at interest rates ranging from 18 to 42 per cent per annum, while awaiting payment from clients.

Prompt payment to contractors helps them to pay their debts on time and can prevent delays in the work programme. If contractors cannot pay workers on time there is often a decrease in the production rate due to the low motivation of the labour force.

Representatives of client organisations acknowledged the points raised by the contractors. They suggest that this is due to a failure in the clients' internal procedures for submission of payment claims. This has caused contractors to lose the confidence to bid for future contracts with certain clients. In some cases, contractors had not received any payment by the time the works were complete.

Labour issues

Most respondents were very positive about awareness and implementation of labour related issues, like basic labours standards and regulations pertaining to employment of labour, recruitment, safe working conditions, insurance, etc. They reported that the basic labour standards are being observed and implemented at works to a high degree.

However, not all clients have a clause requiring the contractor to take out health and safety insurance for their workers. Even when this clause is in the contract, it is usually not enforced by the client. Contractors have relied on a traditional system of negotiated reconciliation to compensate workers if there is an accident at the work site. Although some contractors understand the benefits of insurance, none have taken out a policy. The usual reply to the question "why it is not being implemented?" was that it was not enforced by the law or by the clients. Another response stated that there is no insurance service provider in local areas. Others said they could not afford to include insurance costs in the bid price, as it would make the bid less competitive. According to clients, this is true. They acknowledge that contractors have limited knowledge about insurance and that even their own staff do not understand it.

Training

During the survey, contractors were asked if they had attended training in the last 12 months and many answered "no." However, they mentioned that a few clients like ILO and SEILA provided some formal and informal training. All contractors feel that they need more training in technical aspects (e.g. new methods of construction), contract management, human resource management, accounting and office management.

Clients agreed that contractors need further training, but many of them are unable to help meet this need. However, most clients have provided support to their own staff by sending them to attend various training courses and some have extended these facilities to contractors. The infrastructure assistant to the SEILA project (CARERE II staff, Battambang) said that some contractors were provided with informal training in tendering procedures, understanding drawing design and technical specification. A representative from a local NGO stressed the importance of training for contractors. He noted that contractors who had been trained by the ILO in labour-based road works knew how to estimate project costs and therefore could submit a reasonable bid. Contractors who had not attended these courses were unable to prepare bids, even if they were equipment-based

contractors. The contractors are keen to attend contractor training courses to be competitive with the trained contractors.

Contractors recognise that a lack of proper accounting systems has impaired their capacity to manage company resources. Under these circumstances, it is sometimes difficult for contractors to be certain whether their companies are operating at a profit.

Recommendations and Conclusions

The recommendations presented below are divided into two sections. The first is a summary of ideas and suggestions made by contractors and the clients. The second section is recommendations from the ILO Upstream Project based on the survey results and observing the progress of the contractors.

Recommendations by the Contractors and Clients

Notification given for applying for work

The contractors recommended that all works be more broadly announced in national newspapers regardless of the type of work. The time allocated to bid announcements should be increased so that the contractors have sufficient time to study and prepare the bid properly. Alternatively, invitations to bid can be sent directly to all registered contractors. The clients contact representatives name should also be publicised, to allow easy communication for requesting bidding documents and clarifying other issues.

Access to work and the selection process

In general, contractors would like to see an improved transparent environment for the tendering process. They have suggested that the clients review their selection criteria and price lists and make them clearly known to all contractors so that the evaluation and selection process takes place in an impartial atmosphere. One contractor suggested that if the bidder selected had not previously worked for the client, his qualifications pertaining to staff availability, past performance, tools and equipment should be checked.

Payments

The contractors requested that clients include a mobilisation provision in the contract payment system. Contractors also suggested that clients make the necessary arrangement to ensure that payments are made according to the terms of the contract.

Labour issues

There were no particular recommendations relating to labour from the contractors or the clients.

Training

Both contractors and the clients recognised the need for continued training in construction technology, contract management, human resource management, accounting management, office management, etc.

Recommendations by the ILO Upstream Project

Notification given for applying for work

The process of notification of works should be standardised by the Department of Rural Roads (DRR) taking into account the views of the contractors. Once standardised, all clients should be encouraged to follow them.

Access to work and the selection process.

It is recommended that a classification system for contractors be established. This will better allocate contracts to those contractors who are best positioned to successfully complete them. It also encourages contractors to perform to maintain their status on the qualification list. It would also be possible to arrange the classification criteria to allow new contractors to enter the market. The DRR can establish and publicise standard practices for bid evaluation and awarding of contracts.

Payments

Cash flow is often the most difficult problem faced by construction contractors. Mobilisation payments and prompt payment for work completed are serious issues that need to be addressed by all clients. As a contractual obligation, failure to meet payment obligations should result in a penalty to the client.

Labour issues

Enforcement of the labour law and regulations should be encouraged. Clients should demand that contractors have workers compensation insurance for all employees. One possible solution would be to make insurance costs a pay item in the Bill of Quantities (BoQ). No payment should be made to the contractor until the original insurance certificates are shown as proof of compliance. A workshop should be organised for contractors and clients to learn about insurance and understand the benefits of having insurance. Insurance companies working in Cambodia can be invited to this workshop.

Training

On-going training is vital for contractors and clients if the contracting system is to function efficiently. Unfortunately, there is little business development support training available in Cambodia. Contractors will need to take professional development and the retention of their staff seriously if they are to survive in the long term. Local training centres are available where contractors can send staff to learn important skills like accounting or office management.

It is vital that contractors develop proper financial accounting systems. Financial accounting information can help contractors to manage their resources and therefore assess the status of the company, i.e. whether they are operating at a profit or not.

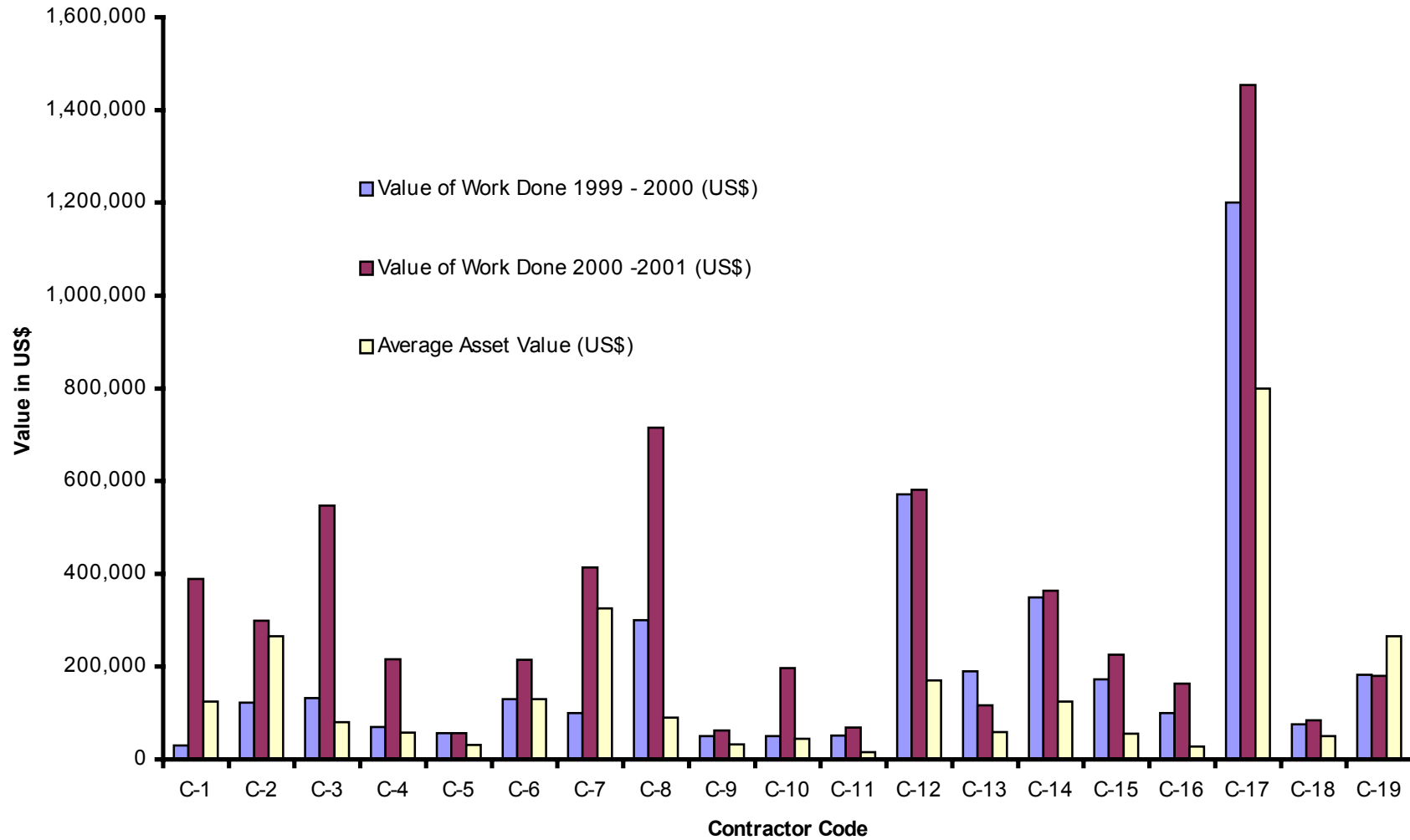
Conclusions

Many of the issues and problems noted in the contract environment a year ago were found to have improved. The second survey revealed that the opportunities and demand for domestic construction contractors are real and are growing and diversifying. From the two surveys, it appears that the contractors who were trained by or with the ILO Upstream Project are doing well. This implies that the demand for the contractors is real and that the training is responding to an important need. The sustainability of the investments made in training contractors look to be promising.

There are still a number of issues that contractors and clients feel need improvement. The problems are not unusual in the construction field and with effort can be steadily improved. The new Department of Rural Roads within the MRD has the potential to harmonise and standardise the contracting environment.

Appendices

Appendix 1: Contractors Assets and Company Turnover (graph)



Appendix 2: Contractors Assets and Annual Company Turnover (table)

Code No.	Company Asset	Company Turnover Per Year		EQUIPMENT HOLDING						
		1999-2000 (US\$)	2000-2001(US\$)	Roller	Truck	Etean*	Excavator.	Grader	Bulldozer	Mixer
C-1	200,000	30,000	389,050	5	6	-	-	-	-	3
C-2	280,000	121,955	298,500	6	12	-	2	1	3	2
C-3	120,000	131,500	547,000	5	2	-	-	-	-	4
C-4	75,000	69,200	216,016	5	1	-	-	-	-	3
C-5	37,000	56,200	56,000	2	2	-	-	-	1	1
C-6	160,000	130,000	214,800	5	2	-	-	-	-	7
C-7	350,000	100,000	414,000	6	15	-	4	-	3	-
C-8	150,000	300,000	715,000	3	2	-	1	-	-	6
C-9	40,000	50,000	61,890	4	1	-	-	-	-	-
C-10	50,000	50,000	196,600	8	-	4	1	-	-	2
C-11	25,000	51,550	67,940	6	-	4	-	-	-	1
C-12	190,000	571,000	581,000	5	-	9	-	-	1	4
C-13	68,000	190,000	116,000	10	-	6	-	-	-	5
C-14	200,000	349,500	363,300	5	6	-	3	-	3	5
C-15	100,000	172,725	225,300	4	3	3	1	-	-	1
C-16	50,000	100,000	163,800	1	2	-	-	-	-	5
C-17	1,000,000	1,200,000.00	1,454,000	3	7	-	-	-	-	3
C-18	80,000	75,350	83,794	2	1	-	1	-	-	1
C-19	500,000	182,250	180,000	4	6	-	7	-	4	-

*An Etean is a locally manufactured light agricultural truck, made from parts of old cars and trucks.

Appendix 3: Survey Data on Contractors

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001						
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client				
C-1	Financial Asset:	US\$50,000	US\$200,000	1999-2000 2000-2001	30,000 389,050	Building	60,000 132,000	CRAB RIIP/ADB/MRD				
	Staff employed:											
	- Support					2	4			Roads	31,000 95,000	TRIP/MRD TRIP/MRD
	- Engineer					3	3					
	- Technician					4	4					
	- Supervisor					3	4					
	- Operator					3	12					
	Equipment Owned:							Culverts	18,050	RIIP/ADB/MRD		
	- Roller					2 units	5 units					
	- Truck					1 unit	6 units					
- Mixer	2 units	3 units										
- Compactor	1 unit	1 unit	Other works	53,000	Private Sector							
C-2	Financial Asset:	US\$250,000	US\$280,000	1999-2000 2000-2001	121,955 220,500	Roads	50,500 54,000 88,000	SIELA/WB TRIP/MRD RIIP/ADB/MRD				
	Staff employed:											
	- Support								2	2	Laterite Delivery	28,000	TRIP/MRD
	- Engineer					2	2					
	- Technician					1	2					
	- Supervisor					3	3					
	- Operator					13	25					
	Equipment Owned:											
	- Roller					5 units	6 units					
	- Truck					11 units	12 units					
- Mixer	1 unit	1 unit										
- Grader	1 unit	1 unit										
- Bulldozer	2 units	3 units										
- Excavator	1 unit	2 units										

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-3	Financial Asset:	US\$40,000	US\$120,000	1999-2000	131,500	Building	135,000	RIIP/ADB/MRD
	Staff employed:			2000-2001	547,000	Roads	188,000	RIIP/ADB/MRD
	- Support	2	2			Culvert/Bridge	97,000	RIIP/ADB/MRD
	- Engineer	1	3			Market	127,000	RIIP/ADB/MRD
	- Technician	1	2					
	- Supervisor	6	6					
	- Operator	4	7					
	Equipment Owned:							
	- Roller	3	5 units					
	- Truck (small)	2	2 units					
- Mixer	1	4 units						
- Compactor	-	1 unit						
C-4	Financial Asset:	US\$40,000	US\$75,000	1999-2000	69,200	Building	22,300	UNICEF
	Staff employed:			2000-2001	216,016	Roads	34,354	RIIP/ADB/MRD
	- Support	1	1				14,875	ILO
	- Engineer	1	2			Bridges	14,690	RIIP/ADB/MRD
	- Technician	2	2			Culverts	20,250	RIIP/ADB/MRD
	- Supervisor	3	6			Causeway	34,590	ILO
	- Operator	4	6					
	Equipment Owned:							
	- Roller	2 units	5 units			Laterite Delivery	72,500	RIIP/ADB/MRD
	- Truck (small)	1 unit	1 unit				2,457	ILO
- Mixer	1 unit	3 units						

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-5	Financial Asset:	US\$25,000	US\$37,000	1999-2000	56,200	Building	42,000	KAFS
	Staff employed:			2000-2001	56,000	Culverts	14,000	RIIP/ADB/MRD
	- Support	2	2					
	- Engineer	2	2					
	- Technician	3	2					
	- Supervisor	2	5					
	- Operator	3	4					
	Equipment Owned:							
	- Roller	2 units						
	- Truck (small)	2 units						
	- Mixer	1 unit						
	- Bulldozer (small)	1 unit						
C-6	Financial Asset:	US\$100,000	US\$160,000	1999-2000	130,000	Building	29,000	CYK
	Staff employed:			2000-2001	214,800		39,800	EFRP/ADB/MRD
	- Support	3	5					
	- Engineer	7	7			Roads	49,000	EFRP/ADB/MRD
	- Technician	5	7					
	- Supervisor	4	6			Bridges	36,000	Social Fund
	- Operator	6	6					
	Equipment Owned:					Market	61,000	RIIP/ADB/MRD
	- Roller	4 units	5 units					
	- Truck	2 units	2 units					
	- Mixer	3 units	7 units					
	- Compactor	-	4 units					
	- Crane	-	1 unit					

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-7	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck - Excavator - Bulldozer	US\$300,000 5 2 5 25 31 5 units 15 units 2 units 1 units	US\$350,000 5 2 6 25 35 6 units 15 units 4 units 3 units	1999-2000 2000-2001	100,000 414,000	Building Irrigation Laterite Supply	14,000 120,000 150,000 130,000	Private Sectors PRASAC MOWR RIIP/ADB/MRD
C-8	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck - Mixer - Excavator	US\$30,000 10 3 4 3 5 3 units 2 units 2 units 1 unit	US\$150,000 10 5 3 6 5 3 units 2 units 6 units 1 unit	1999-2000 2000-2001	300,000 715,000	Building Culverts Markets	500,000 35,000 180,000	RIIP/ADB/MRD RIIP/ADB/MRD RIIP/ADB/MRD

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-9	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck (small)	US\$25,000 1 1 1 3 3 3 units -	US\$40,000 2 2 2 6 5 4 units 1 unit	1999-2000 2000-2001	50,000 61,890	Roads	30,500 31,390	RIIP/ADB/MRD EFRP/ADB/MRD
C-10	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck (small) - Mixer - Excavator	US\$40,000 4 1 3 4 5 7 units 4 units 1 unit 1 unit	US\$50,000 4 1 3 4 6 8 units 4 units 2 units 1 unit	1999-2000 2000-2001	50,000 196,600	Building Roads Bridges Culverts Rental of Equip.	45,000 12,000 36,000 1,800 32,000 62,400 7,400	SEILA UNESCO ILO APSARA SEILA SEILA Private Sectors
C-11	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck (small) - Mixer	US\$7,000 1 1 2 3 3 4 units 4 units 1 unit	US\$25,000 1 - 2 2 8 6 units 4 units 1 unit	1999-2000 2000-2001	51,550 67,940	Roads Rental of Equip.	66,440 1,500	ILO Private Sectors

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-12	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck (small) - Mixer - Bulldozer	US\$150,000 2 2 1 3 8 6 units 9 units 4 units 1 unit	US\$190,000 2 2 1 5 8 5 units 9 units 4 units 1 unit	1999-2000 2000-2001	571,000 581,000	Building Roads Airport	100,000 150,000 7,000 24,000 300,000	AOG SOS MOE ILO CAA
C-13	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck (small) - Mixer	US\$50,000 2 2 1 3 7 10 units 6 units 5 units	US\$68,000 2 2 1 3 7 10 units 6 units 5 units	1999-2000 2000-2001	190,000 116,000	Building Roads Irrigation Culverts	28,500 51,500 28,000 8,000	Private Sectors ILO SEILA SEILA

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-14	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck - Mixer - Excavator - Bulldozer - Crane	US\$50,000 - - - - 8 1 unit 3 units - 1 unit - -	US\$200,000 2 - 2 4 50 5 units 6 units 5 units 3 units 3 units 1 unit	1999-2000 2000-2001	349,500 363,300	Building Roads Irrigation	50,300 103,000 5,800 4,200 20,000 70,000 50,000 60,000	CIAI EU Government Private Sectors PDRD Social Fund Japan Embassy DOWR
C-15	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck - Mixer - Excavator - Tractor	US\$10,000 - - 1 - 3 - 3 units (small) - - -	US\$100,000 1 - 2 3 15 4 units 3 units (big) 1 unit 1 unit 1 unit	1999-2000 2000-2001	172,725 225,300	Building Roads Bridges Culverts	22,000 82,000 63,500 35,000 13,000 9,800	Private Sectors PDRD SEILA WFP SEILA WFP

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-16	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck (small) - Mixer	US\$5,000 3 1 1 3 - - - 2 units	50,000 3 1 1 3 2 1 unit 2 units 5 units	1999-2000 2000-2001	100,000 163,800	Building Roads Bridges Culverts	30,000 20,300 41,000 12,500 45,000 15,000	Health Depart. APS Social Fund SEILA Social Fund Social Fund
C-17	Financial Asset: Staff employed: - Support - Engineer - Technician - Supervisor - Operator Equipment Owned: - Roller - Truck - Mixer	US\$600,000 - 3 1 4 4 3 units 10 units -	\$1,000,000 - 3 1 4 4 3 units 7 units 3 units	1999-2000 2000-2001	1,200,000 1,454,000	Building Roads Culverts	1,200,000 52,000 170,000 32,000	MOEYS RIIP/ADB/MRD Government RIIP/ADB/MRD

Code No.	Company Assets including financing, Staff and equipment owned.	At the start	At the second survey	Value of work done annually (Approx.)		Type and value of work done for various clients in the year 2000-2001		
				Year	Value (US\$)	Type of Work	Amount (US\$)	Client
C-18	Financial Asset:	US\$20,000	US\$80,000	1999-2000 2000-2001	75,350	Roads	18,760	SEILA
	Staff employed:				83,794			
	- Support	-	1			Bridges	10,034	SEILA
	- Engineer	-	1			Laterite Supply	55,000	Private Sectors
	- Technician	-	1					
	- Supervisor	-	1					
	- Operator	2	7					
	Equipment Owned:							
	- Roller	-	2 units					
	- Truck	-	1 unit					
- Mixer	-	1 unit						
- Excavator	1 unit	1 unit						
C-19	Financial Asset:	US\$30,000	US\$500,000	1999-2000 2000-2001	182,250	Roads	40,000	SEILA
	Staff employed:				180,000			
	- Support	-	1			Laterite Supply	40,000	ILO Private Sectors
	- Engineer	-	1					
	- Technician	-	2					
	- Supervisor	-	4					
	- Operator	3	25					
	Equipment Owned:							
	- Roller	-	4 units					
	- Truck	1 unit	6 units					
- Excavator	1 unit	7 units						
- Bulldozer	-	4 units						

Appendix 4: Questionnaires for Contractors

Name of the Company:
 Address:
 Telephone No.:

No	Information Required	Data Collection/Obtained	Observation															
1.	Particular of the respondent (a) Name (b) Position/Title: (c) Academic qualification: (d) Age: (e) What were you doing and why did you switch? (f) What technical or business knowledge did you possess at that time?																
2.	Type of work done (buildings, roads, culverts, bridges and others)	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Since Year 2000</th> <th style="text-align: center;">Value (US\$)</th> </tr> </thead> <tbody> <tr> <td>Building</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>Roads</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>Culverts/Bridges</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>Other</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table>		Since Year 2000	Value (US\$)	Building	Roads	Culverts/Bridges	Other	
	Since Year 2000	Value (US\$)																
Building																
Roads																
Culverts/Bridges																
Other																
3.	Year of establishment:																	
4.	What were the consideration or motivations for becoming contractor?																
5.	Financial assets: (i) When started as a contractor. (ii) Now.																
6.	Class of Contractor: (i) At the start. (ii) Now.																

No	Information Required	Data Collection/Obtained	Observation																
7	Value of work done per year: (i) At the start. (ii) Now.																	
8.	Construction equipment owned: (i) At the start. (ii) Now. (iii) If equipment available on hire at reasonable prices?	<table border="1"> <thead> <tr> <th data-bbox="959 329 1108 357">Rollers</th> <th data-bbox="1121 329 1318 357">Dump Trucks</th> <th data-bbox="1331 329 1480 357">Mixer</th> <th data-bbox="1493 329 1793 357">Others</th> </tr> </thead> <tbody> <tr> <td data-bbox="959 365 1108 393">.....</td> <td data-bbox="1121 365 1318 393">.....</td> <td data-bbox="1331 365 1480 393">.....</td> <td data-bbox="1493 365 1793 393">.....</td> </tr> <tr> <td data-bbox="959 401 1108 428">.....</td> <td data-bbox="1121 401 1318 428">.....</td> <td data-bbox="1331 401 1480 428">.....</td> <td data-bbox="1493 401 1793 428">.....</td> </tr> <tr> <td data-bbox="959 436 1108 464">.....</td> <td data-bbox="1121 436 1318 464">.....</td> <td data-bbox="1331 436 1480 464">.....</td> <td data-bbox="1493 436 1793 464">.....</td> </tr> </tbody> </table>	Rollers	Dump Trucks	Mixer	Others	
Rollers	Dump Trucks	Mixer	Others																
.....																
.....																
.....																
9.	Have you ever borrowed money from any external sources? (from banks, relatives and friends etc?). If so, how much capital, and percentage of interest rate charged?																	
10.	Core manpower held: (i) At the start. (ii) Now.	<table border="1"> <thead> <tr> <th data-bbox="959 646 1073 673">Support</th> <th data-bbox="1085 646 1199 673">Engineers</th> <th data-bbox="1211 646 1325 673">Technicians</th> <th data-bbox="1337 646 1451 673">Supervisors</th> <th data-bbox="1463 646 1793 673">Operators</th> </tr> </thead> <tbody> <tr> <td data-bbox="959 682 1073 709">.....</td> <td data-bbox="1085 682 1199 709">.....</td> <td data-bbox="1211 682 1325 709">.....</td> <td data-bbox="1337 682 1451 709">.....</td> <td data-bbox="1463 682 1793 709">.....</td> </tr> <tr> <td data-bbox="959 717 1073 745">.....</td> <td data-bbox="1085 717 1199 745">.....</td> <td data-bbox="1211 717 1325 745">.....</td> <td data-bbox="1337 717 1451 745">.....</td> <td data-bbox="1463 717 1793 745">.....</td> </tr> </tbody> </table>	Support	Engineers	Technicians	Supervisors	Operators		
Support	Engineers	Technicians	Supervisors	Operators															
.....															
.....															
11.	How well are your expectations from this business being fulfilled? (very satisfied, satisfied, not satisfied).																	
12.	Do you foresee your continuing in this business? If not, why?																	
13.	Registration: (i) Are there any problems of registration as a contractor? (ii) What changes would you like in the registration procedure?																	
14.	In your area, is there a shortage or excess of contractors?																	
15.	Are you satisfied with the way NITs are being issued? Or are there any changes you want made concerning notification, display and availability of tender documents?																	

No	Information Required	Data Collection/Obtained	Observation
16.	Are you satisfied with the contract agreements? (a) Are they fair to both the parties? If not, why? (b) Are you satisfied with the provisions regarding (what changes should be made?): (i) Escalation of prices (ii) Deviations subsequent to award of work.	..... ..... ..... .....
17.	Award of work: (i) Is it taking too long? (ii) Is there transparency? (iii) What should be done when the lowest tender is unrealistic?	..... ..... ..... .....
18.	How co-operative is the client in regard to mention changes desired? (i) Designs and drawings (ii) Decisions on day-to day supervisions	..... ..... ..... .....
19.	Any changes required in payment by the department: (i) Running bills (ii) Final bill (iii) Mobilisation advance (iv) Refund of retention (v) Material advance	..... ..... ..... ..... .....
20.	Do you think it is useful to have a market price assessment of materials, labour etc, to be carried out? If so by who? (MRD/PDRD, Independent Consultants).	..... ..... .....

No	Information Required	Data Collection/Obtained	Observation
26.	What is your assessment in regard to: (i) Dropout or increased rate of contractors in your area? (ii) What are the main reasons: - For drop out: biases, incompetence, incompatibility, lack of financial resources, change of business? - For increase: Market demand, competition etc.	..... ..... ..... ..... .....
27.	Have your construction business been diversified into other work areas? Are you willing to expand your projects into other geographical areas beyond your usual base?	..... ..... ..... ..... .....
28.	Do you have any other general views or specific views pertaining to the execution of rural road works?	..... ..... .....

Appendix 5: Questionnaires for Client Contracting Agency

Name of the Department:
 Address:
 Telephone No.:

No	Information Required	Data Collection/Obtained	Observation
1.	Particular of the respondent (g) Name (h) Position/Title:	..... .....
2.	Road work (i) How many kilometres of rural roads are being constructed in a year on the average by your department? (ii) What is the total length of rural roads under your department's charge?	..... ..... .....
3.	What is the mode adapted for execution: (i) The extent of rural road construction done departmentally and that through the contractors. (ii) The extent of rural road maintenance done departmentally and that through contractors.	..... ..... .....
4.	What are your view regarding relative pros and cons of the two modes of execution from the point of: (i) Cost (ii) Quality (iii) Delays (iv) Audit objections (v) Department convenience	..... ..... ..... ..... ..... .....

No	Information Required	Data Collection/Obtained	Observation
5.	You are aware that contractors had been complaining about a number of problems, which were reported at the National Transport Infrastructure Forum held in Kampong Cham last year. Has there been any measure taken to address these issues and what have been the results? (Referring to each specific case from recommendations made in the contractor survey report of the year 2000).	..... ..... .....
6.	There are complaints regarding inadequacies (insufficient dissemination, etc.) in the issue of NITs and availability of tender documents. If true, what should be done?	..... .....
7.	What changes need to be made so that the agreements are duly fair and equitable? Do the departments need discretionary power? Cannot the matter be put in clearer and more specific terms?	..... ..... .....
8.	Are deviations generally such as could not be foreseen in most of the cases? Cannot this be a way of helping or hurting contractor?	..... ..... .....
9.	What was an average time taken for necessary preparation of contracts and have it awarded, from the closing date for its submission?	..... .....
10.	Does your department regularly carry out a market cost/price assessment for construction materials, labour wage, insurance cost etc? Do you think it would be useful to have such the market cost/price assessment carried out?	..... ..... .....
11.	How do you find the bidder's price compared to the market price (if any), or with engineer's estimate?	..... ..... .....
12.	Will it not be in the interest of everyone if construction machinery is available on hire from the private sources? What has your department done to promote it?	..... ..... .....

No	Information Required	Data Collection/Obtained	Observation
13.	Contractor issues: (iii) Are there too many or too few contractors? (iv) In your view, are any changes required in the registration procedure? (v) Is black listing of non-performing contractors being pursued effectively and consistently?	..... ..... ..... ..... ..... .....
14.	Are there delays in the departments in giving decisions, and making payments? Cannot some time-schedules be fixed in such cases?	..... ..... ..... .....
15.	Labour-intensive technologies for road work provide much needed employment. Are there any problems in continuing with them?	..... ..... .....
16.	Quality issues: (i) What mechanism that has been set up to ensure the quality of works? (ii) Should there be an independent agency for checking the work quality?	..... ..... ..... ..... ..... .....
17.	Was there any progress made regarding to the translation of contract document in local language?	..... ..... .....
18.	Training issues: (i) Has your department organising any refresher courses/training programmes for all levels of your staff? If so, please specify. If not, why? If the training will be given, what kind of training you wish to have for them? (ii) Will it not be advantageous to extend similar facilities to the small contractors? Are there any difficulties?	..... ..... ..... ..... ..... .....

No	Information Required	Data Collection/Obtained	Observation
19.	Labour issues: (a) Are you conversant with the basic labour standards and regulations pertaining to labour employment (equal employment, child labour, labour recruitment, insurance, safe working condition, right to form a trade union etc?) (b) Are they being implemented? If not, why not? (c) How do you make sure that they are being complied with at work?	..... ..... ..... ..... ..... ..... ..... ..... ..... .....
20.	Any other views	..... .....

Appendix VI: Contractors Trained by the Upstream Project.

(In alphabetical order, not in the order of the codes used in the survey).

No.	Name of the Company	Address and Contact Number
1	Acknakot Khmer Organisation	Rong Machine Village, O'Ambil Commune, Serei Sophoan District, Bantean Meanchey Province. Tel: 054-958 877
2	Bin Boniboth	No. 140, Group 6, Krous Village, Svay Dangcum Commune, Siem Reap District, Siem Reap Province. Tel: 012 882 313
3	Bunnak Construction Co.,Ltd – BCC Co.	No. 3, St. 360, Sangkat Boeung Keng Kang I, Khan Chamcarmon, Phnom Penh. Tel: 015-838 073.
4	Bopha Angkor Remextran Construction Co., Ltd.	Phnom Penh. Tel: 012-888 813
5	Chao Ket Construction	No. 265, Sisowath Bolvd., Sangkat Phsar Kandal I, Khan Daun Penh, Phnom Penh. Tel: 012-851 815, 016 898 533.
6	Hong Chhay	House # 621, Group 14, Romchek 4, Ratnak Commune, Dattambang District, Battambang Province Tel: 012 853842
7	Hong Houthly	House # 422, Group 20, Ancharh Village, Ocha Commune, Battambang District. Battambang Tel: 012 927020, 054 952145
8	Khatt Sath Construction Co., Ltd	No. 93Eo, Street 105, Sangkat Boeung Keng Kang 3, Khan Chamcarmon, Phnom Penh, Cambodia. Tel: 012-842 254 Fax: 023-721 756
9	Meas Sovuthidy	No. 101, Street Sothearos, Sangkat Tonle Basak, Khan Chamcarmon. Tel: 015-837 699, 012 941 059
10	Minh Savath	Mondul III Village, Slarkram Commune, Siem Reap District, Siem Reap Province. Tel: 012 890 871
11	Nep Saman Construction Company.	#44Eo, St. 282, Sangkat Boeng Kang, Khan Chamcarmon, Phnom Penh. Tel: 011-871 563 & 011-872 136.

No.	Name of the Company	Address and Contact Number
12	Ngoun Vibol	House # 70, Group 24, 20 Usaphea Village, Svay Po, Battambang District, Battambang Province Tel: 012 914691,884758,884793
13	Nuon Kresna	No. 0030, Banteay Chas Village, Slarkram Commune, Siem Reap District, Siem Reap Province. Tel: 012-890 133
14	Outh Thy Construction and Road Co., Ltd	National Road 3, Phsar Tram Khnar, Chung Rok Commune, Kong Pisei District, Kampong Speu Province. Tel: 023-368 724, 012-835 036.
15	Reahou Engineering Co., Ltd.	No. 16Eo., Street 172, Sangkat Chey Chumneah, Khan Daun Penh, P. Penh. Tel: 012- 900 779.
16	Royal Mekong Construction & Development Pte. Ltd.	No. 81, Road 315, Boeung Kok 2, Toul Kok District, Phnom Penh. Tel: 012-818 733.
17	San Meng	No. 233Eo, Samdach Monereth, Sangkat Boeng Salang, Khan Toul Kork, Phnom Penh. Tel: 012-845 791, 012 876 712, 012 876 360.
18	Sor Kam	House # 99, Group 7, Banteay Neang Commune, Mongol Borey District., Banteay Meanchey Province Tel: 012 911 186
19	Tang Tai Kiang	House # 38, Group 20, Sophy Village, kampong S'vay Commune, Serey Sophan District, Banteay Meanchey Province Tel: 012 833241,833251
20	Tep Kosal Civil Co., Ltd	No. 132, Street 134, Sangkat Veal Vong, Khan 7 Makara, Phnom Penh. Tel: 012-887 763, 012-899 937, 012 930 096
21	Tiv Navuth	Mondul I Village, Svay Dangkum Commune, Siem Reap District, Siem Reap Province. Tel: 012 630 724
22	Veng Sreng	No. 311, Street 182, Khan Toul Kok, Phnom Penh. Tel: 016-820 364, 015 920 166, Fax: 023-366 254.

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