



THEMATIC STUDY
THE DEVELOPMENTAL EFFECTIVENESS OF UNTIED AID:
EVALUATION OF THE IMPLEMENTATION OF THE PARIS DECLARATION
AND OF THE 2001 DAC RECOMMENDATION ON UNTYING ODA TO THE
LDCs

LAO PDR COUNTRY STUDY

Adam McCarty, Alexander Julian

Mekong Economics Ltd.
389 Thuy Khue, Hanoi, Vietnam

www.mekongeconomics.com

Contacts: Dr. Adam McCarty (adaminhanoi@gmail.com) and
Alexander Julian (alexander.julian.mke@gmail.com)

December 2009

Acknowledgements

The untied aid research team at Mekong Economics Ltd. would like to thank all the organisations and individuals who participated in this study and offered their assistance. We would like to thank the Government of Lao PDR for their cooperation, AusAID for facilitating the study, and all donor representatives, project staff, and contractors involved.

The Thematic Study is being undertaken with the support of the Secretariat for the Evaluation of the Paris Declaration and OECD DCD. The views expressed are solely those of the study team and do not reflect the views of the sponsoring organisations.

Table of Contents

List of Acronyms	vi
Executive Summary	viii
1. Introduction	1
1.1 Purpose and Scope	1
1.2 Method of Investigation	2
1.3 Country Specific Issues: Lao PDR.....	3
1.4 Lao PDR - General Economic Review	4
2. Aid and tying/untying status- Lao PDR	7
2.1 Review of ODA.....	7
2.2 Untied Status of Aid	8
2.3 Vientiane Declaration on Aid Effectiveness	9
3. Statistical review of aid to cover.....	11
3.1 Statistical review of aid by donor.....	11
3.2 OECD/DAC Statistics- Aid to Lao PDR.....	19
3.3 Local statistics on ODA to Lao PDR	26
4. Econometric Analysis.....	33
5. Consequences of untying for aid uses	38
5.1 Procurement Options.....	38
5.2 ‘New Aid Modalities’	39
5.3 Aid instruments	40
5.4 Technical Cooperation.....	40
6. The process and <i>consequences of untying</i> – project analysis	42
6.1 Rules and regulations	44
6.2 Practices.....	45
6.2.1 Contracts at the primary level.....	45
6.2.2 Sub-contracting and workers at ground level.....	47
6.2.3 Procurement of goods and services	48
6.3 Conclusion from the process and consequences of untying aid	49
7. Aid and developmental effectiveness	50
7.1 Cost Effectiveness	50
7.2 General Aid Effectiveness.....	52
7.3 Developmental Effectiveness	54
7.4 Cross effectiveness issues.....	56
7.5 Issues of Implementing Untying	57
8. Conclusions	59

Annex A: Case Study of the Lao-Swedish Road Sector Project Phase III (SIDA).....	61
Annex B: Case Study of the Integrated Community Based Rural Development Project in Namor and Xay Districts, Oudomxay Province (EC)	79
Annex C: Case Study of the Nam Theun 2 Hydropower Project (AFD).....	92
Annex D: Case Study for The Project for Vientiane Water Supply Development (JICA). 	103
Annex E: Econometric Analysis.....	115
References	125

List of Tables and Figures

Table 1: Top donors (bilateral and multilateral) in Lao PDR over the period 2005-2007 (commitments in current USD millions)	19
Table 2: Tying status of bilateral ODA of DAC donors during 2005-2007	20
Table 3: Flow type (grants and loans) shares of bilateral ODA over the period 2005-2007	21
Table 4: Tying status of bilateral ODA by aid flow and technical cooperation components during 2005-2007	21
Table 5: CRS Tying status of bilateral ODA by sector in 2005-2007	23
Table 6: Commitments by sector and aid instruments over the period 2005-2007	25
Table 7: Public Expenditure, PIP and ODA: 1999/00 to 2005/06 (US\$ millions, market prices)	27
Table 8: Total ODA Disbursements by Sector, 2005/06	29
Table 9: Donor Aid Modalities, Procurement and Untied Status	43
Table 10: List of Contractors in 2008/09	67
Table 11: Equipment and Tools procured for PIU by Government of Lao PDR, FY 2008-09	72
Table 12: Equipment and Tools procured for PIU by Government of Lao PDR, FY 2007-08	73
Table 13: List of goods and market prices	76
Table 14: Cost effectiveness analysis	76
Table 15: List of contracts issued for services and equipment by GAA for values greater than EUR 5,000	86
Table 16: Short listed companies for water supply construction material	87
Table 17: Individual Consultants hired by GAA	87
Table 18: Cost effectiveness analysis	89
Table 19: Summary of project main Works and Cost estimates (US\$ Million)	94
Table 20: NTPC Projected Income Statements (\$US Million) of which Lao Government revenue in form of tax, royalty, dividend	100
Figure 1 : GDP at Current Market Prices	5
Figure 2: Exports and Imports, Lao PDR	6
Figure 3: ODA Disbursements to Lao PDR	7
Figure 4: ODA Contribution to Capital Investment Expenditure	28
Figure 5: Percentage of ODA Disbursements by Sector, 2004-6	29
Figure 6: ODA Disbursements by Country, 2005-6	30
Figure 7: Total Bilateral ODA Disbursements by Sector, 2005/06	31
Figure 8: Percentage of Grants and Loans Received	31

List of Acronyms

ABEL	Access to Basic Education in Lao
AFD	Agence Francais de Development
ADB	Asian Development Bank
BAC	Basic Access Component
CRM	Community Road Model
CMEA	Council for Mutual Economic Assistance
CSP	Country Strategy Paper
CRS	Creditor Reporting System
DPWT	Department of Public Works and Transport (province)
DAC	Development Assistance Committee
EDF	Electricite de France
EC	European Commission
EU	European Union
EN	Exchange of Notes
EA	Executing Agency
FYP	Five Year Plan
FTC	Freestanding Technical Cooperation
GAA	German Agro Action (also WHH)
GoJ	Government of Japan
GoL	Government of Lao
GNI	Gross National Income
HQ	Headquarters
HIC	High Income Countries
HLM	Higher Level Meeting
HIPC	Highly Indebted Poor Countries
ICB	International Competitive Bid
IDA	International Development Association (World Bank)
INGO	International Non Governmental Organisation
JICA	Japan International Cooperation Agency
Lao PDR	Lao People's Democratic Republic
LSRSP3	Lao-Swedish Road Sector Project Phase III
LDC	Least Developed Countries
LRD	Local Roads Division
MC	Maintenance Component
MDG	Millennium Development Goals
MOFA	Ministry of Foreign Affairs
MPI	Ministry of Planning and Investment
MPWT	Ministry of Public Works and Transport (central)
M&E	Monitoring and Evaluation
NT2	Nam Theun 2 Hydropower Project
NTPC	Nam Theun 2 Power Company
NCB	National Competitive Bidding
NEM	New Economic Mechanism
NGO	Non Governmental Organisation
NTFP	Non-timber-forest-products

OPWT	Office of Public Works and Transport (district)
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PD	Paris Declaration
PDE	Paris Declaration Evaluation
PBA	Programme Based Approach
PIU	Project Implementation Unit
PMU	Project Management Unit
PAFO	Provincial Agriculture and Forestry Office
PIP	Public Investment Programme
PPP	Public-Private Partnerships
SBS	Sector Budget Support
SIDA	Swedish International Development Agency
TA	Technical Assistance
TC	Technical Cooperation
UXO	Unexploded Ordinance
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
VD	Vientiane Declaration
WTO	World Trade Organisation

Executive Summary

Introduction

In the 2008 Phase I study *The Developmental Effectiveness of Untied Aid*, it was found that aid to LDCs is now overwhelmingly untied (excluding exempt categories, technical co-operation and food aid). However, it was also found that there existed very little formal analysis of both the donor practices in partner countries and the actual consequences of untying aid at a country level. The Phase II study is in response to the proposals of the Working Party on Aid Effectiveness and the Development Assistance Committee (DAC) Network on Development Evaluation and the reporting requirement in the 2001 DAC Recommendation on untying ODA to LDCs.

Phase II of the project is intended to provide evidence-based conclusions about the implications of untying aid and its impact on aid effectiveness in selected case-study countries, for presentation to the DAC by December 2009. This report provides the results of the Lao PDR Country Study.

This study aims to highlight the key issue of the implications of untying aid for aid effectiveness in the context of Lao PDR, through a short statistical and econometric review of the available data and through an analysis of four project case studies. The focus of the case studies was placed on procurement practices of the donors, governmental executing agencies and implementing agents, that may have a significant impact on how goods and services are purchased, with implications for aid effectiveness.

The four projects selected as case studies were:

- a SIDA funded road project
- an EU funded rural development project with a water sector component
- an AFD part-funded hydroelectric power project
- a Government of Japan funded water supply project.

Statistical and Econometric Analysis

Bilateral ODA to Lao PDR originated in the early 1960s, and multilateral ODA was first recorded in the late 1970s. Since then, total ODA has shown a strong increasing trend up to the present, although there has been some fluctuation year on year, with bilateral donors traditionally contributing the larger proportion of ODA. Total ODA in 2007 stood at US\$ 280 million, which is approximately 7% of GDP - a large percentage relative to other aid

recipients. Japan, France, and Sweden are Lao PDR's largest bilateral donors, contributing respectively 40.1%, 16.8% and 11.8% of total bilateral aid between 2005 and 2007.

The aim of the econometric analysis is to determine whether ODA, the tying status and the instruments by which aid is provided (loans and grants) have any significant impact on aggregate donor export flows to the recipient, in this case to Lao PDR. Overall, the results show that aggregate ODA, and grants in particular, have significant trade distorting effects through the increase in donor-recipient exports. This empirical evidence suggests that aid flows could be informally or *de facto* tied, when analysis of data from a cross section of donors to Lao PDR is performed. However, as outlined in the econometrics investigations this analysis has some caveats.

Aid Modalities and Tying

Lao PDR is classified as an LDC and is, therefore, covered by the 2001 DAC Recommendation to untie aid. Between 2005 and 2007 DAC donor countries formally untied over 70% of their ODA commitments to Lao PDR (CRS). Meanwhile, for the same period, 22% of bilateral ODA remained unreported with regard to tying status. The process of untying aid has improved over the last decade, despite the hesitation of some donors to move to non-project based aid modalities, such as budget support and pooled funding, which are often associated with untying. Lao PDR receives largely grant aid as an instrument (98% of DAC ODA in 2007) and project based aid modalities. Several donors also provide project based or free-standing technical co-operation, in many cases alongside grant funding for projects, which is often tied. For example, grants which involved no free-standing technical cooperation (FTC) reported a 96.8% untied share, whereas grants which had a whole FTC component reported an untied share of just 27.8% (CRS, 2005-07). The three largest DAC donors to Lao PDR; Japan, France and Sweden, all reported a high proportion of their ODA as untied for 2007: 68.9%, 62.3% and 98.5% respectively. Lao PDR also receives substantial aid from non-DAC donors that is considered to be largely tied and not necessarily conforming to OECD definitions of ODA.

Project Analysis

Four projects were selected from the top active bilateral donors to Lao PDR, to be used as case studies for the project analysis. Although water and sanitation was the target sector, exceptions had to be made in this country study due to low activity in that sector. An in-depth review of the four infrastructure projects was undertaken, to reveal methods of aid delivery and donor practices with respect to untying. The approach used involved tracking donor funds for each project, from commitment by the donor to disbursement by the lead

implementing agency down to ground level. From this account, procurement and funding procedures were closely investigated to determine the exact origin of goods and services employed for the project, and whether any sourcing restrictions on the basis of nationality occurred. The case studies also attempted to assess the impact of the sourcing of contracts on the cost effectiveness and developmental effectiveness of the original aid disbursement. All four projects were implemented using different funding channels, practices and implementation strategies, allowing a suitable range of factors to be investigated. The four case study projects are summarised as follows:

1. The Lao-Swedish Road Sector Project Phase III (LSRSP3) is a SIDA funded project, designed to provide basic road access to remote village communities in 26 of the poorest districts in Lao PDR. This project phase commenced in October 2005, after the government, through the Ministry of Public Works and Transport (MPWT), requested continued support from SIDA for the road sector. The total funding for the four year project period is a US\$ 20 million grant from SIDA (70%) and a US\$ 9 million contribution from Government of Lao PDR (30%). The MPWT is responsible for the management and procurement on the project, where procurement was conducted using country systems.

2. The Integrated Community Based Rural Development Project in Namor and Xay Districts, Oudomxay Province is a three year EC project which started in January 2007, with an overall objective of making a positive impact on the improvement of the food security and socio-economic situation of the targeted 20 communities. The project was implemented by a German International NGO, which also contributed 25% of the total EUR 1,098,678 grant funds (75% from EC). The INGO was selected by international competitive selection by the EC, and all project procurement required EC rules.

3. The Nam Theun 2 Hydropower Project is one of the largest hydropower projects in Lao PDR, with a total value of US\$ 1.5 billion, which began the construction phase in June 2005 and has an expected completion date of December 2009. The funding arrangements of the project involve both private and public sources, which include part loan and grant funding by AFD, World Bank and ADB.

4. The Project for Vientiane Water Supply Development is an urban water supply project, undertaken in the Lao PDR capital from February 2006 to March 2009, with the main objectives to attain a stable water supply and improve the water supply service ratio in Vientiane Capital. The Government of Japan funded US\$ 30.2 million for the project, in the

form of grant aid. The executing agency was the MPWT, and the project utilised the donor's procurement guidelines.

Investigation of these four project case studies produced the following key descriptive results:

- Overall, contracts in these projects were found to be competitively sourced through standard bidding procedures, with the majority of (but not all) contracts for construction work, ground level workers and materials used for construction originating from Lao PDR - the lowest cost and easiest available source.
- Some other project components remained sourced from the donor country/region in practice, even when sourced competitively, such as technical assistance, project consultants, large head contracts, and project implementing INGOs.

Cost and Developmental Effectiveness

The implications of donor practices on the four case study projects for cost, aid and developmental effectiveness can be summarised as follows:

- By reviewing and ground-truthing untied projects, information and price data obtained (where available) showed that cost savings were made on the purchase of equipment items and construction materials relative to market reference prices. This implies that untying led to more cost-effective use of aid funds, at least for equipment.
- Untying has been associated with a shift away from donor priorities and towards the Lao Government's needs and objectives (alignment), supported by the fact that more government agencies are now responsible for project implementation and management.
- Local sourcing of contracts, consultants, workers and materials as a result of untying can have positive developmental effects, by providing increased employment opportunities and revenues for local manufacturers and suppliers. However, as discovered from the account of project practices, it is not always practical to procure all goods and services domestically. Several equipment items or skills are unavailable locally, so must be imported. Quality standards may also require goods and services to be imported, for the end product to be sufficiently effective.

Conclusions and Recommendations

The Lao PDR untied aid country study provides valuable insight into the practical functioning and processes of different donor funded infrastructure projects in the context of a South East Asian LDC - a useful contribution to an area with very little previous investigation. The benefit of the study is that it has enabled the identification and separation of the components of a project where both untying and tying are occurring. As one of six country studies, the Lao PDR study will contribute to a cross country comparison of donor practices with respect to untying and the corresponding impact on aid effectiveness, which will assist in the

understanding of the international untying process and recommendations to further improve untied aid delivery and aid effectiveness.

From the in-depth project case study projects, three out of four were found to be largely untied. Some areas of *de facto* tying were still uncovered, including the areas of TA, head contractors and equipment. Interestingly, no equipment or materials in the EU, SIDA and AFD projects were found to be tied - a typical area of tying in the past. The analysis showed that project case study projects that were overall untied also displayed characteristics of being cost and developmentally effective, thereby providing evidence supporting the benefits of untied aid.

To improve the untying process further in Lao PDR, and to increase aid effectiveness in general, it is recommended on the basis of this study that further steps are taken to encourage the use of 'newer' aid modalities among donors (e.g. budget support and pooled funding) and increased use of country procurement systems. Further action should be taken to untie the service components and TA of projects, by developing the skilled labour sector through education and training activities, and by increasing the supply of qualified consultancy services in Lao PDR. Encouraging participation of non-DAC donors in untied aid policies is another potential channel to explore, for achieving further progress in untying aid with respect to both Lao PDR and internationally.

1. Introduction

1.1 Purpose and Scope

The purpose of the Thematic Study on Untying Aid is to provide the Development Assistance Committee (DAC) and the 2009 High Level Meeting (HLM), as well as the wider development community, with a comprehensive assessment of current donor policies and practices regarding the tying status of aid and an assessment of the effects of the untying status on aid effectiveness. This Lao PDR country study is one of six Country Studies that provide detailed data to support overall Thematic Study conclusions. The OECD/DAC adopted in 2001 the Recommendation to untie all aid, loans and grants, (excluding exempt categories, free standing technical co-operation and food aid) to the Least Developed Countries (LDCs). The concept of untying aid was later enshrined in the 2005 Paris Declaration, indicator no.8 having previously been tracked by the Millennium Development Goals, target no. 35.

The Developmental Effectiveness of Untied Aid phase I (2008), was a thematic study based on three complementary sources of evidence: OECD/DAC data, a literature review of research and evaluation of tying and untying practices, and an exploratory survey of five DAC donors regarding their response and implementation of the Recommendation. It found that DAC ODA to LDCs is ‘overwhelmingly untied’ (about 80%), that untying has no negative effect on amount of ODA support, and that the Recommendation ‘is an important influence on the extent on which aid is untied’. However reporting methodology and practices were described as ‘unsatisfactory’ and there were variations in the tied/untied status of aid instruments and sector destinations

Phase II, of which this Lao PDR country study is part, was developed to investigate the actual consequences of untying as these have not yet been properly investigated from a practical project perspective to acquire a better understanding of the impact of untying and whether it is contributing to aid effectiveness as envisaged in the Paris Declaration.¹

¹ The Developmental Effectiveness of Untied Aid: Evaluation of the Implementation of the Paris Declaration and of the 2001 DAC Recommendation on untying ODA to the LDCs, Clay E.J., Geddes M., Natali L., te Velde D. W., ODI, 2008

Phase II of the project is an exploratory study providing provisional, but evidence based conclusions, about the implications of untying for aid effectiveness. The intention is to provide a benchmark against which further moves towards untying and actions to take advantage of the possibilities opened up by untying could be assessed. The country case studies in Lao PDR and other selected countries will provide an assessment of some of the short-term outcomes of untying. The phase II study will seek to identify newer and better practices in the Paris Declaration sense where untying is a necessary condition for these to happen. The effects of untying on procurement will be considered in terms of procedures used, the sourcing of goods and services and the implications for the local/regional economy. The study will focus especially, but not exclusively, on the water and sanitation sector. The cost-effectiveness and developmental effectiveness of untied aid will also be explored for selected goods and services in that sector.

1.2 Method of Investigation

The Lao PDR case study was conducted in three stages. Stage One involved establishing initial contacts with donor agencies and government, with a review of the general economy and ODA flows and activities. Stage Two involved a more detailed project case study investigation into how project funds have been allocated and disbursed in Lao PDR to determine sourcing of goods and services. This investigated the implications for local and regional markets, trade more widely, developmental effectiveness and cost-effectiveness. Stage Three involved the drafting of a report integrating findings from Stages One and Two, to incorporate the results of a consultation on the preliminary findings.

The countries and agencies who were asked to cooperate in Stage One included bilateral donors with the highest level of disbursements to Lao PDR during 2007 and 2008 and the EC, as well as other donors with a substantial involvement in the water sector. Selection of donors for the stage two project level investigation depended on availability of relevant projects, preferences from the ODI core team, and willingness of donor cooperation. Finally Sweden, France, EC, and Japan were included in the project case study investigations.

The study provides information on the ways aid instruments are currently being employed by bilateral donors, focusing on procurement and sourcing of goods and services. The underlying hypothesis was that actual forms of procurement will be a determinant of sourcing. Historically, tying practices were considered as a major determinant of sourcing and hence the short term trade implications of aid. Most donors have committed themselves to untying of

aid to LDCs, and more recently HIPC. The study therefore seeks to explore empirically the ways in which the uses of instruments and tying/untying practices might separately or interactively influence developmental effectiveness outcomes.

The aim was to ascertain actual current practice at the country level by first reviewing whatever statistical data was available about donors' instruments, procurement and sourcing practices; followed by seeking individual donor data about their current and recent water and sanitation programmes. The limited data available for all donors even in a country where government and donors are strongly committed to delivering on the MDGs and the PDE, made it necessary to focus on obtaining more detailed information from individual donors.

1.3 Country Specific Issues: Lao PDR

Lao PDR is a landlocked country of nearly six million inhabitants, and as an aid recipient country defined as an LDC, it is included in the 2001 Recommendation to untie aid. It is partly for this reason that it was included in the phase II investigation, as a prime candidate to evaluate the impact on untied aid, as well as being part of a South Asia neighboring country pair together with Vietnam. In 2006, Lao PDR's gross national income (GNI) per capita was US\$2,050 (in purchasing power parity terms). The most recent poverty survey (2002) estimated that 27% of the population lived below the dollar-per-day international poverty line, with 74% living below the two-dollars-per-day line. Economically it is resource-rich though is very dependent on large-scale donor funded projects and investment from its wealthier neighbours.

As part of its commitment to the Paris Declaration, Lao PDR published the Vientiane Declaration on Aid Effectiveness in 2006. One aim is that Development Partners increase the percentage of untied aid executed by GoL as encouraged by the 2001 DAC Recommendation on Untying Official Development Assistance to Least Developed Countries. It notes that in 2005, 75-80% of all ODA was untied, using the OECD definition, and targets 99% by 2010. However two countries are in anomalous positions, China and Vietnam, who provide about 20% of ODA; China is a signatory but does not contribute nor take part in the Task Force (but wishes to be kept informed) while Vietnam is not a signatory².

² Second Taskforce Meeting on Developing Country Action Plan of Vientiane Declaration on Aid Effectiveness, 2007

1.4 Lao PDR - General Economic Review³

Since 1975, Lao PDR has been governed by a communist government, who initially imposed a command economy system, replacing the private sector with state enterprises and cooperatives; centralizing investment, production, trade, and pricing; and creating barriers to internal and foreign trade. As a result the isolated economy grew at just 2.9% per annum; barely enough to feed the population, and an unsuccessful attempt to collectivize agriculture during the late 1970s seriously disrupted production. Primary trade was with the Soviet Union and CMEA countries until the mid-1980s⁴ while trade with ASEAN declined from US\$10.7 million in 1981 to US\$1.3 million in 1986; meanwhile imports fell from US\$44 million to US\$33 million in the same period.

The Government adopted a new programme of structural reform, the New Economic Mechanism (NEM) in 1986, of which the main objective was to bring about the transition to a market-oriented economy. Due to the country's land-locked location and underdeveloped communications infrastructure, the reformist economic policies of the 1980s took time to take root in Lao PDR, but reintegration into the global economy since 1990 has seen overall improvements in investment, infrastructure, healthy GDP growth and reductions in poverty levels. From 1991 until 1997 growth averaged 6% per annum, and Lao PDR succeeded in attracting substantial foreign investment in hydroelectricity, mining, food processing and the textile industry. It is heavily reliant on Thailand for both imports (70%) and exports (36%). The country was heavily affected by the Asian crisis of 1997, but since 1999 annual growth has recovered, averaging 5% per annum. Private enterprise has developed considerably since receiving official encouragement in 1987, although the government still subsidizes a number of loss-making state enterprises.

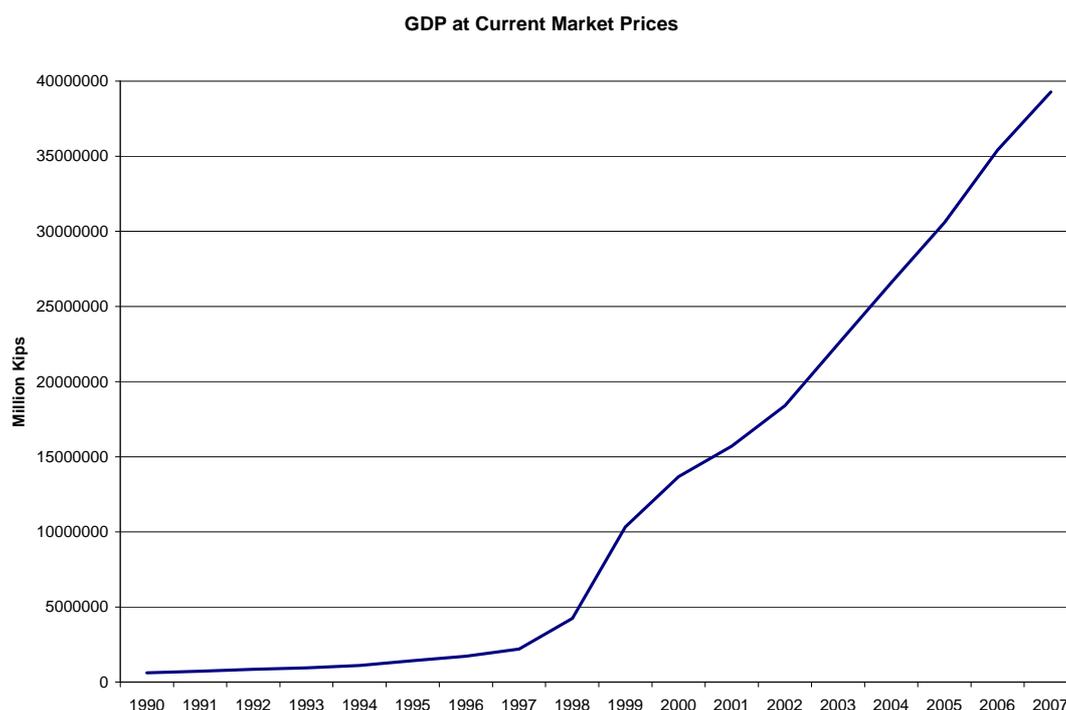
According to the World Bank⁵, Lao PDR remains the poorest and least developed country in East Asia and one of the ten poorest countries in the world, with a per capita income of around US\$320. Subsistence agriculture still accounts for half of GDP and provides 80% of total employment. Industry accounts for 23% of GDP and the remaining 27% of GDP comes from the services sector, mostly tourism and communications.

³ All charts are based on ADB data: www.adb.org/Documents/Books/Key_Indicators/2008/pdf/lao.pdf

⁴ Lao's Dilemmas and Options, Than M. & Tan L., Institute of South Asian Studies, 1997, p. 260

⁵ http://www.culturalprofiles.net/Laos/Directories/Laos_Cultural_Profile/-25.html

Figure 1 : GDP at Current Market Prices



Source: Lao PDR Economic Monitor, World Bank 2008

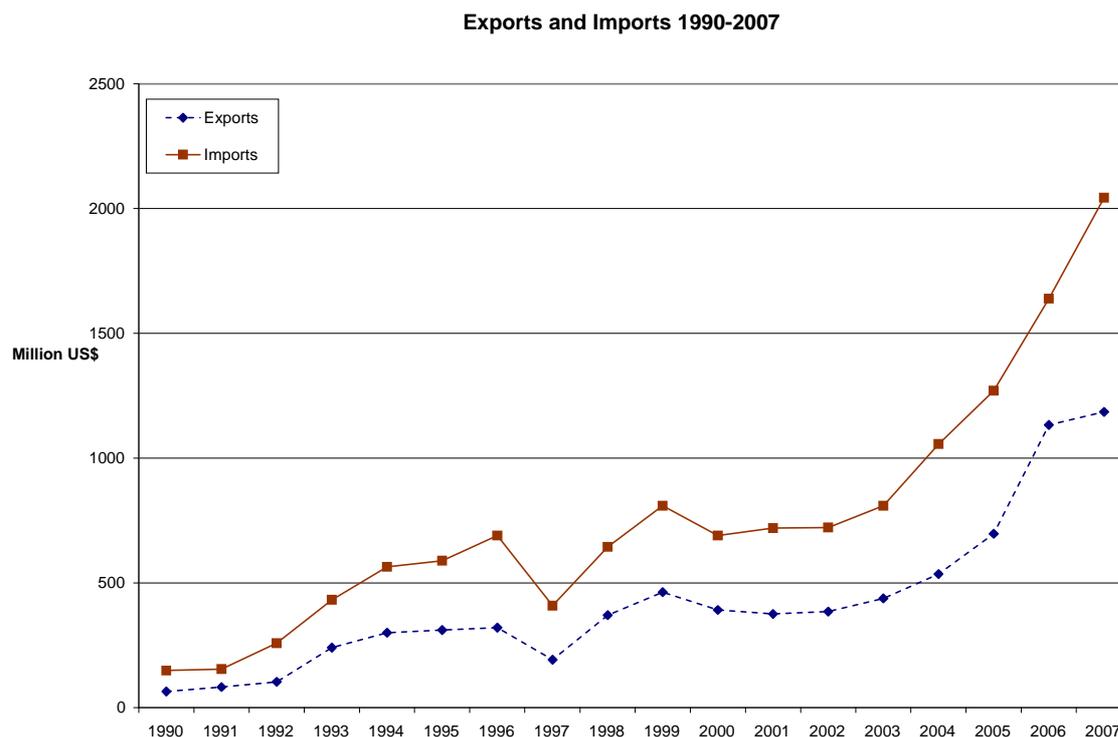
Rice dominates agriculture, with about 80% of the arable land area used for growing rice; approximately 77% of rural households are self-sufficient in rice. Other agricultural products include coffee, corn, sugar cane, vegetables, sweet potatoes, ginger, tea, peanuts, tobacco and cotton, and the raising of livestock.

Hydroelectric production has become a prominent earner in recent years and there is still considerable potential in supplying Vietnam and Thailand. Development banks predict that these schemes will lift the country out of poverty. There are six large dams in operation, seven under construction, at least 12 more in the works and development deals pending on another 35. Mining is another key sector with major activity in tin, gypsum, lead, copper, coal, barite and zinc, which primarily go to Australia, China, Thailand and Vietnam.

Exports⁶ have risen from US\$64.4 million in 1990 to US\$1,185 million in 2007 with major growth of almost 40% from 2005. Lao PDR's main exports are wood products, garments, electricity and garments at around 55% in 1990 and 35.5% in 2007. The main export markets are Thailand, Vietnam and China all of which have seen continued growth from 1990-2007. Imports have grown from US\$148.6 million to US\$2,043.6 million in the same period, primarily from Thailand, China, and Vietnam.

⁶ http://www.adb.org/Documents/Books/Key_Indicators/2008/pdf/lao.pdf

Figure 2: Exports and Imports, Lao PDR



Source: Key indicators for Asia and the Pacific, ADB, 2008

Overall poverty levels in Lao PDR have declined from 46% in 1992 to 33.5% in 2002 to an estimated 28% in 2008; the MDG of halving poverty by 2015 is achievable. Progress is being made on all the MDGs but the main challenges are still in rural development to eradicate poverty, ensure adequate nutrition and sustainable livelihoods. UXOs remain a significant problem, with two-thirds of the country still contaminated. The UNDP's Human Development Index (2005) rating for Lao PDR is currently 0.601 (130th out of 177 countries), although had increased steadily increased from 0.45 in 1985. The government's 6th Five-Year-Plan (FYP) states that for 2006–2010, GDP growth targets are 7.5 – 8.0% p.a. and the level of poverty should be reduced by 50%. By 2020 it plans to have emerged from LDC status and have joined the WTO (for which preparations are underway).

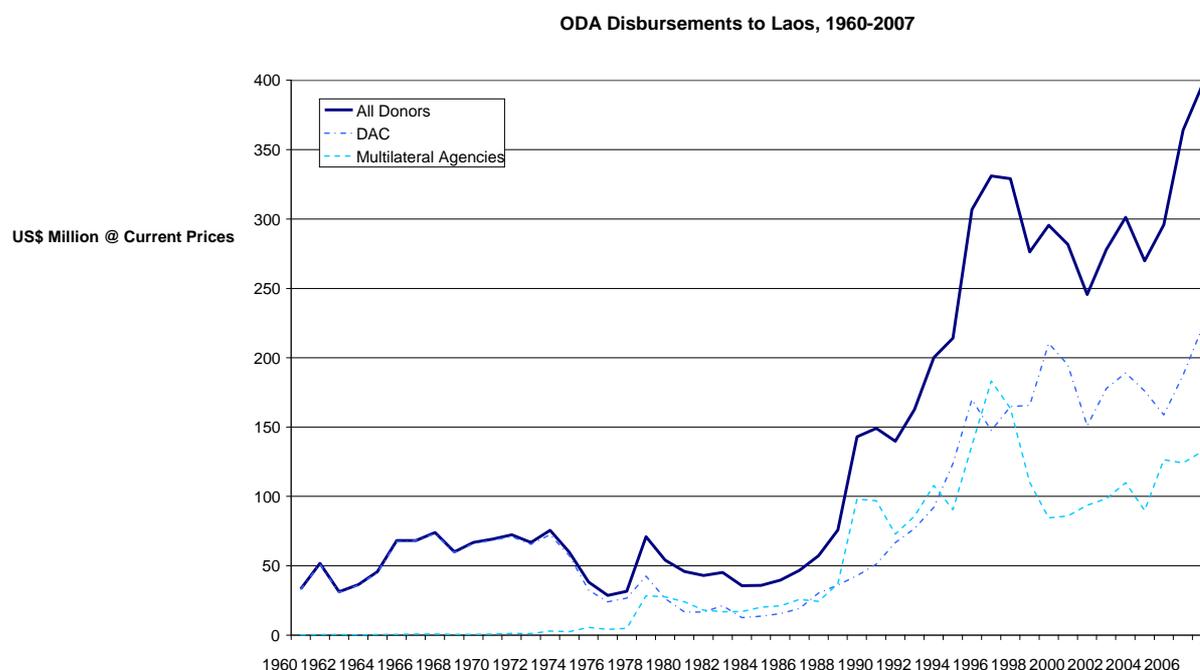
2. Aid and tying/untying status- Lao PDR

2.1 Review of ODA

The origin of ODA in Lao PDR comes primarily from USAID interventions prior to 1975 but was followed by ODA from Russia and the Eastern Block after the Pathet Lao coup of that year. In the late 1980s, after its emergence from isolation and the establishment of the New Economic Mechanism (NEM) in 1986, the country became eligible for international bilateral and multilateral aid and concessional loans.

Figure 3 below illustrates the fluctuations of ODA disbursements over the period 1960-2006. Before 1990 total ODA fluctuated at about US\$50 million per annum but rose sharply reaching about US\$325 million by the late 1990s. After a drop in aid in early 2000s, it increased again to just under US\$400 million in 2007. However it is doubtful whether this level of ODA will be maintained following the global economic downturn of 2008/09. During its period of isolation Lao PDR received only about 2% of aid given to the current recipients of aid in the Asia Pacific Region but this has now risen to around 6-7% though peaked at 9% in the late 1990s. Overall ODA is declining as a percentage of GDP.

Figure 3: ODA Disbursements to Lao PDR



Source: OECD CRS database

In general, ODA since 1990 has come from DAC countries and multilateral organizations. In 1992-3 around 90% of ODA came from DAC member countries but since then has varied between 60-70%, while multilateral donors varied between 30-40% though fell to around 25% around 1999-2000.

Traditional multilateral donors have primarily been the IDA and ADB. Bilateral aid has shifted significantly since the 1980s. In the early 1980s the CMEA/CEAA were still important and provided about 85% of aid, but had disappeared by 1987. In that period Japan grew from 4% to 20%, Sweden from 8% to 14% and Australia from 2.5% to 9% and other countries went from less than 0.5% to 10%. By 2006 Japan was the largest donor at 27%, followed by Vietnam (11%), China (9.5%), Sweden (8.9%), Thailand (8.5%), France (8%), Australia (7.7%) and Norway (6.6%). Currently the main bilateral donor is Japan, providing an average of US\$100 million annually, almost 50% of total bilateral assistance, mostly in grants to finance energy and transport infrastructure. China is also involved in similar major infrastructure projects, accounting for some 15% of total ODA.

The number of INGOs has risen from three in 1975 to 161 in 2009. They provide financial assistance of US\$35 million a year on average on projects including education, public health, environmental protection, community and rural development, clearance of UXO, and disaster relief.

ODA plays an important role by funding both the Government's overall public expenditures and its Public Investment Programmes (PIP). The ODA share of PIP has now risen to 85% after a period of around 60-70% and contributes around a third of total expenditure. Bilateral donors focus on Transport, Development Assistance and Education sectors, multilateral donors on Energy, Social Development and Rural Development and INGOs mostly on Health with interventions in Social Development, Education and Agriculture sectors. Donors and the Government are cooperating to jointly identify alternative ways to meet increasing development demands, while examining the recurrent expenditure implications in ODA project selection and efficiency to achieve the National Growth and Poverty Elimination Strategy (2003).

2.2 Untied Status of Aid

In the 1980s two-thirds of aid from OECD countries to Lao PDR was tied to commercial contracts, for donors' goods and services, with a high percentage of aid in kind from the non-convertible currency area as well. The major problem in the 1980s was that compatibility of equipment standards and services posed a problem of wastage, aggravated due to parallel

arrangements of ODA from the two blocs and in the late 1980s the substitution of western for Council for Mutual Economic Assistance (CMEA⁷) resources. Two other problems were that the embodied technologies were not always suitable to local factors and conditions and subsidized imported inputs at cost caused distortions in other sectors and markets.⁸

Between the years 2005-7, it was reported that 75.4% of DAC aid to Lao PDR was untied (CRS database, OECD). This is a success story from the OECD perspective when compared to the overall benchmark for untying aid of 60% linked to the Recommendation to untie aid. However the Lao government does not monitor aid status through the in country Aid Coordination and Monitoring System (ACMS) in this way and the figures only come from donor countries, so there is no independent verification nor are there any statistics of percentages of untied aid from non-OECD countries, which was 31.5% of bilateral aid in 2005-6 (ACMS). The reporting system also does not record bilateral ODA channelled through multilateral organizations or INGOs; the former is untied (excluding the EC⁹) but the percentage of untied aid for the latter is not known (out of INGO disbursement totalling US\$16.23 million in 2006)¹⁰. The World Bank (2006) also reported a decline in tied aid among external partners such as AFD and SIDA¹¹.

2.3 Vientiane Declaration on Aid Effectiveness

The Vientiane Declaration on Aid Effectiveness was signed by the Government of the Lao PDR and representatives of 22 partner countries and organizations during the Ninth Round Table Meeting in Vientiane on 29 November 2006, and seeks to localise the Paris Declaration to fit the circumstances of Lao PDR. It contains 33 points under the headings of Ownership, Alignment, Harmonization and Simplification, Managing for Results, Mutual Accountability and includes the defining of an Action Plan and associated Indicators with time-bound targets and a framework for monitoring progress on implementation and outcomes.

In detail the partners are to align with the government who will strengthen regulations and procedures, development capacity, financial management, procurement, and assessments; while partners (donors) simplify procedures, implement common arrangements and an effective division of labour. Both Government and partners commit to managing resources and improving decision-making for results where both will be responsible. The Country

⁷ Also known as Comecon, in existence from 1949-91. Laos had observer status

⁸ Lao's Dilemmas and Options, Than M. & Tan L., Institute of South Asian Studies, 1997, p. 287

⁹ EU procurement notices specify that EU countries or aid recipient countries are eligible to tender. Therefore is 'partially tied'.

¹⁰ Lao PDR Foreign Aid Report, 2006

¹¹ <http://siteresources.worldbank.org/CDFINTRANET/Overview/21458677/LaoPDRFINALNovember302006.doc>

Action Plan has goals, actions, baselines for 2005/06, performance milestones and targets for 2010/11 with nominated government and international lead agencies. Partners are to increase the percentage of untied aid; the baseline is 75-80% for 2005/06 with a 90% target for 2010/11. However of the 14 highest bilateral donors two were not original signatories - Thailand and Vietnam (c. US\$20 million each in 2005/06; 29% of total ODA) - and are therefore not bound by the declaration (Thailand subsequently signed). The Republic of Korea (US\$5.88 million, 2.6% of total ODA), an OECD applicant country, and China, are two other non-DAC signatories.

3. Statistical review of aid to cover

3.1 Statistical review of aid by donor

This section contains a synopsis of the main activities of the key bilateral donors in Lao PDR, as per the amount of ODA commitments up to 2007. Other countries are involved in a very small way; these are usually organized through embassies or country offices based in either Thailand or Vietnam. This information and statistics in this section is mostly derived first hand from donors or from donor websites.

Australia

Australia's strategy¹², developed in consultation with the Government of Lao PDR, is assisting to improve the pre-conditions for poverty reduction and sustainable development. Key objectives include building human resources by improved access to education and support for applying new skills and knowledge; promoting the growth of the market economy; and reducing the vulnerability of the poor through rural development. In total, Australia will provide an estimated A\$3.155 billion in ODA in 2007-08, an increase over the 2006-07 budget of A\$209 million. ODA managed by Australia's overseas aid agency, Ausaid, will increase by over 21.7% in real terms.¹³ Since 2006 Australian aid achievements include:

- Support for donor-government Education Sector Working Group
- Provision of assistance to the GoL to support reform of its trade and investment policies
- Promotion of land tenure security through support of the Government's land titling program, in partnership with the WB and Germany.
- Providing local institutional capacity in UXO clearance and reducing the need for expatriate technical assistance.

Australian ODA has been officially untied since 2006, and in Lao PDR most aid is channeled through other multilateral donors, therefore procurement is not conducted directly using Australian rules.

China

Chinese ODA is controlled by the Ministry of Economy, Trade and Industry but how much they disburse is unknown, as it is not published (it is a 'state secret' according to the Chinese Academy of International Trade and Economic Cooperation, a ministry agency) there have been a number of independent assessments of the amounts, recipients, purposes, economic and political contexts.

¹² <http://www.ausaid.gov.au/country/country.cfm?CountryID=35&Region=EastAsia>

¹³ <http://www.Lao PDR.embassy.gov.au/vtan/PR0307.html>

One source calculated that since the late 1990s, Chinese aid has included grants (nearly US\$300 million), loans worth US\$350 million, pledges of trade, and investments worth US\$876 million, technical assistance, and high profile public works projects, such as the National Cultural Hall in Vientiane¹⁴. A second estimate from Xinhua News Agency put aid at US\$1.7 billion between 1988 and 2001, of which most debt was cancelled in 2003¹⁵. The Wagner School¹⁶ compiled a list of Chinese aid and related investment projects or offers to ASEAN from 2002-2007 and arrived at a combined total value of US\$14 billion. They estimated that 43% of that figure went to infrastructure and public works projects, 32% for natural resource extraction or development, 3% to military, humanitarian and technical assistance and the remaining 22% to unspecified activities. Another lower estimate is US\$73 million between 1988 and 2000 (2% of total ODA) and US\$125 million between 2001 and 2004 according to the Ministry of Commerce, which lists the following projects and programs.¹⁷

¹⁴ Laos: Background and US relations, CRS Report for Congress, 2008

¹⁵ [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=3867](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=3867)

¹⁶ <http://www.japanfocus.org/-B-McCartan/3153>

¹⁷ China Development Brief, 2006 <http://www.chinadevelopmentbrief.com/node/454>

TABLE III: CHINESE AID TO LAOS (1998-2005)

NOTE: The data presented here is culled from newspaper reports, interviews, and books published by the Yunnan Academy of Social Sciences. It is inevitably schematic; some projects may be omitted, and some sources may be unreliable. Not all of the projects listed here would be counted by the OECD as official development aid, so the total here does not necessarily tally with that in Figure 1. On the other hand, we have excluded numerous private investments by Chinese corporations that appear to be linked or complementary to aid projects.

Lao National Cultural Hall Vientiane, 1998–2000	USD 7 million grant	Yunnan International Economic & Technology Cooperation Co.
Sino-Laos Friendship Hospital Luang Prabang, 2002–2003	USD 5 million grant	Yunnan Construction Engineering Group
Kunming-Bangkok Highway, Mohan-Nanlun Bridge (80 km) Central Avenue Vientiane, completed in 2003	USD 30 million in mixed credits Grant, amount N/A	Yunnan Road & Bridge Co. Guangdong No.3 Hydroelectricity Construction Co.
Triumphal Arch Park renovation Vientiane, 2004	USD 1.25 million grant	Guangdong No.3 Hydroelectricity Construction Co.
Vang Vieng Cement Plant, Phase I 1992–1994; Phase II 2000–2002	USD 13.9 million grant for Phase I, USD 36 million loans and investments for Phase II	Yunnan International Economic and Technology Corp.
Mekong River Dredging (China-Burma border to Luang Prabang) 2002–2004	USD 5 million grant	N/A. Note: this included work on the Chinese side of the border
Nam Leuk Hydropower 1996–1999	USD 56 million credit	Sinohydro Corp.
Nam Mang III Hydropower 2002–2004	USD 200 million credit	China Arms Industry North Group & Sinohydro Corp.
Transformer Substations (for Nam Mang, III) 2004–2006 project	USD 60 million credit	Sinohydro Corp.
Seset II Hydropower 2005 (under construction)	USD 200 million credit	China Arms Industry North Group & Sinohydro Corp.
Nam Ou VII Hydropower Phongsaly (pipeline, MOU signed)	USD 700 million credit	Sinohydro Corp.
Potassium Mining survey (Phase I) and Mining development (Phase II) 2005–2006	USD 5 million grant (survey); USD 20 million investment	Yunnan Provincial Government, Yunnan Sino-Lao Mining Development & Investment Co.
Drugs eradication programme in Oudomsay and Namtha Provinces—providing seeds, technology and experts to plant sugarcane, rubber, rice and tea.	Grants and private investments, total N/A	Yunnan Local Special Products Export and Import Co; Pufa Organic Tea Factory
Fruit & Vegetable Experiment Planting Base 60 hectare, Pakso of Champassak	N/A	Guangxi Xianglei Tea Factory Xishuangbanna Prefecture (Yunnan), Guangxi Agricultural Technology Vocational School
Ground satellite reception station; 1990–1991	Grant, amount N/A	China Broadcasting & TV International Technical Cooperation Co (CBTITOC)
Build TV stations and transmission towers in the nine northern provinces, 2000	USD 1.3 million	CBTITOC
A small-scale TV broadcasting station	USD 750,000	CBTITOC
Telecommunications Network Expansion 2000 (Phase I), 2002 (Phase II)	USD 66 million credit	Shanghai Bell Company
Scholarships (Grant) 30 scholarships per year since 1991, increased to 55 in 1999, for Lao people to study in China. Each year China also sends 10 Chinese people (officials, researchers etc) to Laos for Lao language training and provides scholarships for 7 longer term students to study in Laos.		
Volunteers (Grant) 54 volunteer placements in 5 batches from Shanghai and Yunnan. They spend six months, teaching English, Chinese, medical service, sports, music, IT and agricultural technology.		

Source: China Development Brief, 2006

Subsequently China¹⁸ has promised to establish a China-ASEAN investment cooperation fund totaling US\$10 billion, designed for cooperation on infrastructure construction, energy and resources, information and communications and would be conducive to the establishment of

¹⁸ http://www.chinadaily.com.cn/china/2009-04/12/content_7669717.htm

the China-ASEAN free trade zone. It has also offered an extra 2,000 government scholarships and 200 master's scholarships for public administration students from developing member countries over the next five years.

Concessional loans from China are more affordable since the interest rate is pegged at a very low 1%, compared to 5-7% from multilateral agencies like the ADB and WB. Chinese loans are also easier to obtain as multilateral agencies impose more stringent requirements and take a longer time to secure. Countries do not turn away from Chinese tied loans because it is necessary to accept that the financier had the right to choose the contractor to obtain the Chinese ODA loans.

EC

Overall, ongoing projects in 2009 have a value of €57 million, with rural development and food security projects making up some two thirds of the project portfolio. EC delegation also plays a part in community development projects, although currently have no projects explicitly in the water sector. NGO implemented projects in food security and rural development, health, UXO clearance and basic education account for approximately 20% of ongoing projects. In addition, there are 14 Asia-wide projects with components affecting Lao PDR under implementation. EC declare all their aid as untied, although a small amount of aid is still tied in the form of technical assistance. 50% of aid from EC to Lao PDR is channeled into budget support.

France

Within the context of the RTMs, France, through the AFD, is focusing on Agriculture, Food Security and Urban Infrastructure, and Access to Education and Health Care¹⁹ in Lao PDR. In addition, decentralized co-operation is growing but is currently not included in French ODA (approximately 3,000 territorial authorities are active in 115 countries).

France has become a co-chair of the donor's rural development group with ADB due to its ten years of involvement and €40 million investment in the sector. Current programs include four projects focusing on mountain agriculture, modern export-oriented agriculture, support for the development of coffee exports; the development of irrigation; improving capacity in the Faculty of Agriculture at Nabong; an agro-ecology project that favors soil protection with support from the CIRAD; and an initial drainage basin management scheme.

¹⁹ http://www.diplomatie.gouv.fr/en/country-files_156/laos_491/france-and-laos_3120/framework-partnership-document-france-lao-2007-2011_9106.html#sommaire_10

French initiatives in the urban sector mainly involve Vientiane (urban infrastructure, municipal management and water supplies) and Luang Prabang (urban housing and heritage protection). More than €20m in finance has been allocated to this sector over five years. In the capital, Vientiane, priority is given to the water sector with water distribution projects accompanied by institutional support and training provided to the water utility. Most French assistance is channeled through country procurement systems and pooled funding (AFD, 2009).

Germany

The aim of Lao-German cooperation²⁰ is twofold: sustainable economic development and rural development. The first aim is the elimination of administrative obstacles to investment and business start-ups and boost institutional, organizational and staffing capacity in small and medium-sized enterprises. Rural development in northern mountain focuses on infrastructure rural roads, where access is opened up to markets, schools and health facilities for people in structurally disadvantaged areas and advisory services for the general public. Advances have also been made in the area of rural telecommunications. Germany is now helping the local population to introduce new crops and develop alternative sources of employment. Particular care is taken to make sustainable, low-impact use of natural resources.

Japan

Providing assistance contributes to the socioeconomic development of Lao PDR is in accordance with Japan's policies with a focus on ASEAN and assistance policies for the Mekong Region development to correct intraregional disparities²¹. Between 1997 and 2003 they gave US\$660 million of which US\$420 million was grant aid and the balance of technical cooperation and focused on infrastructure development, in particular transport, the areas of health and medical care and primary education, including the construction of elementary schools. There was also grant aid for human resource development through the construction of facilities for the Lao National University and for scholarship programs. Technical cooperation has taken place in human resource development, social infrastructure development, health and agriculture²².

Since 1990²³ Japan has grant aided the construction of various infrastructural projects, particularly in transport, roads, bridges, Vientiane airport, hospitals, schools and training

²⁰ http://www.bmz.de/en/service/infothek/buerger/Faltblatt_Laos_engl.pdf

²¹ http://www.mofa.go.jp/mofaj/gaiko/oda/seisaku/enjyo/pdfs/e_laos0609.pdf

²² Country Assistance Evaluation of Laos, MOFA Japan, 2004

²³ <http://www.la.emb-japan.go.jp/en/oda/shienjiseki.htm>

centers. During 2000-6 it disbursed ¥36,138 million on 89 projects and a further ¥1,142 million on 167 Grant Assistance Schemes for Grassroots Human Security Projects (GGP). It has made major loans of ¥164.3 thousand million for four hydroelectric and one road projects and another ¥10 thousand million in the 2nd Poverty Reduction Support Operation in 2006-7. As of 2008 the country has sent 1,781 technical experts, 106 senior volunteers (since 1999) and 593 JOCV volunteers (since 1990). Overall ODA is less directly related to FDI compared to the rest of Asia.

Korea

Since 1991 Korea²⁴ has provided US\$37.2 million (55% of the total since 2002) of which 63% has been in grants and the balance in loans. Current programs and projects include: LAO MOFA Computer Network Development; Vientiane Mekong River Embankment Repair and Park Development Feasibility Study; General Development Project for 5 Rural Villages in Vientiane; Secondary School Textbook Provision Project; Feasibility Study Project for Water Supply and Sanitation of the South Central Region; Vocational Training and Capacity Strengthening Project; WFP Food Aid; Invitation of Trainees; and 92 Overseas Volunteers.

Since 1991 aid has focused on MOFA computer networks and e-Government, Mekong River embankment schemes, construction of schools and training centers, hydroelectric and irrigation feasibility studies.

Luxembourg

Luxembourg's involvement²⁵ in Lao PDR began in 1997 and is the second largest bilateral donor in the health sector. Between 2007 and 2011 €35 million will be disbursed, a doubling of the 2002-6 period, and will focus on Health, Education and Training, and Local Development and Governance. Additionally funds are distributed to six UN agencies and the NGO sector. LuxDev ODA is now reported as 100% untied. However Luxembourg has a relatively small number of indigenous enterprises compared other donors which could potentially benefit from tied aid, therefore untying does not represent such an obstacle to Luxembourg. One interesting exception is the previous case of Electrolux fridges (Luxembourg origin) that were specified in the procurement guidelines for any projects which required fridges (and therefore an example of tied procurement). The most common aid modality used by LuxDev in Lao PDR is country procurement systems.

²⁴ <http://www.odakorea.go.kr/eng/operations/Asia/Laos.php>

²⁵ http://www.lux-development.lu/publication/LAO_light.pdf

New Zealand

New Zealand's overall strategy, 2005-10²⁶, is to eliminate poverty through a focus on sustainable rural livelihoods by building skills, promoting income-generation (such as the UNESCO Nam Ha ecotourism project²⁷) and sustainable resource management (UXO and mine clearance, pro-poor tourism and sustainable heritage resource management). Sustainable rural livelihoods are promoted through the core sectors of pro-poor tourism and natural resource management and are complemented by trade and private sector development, NGO partnerships and human resource development. There are usual cross-cutting themes of promotion of human rights and gender equity, reduction of vulnerability and environmental protection. It also provides developmental scholarships, short-term training awards and post-graduate scholarships to eligible applicants²⁸.

Sweden

Sweden²⁹ first started supporting Lao PDR in 1974 (one of the earliest bilateral donors) as a traditional non-aligned country and has included contributions relating to roads, education, distribution of medicines, and efforts against maternal and infant mortality. In the environmental sector, Swedish development cooperation has contributed to a nationwide strategy for handling environmental issues, and an action plan.

In 2008, according to SIDA's annual report, nearly SEK139 million will be disbursed primarily in infrastructure (roads to remote areas), research (institutional development and IT) and human rights (law and capacity development), with education (literacy, teacher training) and natural resources (livelihoods) close behind. All Swedish aid is officially untied and most aid is channeled through Lao procurement systems. SIDA is currently implementing an exit strategy to pull out of Lao PDR by 2011.

Thailand

Generally Thai aid (US\$167 million in 2005) goes to neighboring countries of which 50% goes to Lao PDR³⁰. The bulk of the assistance is to support basic infrastructure development, including the building of roads, bridges, dams and power stations including a 228-kilometre stretch of road that will connect the south-western Chinese city of Kunming with Bangkok.

²⁶ <http://www.nzaid.govt.nz/programmes/c-lao-pdr.html>

²⁷ <http://www.unescobkk.org/index.php?id=486/>

²⁸ <http://www.nzaid.govt.nz/scholarships/>

²⁹ http://www.sida.se/sida/jsp/sida.jsp?d=543&language=en_US

³⁰ Global Partnership for Development – Thailand's contribution to MDG 8, 2005

Thai ODA is largely tied, which places expectations on the recipient country to buy goods and services related to the development project from Thailand. It includes a trilateral technical assistance partnership with Japan by where Japan provides the funding while Thailand provides the assistance. The remainder of Thai ODA is in the form of technical assistance and training in the areas of education, public health, agriculture, transportation, economics, banking, finance, and science and technology, as well as contributions to the UN System and the Asian Development Fund of the ADB.

USA

US aid to Lao PDR is relatively very small³¹ at US\$4.8 million in 2007 (US\$4.3 million in 2006, compared to US\$55 million to Cambodia) and has focused on ‘counter narcotics and de-mining’. UXO funding is declining but new programs are planned for public health, economic development, judicial reform and civil society. Other areas of cooperation include MIAs and avian flue.

Vietnam

The political relationship between both countries has been close since the mid-1970s, and sometimes cooperation can be difficult to distinguish between FDI and ODA. Vietnam does not publish ODA statistics but the following has been extracted from various media sources. It provided VND560 billion in grant aid in the 2001-2005 period and VND1.2 trillion in 2006-2010³². This conflicts slightly with an earlier commitment of VND900 billion (US\$54.5 million) for 2006-2010, which included VND230 billion for 2008 alone; divided into VND100 billion for Lao students in Vietnam, and VND130 billion for other projects³³. A preferential loan of US\$48 million was provided for a recent road upgrade and another US\$43 million has been offered for another scheme; in both cases they connect the two countries.³⁴ The construction of a cultural house costing VND15.2 billion (US\$850,000) in Oudomxay province will be completed in 2010³⁵. Other areas of assistance include construction and support for the 25th SEA Games³⁶, information, culture, human resource training, tertiary education (particularly for Laotian political cadres and military officers).

³¹ <http://www.fas.org/sgp/crs/row/RL34320.pdf>

³² <http://www.mofa.gov.vn/en/nr040807104143/nr040807105001/ns090512085303>

³³ <http://www.mofa.gov.vn/en/nr040807104143/nr040807105001/ns080722095916> the former is from May 2009 and latter from 2008

³⁴ <http://www.uni-bros.com/en/news.php?id=11031&cid=2>

³⁵ http://www.mofa.gov.vn/en/cn_vakv/ca_tbd/nr040819103029

³⁶ <http://english.vovnews.vn/Home/Vietnam-helps-Laos-prepare-for-25th-SEA-Games/20093/102356.vov>

3.2 OECD/DAC Statistics- Aid to Lao PDR

The following section presents tables of key indicators of ODA to Lao PDR, with data drawn from the OECD's Creditor Reporting System (CRS).

Table 1: Top donors (bilateral and multilateral) in Lao PDR over the period 2005-2007 (commitments in current USD millions)

Donor	2005	2006	2007	2005-2007
Japan	90.6	94.2	58.9	243.7
IDA	48.4	25.8	28.0	102.1
France	24.4	7.2	41.1	72.8
Sweden	34.5	14.6	22.9	72.0
Germany	14.5	28.4	16.2	59.1
AsDF	27.2		19.3	46.5
Global Fund	21.1	0.0	23.5	44.7
Australia	8.9	13.4	13.8	36.1
Luxembourg	8.6	6.8	11.3	26.7
EC	2.1	5.4	14.3	21.8
IFAD	18.0	3.0		21.0
UNDP	5.1	4.9	4.9	15.0
Norway	2.9	11.5	0.5	14.9
Switzerland	1.8	5.7	7.0	14.5
Belgium	7.1	2.7*	4.5	14.2
United States	5.1	3.0	3.7	11.7
UNICEF	2.2	2.4	2.6	7.3
New Zealand	0.9	3.8	1.1	5.9
Finland	0.3	3.0	2.2	5.5
Ireland	0.2	2.4	2.2	4.8
UNFPA	1.2	1.6	1.4	4.2
United Kingdom	1.2	0.9	0.9	2.9
Canada	0.5	0.8	0.1	1.4
UNAIDS	0.3	0.1	0.2	0.6
Netherlands	0.2	0.0	0.1	0.3
Denmark	0.0	0.0		0.0
<i>Total bilateral ODA</i>	<i>203.8</i>	<i>203.7</i>	<i>200.7</i>	<i>608.2</i>
<i>Total multilateral ODA</i>	<i>123.5</i>	<i>37.8</i>	<i>80.1</i>	<i>241.4</i>
Total ODA (bilateral & multilateral)	327.3	241.5	280.8	849.6

Note:

*There is a discrepancy between the CRS online database and the downloadable version. Belgium commitments for 2006 are 6.72 US\$ mn on the website whereas in the downloadable dataset, and therefore in this table, they are 2.7 US\$ mn.

The top bilateral donors are Japan, France, Sweden and Germany (commitments above 50 US\$ mn) for the period 2005-2007. The largest multilateral donor is IDA.

Table 2: Tying status of bilateral ODA of DAC donors during 2005-2007

	Untied aid share of donor ODA (%)	Partial tied share of donor ODA (%)	Tied share of donor ODA (%)	Not Reported share of donor ODA (%)	Untied aid share of bilateral ODA (%)	Partial tied share of bilateral ODA (%)	Tied share of bilateral ODA (%)	Not Reported share of bilateral ODA (%)	Bilateral ODA commitments reported to CRS (US \$ millions)
Japan	68.9	0.0	0.0	31.1	39.2	0.0	0.0	56.2	243.7
France	62.3	0.0	7.0	30.7	10.6	0.0	19.0	16.6	72.8
Sweden	98.5	0.0	1.5	0.0	16.5	0.0	4.1	0.0	72.0
Germany	61.5	0.0	11.5	26.9	8.5	0.0	25.4	11.8	59.1
Australia	43.3	0.0	17.8	39.0	3.7	0.0	23.9	10.4	36.1
Luxembourg	100.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	26.7
EC	20.1	79.9	0.0	0.0	1.0	95.2	0.0	0.0	21.8
Norway	100.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	14.9
Switzerland	54.7	0.0	0.0	45.3	1.8	0.0	0.0	4.9	14.5
Belgium	100.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	14.2
United States	53.5	0.0	46.5	0.0	1.5	0.0	20.3	0.0	11.7
New Zealand	75.9	14.9	6.0	3.2	1.0	4.8	1.3	0.1	5.9
Finland	89.4	0.0	10.6	0.0	1.1	0.0	2.2	0.0	5.5
Ireland	100.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	4.8
United Kingdom	100.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	2.9
Canada	31.5	0.0	67.0	1.5	0.1	0.0	3.6	0.0	1.4
Netherlands	81.2	0.0	18.8	0.0	0.1	0.0	0.2	0.0	0.3
Denmark					0.0	0.0	0.0	0.0	0.0
All donors	70.4	3.0	4.4	22.2	100.0	100.0	100.0	100.0	608.2

The table shows the tying status of bilateral aid by donor (left section of table).

Sweden, Luxembourg, Norway, Belgium, Ireland and the United Kingdom report virtually all their aid as untied. EC reports 80% of its aid as partially tied. The highest shares of tied aid per donor ODA are reported by Canada (67% of Canadian ODA to Lao PDR is reported as tied), United States (US reports almost half of their aid, 46.5%, as tied and the other half, 53.5%, as untied). High shares of non-reporting are noticed for Switzerland and Australia (for more than one third of their aid the tying status is not reported).

The central section of the table shows where un/tying is the most (as a share of bilateral ODA). Most of untied bilateral aid comes from Japan (39.2%) and Sweden (16.5%). All partially tied aid comes from EC (95.2%) and New Zealand (4.8%). Around 80% of tied aid comes from four countries: Germany (25.4%), Australia (23.9%), the United States (20.3%) and France (19%).

Table 3: Flow type (grants and loans) shares of bilateral ODA over the period 2005-2007

%	2005	2006	2007	2005-2007
ODA Grants	85.2	100.0	97.9	94.3
ODA Loans	14.8	0.0	2.1	5.7
<i>Other flow</i>	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

ODA grants represent around 94% of bilateral ODA whereas grants represent a smaller percentage of bilateral ODA (around 6%). Other flows of ODA (equity investment or grant like) have not been recorded in Lao PDR over the selected period.

Table 4: Tying status of bilateral ODA by aid flow and technical cooperation components during 2005-2007

	Untied aid share of grants/loans ODA (%)	Partial tied aid share of grants/loans ODA (%)	Tied aid share of grants/loans ODA (%)	Not Reported aid share of grants/loans ODA (%)	Untied aid share of bilateral ODA (%)	Partial tied share of bilateral ODA (%)	Tied share of bilateral ODA (%)	Not Reported share of bilateral ODA (%)	Bilateral ODA commitments reported to CRS (US \$ millions)
<i>Grants ODA</i>	68.6	3.2	4.7	23.5	92.0	100.0	100.0	100.0	573.7
Grants no FTC	96.8	2.9	0.1	0.2	42.1	29.2	0.6	0.3	186.3
Grants with partial FTC	100.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	5.1
Grants wholly FTC	27.8	5.3	10.1	56.9	14.0	62.4	80.8	90.9	215.6
Grants - missing	89.0	0.9	3.0	7.1	34.6	8.3	18.6	8.8	166.8
<i>Loans ODA</i>	100.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	34.5
Loans no FTC	100.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	30.2
Loans - missing	100.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	4.2
<i>Other flow ODA (equity investment, grant-like)*</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	70.4	3.0	4.4	22.2	100.0	100.0	100.0	100.0	608.2

Note: In order to compute this table all missing values have been considered as zero. Therefore, the table should be interpreted carefully.

"Grants no FTC" are grants for which donors either reported the absence of a free-standing technical cooperation component or for which donors did not report at all (and so there may be grants which in reality have a partial technical cooperation component which are erroneously categorized under "grants no FTC"). Similarly, "grants wholly FTC" are grants for which donors reported a free-standing technical cooperation component and no sector programme/investment project component or for which donors reported a free-standing technical cooperation component and incomplete/missing information on sector programme/investment project component (therefore there may be grants which in reality have a partial technical cooperation component which are erroneously categorized under "grants wholly FTC").

Bilateral ODA grants amount to US\$ 573.7 million (94.3% of bilateral ODA). The majority of grants ODA is untied (almost 70%), however the tying status of around one fourth of bilateral ODA grants is not reported (23.5%). Around 8% of bilateral ODA grants are either

partially tied (3.2%) or tied (4.7%). Virtually all bilateral ODA grants without a FTC component or with a partial FTC component are untied. Differently, only 30% of bilateral ODA grants with only a FTC component are untied. The tying status of almost 60% of bilateral ODA grants with only a FTC component is not reported, whereas around 15% is either partially tied (5.3%) or tied (10.1%). Loans, as noticed in the previous table, represent only 5.7% of bilateral ODA (or 34.5 US\$ million) and most of them do not have a FTC component (US\$ 30.2 million). As noticed in the table above, Lao PDR does not receive any ODA in the form of equity investment or grant-like.

Most of untied bilateral ODA is represented by grants without a FTC component (42%) or by grants whose component information is missing (34.6%), whereas the highest shares of tied/not reported/partially tied bilateral aid are mainly constituted by grants with only a FTC component (respectively 80.8, 90.9 and 62.4%).

Table 5: CRS Tying status of bilateral ODA by sector in 2005-2007

	Untied aid share of sector ODA (%)	Partial tied share of sector ODA (%)	Tied share of sector ODA (%)	Not Reported share of sector ODA (%)	Untied aid share of bilateral ODA (%)	share of bilateral ODA (%)	Tied share of bilateral ODA (%)	Not Reported share of bilateral ODA (%)	commitments reported to CRS (US \$ millions)
I.1.a. Education, Level Unspecified	16.9	0.0	0.1	83.0	0.5	0.0	0.1	7.5	12.2
I.1.b. Basic Education	50.2	0.0	9.3	40.5	0.4	0.0	1.3	1.1	3.8
I.1.c. Secondary Education	68.3	0.0	1.5	30.2	1.8	0.0	0.6	2.5	11.1
I.1.d. Post-Secondary Education	33.3	4.0	8.2	54.5	1.4	3.9	5.4	7.1	17.6
I.2.a. Health, General	49.1	0.0	0.0	50.9	2.3	0.0	0.0	7.7	20.4
I.2.b. Basic Health	85.8	0.0	4.1	10.1	6.7	0.0	5.1	2.5	33.4
I.3. Population Programmes	26.4	0.0	28.4	45.1	0.1	0.0	2.0	0.6	1.9
I.4. Water Supply & Sanitation	91.3	0.0	0.0	8.7	8.4	0.0	0.0	2.5	39.2
I.5.a. Government & Civil Society-general	67.3	10.2	6.6	16.0	9.1	32.3	14.2	6.9	58.0
I.5.b. Conflict, Peace & Security	86.5	0.0	5.8	7.7	3.3	0.0	3.5	0.9	16.3
I.6. Other Social Infrastructure & Services	45.2	0.0	15.8	38.9	2.4	0.0	13.7	6.7	23.2
II.1. Transport & Storage	96.6	0.0	0.0	3.4	18.4	0.0	0.0	2.1	81.8
II.2. Communications	5.9	0.0	10.9	83.2	0.0	0.0	1.1	1.7	2.8
II.3. Energy	87.8	1.2	0.4	10.6	10.9	3.4	0.8	4.2	53.3
II.4. Banking & Financial Services	15.6	0.0	0.0	84.4	0.0	0.0	0.0	0.7	1.1
II.5. Business & Other Services	45.5	0.0	14.1	40.4	1.8	0.0	8.8	5.0	16.8
III.1.a. Agriculture	58.9	0.0	0.6	40.4	9.8	0.0	1.7	21.2	70.9
III.1.b. Forestry	44.9	0.0	0.0	55.0	1.0	0.0	0.0	3.9	9.6
III.1.c. Fishing	3.8	0.0	1.1	95.1	0.0	0.0	0.2	2.7	3.8
III.2.a. Industry	55.9	27.6	4.7	11.8	1.8	20.6	2.4	1.2	13.6
III.2.b. Mineral Resources & Mining	0.0	0.0	0.0	100.0	0.0	0.0	0.0	1.1	1.5
III.2.c. Construction					0.0	0.0	0.0	0.0	0.0
III.3.a. Trade Policies & Regulations	6.0	78.9	2.3	12.8	0.1	31.5	0.6	0.7	7.3
III.3.b. Tourism	52.8	0.0	0.0	47.2	0.3	0.0	0.0	0.9	2.6
IV.1. General Environment Protection	79.8	0.0	13.5	6.8	2.5	0.0	6.8	0.7	13.6
IV.2. Other Multisector	70.1	0.0	18.3	11.6	7.2	0.0	30.0	3.8	43.9
VI.1. General Budget Support	100.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	8.6
VI.2. Dev. Food Aid/Food Security Ass.	97.1	0.0	0.1	2.8	2.1	0.0	0.0	0.2	9.4
VII. ACTION RELATING TO DEBT	100.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	4.7
VIII.1. Emergency Response	71.1	22.5	0.3	6.1	1.1	8.2	0.1	0.3	6.6
VIII.2. Reconstruction Relief &	65.3	0.0	0.0	34.7	0.2	0.0	0.0	0.3	1.3

Rehabilitation									
VIII.3. Disaster Prevention & Preparedness					0.0	0.0	0.0	0.0	0.0
IX. ADMINISTRATIVE COSTS OF DONORS	86.2	0.0	12.3	1.5	0.6	0.0	1.3	0.0	2.8
X. SUPPORT TO NGO'S	97.5	0.0	0.0	2.5	1.7	0.0	0.0	0.1	7.6
XI. REFUGEES IN DONOR COUNTRIES	96.3	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.2
XII. UNALLOCATED/UNSPECIFIED	41.8	0.4	1.1	56.7	0.7	0.1	0.3	3.0	7.2
Total	70.4	3.0	4.4	22.2	100.0	100.0	100.0	100.0	608.2

The water supply and sanitation sector is the sixth most targeted sector by bilateral donors with US\$ 39.2 million after ‘transport and storage’ (81.8 US\$ mn), ‘agriculture’ (70.9 US\$ mn), ‘Government and Civil Society-general’ (58.0 US\$ mn), ‘Energy’ (53.3 US\$ mn) and ‘Other Multisector’ (43.9 US\$ mn). Most of ODA flows to the W&S sector is untied 91.3% (or not reported, 8.7%). Almost one third of tied aid is concentrated in ‘Other multisector’.

Table 6: Commitments by sector and aid instruments over the period 2005-2007

	Grants (US\$ mn)	Loans (US\$ mn)	Grant %	Loans %	Total (US\$ mn)
I.1.a. Education, Level Unspecified	12.2	0.0	2.1	0.0	12.2
I.1.b. Basic Education	3.8	0.0	0.7	0.0	3.8
I.1.c. Secondary Education	11.1	0.0	1.9	0.0	11.1
I.1.d. Post-Secondary Education	17.6	0.0	3.1	0.0	17.6
I.2.a. Health, General	20.4	0.0	3.6	0.0	20.4
I.2.b. Basic Health	33.4	0.0	5.8	0.0	33.4
I.3. Population Programmes	1.9	0.0	0.3	0.0	1.9
I.4. Water Supply & Sanitation	39.2	0.0	6.8	0.0	39.2
I.5.a. Government & Civil Society-general	58.0	0.0	10.1	0.0	58.0
I.5.b. Conflict, Peace & Security	16.3	0.0	2.8	0.0	16.3
I.6. Other Social Infrastructure & Services	23.2	0.0	4.0	0.0	23.2
II.1. Transport & Storage	81.8	0.0	14.3	0.0	81.8
II.2. Communications	2.8	0.0	0.5	0.0	2.8
II.3. Energy	23.1	30.2	4.0	87.7	53.3
II.4. Banking & Financial Services	1.1	0.0	0.2	0.0	1.1
II.5. Business & Other Services	16.8	0.0	2.9	0.0	16.8
III.1.a. Agriculture	70.9	0.0	12.4	0.0	70.9
III.1.b. Forestry	9.6	0.0	1.7	0.0	9.6
III.1.c. Fishing	3.8	0.0	0.7	0.0	3.8
III.2.a. Industry	13.6	0.0	2.4	0.0	13.6
III.2.b. Mineral Resources & Mining	1.5	0.0	0.3	0.0	1.5
III.2.c. Construction	0.0	0.0	0.0	0.0	0.0
III.3.a. Trade Policies & Regulations	7.3	0.0	1.3	0.0	7.3
III.3.b. Tourism	2.6	0.0	0.4	0.0	2.6
IV.1. General Environment Protection	13.6	0.0	2.4	0.0	13.6
IV.2. Other Multisector	43.9	0.0	7.6	0.0	43.9
IX. ADMINISTRATIVE COSTS OF DONORS	2.8	0.0	0.5	0.0	2.8
VI.1. General Budget Support	4.4	4.2	0.8	12.3	8.6
VI.2. Dev. Food Aid/Food Security Ass.	9.4	0.0	1.6	0.0	9.4
VII. ACTION RELATING TO DEBT	4.7	0.0	0.8	0.0	4.7
VIII.1. Emergency Response	6.6	0.0	1.2	0.0	6.6
VIII.2. Reconstruction Relief & Rehabilitation	1.3	0.0	0.2	0.0	1.3
VIII.3. Disaster Prevention & Preparedness	0.0	0.0	0.0	0.0	0.0
X. SUPPORT TO NGO'S	7.6	0.0	1.3	0.0	7.6
XI. REFUGEES IN DONOR COUNTRIES	0.2	0.0	0.0	0.0	0.2
XII. UNALLOCATED/UNSPECIFIED	7.2	0.0	1.3	0.0	7.2
Total	573.7	34.5	100.0	100.0	608.2

Note: as noticed before there are no grant-like or equity investment flows to Lao PDR in the selected period.

The W&S sector represents the sixth most targeted sector in terms of commitments (US\$ 39.2 million) over the 2005-2007. All US\$ 39.2 million committed to the W&S sector are in the form of grants. Loans are concentrated in the energy sector (87.7% of bilateral ODA loans) and in general budget support.

NOTES

In general on the dataset:

The following main changes were made to the CRS database as downloaded from the OECD website:

- all cases of budget support were changed to untied (budget support is assumed to be untied by definition);
- the tying status for Australian aid for 2006 has been modified to 'not reported' from "all untied" (Australia informed us that they had not report the tying status of aid in 2006). To check again with OECD statisticians.

There are few cases in which the tying status seems to be reported on a disbursement basis (exceptional cases). These have been modified (i.e. as the tying status is reported on a commitment basis and it is reported for new commitments only, if commitment=0 then the tying status should be reported as zero).

In particular on Lao PDR:

When computing the 'not reported' variable (as the difference between commitments and the total amount reported either as tied/untied/partial tied) we get some negative values. These are few special cases (12 out of 2478 observations). These observations are kept in the dataset (although they are clearly mistakes) and did not carry out any modifications. Deleting these observations does not create any substantial bias with respect to the tying status as the total negative amount for the 'not reported' variable is around 277 dollars. However, deleting these observations would create a bias in commitments. Deleting these rows would corresponds to not taking into account 6.7 US\$ mn commitments.

3.3 Local statistics on ODA to Lao PDR

The statistics and tables presented in the following section are all based on locally obtained data from within Lao PDR. This consists of data held by donors' country offices on their aid disbursements, as well as from statistics maintained by the Government of Lao PDR based on donor reporting figures. The data obtained locally is of fairly limited use because recent statistics are scarce. The following data is intended to provide a contrast to the CRS/OECD data and to draw any additional information related to ODA and tying where available.

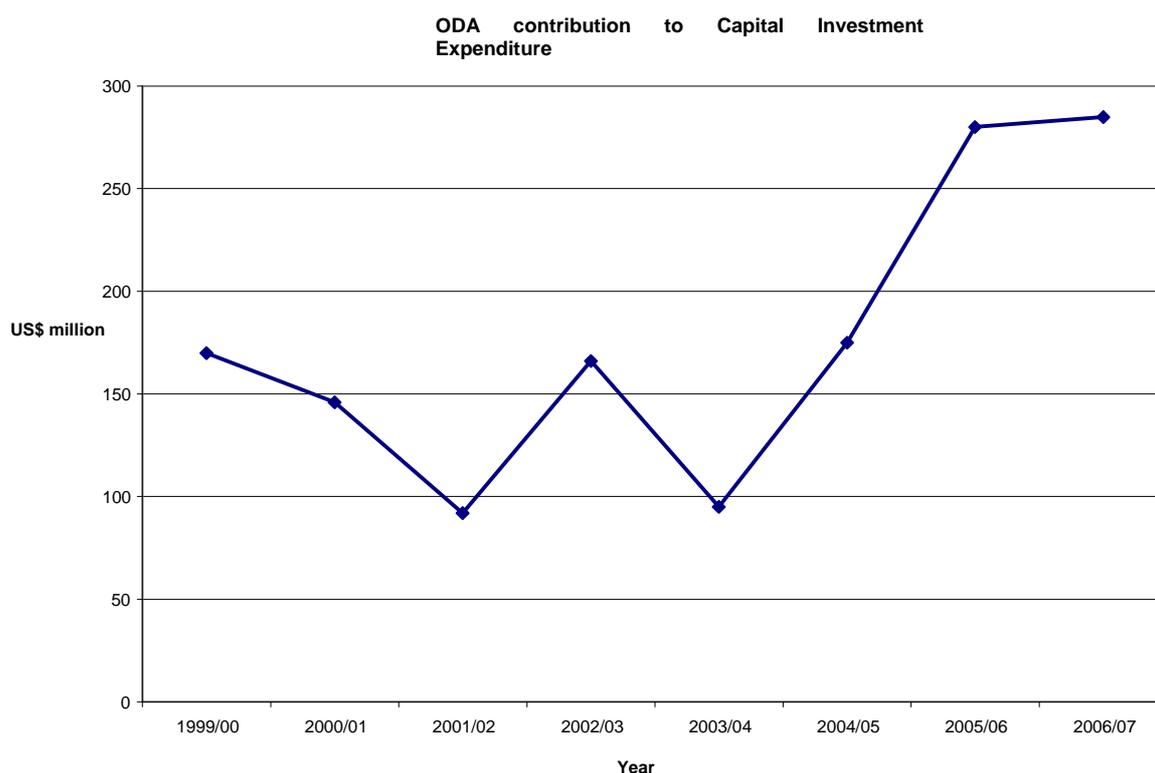
Table 7: Public Expenditure, PIP and ODA: 1999/00 to 2005/06 (US\$ millions, market prices)

US\$ MILLION								
Item	1999/00 Actual	2000/01 Actual	2001/02 Actual	2002/03 Actual	2003/04 Actual	2004/05 Actual	2005/06 Actual	2006/07 Planned
Total Expenditure	<u>341</u>	<u>406</u>	<u>330</u>	<u>438</u>	<u>354</u>	<u>514</u>	<u>682</u>	<u>792</u>
Current Expenditure	106	162	138	167	199	248	362	456
Capital Investment (PIP)	235	245	192	271	155	266	320	336
PIP of which:								
- ODA	171	147	93	165	96	177	278	284
- Domestic	63	98	99	106	59	89	42	52
PIP/Total Expenditure (%)	69	60	58	62	44	52	47	42
ODA/PIP (%)	73	60	48	61	62	67	87	85
ODA/Total Expenditure (%)	50	36	28	38	27	34	41	36

Source Fiscal Policy Unit, Dept. of Finance, Lao PDR

Total expenditure has more than doubled since 1999 from US\$341 to US\$792 million, while Capital Investment expenditure under the Public Investment Programme (PIP) has declined as a proportion of total expenditure from 69% to 42%. ODA as proportion of capital investment has fluctuated slightly between 1999 and 2006, increasing in more recent years to around the 80% mark. The ODA contribution to capital investment expenditures has an overall increasing trend over the decade, starting from around US\$150 million in 2000, increasing up to almost US\$280 million in 2005/06. Meanwhile the Government of Lao's domestic contribution has fluctuated considerably in monetary terms. The fluctuations of ODA as a contribution to PIP are represented graphically in the figure below.

Figure 4: ODA Contribution to Capital Investment Expenditure



Source Fiscal Policy Unit, Dept. of Finance, Lao PDR

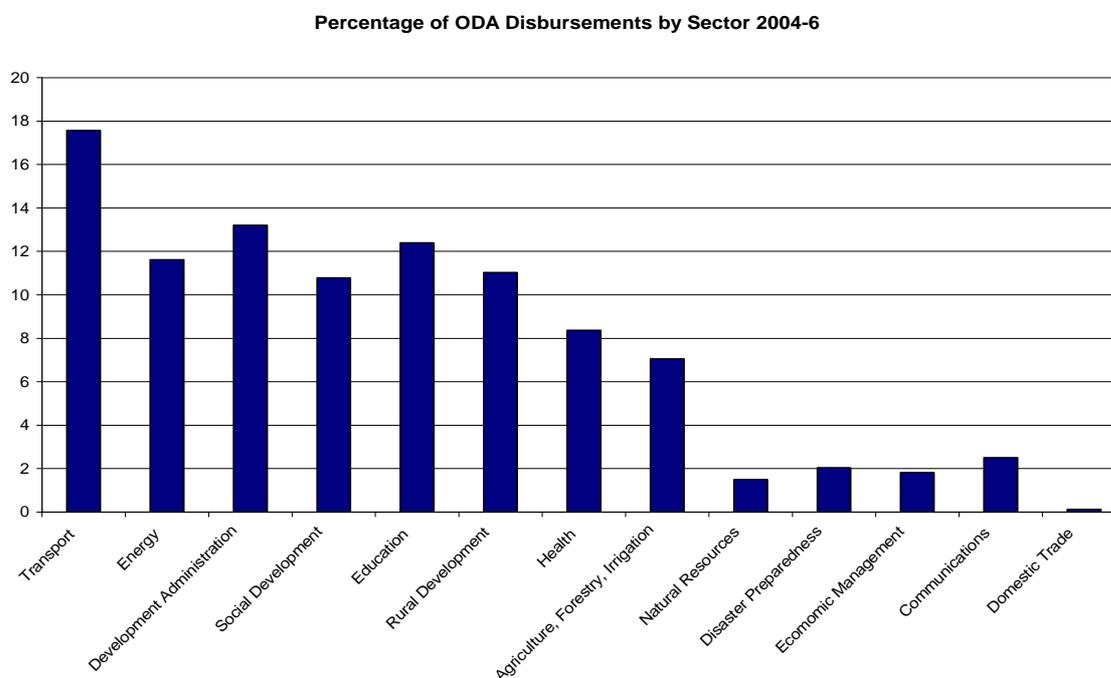
As shown in the table and corresponding figure below, the sectors that received the greatest amounts of ODA disbursement in 2005/6, according to local data, were transport, energy, development administration, social development, and education. Comparing local data to the CRS data, many of the top ODA recipient sectors are similar, including transport, education, health and agriculture. However one of the key differences is that no water and sanitation sector appears in the list of top disbursements by sector in the local data. This difference may be explained by the fact that the CRS data is measured in ODA commitments by donor, whereas the local data is measured in actual ODA disbursements. Moreover, the quality of local data is fairly uncertain since a detailed description of the data source, method of data collection, coverage and number of observations used to compile the data is not available.

Table 8: Total ODA Disbursements by Sector, 2005/06

SECTOR	2004/05		2005/06	
	US\$ MILLION	%	US\$ MILLION	%
Transport	55.9	15	91.4	19.5
Energy	22.2	6	75.2	16.0
Development Administration	56.9	15	53.9	11.5
Social Development	37.3	10	53.2	11.3
Education and Human Resources Development	52.7	14	51.3	10.9
Area and Rural Development	43.5	12	49.0	10.4
Health	33.7	9	36.5	7.8
Agriculture, Forestry & Irrigation	29.2	8	29.9	6.3
Natural Resources	4.4	1	8.2	1.7
Disaster Preparedness	9.4	3	7.7	1.6
Economic Management	9.1	2	6.1	1.3
Communications	15.6	4	5.4	1.1
Domestic Trade	0.9	0.3	0.1	0.0
Total	371.32	100	468.39	100

Source: Lao foreign aid report, 2005-6

Figure 5: Percentage of ODA Disbursements by Sector, 2004-6

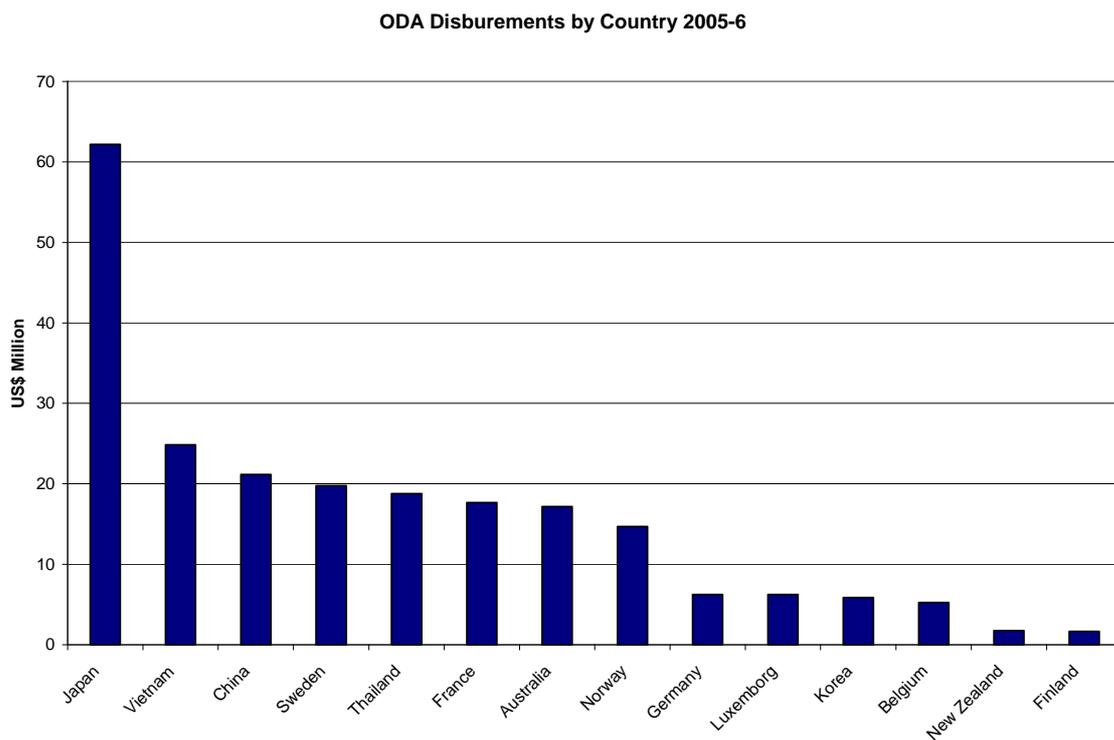


In terms of ODA disbursement by bilateral donor, the figure below gives the amount of ODA disbursements in 2005/06 by donor country. Other countries are involved in a very small way and are

usually organized through embassies or country offices based in either Thailand or Vietnam. Similarly to the CRS data, Japan ranks as the largest donor, with Sweden, France and Australia ranked as other top donors, although the values are less than the CRS data, and Vietnam, China and Thailand are shown to be in the list of top five donors to Lao PDR.

The apparent conflict in the data between the Lao Foreign Aid report and CRS data with regards to bilateral aid can be explained by the fact that the CRS contains only data from DAC member countries, whereas the Lao Foreign Aid report includes non-DAC donors such as China, Korea, Thailand and Vietnam, who are more likely to contribute ODA loans. On average during 2005-7, 50% of total ODA was in loans compared to 5% from DAC countries. Also the Lao PDR data is measured in disbursements as opposed to commitments in the CRS data, which may explain some of the discrepancy in ODA contributions by country between the two data sources.

Figure 6: ODA Disbursements by Country, 2005-6

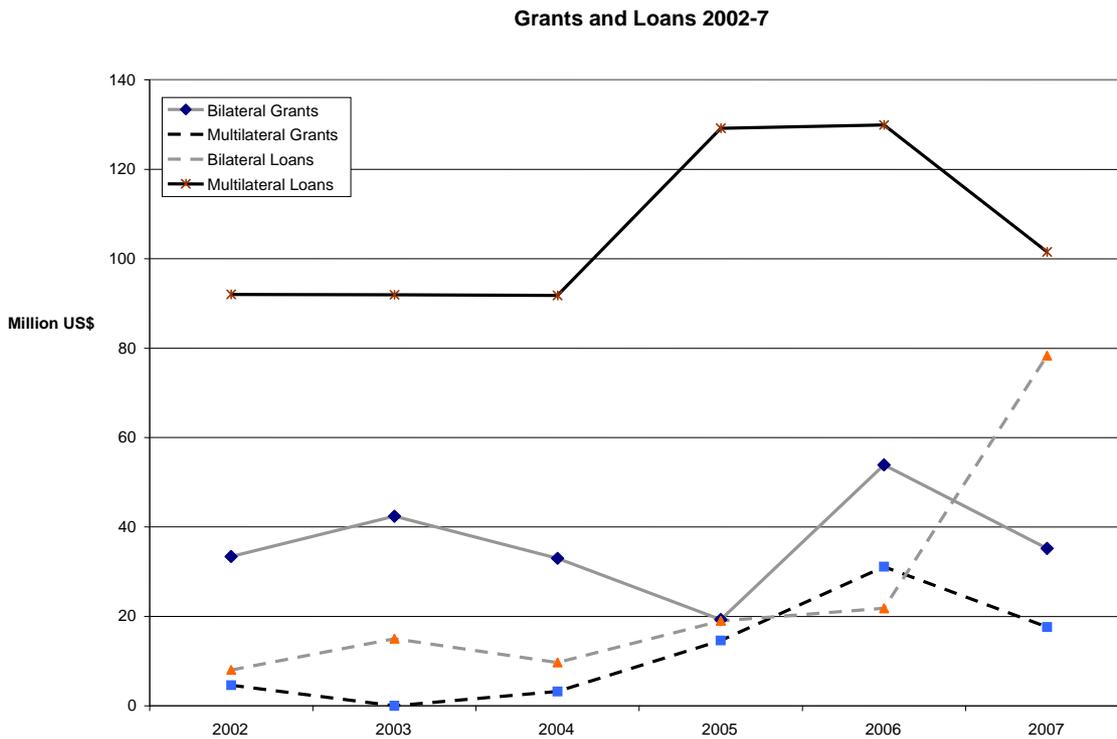


Source: Lao foreign aid report, 2005-6

With respect to grants and loans, figure 8 below illustrates the fluctuations of grants and loans over time in terms of absolute values. One key difference here to the CRS data is the value of bilateral

ODA loans. The CRS estimates bilateral loans to be relatively small (just US\$ 35 million over 2005-07), whereas the figure below shows a jump in the value of loans up to US\$80 million in 2007. Again this is not necessarily evidence of any conflict regarding CRS and local data, since this local data includes total ODA rather than purely DAC ODA.

Figure 7: Total Bilateral ODA Disbursements by Sector, 2005/06

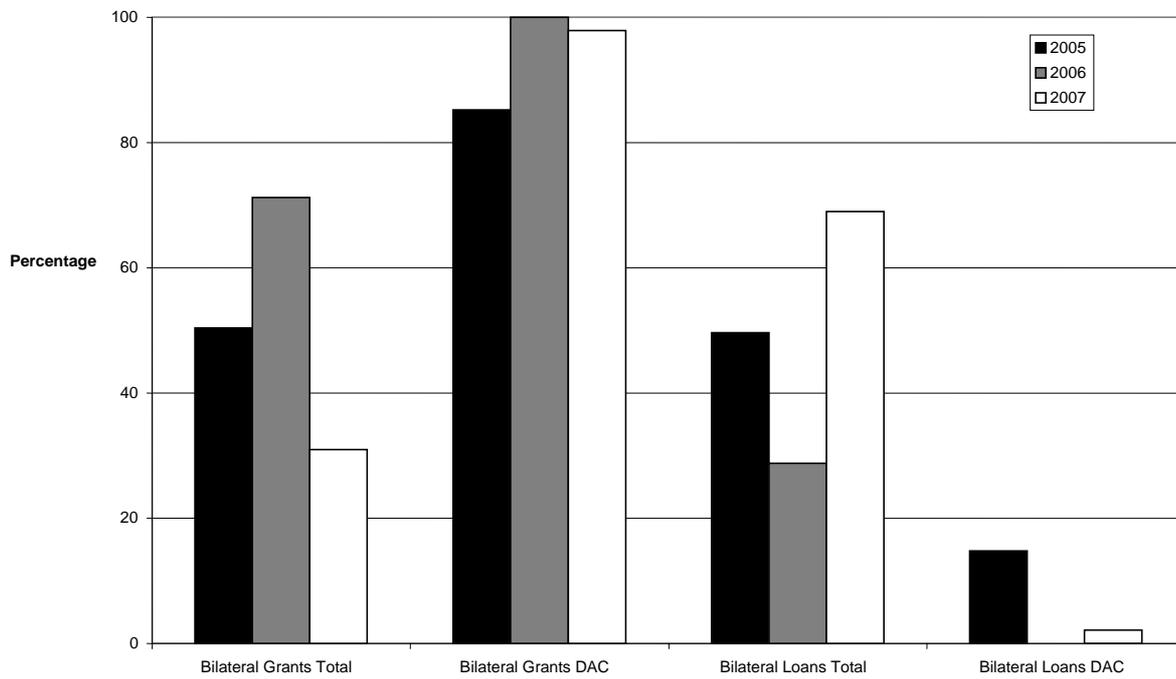


Source: Lao foreign aid report, 2005-6

This hypothesis is confirmed in figure 9 below constructed from in country data which splits grants and loans by ‘Total’ and ‘DAC only’ in percentage terms of ODA provision, and for three separate years (2005, 06, and 07). For example in 2007, out of total ODA from all donors, 70% was loan based and 30% grant based. However for DAC only ODA, 2% was loan based, and 98% grant. This suggests that non-DAC donors are driving the source of ODA loans in Lao PDR.

Figure 8: Percentage of Grants and Loans Received

Grant and Loan Percentages, 2005-7



Source: Lao foreign aid report, 2005-6

4. Econometric Analysis

4.1 Introduction - objectives and scope of investigation

This section investigates econometrically whether there is any evidence that bilateral aid and associated tying practices are trade distorting. The aim is to understand whether Official Development Assistance, its tying status and the different forms in which aid is provided (different aid instruments: loans and grants) have any discernible impact on aggregate donor export flows at the country level, in this case to Lao PDR.

The econometric investigation is undertaken for each of the six case study countries and an overall analysis for the six countries will be provided in the Draft Synthesis Report (DSR) for the Thematic Study. The six countries are deliberately paired according to trading region: Lao PDR, here analysed, is one of six studies including Vietnam, also in South East Asia region and ASEAN, Ghana and Burkina Faso in West Africa, and Zambia and South Africa in SADC region.

The chapter is organized as follows. Sections two and three respectively briefly describe the methodology and the data used. Section 4 provides the results of the empirical analysis of the relationship between aid and trade flows for Lao PDR and also compares these with those for Viet Nam.

4.2 Methodology

The basic idea is to find out what influences total bilateral exports of donor countries to Lao PDR. Hereafter, a range of possible explanatory factors are explored.

GDP and GDP per capita of donor countries, which proxy respectively for their economic size and level of development, are potentially important determinants of donor bilateral exports. It could be expected that the larger the donor country's GDP the higher the level of exports, with countries such as Japan or United States exporting more than Luxembourg or Switzerland.

Empirical investigations have found that bilateral trade between two regions (countries) is inversely related to the distance between them; distance usually proxies for transport costs as well as time,

unfamiliarity, market access barriers and so on. Common language, as in general the existence of common cultural factors, can help to facilitate trade flows between countries.

Aid flows from donor countries to Lao PDR might be a possible influence on exports; but it is important to distinguish between a donor's ODA and ODA that Lao PDR receives from all other bilateral donors. The basic idea is to consider whether there is any trade distorting effects of aid at an aggregated level by examining whether bilateral aid from a particular donor to a recipient country affects trade between that donor and recipient pair differently from aid from other donors. It could also be that certain aid instruments impact differently on trade flows; it might therefore be important to disaggregate ODA into loans and grants and keep distinguishing aid instruments based on the origin of the flows. Moreover, when a donor provides tied aid, the recipient is constrained to the purchase of donor country exports and so there is a direct link between formally tied aid and trade. The formal tying status of aid, computed as the percentage of donor ODA reported as tied, could therefore be a potentially important factor in determining bilateral exports.

There are other possible influences which should be taken into account: foreign direct investment is another potentially important influence on trade between countries as well as export credits. It has sometimes been suggested that the ACP-EU relationship might be an influence on exports from EU countries; so including a variable for EC disbursements is a way to explore further this relationship.

To investigate the above relationships, a gravity model was chosen; this model, used extensively in the literature, is adapted to the country level analysis to estimate bilateral export flows from DAC donors to Lao PDR incorporating many of the influences listed above as explanatory variables.

There might also be a number of unmeasured influences that affect both aid and exports in the model. The omission of variables representing such influences (either difficult to measure and unquantifiable relationships such as political ties between the donor and the recipient, or simply underlying relationships not identified as potential determinants) could lead to attributing too great an importance to the explanatory power of foreign aid. Aid could be proxying for a complex relationship including several of these omitted variables. In order to overcome this problem an OLS regression of imports to the donor from the recipient is estimated and the residuals from this regression are included in the

original equations. This procedure is carried out on the assumption that underlying relationships, and more in general unmeasured variables, between the donor and the recipient (trading partners in this case) affect imports and exports in the same way (Wagner, 2003).

Annex X includes further details on the empirical specification as well as the theoretical framework, a review of possible methodologies and a brief discussion of the problems in estimating the determinants of exports related to the nature of the aid and trade relationship.

4.3 Data

Empirical estimation includes 20 DAC donor countries to Lao PDR with observations covering the years 2002-2007 because of data quality issues and availability; further details are given in the Annex X. The bilateral trade data are from the IMF Direction of Trade Statistics database, ODA data are taken from the OECD CRS database and official export credits are as reported to the OECD.

The analysis uses aid disbursements and not commitments, because trade effects are expected to follow actual disbursements and not commitments. Data on the tying status of aid, however, is not available in disbursement form³⁷. Therefore, a proxy for the tying status is computed by applying the share of tied commitments to total commitments (average of the previous two years) and then assuming the tied share in disbursed aid to be the same.

Data for GDP and GDP per capita are taken from the World Development Indicators (WDI) Online database. All nominal variables (exports, export credits, GDP and GDP per capita) are deflated into 2000 constant US dollars using DAC deflators. Data for distance and common language dummy are taken from the CEPII Distance Database.

4.4 Results comparison with Viet Nam

Limitations on the availability and quality of the data, the small sample and potential problems with the econometric model, warrant caution in interpreting the results³⁸. Findings at the country level suggest probabilistic and not necessarily robust economic relationships. The Draft Synthesis Report

³⁷ In the OECD Creditor Reporting System, tying status is reported against new commitments only.

³⁸ See data section in annex for further details.

will provide a fuller and possibly more robust analysis comparing results from six countries, highlighting similar patterns and systematic differences.

The results for Lao PDR are presented in Table 4.1. In line with expectations and previous published findings, the size of donor economy seems to be an important determinant of bilateral exports. The parameter estimate³⁹ indicates that a 1% increase in GDP is associated with around a 0.7% rise in exports.

Aggregated aid flows from the donor have a significant impact on donor exports; differently, ODA from the rest of bilateral donors are not significant. Results indicate that a 1% increase in donor aggregate aid flows is associated with around a 0.3% rise in exports. This result confirms expectations for a country such as Lao PDR which has long been and still is highly dependent on donors' assistance. Such results could be suggestive of some informal or de facto tying of grants: it is difficult to explain why bilateral grants from a particular donor to a recipient country should affect trade between that donor and recipient pair differently from grants from other donors. It cannot be excluded however that aid flows result in an increase in trade with the donor reflecting the goodwill on the recipient part towards the donor or that the aid relationship might simply facilitate trade between the donor and the recipient increasing recipient's proclivity to procure goods from the donor (reinforcing commercial ties)⁴⁰.

When aid is disaggregated in terms of loans and grants, grants from the donor country are found to be positively associated with donors exports; a 1% increase in grants from the donor country causes around 0.3% increase in bilateral exports. Differently, grants from the rest of bilateral donors are not significant. Again disaggregate aid flows estimates could support the existence of some trade distorting effects of aid at least for grants; loans, which are an unimportant form of aid in Lao PDR, are not a significant influence on donor exports⁴¹.

The direction of the relationship between formally tied aid and exports is not found to be significant.

³⁹ The parameter estimates commented in this section refer to the last specification of table 4.1.

⁴⁰ See theoretical framework in Annex for further details.

⁴¹ Loans represent around 5.5% of aid flows in our dataset.

The statistical relationships found may simply highlight influences reflecting the available data; in the reality there could be other relationships often difficult either to identify or measure. The import residuals variable, which is used to control for such underlying relationships between the donor and the recipient countries, is highly significant and positive in all specifications, implying that special relationships between trading partners do exist and impact positively on the exports level. This result suggests the existence of a complex reciprocal relationship.

Other potential influences are found to be wholly insignificant: common language, distance, EC disbursements and the level of development of donor countries, measured by their income per capita level, have no impact on bilateral export flows.

Lao PDR and Viet Nam compared: it is interesting to compare results obtained for Lao PDR, a least developed country highly dependent on development assistance, with those for neighbouring Viet Nam (Table 4.2), also a low income country in the same trading area, ASEAN.

The results are broadly similar for the two countries, notwithstanding some differences in the basis of the computations⁴². GDP plays a significant role in explaining exports in both countries. There is no robust indication that formal tied aid is associated with higher bilateral export flows to either country. As expected, ODA levels are more strongly associated with higher donor exports to Lao PDR compared to Viet Nam, which is a country that relies much less on development assistance; however ODA from other bilateral donors is significant only in Viet Nam. The Viet Nam results therefore do not support the hypothesis that aid flows could be informally or de facto tied, as bilateral ODA from a particular donor do not seem to affect bilateral exports with that donor differently from ODA from other donors; however, at a disaggregated level, grants to Viet Nam, as to Lao PDR, are found to be potentially trade distorting. Again, grants to Lao PDR are more strongly associated with higher bilateral export flows than those to Viet Nam; this result could be explained by the comparatively high aid dependency which characterizes Lao PDR.

Import residuals are significant for both Lao PDR and Viet Nam suggesting a complex of reciprocal relationships between these countries and trading partners. A difference between Vietnam and Lao PDR is that whereas the variables for distance and EU disbursements are significant and negative for Viet Nam, in the case of Lao PDR both are insignificant.

⁴² Laos specification does not include export credits.

5. Consequences of untying for aid uses

Donor agencies that disburse official development assistance to their development partners typically have a number of different ‘aid uses’ (procurement, modalities, instruments, TA, etc) to choose from when making the disbursement. With each aid intervention, depending on the donor’s policy or for each individual case, a decision will be made relating to which method for delivering the ODA is most appropriate. These aid uses include the type of aid instrument i.e. whether it is a grant, loan, or mixed credit arrangement, and the aid modality which determines the channel of aid delivery, which may include general or sector budget support, pooled funding, project based assistance, channeling through NGOs, etc. It may also be the donor’s responsibility to determine the procurement procedures conducted with the aid funds, and the donor may or may not choose to provide technical cooperation to assist with implementation of a particular project funded by the donor. The choice of these aid uses will have different implications for Lao PDR, and may determine the untied status of the aid delivery or aid effectiveness. Alternatively the process of untying aid may influence the donor’s choice of aid uses (i.e. two possible directions of causality exist).

5.1 Procurement Options

Many donor funded projects in Lao PDR rely on competitive bidding for the procurement of at least some contracts on a project. Whether the competitive bidding process for a contract is extended internationally or nationally often depends on the threshold value on the contract. International competitive bidding (ICB) as a procurement option is associated as being most untied. In theory ICB is the most competitive and fair form of procurement because sourcing and nationality is completely unrestricted. Some donors are lowering the thresholds values for ICB in their procurement guidelines (e.g. EC) which has an impact on progress towards greater untying. Calls for bids are gradually being more widely advertised with the use of the internet (e.g. LuxDev advertises all tenders for their projects on their website), which is also contributing to the untying process. The World Bank is now trying to encourage bids from international applicants on all tenders.

National competitive bidding (NCB) procedures are also often competitive and international or foreign firms are normally still eligible to apply if they are aware of calls for bids in Lao PDR. It had been argued that NCB processes may be tied to Lao PDR, since quite often it is only local firms who apply, however in most cases the contract values are too small to be of interest to international firms. Single sourcing or direct hiring procurement procedures are perceived as uncompetitive and possibly tied. In some cases, however, this type of procurement is necessary, for example emergency

procurement, very small scale procurement, limited supply of qualified contractors, and procurement of spare parts. Overall in Lao PDR there has been a trend of procurement on ODA projects moving away from single sourcing to widely sourced competitive bidding, and hence contributing to the advances in untying aid. On the other hand, untying aid may also have had an influence on the procurement method i.e. encouraging the use of more NCB and ICB procurement procedures.

5.2 'New Aid Modalities'

The choice of aid modality by the donor for development assistance to Lao PDR can have an important influence over the untied nature of the assistance. Newer aid modalities, for example pooled funding and budget support, which are differentiated from the more traditional project based support, are often strongly linked with untying. With budget support, donor funding is disbursed through the government budget and is not tightly linked to specific projects and expenditure programmes. Meanwhile pooled funding may involve two or more donors whose funds are pooled into one account and are indistinguishable from each other. Budget support and pooled funding are recognised as untied by default since it is highly unlikely a single donor could enforce sourcing restrictions in these situations. Whereas project based assistance may be tied or untied, and depends on the rules and practices used on the project.

Project based assistance has in past has been linked with tied aid where a donor designs and implements a project which is based more on the donor's own interests and priorities, for example a project involving the use of specialist skills from the donor country or directly exporting the donor's comparative advantage goods or services. Although recently project based modalities have also been become more untied. Projects are now more frequently being identified and designed by government agencies, who then apply for donor funding. These projects are more in line with the government's development objectives and often also more untied and aid effective.

In Lao PDR, after discussions with donors, it was apparent that project based support is still the most common and popular aid modality among the donor community. Some budget support is provided by the EC (50% of their ODA commitments), and AFD channel some of their ODA through pooled funding. This is reportedly due to a lack of capacity and systems on the government side, such as accounting, reporting and monitoring and evaluation systems, which are required for newer aid modalities to be fully effective. Nevertheless, despite the continued use of traditional project support in Lao PDR, use of country procurement systems are being encouraged (e.g. AFD and SIDA projects), and Lao PDR untying practices are being observed in practice on ODA projects. As more

aid becomes untied, this may also impact the modality and result in the increase use of ‘new aid modalities’, although the direction of causality between untying and modality use trends is not possible to determine from this study.

5.3 Aid instruments

Aid instruments most commonly take the form of grants or loans, although other instruments do exist such as mixed credits. Lao PDR as an aid recipient receives almost entirely grant based ODA. According to CRS data presented in chapter 3, for the most recent data available in 2007, 97.9% of ODA was grant based assistance and 2.1% loan based. As indicated by the country’s LDC status, the Lao government is currently not financially or developmentally equipped to be able to repay ODA loans, therefore only ODA grant aid is accepted at the present time.

The implication of the choice of grant or loan for untying is not entirely clear in theory. For example one conjecture could be that with grant aid donors may feel they have more ownership over the funds compared to a loan and therefore become more inclined to tie their aid. From the empirical analysis in chapter 4, it was discovered that grants had a positive and highly statistically significant impact on exports from the donor to Lao PDR (a indicator for tied aid) from a cross section of donors, hence the choice of grant aid appears to favour tied aid. The econometric analysis found loans as an aid instrument not to have a statistically significant impact on donor exports to Lao PDR. However because loans only account for 2.1% of ODA to Lao PDR, the data is seriously lacking in this regard and not substantial enough on which to base conclusions of tying consequences.

5.4 Technical Cooperation

Donors in Lao PDR sometimes feel that it is necessary to provide technical cooperation (TC) to assist a government agency with project implementation in either specific projects or more general assistance. However TC provided on donor funded projects has proved to be one sticking point for the untying process and many donors still choose to tie technical cooperation. From the 2001 recommendation to untie aid, investment related TC, which denotes the provision of technical services required for the implementation of specific investment projects, is covered by the recommendation. Whereas freestanding TC, which is the provision of resources aimed at the transfer of technical and managerial skills or technology for the purpose of building general national capacity without reference to the implementation of specific investment projects, is not covered. So in theory donors should be making an effort to untie investment related TC. Statistics are currently not available for the extent both types of TC are being provided by donors in Lao PDR and their untied status.

However, a shift to using more investment related as opposed to freestanding TC is more likely to become untied since it is covered by the recommendation.

6. The process and *consequences of untying* – project analysis

The overall purpose of the Lao PDR country study is to focus on the association of different patterns of aid provision with untying of aid by donors, how goods are sourced with untied funds, and from which sources, followed by an impact analysis. The research design involves a selection of four currently active or recent bilateral donor funded projects in Lao PDR, which were subject to a detailed case study analysis in order to gain an understanding of how funds are disbursed; from the initial commitment to the procurement of goods and services at the primary level to the ground level. In order to gain a full picture of the untied status of a project, the project process must be looked at in depth, since there can be multiple levels of contracts and disbursements, each with their own tying status.

Once the disbursement and procurement process was mapped in each project case study, an in-depth analysis was applied for each project to determine the development and aid effectiveness implications for the recipient economy as result of the untied status of the project. This impact analysis focuses on two key areas; cost effectiveness of expenditures and procurement, and the development benefits to the recipient that arose from these expenditures.

The four project case studies (see Annex) were selected from the most active DAC donors in Lao PDR. To maximise comparability across the different country studies, efforts were made to secure case studies in the water and sanitation sector, although due to inactivity of donors in this sector, this was not possible from every donor. In these cases, projects from other infrastructure sectors were chosen, so that analysis of physical goods procurement could still be applied.

This chapter reports a summary of key findings of the processes used in the Lao PDR project case studies in terms of donor rules and donor practices observed in the course of the projects, and the role these outcomes play in determining untied characteristics of the projects. The subsequent chapter 7 is allocated for discussing the impact on aid and developmental effectiveness of project funds as a result of the processes used in practice and the untied status of the project case studies.

Table 9: Donor Aid Modalities, Procurement and Untied Status

Project	Donor(s)	Modality	Aid Instrument	Procurement					Nation alities	Untied Status
				Procurement Rules / Guidelines	Agencies in Charge of Procurement	Awarded Contracts				
						TA	Consul tancy	Civil Works		
Lao-Swedish Road Sector Project Phase 3	SIDA	Project	Grant funding: SIDA fund 70% of project expenditures. 30% funded by GoL	Government of Lao PDR procurement rules	All Contracts – Provincial departments of public works and transport. Managed by Local roads division at MPWT	2	0	150 approx.	Lao	Hybrid
Integrated Community Based Rural Development Project in Namor and Xay Districts, Oudomxay Province	EC	Project channelled through INGO	Grant funding: 75% from EU, 25% from INGO	EU procurement rules used throughout	INGO is the implementing agency and responsible for all procurement	0	3 individuals	5	Lao, German, Canadian	Untied
Nam Theun 2 Hydropower Project	AFD, World Bank	Project	Grant and Loan	World Bank procurement rules	Head Contractor single sourced by donors and has a turnkey contract	0	0	1 head contractor, 4 sub-contractor	French, Japanese, Lao, Thai	Untied
Project for Vientiane Water Supply Development	JICA	Project	Grant	JICA Grant procurement rules	Consultants – procured by JICA Civil Works – contracted by government executing agency	0	1 firm	1 head contractor	Japanese	Tied

6.1 Rules and regulations

Rules and regulations which are required to be followed throughout an aid activity play an important role in determining the untied status of aid. Often the most relevant and important sets of rules and regulations or guidelines to determine tying status are those relating to procurement, including construction works contracts, consultancy positions, and equipment.

The guidelines which are followed during implementation of a bilateral donor's project vary by project and by donor, and may be one of several different types. These are generally the donor's own guidelines from HQ, the donor's own country-specific guidelines, another donor's guidelines, the recipient government's guidelines, or a contractor's own guidelines. Similarly in the Lao PDR country study it was found that different guidelines were used for different projects. The EC and JICA projects both required use of their own (donor HQ) guidelines, the SIDA project used County Procurement Systems/GoL guidelines approved by the donor, while the AFD project required the use of World Bank guidelines.

Guidelines can have an influence over the source and nationality of goods and services on a project, the procurement options used (ICB, NCB, etc) according to certain threshold values, how contracts are advertised, how contracts are awarded, and other factors that determine the untied status of projects.

GoL guidelines used on the SIDA project were not found to contain any explicit sourcing restrictions tying procurement to either the donor country, Lao PDR, or any other source. The donor guidelines used on the AFD project contained no references to tying to nationality by regulation. However the EC guidelines state that eligible applicants must be either nationals of any aid recipient of OECD/DAC or an EEA member state, so therefore partially tied. The JICA guidelines for their grant project were the exception, where procurement of construction works and consultancy services is fully tied by regulation to Japanese national firms. However equipment procured under JICA grant aid is untied by regulation⁴³. Indirect sourcing restrictions (e.g. equipment specifications, specialized parts, or another requirements restricting sourcing implicitly) were not discovered in any guidelines used in the case study projects.

⁴³ Although a Japanese loan funded project was not adopted in the Lao PDR country study, procurement of both contractors and equipment under Japanese ODA loans is untied by regulation.

The procurement options required to be used on the projects, as specified in the guidelines, often varied with the value threshold. On all the projects in this country study only the AFD project had contract values that were large enough to validate an ICB procedure. (The Japanese project is tied and therefore not relevant). The SIDA project used NCB procedures for all contracts and EC values were below the NCB threshold, and required competitive selection only. In some cases contract lots with small values are specifically designed for a project to exclude international firms, while at other times it is considered a more efficient implementation method. Technically even with NCB, international firms are not excluded, therefore sourcing is not officially restricted to Lao nationality firms, but is still often unappealing to non-Lao firms, especially if they have no permanent local presence.

Advertising medium and language also influences the source of applicant firms for the project. All projects were required to advertise for contracts in national newspapers by regulation. The EC posts calls for tender on its website as well as at the delegation in Lao PDR and regularly holds information sessions about upcoming projects. Contracts issued by the implementing agency are also required to be advertised for NCB. On the SIDA project, advertisements were required to be published in national newspapers, appearing in both Lao and English. The JICA guidelines state advertising should appear in at least one newspaper in general circulation in the recipient country, the region (including neighboring countries), or Japan.

6.2 Practices

A description of donor rules is just one component of the analysis process when looking at the status of donor projects and their impact. It is also crucial that the practices and methods adopted during the implementation of the project at the donor and management level are examined. This is necessary to give a full understanding of how procedures are put into practice, and the true untied status of the project at each level. This may also reveal discrepancies between what is formally mentioned in the rules, and what actually happens during practical implementation.

6.2.1 Contracts at the primary level

Contracts at the primary level include all contracts issued for a project which were sourced by and signed with either the donor or government executing agency. In the case studies it was important to note whether this type of procurement in practice was consistent with the regulations, and what the final outcome was.

In the SIDA project, all contracts for road construction were signed with Lao firms in practice, selected using NCB procedures, which will include approximately 140 contracts in total by the end of the project. However during the project analyses it became apparent that the project was deliberately designed with small lots to make the contracts unappealing to international firms, an arguably anti-competitive but developmentally beneficial practice. By separating the road construction into around 20km lengths, the smaller lot sizes reduced the requirements for equipment inventory and capacity of the bidding firms, allowing smaller firms to be eligible. The fact that the relatively short sections of roads for construction were located in several different districts among 9 provinces, a large geographical area, also had a role in determining the high number of lots.

The EC project was designed to be implemented by an INGO, and the winning INGO from the quality-cost based selection was of German nationality. Although this INGO is of EU origin, the procurement procedure was found to be open and competitive and therefore untied in practice. This was the only contract held at the primary level with the EC, and the government was not responsible for any procurement for the project. All additional contracting and procurement was conducted at the secondary level by the INGO using EC rules.

The JICA project, tied by rule at the primary level, was also tied in practice for the two large contracts issued. The government agency, department of housing and urban planning, was technically the executing agency, with oversight by the donor and assisted by the Japanese consultant firm hired for the project. The two primary contracts included one Japanese consultancy firm, and one Japanese construction firm, officially under contract with the government of Lao PDR. For the AFD project, the head contractor is a French firm with a turnkey contract for the whole project, and was awarded the contract directly, and therefore *de facto* tied.

Out of the four projects, only the SIDA project was found to have project specific (or ‘investment related’) technical assistance, which is covered by the 2001 recommendation to untie aid. The technical assistance allocated to the GoL for this project was provided directly by SIDA, paid for out of the project budget, and was tied in practice, although a relatively small proportion of total project funds. JICA claims to provide free standing technical assistance to the government of Lao for general support in the water and sanitation sector, but not assistance specifically for the project reviewed in the country study.

6.2.2 Sub-contracting and workers at ground level

The EC project is one of relatively small scale, hence most of the contracts issued by the implementing German NGO are relatively low value and were sourced through competitive ‘negotiated procedures’ according to the threshold value (as opposed to larger scale advertised NCB). The contracts issued by the INGO for construction works were to individual Lao construction firms and workers, and contracting was untied in practice. For consultants, a combination of two international and three local consultants were used, with one international consultant from Germany. Since these consultants were procured using EC rules, and a competitive selection process was employed, even though one consultant was of EU origin, the procurement of consultants for this project is seen as untied in practice. For the SIDA project, no secondary or sub-contracts were issued, since all contacts were of relatively low value (generally less than US\$100,000) and did not require much diversity of work or specialist work which could encourage sub-contracting.

The French head contractor for the AFD contract issued five sub-contracts, dividing the main civil works by sub-contract (for example one sub-contract for dam construction works, another for the turbines and generator, etc.). Four of the five sub-contracts were procured using ICB processes following the head contractor’s rules and regulations (approved by the funding agencies), and one sub-contract was awarded directly without a competitive bid. The sub-contractors were of all different nationalities; three subcontracts were to Japanese firms, one to an Italian-Thai firm, and one including a consortium of European and Canadian firms. The procurement of sub-contracts can therefore be seen as untied in practice. More than ten sub-sub-contracts were also issued for the project, for the supply of construction goods to the project. However the information relating to nationalities of these firms or where the exact sourcing of their supplies is treated as confidential and un-available. Under the JICA case study project, sub-contracting did occur, although official records or accounts on sub-contracting are not held by the donor or executing agency. The Japanese head contractor could not release the information relating to sub-contractors on confidentiality grounds; therefore it is not possible to review the untied status of the project at this level.

All the unskilled labourers working on site for the four case study projects were Lao nationals and no project imported labour for basic construction duties. For the AFD project, 80% of all workers on site are Lao nationals.

6.2.3 Procurement of goods and services

During the project case studies, it was discovered that obtaining an account of procurement of goods and services used on the project such as equipment and materials, was not only the most challenging aspect of the case studies, but also generally least useful for determining tying practices. For example in several instances it was discovered that contractors for construction works procured very little or no new equipment with the project funds received. This was because companies were often required to already own most of the equipment to be eligible for bidding. The other difficulty lay in obtaining procurement information of goods and services from private contracted companies who were often unwilling to participate in contributing information for research of the project. Hence it has only been possible to summarize some basic factual information on procurement of goods and services on projects that was available and relevant.

For the EC project, the main goods procured included one four wheel drive vehicle and ten motorbikes. The manufacturers of all these goods were Japanese, and they were all bought from local suppliers in Lao PDR. Since the value of these goods were below the threshold value for NCB under EC rules, a competitive local sourcing procedure was applied, which purchases the goods from the lowest cost source, with a minimum sample of three. Hence the procurement of these goods is untied in practice. Other goods such as construction materials and services such as bridge construction for the project were also procured using a similar procedure, and all locally sourced, hence were also untied. Equipment goods used on the SIDA project were already owned by contractors, or hired short term for the project, and any other materials used in construction were purchased from the cheapest source available locally (although was not restricted to local sources), and hence untied. The SIDA PMU at the ministry procured a few items for use by the management including computers, digital cameras, and generators. These were also procured from the lowest cost source and untied.

Equipment sourced for the JICA project was unrestricted by rule, however the ground truthing mission for this case study told a different story. The visit revealed many items (including pumps, pipes, valves, tanks, control panels, and small cranes) that were clearly imported directly from Japan (most items appeared very unlikely to be stocked by local suppliers). A minority of equipment items were imported from Thailand (including some of the pipe material and lighting equipment), and most of the basic construction materials (including cement, sand, wood, etc) were procured from Lao PDR. Based on the fact that the head contractor was Japanese, this made it likely that most of the equipment used would also be imported from Japan, and therefore *de facto* tied. Further details of the equipment, as well as prices and reason for using the chosen source, were unable to be obtained form

the head contractor. Since the head contractor was Japanese (also responsible for procuring all the equipment), this may have been a major factor in determining the source of equipment due to familiarity with the equipment from experience, and relationships with regular suppliers. It was not clear if the donor directly influenced the chosen source of equipment. Details of the equipment procured under the AFD project were also not extensively available to the research team. It was discovered that most of the cars procured on the project were Toyota and Ford brands procured through direct purchase agreement with local dealers in Lao PDR, an untied practice, and among other equipment, water pumps came from India.

6.3 Conclusion from the process and consequences of untying aid

From reviewing the factual practices conducted with respect to procurement and sourcing on the four selected donor projects through in depth case studies, it has been possible to determine tying practices at different levels of each project. This is an important step in the country study in order to compare project rules with project practices on procurement, and noting their similarities and differences. This makes it possible to provide a descriptive snapshot account of untying in practice, and the performance of individual projects and donors in accomplishing the commitment to untying aid and improving aid effectiveness. An interesting point noted from the descriptive process of the case studies is that the tied status of a project is not simply a binary variable, but in fact there are many levels and components within a project which can be defined as tied or untied. To determine the beneficial impacts these practices have had on aid effectiveness and the development goals of the Lao economy, the practices accounted for in this chapter will be subject to analysis in the following chapter.

7. Aid and developmental effectiveness

In the course of this chapter, the descriptive findings from the case studies presented in chapter 6, will be analysed in as much detail as possible in order to relate the process of untying to the impacts on aid and developmental effectiveness. The practices related to untying at each project level across the four case studies will be examined to determine the impact on the three areas of aid effectiveness; cost effectiveness, general aid effectiveness, and developmental effectiveness. Cross effectiveness issues, or trade offs, between the three areas of aid effectiveness will also be considered.

7.1 Cost Effectiveness

In the context of this study, cost effectiveness is defined as the most cost efficient use of funds allocated to a specific project. Minimising costs as much as possible at every stage of a project by acquiring goods and services from the lowest cost source, while maintaining the minimum acceptable standards of quality, is said to be cost efficient. In the literature on the topic of tying, tied aid is estimated to increase costs by approximately 35% on average above the potential minimum total costs for an aid activity. Through untying aid, restrictions and barriers on sourcing goods and services are lifted, so they can be supplied from markets in potentially any country. By liberating sourcing restrictions, the consensus in the literature is that significant cost savings will be made (i.e. eliminating the 35% average cost increase), and result in an increase in the total amount of goods and services that can be obtained with the same value of allocated funds.

In determining the cost effectiveness of the way in which a project budget has been spent, the following project areas can be reviewed; the procurement of the key contracts (including construction and consultants), and the procurement of physical equipment and materials. In both cases, a basic cost effectiveness analysis can be applied, to compare the costs of the goods and services actually purchased during the project, with a lower cost or locally available alternative (i.e. comparison with locally available market prices of equivalent goods if available).

For procuring firms under contract for a project, practices described in chapter 6 show that some case studies used ICB or NCB procedures (depending on the value and threshold value). These procedures usually require firms to be pre-qualified for the position they are applying for, which ensures candidates have the minimum capabilities and capacity for the role. (These pre-qualifications differ according to the procurement rules used and are explained in each case study in the Annex). Out of the suitable registered candidates, the winning firm is the one with the lowest cost bid. Hence this

procedure is often considered to be cost effective as well as practical, and is a popular procurement method on ODA projects of varying sizes.

For instance, on the SIDA project, NCB procedures were used for all construction firms, where all winning bids were the lowest cost bids and all Lao companies. Procurement undertaken by the NGO for the EC project also followed similar procedures to a NCB but on a smaller scale not requiring advertising. Since the contract values were all relatively small, price offers and quotes were collected locally before selecting the lowest cost source, hence also a cost effective practice. Since tied TA occurred on the SIDA project, in the opinion of the research team, this was not the lowest cost source of services and therefore was not the most cost effective. The Japanese project was officially tied at the primary level, and the two key contracts issued are not considered cost effective since applications were only open to Japanese companies, and competitors from markets in other countries were excluded from applying. Having a broader scope of sourcing firms is likely to increase the number of qualified applicants, including lower cost applicants, and improve cost effectiveness. The French head contractor for the AFD project was found to have been recruited directly for the project and was not subject to international competitive bidding. However in this case the scale of the project was very large, requiring a head contractor with a large capacity for management and implementation, and much expertise in the hydroelectric power sector. Firms meeting the requirements for this contract are scarce relative to firms involved in smaller and more basic infrastructure projects, so this is one main reason for the direct sourcing practice.

For case study projects where price data of equipment or materials used on a project was available, a cost effectiveness analysis was performed. Traditionally tied projects are often associated with a large import component of equipment and materials from the donor country to the aid recipient development partner. This tied sourcing of goods is considered cost ineffective when similar or like goods are available in the recipient country, recipient region, or other donor countries at a lower cost, which is often the case. For the cost effectiveness analysis applied in this study, prices paid for goods on a project were compared with local market price data obtained from local suppliers of similar comparable goods. The ratio of the two prices (the price paid per item relative to the local market price) is calculated as an indicator for cost effectiveness. Hence very approximately, a ratio greater than one can be interpreted as cost ineffective- price paid on the project greater than the alternative reference price; and a ratio less than one interpreted as cost effective - a lower price was obtained on the project than the market price. In theory untied aid should produce a cost effectiveness ratio for goods close to one or less than one on average.

Price data was obtained for goods procured by the PMU for the Swedish road sector project (untied), including costs of digital cameras, desktop computers, and electricity generators. Procurement of digital cameras and generators was found to be cost effective with ratios of 0.86 and 0.47 respectively (i.e. the price paid for a generator was 47% of the market reference price). Whereas procurement of desktop computers had a ratio of 1.84 (more expensive than the reference price). The reason for this cost difference is not clear, but since the model of the computer used on the project is unknown, it is possible a top end model was purchased. Although the cost effectiveness of untied aid is likely to vary between the procurement of different goods in practice, this basic example shows how significant cost savings can be made when sourcing is unrestricted.

A similar analysis was conducted for vehicles procured by the implementing NGO for the EC project which was also untied. Here the Toyota Landcruiser had a cost effectiveness ratio of 0.43, indicating a large cost saving relative to the reference price; and the Honda Wave 125 motorcycles a ratio of 1.08, showing a small difference between the two price values. Hence the untied aid in the EC case study can also be shown to be cost effective.

Price data for the Japanese and AFD project was not available to the research team. However from the ground truthing visit to the Japanese project site, several items of equipment were noted to be imported from Japan, as described in chapter 6. Although no quantitative cost effectiveness analysis could be applied, it is highly likely that goods bought in Japan were more costly than similar or equivalent goods purchased in Lao PDR or neighboring countries. This provides a comparative case of cost ineffective use of aid funds which are tied to the donor country in practice.

7.2 General Aid Effectiveness

From studying the four donor projects in Lao PDR, some basic inferences can be drawn for the impact on aid effectiveness in a wider sense from untying aid. General aid effectiveness is defined in one way as the extent to which ODA to a recipient country is contributing to achieving specific development goals or targets. For example donors may be targeting ODA to improve economic or human development indicators such as GDP per capita, reducing infant mortality, increasing literacy rates and life expectancy, improved access to electricity and transport infrastructure, etc. Hence the greater the impact or contribution ODA has on achieving the development objectives, the greater the aid effectiveness. The Paris Declaration (PD) in 2005 formalised the five key principles for donors to follow as an instrument to improve aid effectiveness and encourage greater recipient government

involvement for more sustainable development. The localized version in Lao PDR, the Vientiane Declaration (VD) (2007), put these principles into a local context for improving aid effectiveness in Lao PDR.

From the Lao PDR country study, evidence has been found from the case studies of untied practices which are in accordance with the PD/VD principles and contributing to improving aid effectiveness. By identifying priority projects, designing the project themselves, and applying for funding from the relevant donors, as in the case of the SIDA project, Lao government ministries are taking more ownership of ODA projects which is an important component of improving aid effectiveness. In turn, by supporting the government with funds to implement these projects in the desired areas, donors are aligning themselves with government strategies. Although the JICA project was tied, the research team still found that there was an effort from the donor to encourage some ownership of the government, for example the government originally identified and requested funding for the project, and contracted the head contractor and consultants. This suggests that untying is not strictly a prerequisite for pursuing the ownership principle. However the donor still maintained a large amount of involvement in this project on other levels, for example using donor procurement guidelines. From this case study, the fact the project was tied did also not rule out alignment principles practiced by this donor. Japan is regularly involved with round table meetings, donor review meetings, and aims to support development strategies of the government through funded projects.

The untied nature of the SIDA project saw the use of country procurement systems, management of the project at the central level, and implementation at the provincial level. The ministry was also responsible for its own accounting, auditing and monitoring procedures during project implementation. This type of government involvement and ownership supported by capacity building activities has positive implications for overall aid effectiveness. The mostly untied EC project similarly contributed to improving overall aid effectiveness by encouraging government participation at the provincial, district, and village level. Although the NGO implemented project was relatively small scale, some members from government departments were heavily involved with the project. Representatives from the provincial agriculture office were included on the project steering committee, and cooperation between government departments including agriculture, forestry, and education departments was initiated. The AFD hydroelectric dam project supported the Lao government's strategy of developing and expanding Lao PDR's hydroelectric power sector as part of a national development strategy to increase electricity output for export to neighboring countries. This donor and project alignment with government development policies results in the aid being used more

appropriately and channeled to the area targeted by the government for development, and hence is more effective. It is the opinion of the research team from conducting these case studies that untying and fulfilling the ownership and alignment agendas are linked and certainly positively correlated. However the extent of this linkage can only be determined by further investigation on the topic.

It has been observed that by untying their aid, donor's aid processes in Lao PDR are gradually becoming more led by the government of Lao PDR and less influenced by the donor's own priorities and interest groups, having positive implications for general aid effectiveness. Round table meetings are held annually between the group of international donors and the government for the purpose of supporting the alignment principle and aid effectiveness. To ensure their ODA is collectively harmonized to reduce overlapping, the donor community in Vientiane meets quarterly to review and coordinate their activities for effective aid use.

7.3 Developmental Effectiveness

Developmental effectiveness refers to the longer term dynamic social and economic impacts of the sourcing of goods and services for ODA funded projects. It has been perceived in the literature on the subject that the process of untying aid will have positive implications for development of the recipient economy, such as increasing local employment, incomes, productivity (knowledge transfer), use of local suppliers, etc. However the extent of the benefit may be limited depending on factors such as local market capacity, market potential, and the availability of goods and services (e.g. if more varieties of goods are available there is less of a need to import).

Across the three majority untied donor case study projects (AFD, EC, SIDA), it was found that a large proportion of the labour was sourced from Lao PDR, including labour employed by contracted companies, and contracted individuals. Both skilled labour (e.g. experts, consultants, engineers) and unskilled labour (e.g. construction workers, labourers) were found to be mostly (but not entirely) sourced from local labour markets. Clearly an absence of restrictions on labour sourcing, allowing freedom to procure local workers if appropriate and at the implementing agent's discretion, has economic benefits to the Lao economy. Not only is the employment rate of Lao workers and total real income increased, but workers gain useful experience and learn valuable technical expertise through knowledge spillovers by working alongside their international counterparts and through organised training activities. This can have positive long term developmental benefits by increasing the aggregate stock of skills and productivity of Lao workers, leading to a higher economic growth rate. Although local sourcing of labour on untied projects is popular due to its cost efficiency and

development benefits, currently not all labour skills required for projects are available locally. This is partly due to the country's relatively low level of economic development where local highly skilled professionals and variety of skilled labour is scarce. Hence on the untied case study projects, international consultants and technical advisors are also being recruited. The JICA case study provides an interesting comparison case as a tied project. The contracts issued at the primary level for this project involved construction and consultant companies which employed only Japanese labour. In contrast this provides relatively little development benefit to Lao PDR through employment during the implementation and construction of the project. However at the lower level the project was untied and it was noted that the unskilled construction workers were of Lao nationality, providing some economic benefit.

Besides the sourcing of labour, the sourcing of capital/equipment and materials from local markets as a result of a project's untied status can also have a beneficial impact on the country's development. For the three largely untied projects, most equipment was sourced locally (where information was available), such as motor vehicles, computers, electricity generators, and digital cameras. This has positive developmental effects by boosting incomes for local suppliers, as well as helping to develop a local market for goods which may have previously have only been purchased by project implementing agents directly as imports.

For the JICA project, relatively little development benefit would have been brought about through this channel of sourcing goods from local producers, since many items of equipment were directly imported from Japan (even though the procurement of equipment is untied under Japanese procurement regulations). However it can be argued that much of the project equipment (e.g. electronic control panels and modern water pumps) was purchased from Japan for other very valid reasons, and not purely based on lowest cost objectives. For example, quality plays an important factor, especially for technically advanced equipment items such as computers and control panels. Moreover, the head contractor may be unfamiliar with sourcing from local markets and lack local market information on availability, quality and suitability of equipment. Specialised equipment is likely to be unavailable locally, and the contractor is more likely to be trained and experienced with the design, installation, correct specification, reliability and operation of Japanese equipment. Existing relationships with suppliers with Japanese may also have an influence on the sourcing choice.

Basic construction materials such as cement, sand, steel, pipes for all four case studies were found to be purchased from local suppliers, which was not a surprising discovery since most materials are available locally and cost less than imports. Again this has economic benefits for local suppliers and producers of these materials.

7.4 Cross effectiveness issues

An interesting discussion point on the topic of impacts of untying aid on aid effectiveness is whether there are any trade offs between the different types of aid effectiveness (i.e. between cost effectiveness and developmental effectiveness). Untying aid may lead to procurement of goods and services from the cheapest source, but it should also be ascertained if these goods are necessarily appropriate for the recipient and consistent with the county's development needs and objectives. A key argument is that when the cheapest goods and services are procured from untying, developmental effectiveness is adversely affected in terms of the goods not meeting the sufficient standards to achieve the development goals of the project. Negative factors associated with lower cost goods could include poor quality of goods lacking internationally recognized standards, health and safety concerns, cost of repairs, no guarantee conditions, etc. Similarly less cost effective/more costly goods could be associated with the reverse of these development factors in the opinion of the research team based on finding from the study.

For instance, if the completed water treatment plant for the JICA case study project had been constructed with the lowest cost equipment available (and assumed lower quality), and considering no other factor, this may have given development benefits to local suppliers or producers. Whereas on the other hand, the aggregate welfare cost to Lao PDR from poor quality facilities, low sustainability, and high repair costs, etc. could easily outweigh the benefit to local producers and suppliers in this scenario. In this case, importing the more costly and higher quality equipment from Japan would be more developmentally effective in the long run (a net positive developmental effect). However in practice it is not feasible to accurately perform this type of cost benefit analysis. It can be argued that for quality purposes and for compatibility of the equipment, it was important that Japanese equipment was imported for the effectiveness of the end product and success in delivering development results intended from this project (although less cost effective). JICA emphasised that their goal is to complete projects with sustainability in order to deliver development results, and procurement is a very important step in this process. It can be argued that similar quality goods could have been procured from other countries besides Japan, however the Japanese head contractor may not have had full market information of the good or technical know how of non-Japanese equipment.

From the overall Lao PDR country study, there has not been much evidence of a trade off between these two types of aid effectiveness (i.e. the two are not necessarily mutually exclusive). Instead often a balance is struck between cost and quality/suitability which has positive implications for development. Most projects have outlined quality specification prior to implementation including in bidding documents and project designs, for example standards and specifications of goods, and abilities and experience of construction firms and consultants. As long as these requirements for the project are met then the lowest bidder or lowest quote wins. For construction materials, a quality-cost trade off is rarely an issue due to the small variation in quality of basic materials such as cement, and with most basic materials are available locally, the closest cheapest source is almost always selected. Consultants also often have a role in monitoring progress and quality control of construction projects to ensure that acceptable standards are reached. Evidence also shows that where necessary untied projects still import goods to meet quality requirements (e.g. pumps from India for AFD project, and not necessarily always the cheapest source).

Hence it can be concluded from the project case studies that cross effectiveness issues are not really a concern in Lao PDR due to the precautions taken to ensure that inputs to projects are of a decent standard and quality to ensure development results as well as cost efficiency. Untying is still to be considered aid effective in both forms.

7.5 Issues of Implementing Untying

The decision for donors to implement a policy of untying their aid by rule and regulation is a policy decision made by the donor's HQ and the same rules of untying will almost always apply to all of the donor's development partners. Therefore at the donor country office in Lao PDR, country specific factors are highly unlikely to play any role in enhancing or impeding untying of ODA to Lao PDR by donor rule. As discovered in the Phase I report, untying is increasing which may be driven by a sufficient adjustment time period since the 2001 recommendation to untie, as well as following examples of other donors. Barriers to untying could perhaps include pervasive domestic interests and continued support to donor's domestic industries.

On the other hand, untying in practice (when donor rules are already untied), can be influenced by country specific factors. Availability of goods and services in Lao PDR is a key issue for successful implementation of untying to result in increased sourcing of goods and services from within Lao PDR

and to realise increased developmental benefits from ODA. Lao PDR is an agricultural and primary resource based landlocked economy, and has a relatively undeveloped manufacturing and service sector, and most imports originate from Thailand, Vietnam, and China. As a result advanced equipment for some ODA projects are not available locally, which can lead to imports from the donor country and *de facto* tying practices, such as in the JICA case study project. Similarly skilled labour and technical expertise is scarce in Lao PDR - the national enrolment rate for tertiary education is just 5.2 per 1,000 people (UNESCO, 2008). Many positions in ODA projects require skilled labour and this may also have to be imported if not available locally. Availability of goods and services may not be necessary for increased untying where a greater proportion of goods and services are sourced from the region e.g. Thailand, or other OECD countries, although this outcome is less developmentally beneficial to Lao PDR.

In sum there are currently still some factors impeding further untying of ODA to Lao PDR in practice, namely availability of certain equipment and skilled labour. However there are good prospects for increasing the proportion of genuinely tied aid in the future as the Lao economy develops and becomes more diversified into the manufacturing sector, increases international trade, and increases its stock of skilled labour.

In terms of the Lao government's opinions and support for implementing untying of aid, as a signatory of the Vientiane Declaration, they see themselves as committed to supporting the aid effectiveness agenda including untying of aid to Lao PDR. The Department for International Cooperation (DIC) under the Ministry of Planning and Investment are the focal point for organising and coordinating international aid to Lao PDR, and is the overall coordinating agency for the Country Action Plan of the Vientiane Declaration on Aid Effectiveness. After meeting with the DIC, it is clear that the agency takes their role in untying and aid effectiveness seriously, and is involved with monitoring and assessing progress towards the objectives outlined in the VD, to help ensure a successful outcome. After meeting with line ministries involved with project case studies, it is also evident that officials at this level of government are also aware of the issue and the benefits of untying aid. However it was also apparent that executing agencies in the government ministries are not in a financial position to put up resistance to aid which is tied by the donor, as in the case of one of the project case studies. In this situation the ministry is willing to accept the funding and contracting recommendations by the donor, even if these may be tied. In the future the government of Lao PDR may encourage increased untying practices by developing a national procurement law more focused on open and unrestricted procurement.

8. Conclusions

The findings of the research exercises conducted for this study have been presented in this report as a detailed description of the untying of aid process by bilateral donors in Lao PDR and an investigation into the impact of untying on aid effectiveness. The analysis and evaluation of the different issues relating to untying of aid explored in this report have been based on country level information and four in depth project case studies.

In terms of a general overview of aid to Lao PDR, it was found that several DAC member donors are currently active in the country, committing over US\$200 million of ODA in 2007 (CRS, OECD). Lao PDR is considered heavily dependent on ODA in several sectors and donors supply aid mostly in the form of project based aid modalities. The government does not currently have a level of capacity sufficient enough to receive large amounts of budget support and pooled funding modalities and to take a large role in ownership regarding ODA. However this is gradually changing through the introduction of capacity building projects, use of country procurement systems, TA, and greater roles played by government executing agencies. Aid instruments were found to be almost entirely in the form of grant based assistance, due to a lack of government funds available for loan repayments. The majority of total ODA from DAC donors to Lao PDR is now untied (70.4%, CRS, 2007) according to donor reporting figures to donors' headquarters, and has shown a steady increasing trend over the last decade. In the view of the research team through information collected from donor meetings and in depth case studies, this untied figure appears accurate for DAC donors, although is certainly lower for all donors. Based on the information collected for this study, it seems logical that the next step for untying aid in Lao PDR is to increase the proportion of untied aid from non-DAC donors, some of whom are also signatories to the VD (e.g. China, Korea), as well as increase the proportion of untied aid from DAC donors. These steps would contribute towards reaching the overall target of achieving 99% of untied aid by 2010 as stated by the Recommendation. Other prominent bilateral donors to Lao PDR could also be encouraged to follow the principles presented in the VD and improve untying and aid effectiveness in near future (e.g. Vietnam).

From the in depth project case studies it was found that projects as a whole cannot simply be classified as tied or untied, but in fact there are many levels of a project which may have minor tied components. Overall three out of four case study projects were found to be largely untied. Some areas of de facto tying were still discovered, including the areas of TA, head contractors, and equipment. Interestingly though, no equipment or materials in the EU, SIDA and AFD projects were

found to be tied, a typical area of tying in the past. This may be a signal that tying is shifting away from the more obvious and traditional tying practice of donors exporting goods for their projects, and more towards tying services of donor origin.

Using the detailed account of the disbursement of donor funds and procurement performed in the case studies, the study focused on analysing these practices to determine the impacts on aid effectiveness. The conclusions reached from this analysis were that the aid funds on untied projects were overall used efficiently, and competitive and unrestricted procurement mechanisms such as ICB and NCB ensured low cost contracts and items were bought. Developmental effectiveness from untied aid was concluded to be positively impacted through such channels as increased local skilled and unskilled employment, sourcing of goods and services from local suppliers, and knowledge spillovers. Cross effectiveness issues are assumed to be minimal as a result of quality standards of goods and services on projects.

The impact on aid effectiveness from untying aid analysis was limited somewhat by the availability of procurement and price information. Contractors had little incentive to participate in the study and had existing stocks of equipment so very little procurement was performed by contractors on a project.

In conclusion, the Lao PDR untied aid country study has provided a very useful contribution and rare insight into the practical functioning and processes of different donor funded infrastructure projects in the context of a South East Asian LDC; a useful contribution to an area with very little previous investigation. The benefit of the study is it has enabled the identification and separation of the components of a project where untying and tying are occurring, and has showed that most donor projects in Lao PDR are close to fully untied in practice. In addition the implication of the untied status of projects for cost effective use of aid and developmental effects for the Lao economy were discussed in reference to key findings from the case studies, and found to have an overall beneficial impact on aid effectiveness. To improve the untying process further in Lao PDR, and aid effectiveness in general, it can be recommended on the basis of this report that further steps are taken to encourage newer aid modalities (e.g. budget support) and increased use of country procurement systems. Further action could be taken to untie the service components of projects by developing the skilled labour sector through education and training activities, and increasing the supply of qualified consultancy services in Lao PDR.

ANNEX: Project Case Studies for Lao PDR Untied Aid Country Study

- **Annex A: Case Study of the Lao-Swedish Road Sector Project Phase III (SIDA)**
- **Annex B: Case Study of the Integrated Community Based Rural Development Project in Namor and Xay Districts, Oudomxay Province (EC)**
- **Annex C: Case Study of the Nam Theun 2 Hydropower Project (AFD)**
- **Annex D: Case Study of The Project for Vientiane Water Supply Development (JICA)**

Annex A: Case Study of the Lao-Swedish Road Sector Project Phase III (SIDA)

1. Background

The Lao-Swedish Road Sector Project Phase III (LSRSP3) is a road and transport sector project designed to provide basic access construction of roads to remote village communities, and apply maintenance operation to existing rural roads in 26 of the 37 poorest districts selected from the National Growth and Poverty Eradication Strategy (NGPES), in the eight northern provinces of Lao PDR. In January 2004, the Government of Lao PDR, through the Ministry of Public Works and Transport (MPWT) requested continued support to the road sector from SIDA. Preparation for the next phase of the Lao-Swedish Road Sector Project (LSRSP 3) was then initiated, based on the present policy framework, sector analyses, as well as analyses of poverty and growth in relation to road sector development.

The Basic Access Component (BAC) of (LSRSP3) commenced on 1 October 2005. Tenure of the project is 4 years, ending in December 2009. The main objective of the project is to ease poverty through improved Basic Access within remote poor districts, particular to villages with limited access located in the 8 Northern provinces of Phongsaly, Bokeo, Luang Namtha, Oudomxay, Huaphan, Xiengkhouang, LuangPrabang and Xayaboury. The ultimate goal of the project is to create an increased sustainable basic access, leading to increased access and decreased transport problems in the districts.

2. Objectives and Methodology

The main purpose of this case study is to take a micro level approach in tracking donor funds for a specific project from commitment by the donor to disbursement by the lead implementing agency down to the ground level. From this account, funds dispersed will be investigated to determine the organisations involved with the disbursements, the procedures used at each stage, and the exact source in terms of countries of origin of the goods purchased and services employed for the project. A key feature of these case studies will be to identify factors which led to the discrimination of goods and services on the basis of nationality and how this occurred, for example a rules and regulations based explanation, or due to an organisation's practices. The second step of the case studies will be to assess the impact of the sourcing of contracts on the cost effectiveness and developmental effectiveness of the original disbursement for the project.

To gather the necessary information required to meet the objectives stated above, several different sources, both primary and secondary, had to be investigated. The primary sources included having face-to-face meetings and discussions with those individuals directly involved with the project. This occurred on the donor level with the SIDA head of development cooperation and the SIDA LSRSP3 Project Manager. At the executing agency, meetings were held with the Director of the Local Roads Division, Department of Roads at the Ministry of Public Works and Transport, with the International TAs placed within the division, and with the Director of Disbursement Division at the Department of Roads. Telephone interviews were held with contractors for road construction in Luang Prabang province. In addition documentation had to be collected and referred to including annual project reports, disbursement reports, bidding documents, and procurement guidelines.

3. Project Structure

The project consists of two main components:

1. Basic Access Component (BAC) located in the northern 8 provinces
2. Maintenance Component (MC) located in 17 provinces nationwide

The BAC is main component involving a construction element, so is therefore the most relevant component for the case study. Hence this case study will focus mostly on the BAC.

The BAC has three main aims:

1) Capacity Building- including rural engineering development, staff training, and a study visit. Skill improvement for the concerned staff, from the Ministry level to village level through the Provincial Department of Public Works and Transport (DPWT) and the District Office of Public Works and Transport (OPWT) is one of the focus areas of BAC. The project focuses on using the available knowledge, systems and policies within the concerned GoL organizations.

2) Tools/system development- operation rules, participatory rural transport planning

3) Physical Access (construction). The BAC is designed to provide basic access to the 26 poorest districts in the 8 poorest provinces (all northern) by constructing district rural roads.

In total around 300-400 km of district and rural roads are constructed per year under the BAC (costs are estimated at approximately US\$ 6,000 per km). By constructing very simple rural dirt roads which are designed to receive only a low volume of traffic, remote and isolated villages can be linked to other villages and to the outside world. This is expected to alleviate poverty and improve welfare of the population in the target districts for road construction. By providing basic access to villages, villagers can gain access to local retail and employment markets, as well as having greater access to social services such as health care and education to improve overall wellbeing. The roads which are built from the beginning stages are only basic and narrow dirt roads which are enough to provide much more convenient access to villages and reduce travel time significantly by accommodating vehicle transportation. However, due to the material of the road surface, the roads are not as durable as regular paved roads, particularly in the rainy season. Hence the ‘maintenance component’ of the project also plays an important role.

The project is designed in a way to promote and increase capacity in both the government and private sector. The project uses a ‘labour based equipment support’ approach where construction aims to maximise the use of labour and local markets and minimise the use of heavy equipment which is more likely to be imported. Community participation and involvement with the project is encouraged both during construction for the BAC and for the maintenance component, for which a village maintenance committee is established. Emphasis is placed on the community taking ownership and responsibility to some extent for the construction and maintenance of the roads they are benefiting from. Under government labour laws, each household is required to supply two days of labour per year (e.g. bush cutting). The BAC supports the government’s poverty reduction programme, therefore the project is

fulfilling the alignment goal for aid effectiveness outlined in the Vientiane Declaration. The project designed not to involve foreign currency and support local markets

4. Funding Arrangements

In this project, SIDA is the single donor, funding 70% of all project expenditures. The remaining 30% of all expenditures is financed by the Government of Lao PDR. SIDA funds are transferred from SIDA in Stockholm to the account of the Ministry of Public Works and Transport held in Bank of Lao PDR. Government of Lao funds (30%) are similarly transferred to this account for the project.

The total funding over the four year project period was a 140 million SEK grant from SIDA (20 million USD) and 63.22 million SEK contribution from Government of Lao PDR (9.03 million USD).

The project budget, prepared on an annual basis, is divided between capacity building activities (TA, training, engineer courses, study trips, workshops) and physical access activities (basic access construction, baseline survey, equipment support).

Budget 2007-08: 19.05 Million SEK

- 2.9 million SEK for capacity building activities
- 16.15 million SEK for physical access activities

- 14.3 million SEK from SIDA
- 4.75 million SEK from GoL

Budget 2008-09: 17.04 MSEK

- 13.55 million SEK from SIDA
- 3.50 million SEK from GoL

Government Role

For both components of the LSRSP3 project, the executing agency is the Department of Roads (DoR), Ministry of Public Works and Transport (MPWT). Within the Department of Roads, the Local Roads Division (LRD) is responsible for managing the project, supported by two full time technical

advisors (TA) provided by SIDA. Along with project management, this division is also responsible for coordinating with the donor and provincial departments, and ensuring the procurement guidelines are being implemented effectively. DPWTs and OPWTs in the provinces and districts respectively are responsible for project implementation.

MPWT prepares an annual work plan and budget submitted to the SIDA local office in Vientiane for approval. Once approved, the budget has thereafter is occasionally revised and adjusted to cover some of the risk of exchange rate fluctuations.

The provincial DPWT and district OPWT in the eight Northern provinces where the basic access component takes place are responsible for implementing the project locally. The provincial departments manage their own finances received from the Department of Roads (of the combined SIDA and Government of Lao project funds), and are responsible for all procurement of construction companies. This method of implementation was part of the project design to improve government capacity at the central and provincial level by increasing government ownership. The only procurement guidelines used in this project for procurement of contractors are MPWT's own guidelines approved by SIDA.

The Disbursement Division (DD) within the Department of Roads is responsible for disbursement of funds to the provincial departments and monitoring all expenditures at the provincial level for the project which are reported to the division every month. The Disbursement Division at the MPWT conducts an annual audit by a third party, which is an addition to an annual audit by SIDA.

The Steering Committee (SC) is in place to review the project as and when necessary, and is comprised of representatives from provincial departments and DoR, MPWT. The SC meeting are supposed to take place on a quarterly basis, or "as and when needed"

5. Tender and procurement process

Guidelines for the selection of TA Consultancy Services

The TA team is headed by a Team Leader/Rural Accessibility Advisor who is assigned to assist the LRD, DPWTs and OPWTs. The TA team includes also two Community Road Model (CRM) Development Advisors and three Community Road Model Implementation Advisors, mainly responsible for the CRM and physical implementation. The CRM is the model established to enable participation of the beneficiaries of the rural transport infrastructure through a bottom up planning, implementation and maintenance approach.

The LRD with assistance from the TA has designed simple tools for Monitoring and Evaluation (M&E) for the management of Basic Access. The M&E enables the concerned parties to oversee the progress and impact of the BAC intervention in the poorest districts. The TA has in addition received training in GIS and planned strengthen the capacity on this to counterpart staff of LRD in coordination with other related units at DoR.

The TA consultants were recruited through project funding with a separate contract agreement with SIDA. The two international advisors at the LRD were recruited by the Swedish consultancy firm Haifab.

Guidelines for the selection of Contractors and construction work

The process of procuring construction works was undertaken by provincial departments of public works and transport, following national competitive bidding procedures. Contracts for construction of each segment of road specified in the project were open to bidding. The provincial departments evaluated each group of bids for a contract using a standard bid evaluation guidelines issued by MPWT which are based on the World Bank tender evaluation guidelines, and are approved by SIDA.

Invitations for sealed bids from contractors for each section of road under the project were advertised in local and national newspapers in English and Lao language (and also television and radio) by provincial departments for public works and transport. The advertisements give information of the starting and finishing points of the road construction by village name (sometimes more than one section of road was included in one invitation for bid), and the length of the sections of roads needing construction. Bidders had to be eligible registered companies, and applicants had to pay a non refundable fee of 1,000,000 Kip (118 USD).

From the MPWT guidelines, for contract values up to 1,000,000 USD, a National competitive bidding procedure must be conducted using the MPWT standard bidding documents. Above this threshold value, an International competitive bidding procedure must be used. However for this project, all contract values were below this threshold, therefore only national competitive bids were conducted.

In the Government of Lao procurement guidelines, based on World Bank guidelines, and approved by SIDA, there is no evidence of any explicit rules which suggest any forced tying outcomes with respect to procurement of goods and services for the project (i.e. no rules limiting procurement to the donor

country or another specific country or region). Similarly there is no evidence of other specific regulations or requirements which could lead indirectly to tying, such as technical specifications of equipment for the project.

Tender Evaluation

Bids are evaluated by members of the tender evaluation committee for each construction works invitation to bid. After the public opening of sealed bids, bids are checked for validity, and then evaluated. Evaluation includes verification of bids- making sure no errors or mistakes were made, and checking eligibility- all bidders must be pre-registered. If all other conditions are satisfied, the lowest evaluated cost bidder will be awarded the contract.

6) Results of Procurement on the Project

Contracts at the primary level

The following table gives a list of firms who successfully won their respective bids and were awarded contracts in 2008/09. In this fiscal year alone, 35 contracts were awarded for the basic access component of the project with a total value of 14,393 million Kip (1,693,000 USD). In fiscal year 2007/08, 31 contracts for construction works were awarded with a total value of 21,849 million Kip (2,570,000 USD).

Table 10: List of Contractors in 2008/09

Name of contractor	Access Start at Village	Access End at Village	Estimated amount excluding villager contribution	Contract Amount	Accumulated Physical progress	Planned completion date	Actual completion date	Remarks
Company	Name	Name	MKIP	MKIP	%	dd-mm-yy	dd-mm-yy	
Xaychalern bridge construction Co. LTR	B.Nasan	B.Sopv aek	644.7560	224.000	100%	20.05.09	19.02.09	224 MKIP, 3Km only provincial fund(planned 10.50m)
Agri Dev Imp-Exp and Rd&Brdg Company	B.Xontay	B.Hou aysang	523.84	571.270	30%	20.05.09		Suspension bridge (70 m)

		on	9					
Agri Dev Imp-Exp and Rd&Brdg Company	B.Sobheng	B.Kha	661.995	693.205	100%	20.0509	19.0209	
Provincial R&B Co. Ltd	B.Tha	B.Phonhom	437.760	376.480	100%	30.0409		
Phothavong Co. Ltd	B.Doneanh	B.Namkham	516.810	434.390	90%	30.0409		
DM Co. Ltd	Rd. 3604	B.Pakpet	172.350	130.460				Synergy project
Provincial R&B Co. Ltd	B.Pangbong	B.Kewngew	596.370	713.100				
Vianchaleun Co.Ltd	B.Thong	B.Pangbong	174.000	78.000				Estimated cost 1563.950 MKIP, Partner contribution 1389.500 MKIP, Synergy Fund 174 MKIP
DM Co. Ltd	B.Namtanh	B.Namtom	315.030	238.700				
Phothavong Co. Ltd	B. Phonchanh	B.NamNhang	217.400	108.108				Estimated cost 309.660MKIP, Partner's contribution 92.260 MKIP
Muengpaylin Rd & B Construction	B.Vangpom	B.Hatmuok	498.080	278.450		30.0509		
	B.Namkha	B.Keankham	214.455	135.330	30%			
Subbounthavee Rd & Brd Construction	B. Houypen	B. Namya	382.800	555.150				
Subbounthavee Rd & Brd Construction	Junction Rd .2203	B.Namkhaleu	233.540	50.760	100%	30.0509	15.1208	
	Junction Rd .2203	B.Chomseng	211.700	140.400	100%			
	B.Phadam	B.Phakao	208.693	157.460	100%			

Souliyong Rd & Brd Construction	B. Houasoua	B.Hatsa	530.137	253.670	30%	30.0509			
	B. Hatsa	B.Hatsak	601.558	324.720	30%				
R&B Co.Ltd	B.Younsaisana	B.Nator	367.206	367.530	100%	17.0409	22.0109		
	Rd No. 3908	B. Vangfay	343.305	220.480	100%	17.0409	22.0109		
Thin Thong Co. Ltd	B.Khangphanieng	B.Phalouang	329.965	580.070	100%	17.0409	15.0109		
	Rd No. 7A	B.Longkhouang	250.505		100%	17.0409	15.0109		
Somphou Co. Ltd	B.Namchat	B.Namteun	485.900	485.900	100%	17.0409	05.0109		
Sisomthon Co. Ltd	B. Ngaabsy	B.Napheung	208.800	208.231	100%	17.0409	05.0109	Synergy project	
Sisomthon Co. Ltd	B.Nonglea	B.Chameun	374.079	346.929	100%	17.0409	30.0209	Synergy project	
Asian Civil construction Co. Ltd	Hatkom	B.Nonng	457.00	401.900	100%	01.3009			
Phonchaleun R&B Co. Ltd	B.Pakvy	Phatoub	457.00	483.386	100%	04.3009			
No. 1 R&B construction Co. Ltd	B.Phalangnou	B.Hintang	457.00	448.890	95%	02.1509			
Phonchaleun R&B Co. Ltd	B.Vienghkam	B.Hatko	457.00	444.790	100%	04.2009			
Saychaleun Co. Ltd	Rd 17 B	Sop-Ei	2,212.71	570.406	100%	28.0409	10.0209		
	Rd 17 B	B.Phon samphan	27.70	59.430	100%		05.0109		
	Rd 17 B	B.Phakha	7.19	18.942	100%				
	Rd 17 B	B.Phatae	13.64	22.620	100%				
	Rd 17 B	B.Chal eunesay	11.52	25.581	100%				
Chaleun R&B Co. Ltd	District center	B.kone lang	647.45	674.945	97%	28.0409			
Phonepaseurt Co. Ltd	Road 3(B.Ph	B.Namvang	352.96	458.963	47%	28.0409			

	oulane)							
Somphasong Co.Ltd	RD&B	B.Houaymoung	B. Houay-O	484.00	425.250	20%	30.05.09	Contract not sent to Local Road Division/DD
Hounsonmith-mai		B.Houayhok	B. Chongnang	371.18	319.148	90%	30.05.09	
Souliyong Construction		B. Khengxang	B. Houayka	438.72	364.860			
Noanta construction		B.Namveuntai	B.Nathur	583.01	415.140	20%	30.05.09	
Inthavong Co. Ltd		B. Sophoun	B. Houaydoy	450.00	449.992	60%	30.06.09	Synergy project
Inthavong Co. Ltd		B.Houay-Oun	B.Ompalong	405.68	403.110	45%	30.06.09	
Seaveun Co.LTD	Rd&Br	B.Namou	B.Namhang	405.68	402.000	50%	30.06.09	
Sithivong Co. Ltd		B.Nahok	B.Sikahoh	1020.00	1013.750	85%	30.06.09	
Phomavongsay Co. Ltd		B.Kokphao	Namma	420.00	419.408	85%	30.06.09	Synergy project
Total BAC				15,301.02	11,858.33	74%		
Total Synergy				2,714.46	2,534.98	38%		
Total		-	-	18,015.48	14,393.30	67%	-	-

Source: LSRSP3 Annual Report FY2008-09

All of the firms in table 1 are of Lao nationality, as were all of the firms contracted in the previous year. Most of the contracts for the project have a value less than US \$100,000, and only relatively short segments of road for each contract, which explains the large number of contracts. All contracts were open to competitive bidding, all of which were only bid for by Lao firms, employing Lao workers. Hence there is no evidence of any tying to donor country by observing the firms that bid and were hired for construction works.

In discussion with technical advisors at MPWT, it was found that the project was designed deliberately to be divided into many small lots, to discourage international firms from bidding. However as a result of these relatively low value contracts, there is overall very little new equipment

procured with the project funds within each contract. Contractors almost always use their old existing equipment. In addition, the road construction only focused on ‘district roads’ and ‘rural roads’ which are the lowest two categories of roads and are all dirt roads to provide the most basic access to villages. As a result of this very little raw material is required to be procured, unlike the paved ‘national roads’ and ‘provincial roads’ which require bitumen, etc.

In telephone interviews with two contractors from fiscal year 2007/08, one of the companies, named Irrigation and Road Construction Company (SOE-Luang Prabang), was a successful bidder for Construction of 17.5km of district road in Luang Prabang province with a value of 699 million Kip (82,200 USD). The contract was signed between Department of Public Work and Transport of Luang Prabang Province and the company in November 2007. In this case, similar to other contracts, procurement was performed through a NCB, and advertised in newspapers following Lao Government procurement rules. The key heavy equipment used during construction for this project was originally purchased ‘brand new’ by a Japanese project in 1990, then donated to the company. Only two items have been purchased by the company (a Komatsu excavator and Caterpillar motor grader second hand from Thailand), in 2000 and 2003, before the contract for the SIDA road project.

Another contractor interviewed, Manoluck Construction Road – Bridge and Repair Co., Ltd. (Sayabouly Province), won a tender for 18.5 Km of rural road construction for a sum of 960,000,000 Kip (112,900 USD). All heavy equipment used during this project (including excavator, bulldozer, Motor grader, steel drum roller, pneumatic roller, wheel loader) were purchased in 1997- 1998, second hand from Thailand. Again no new equipment was procured during this company’s involvement with the project. As advised by the MPWT, this is the case for all the construction companies contracted

Procurement of Goods and Services (equipment procured by PIU)

Some small scale procurement of equipment was performed by the ministry and provincial department for use by the Project Implementation Unit for the project, as shown in the table below. For the PIU at the ministry, most of the equipment used for the LSRSP3 project is from the original phase I of the project, where in 1996 equipment was procured using International competitive bidding procedures (including all vehicles presently used by the PIU on the project). Therefore very little new equipment has been procured, and just reused from earlier phases in order to preserve project funds.

Table 11: Equipment and Tools procured for PIU by Government of Lao PDR, FY 2008-09

No	Item	Quantity	Estimated Budget (SEK)	Est. Budget (USD)	Purposes	Users	Remark
1	Digital camera	16 Units	29,000	4,143	To improve the documentation and reporting at OCTPC level for BAC works	16 OCTPCs: (1)Muang, (2) Paktha, (3) Nalea, (4) Viengphoukha, (5) Samphan, (6) Yothou, (7) Pakbeng, (8) Namor, (9) Phoukhoun, (10) Viengkham, (11) Viengthong, (12) Xamtai, (13) Nonghet, (14) Mork, (15) Xienghone, (16) Nguen.	Procurement done by DPWTs
2	Basic furniture	As per requirement	46,000	6,571	Provide additional office furniture for districts where basic furniture is lacking or insufficient	Districts in special need for office furniture	Procurement done by DPWTs
3	Wheel barrow, hoe, spade, rake, rammer, hammer (5 pound) and various lengths of measuring tape	Each district 25 Units	200,000	28,571	For labour-based construction and routine maintenance	Villagers for construction and maintenance by VMCs and Supervisors	Procurement done by DPWTs
4	Equipment	As per requirement	15,000	2,143	Office furniture	Local Roads Division	Procurement done by LRD

5	Equipment accessories for LRD	As per requirement	10,000	1,429	Maintenance of office equipment	Local Roads Division	Procurement done by LRD
Total SEK			300,000				
Total USD(1 USD/7.0 SEK)			42,857				
Total in Million Lao Kip (1USD/8700kip, June 2008)			373				

Source: LSRSP3 Annual Report FY2008-09

Table 12: Equipment and Tools procured for PIU by Government of Lao PDR, FY 2007-08

No	Item	Quantity	Estimated Budget (SEK)	Est. Budget (USD)	Purposes	Users	Remark
1	Desktop computer with printer and accessories	8 Units	56,000	8,000	1) To support capacity building to district OCTPC staff on general computer skills; 2) To improve systematic reporting of project by OCTPC staff	District of OCTPC: Paktha (1), Viengphoukha (1), Yoth-Ou (1), Namor (1), Samta I (1), Mork (1), Viengkham (1), Nguen (1)	Procurement done by Local Roads Division (LRD)/ Department of Roads (DoR) and transfer to the mentioned districts OCTPCs
2	Electricity Generator	2 Unit	4200	600	To supply power for operating computer	District OCTPC: Mork (1) Yot Ou (1)	Procurement done by DCTPCs
3	Digital camera	10 Units	10,500	1,500	To improve the documentation and reporting at OCTPC level for BAC works	OCTPCs: 1 camera each for long, Phaoudom, Mai, Et, Hun, Nga, Pakxeng, Phonexay, Khon and	Procurement done by DCTPCs

						Xaubury districts	
4	Wheel barrow, hoe, spade, rake, rammer, hammer (5 pound) and various lengths of measuring tape	Each district 25 Units	120,000	17,143	1) To carry out the labour-based construction works by the villagers 2) To carry out routine maintenance works on the Basic Access by the VMCs	Villagers for construction and maintenance by VMCs and Supervisors	Procurement done by DCTPCs
5	Equipment accessories for LRD	As per requirement	10,000	1,429	Photocopy and fax machine spare parts and supplies	Local Roads Division	Procurement done by LRD
Total SEK			200,700				
Total USD(1 USD/7.0 SEK)			28,671				
Total in Million Lao Kip (1USD/8700kip, June 2008)			249				

Source: LSRSP3 Annual Report FY2007-08

Extent Untied

After holding meetings with the donors and implementing agency, reading through various procurement and project documents, investigating the source of goods and services, it is found the nature of the project is overall untied with respect to donors rules and regulations and practices. No informal rules or practices which unfairly favour donor national sourcing were discovered.

All companies contracted by the executing agency in the province were of Lao nationality with Lao workers. This was not because the procurement guidelines restricted contracting to Lao firms, international firms were also eligible to apply and invitations to bid were advertised in English in national newspapers. It so happened that only Lao firms registered and submitted bids. This is most likely due to the small nature of the contracts, which international firms did not find profitable enough to encourage them to apply. Obviously costs are incurred by international firms entering Lao PDR,

and these firms often lack of a competitive edge against small scale local firms who are much more suited for small scale construction works in terms of know-how, location, experience, and lower operational costs. However it had been indicated that one factor for designing the project with small construction lots had been the intention to make the contracts unappealing to international firms, but not excluding them from bidding directly.

7. Impact

Cost Effectiveness

In terms of procurement for construction works, tender processes were conducted by NCB procedures, where the lowest cost, pre qualified bid from all those submitted was awarded the contract. This process ensures companies for construction services procured on the project are of lowest cost and suitable for the contract. Therefore it is reasonable to conclude that procurement of construction services was cost effective as a result of untying since the source of services was unrestricted. In this case the cheapest source by nationality was Lao firms, although bidding was not restricted to Lao firms.

As has been explained in the procurement section, very few items of equipment were procured during the course of this project. This was partly because equipment for the PMU was passed on from previous phases, the road construction required very few raw material inputs, and the companies contracted had their own existing equipment which they used for this project. Therefore it is not possible to perform a cost effectiveness analysis on the goods procured by contractors during this project.

A trivial cost comparison can be conducted for a number of items procured by the PMU for this project phase. The cost price paid for items on the project (A) is obtained from the budget per item in the annual project report, and the reference price (B) is obtained from dealers in Vientiane. Unfortunately the exact brand and model of equipment items is not cited in the project documents, therefore the below cost comparison should be considered as an approximation only.

Table 13: List of goods and market prices

No	Items	Price
1	-Camera digital Sony 930 (10m PX)	5,000 Bath Thai
2	-Camera digital Sony 950 (10m PX)	7,000 Bath Thai
3	Computer desktop assembled in Lao PDR	11,600 Bath Thai
4	Computer desktop Acer	16,000 Bath Thai
5	Computer desktop HP Pavilion p 6082L	6,599,000 kip (26,540THB)
6	Computer desktop Acer M1641	4,999,000 kip (20,105THB)
7	Laptop HP 6530S-core2DuoP8600 (2,4 hz)	6,999,000 kip
8	Laptop HP 6530S Intel core2Duo (2,0 hz)	6,599,000 kip
7	HP All in one MFP1120 print- scan copy	1,999,000 kip
8	Photo copy canon IR2022n print- scan copy	19,999,000 kip
9	Canon photocopy IR2116j speed16ppm	9,999,000 kip
10	Generator (-for 30 to 40 lamps of 40-W)	22,000 Bath Thai
11	Hand operated vibrator road roller 600kg	66,000 Bath Thai

Source: Dealers in Vientiane

Table 14: Cost effectiveness analysis

Item	Budget per item (USD) (A)	Market Reference Price, average (USD) (B)	Cost effectiveness ratio (C) = A/B
Digital Camera	150	175	0.86
Desktop Computer	1,000	543	1.84
Electricity generator	300	644	0.47

The cost effectiveness ratio displayed in the third column of the above table represents the price of goods used on the project relative to the alternative market price of similar goods. Therefore a value of $C < 1$ implies a cost efficient expenditure by cost saving relative to the market price, whereas a value of $C > 1$ indicates a cost inefficient expenditure, with a cost gain relative to the market price. In theory untied aid is thought to procure goods from the cheapest available source, since sourcing is unrestricted. From the above table it can be seen that mixed results are produced, although overall procurement of the items can be seen as cost effective, supporting the conjecture of efficient use of funds for procurement associated with untied aid in practice. In particular, the two electricity generators were procured at price which was 47% of the market reference price.

Developmental effectiveness

In terms of impacts on employment as a component of developmental effectiveness, this project employed all Lao construction firms, including Lao experts and workers at ground level, thereby suggesting a positive impact on development during implementation. However the direct impact on increased employment of local workers as a result of the aid being untied is not entirely clear. If the project was tied, it is difficult to speculate on the potential developmental benefits that would have accrued to local workers regardless of this tied status.

The international technical assistance provided on this project helped in several ways to build capacity in government institutions at every level of governance from central to village level. Some key examples include establishing a monitoring and evaluation system, and developing a community road model, where community participation is encouraged with the project. This assistance undoubtedly has provided much benefit to the government and provided transferable and sustainable skills which can be used on future projects. The capacity building activities provided by the TA therefore would have had a positive developmental effect to some extent. However the TA provided for this project was in effect tied, therefore the developmental benefit provided by the assistance cannot be attributed to the untied components of the project. If the TA was untied, and was procured from the lowest cost source, it is difficult to estimate the trade off of lower developmental effectiveness e.g. due to lower skills/ technical expertise, against the cost saving incurred.

In terms of developmental effectiveness through increased use of local markets as a direct result of untying, we see in this project that no goods or materials were directly imported but all sourced locally. This implies a positive impact through increased sales by local traders and producers, which

would in turn lead to greater incomes of local suppliers, and having a multiplier effect in the local economy. This would be an improvement in the developmental effectiveness of aid funds spent during the project compared to the tied scenario where all goods and materials must be imported from the donor country.

8. Conclusion

This single donor, SIDA grant-funded project was found to be delivered by a fairly traditional aid modality, namely project-based assistance, but using the local country procurement systems. Despite the project not being delivered through more modern aid modalities such as general or sector budget support, or pooled funding, the nature of the project was found to be mostly untied in rule and practice, with all construction works, materials and equipment competitively procured from the lowest cost source (and therefore cost efficient) which proved to be local domestic sourcing. The decision to use country procurement systems for the project implementation also assisted in extending the management capacity of development projects in both public and private sectors, promoting the ownership agenda for aid effectiveness. With respect to TA, the procurement of advisors was tied to the donor, and may not have been cost effective; although this was a relatively small proportion of total project funding (e.g. 2007-08 annual contract value for all International TA was 1.5 million SEK out of total 14.3 million SEK). The high proportion of sourcing from local labour markets and goods markets, which were exploited due to their low cost and ease of access, implies that the developmental impact from the untied project funds is positive. Meanwhile, the tying of international experts had its own developmental benefits through capacity building activities, and had this been based purely on cost, the quality and developmental effectiveness may have been comprised to some degree.

Annex B: Case Study of the Integrated Community Based Rural Development Project in Namor and Xay Districts, Oudomxay Province (EC)

1. Background of Project

The project is a rural development sector project located in the North of the Lao People's Democratic Republic in the Namor and Xay Districts of Oudomxay Province, where some 85 % of the land is steep hills and mountains. Xay currently hosts 95 villages with 11,414 household of which 1,800 are classified as poor. Namor, being amongst the poorest district in Lao PDR, has 67 villages with 5,167 households of which 1,712 are classified as below the national poverty line. Roads, like other basic infrastructure, are still feebly developed and access to many villages is difficult or even impossible especially during the rainy season. The countryside is mainly populated by Khamu, Hmong, Akha, Leu and Thai Dam ethnic minorities, whereas the dominating Lao Loum and the Chinese Ho provide for the majority in the provincial capital. The project, implemented by the German International NGO German Agro Action (GAA), targets 20 communities with a total of about 7,419 individuals grouped into approximately 1,217 households. The duration of the project is 3 years, and commenced in January 2007.

2. Objectives and methodology of case study

The main purpose of this case study is to take a micro level approach in tracking donor funds for a specific project from commitment by the donor to disbursement by the lead implementing agency down to the ground level. From this account, funds dispersed will be investigated to determine the organisations involved with the disbursements, the procedures used at each stage, and the exact source in terms of countries of origin of the goods purchased and services employed for the project. A key feature of these case studies will be to identify factors which led to the discrimination of goods and services on the basis of nationality and how this occurred, for example a rules and regulations based explanation, or due to an organisation's practices. The second step of the case studies will be to assess the impact of the sourcing of contracts on the cost effectiveness and developmental effectiveness of the original disbursement for the project.

To gather the necessary information required to meet the objectives stated above, several different sources had to be investigated. This included the primary source of face-to-face meetings and discussions with those individuals directly involved with the project. This occurred on the donor level with the EC rural development team at the EC delegation in Lao PDR and with the Director and

Project Manager from the lead implementing agency GAA/WHH. In addition documentation had to be collected and referred to including annual project reports and procurement guidelines.

3. Project Structure

The overall objective of the project is to make a visible contribution towards the improvement of the food security and socio-economic situation of the target group through participation in rural development and sustainable management of natural resources. More specifically, the objective aims at improving the livelihood situation of the target group through better access to and improved utilization of productive resources, as well as sanitation, health and education facilities.

The project involves a range of activities which include:

- Participatory land use planning and allocation
- Establishment of farmer managed upland demonstration plots
- Levelling of new paddy fields and construction of irrigation facilities
- Expansion of family livestock and animal fodder production
- Expansion of fish farming and establishment of vegetable gardens
- Promotion of non-timber-forest-products (NTFP) and establishment of conservation zones and conservation rules
- Construction or upgrading of village water systems and of latrines
- Sanitation campaigns along with training for village sanitation infrastructure including village health workers and supporting village pharmacies
- Upgrading of school infrastructure, dormitories and village meeting facilities
- Improve access to education facilities, and adult literacy campaign
- Promotion of environmental awareness in schools
- Strengthening of women through training, income generation and marketing
- Training of staff and beneficiaries according to requirements of activities,
- Initiation of village development funds

4. Funding Arrangements

This project is an EC single donor funded project, however the implementing agent for the project, GAA (an International NGO), also contributes approximately 25% of the total funds for the project.

The combined funds for the project total at EUR 1,098,678, with the EC contributing EUR 750,000 and GAA contributing EUR 348,678 from its internal funds.

Since the receiver of funds and main implementing body is an International NGO, the aid modality can be identified as a project with funds channelled through an International NGO.

Government Role

The Provincial Agriculture and Forestry Office (PAFO) is the official partner and countersignatory of the MOU, although does not contribute funds for the project, and is not involved with managing or implementing the project directly. However the PAFO does assign a number of staff to the project, and heads the project steering committee. The head of PAFO is the chairman of the provincial steering committee and responsible for the coordination amongst provincial and district authorities and WHH/GAA. PAFO also seconds one person directly to the project as National Project Director who acts as counterpart to the project manager from WHH/GAA. There are nine government staff in total who work in each team for the two districts (18 total), responsible for working in the field and coordinating with local district and provincial government offices. The project framework aims to incorporate active participation by different government agricultural agencies from the provincial level down. Design of the project is overseen by the provincial department, monitoring and evaluation is the responsibility of the district office, and physical implementation of the project is overseen at the village level of government.

5. Tender and Procurement process

Guidelines for the selection of an implementing agency (INGO)

The contracting of GAA by the EC followed standard EC procurement guidelines through calling for proposal, short listing, and making a quality-cost based selection. EC makes thematic calls for proposals on their website, which are launched from and submitted to Brussels. In this case, the call for proposal for project implementation was specifically targeted at International NGOs. Calls are separated for INGOs, local NGOs, government authority, and companies, and the EC specifies eligibility for one or more groups. If interested, the NGO submits a 'corporate proposal', consisting of a 'concept note' followed by a full proposal.

Tender advertisements are advertised publicly through three mediums: on EC website 'EUROPEAID', at the delegation in country, and at information sessions held locally to inform INGOs of funding opportunities.

Tender Evaluation

Once submitted, the evaluation process takes approximately 6-7 months for project proposals to be reviewed, short listed, and selected. The EC evaluation criteria correspond to the traditional practice of evaluating development aid, formalised by the OECD-DAC (the first five criteria in the box below), and to the specific EC requirements (the last two criteria). In addition, the EC stipulates that the INGO must be resident in Lao PDR, and have the appropriate financial capacity.

<i>EC</i>	<i>Evaluation</i>	<i>criteria</i>
	Relevance:	<ul style="list-style-type: none">○ The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies
	Effectiveness:	<ul style="list-style-type: none">○ The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
	Efficiency:	<ul style="list-style-type: none">○ A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
	Sustainability:	<ul style="list-style-type: none">○ The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.
	Impact:	<ul style="list-style-type: none">○ Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.
	Coherence/complementarity:	<ul style="list-style-type: none">○ This criterion may have several dimensions:<ol style="list-style-type: none">1) Coherence within the Commission's development programme2) Coherence/complementarity with the partner country's policies and with other donors' interventions3) Coherence/complementarity with the other Community policies
	Community value added:	

- | |
|--|
| <ul style="list-style-type: none">○ The extent to which the project/programme adds benefits to what would have resulted from Member States' interventions in the same context. |
|--|

Source: EU website

Guidelines for the selection of Consultancy Services and Contractors

For all procurement undertaken in this and any other EC funded project, EC procurement guidelines have to be followed by the implementing agency. Therefore the procurement of all goods and services by GAA for this project had to follow EC rules.

The EC procurement guidelines are continually being updated and reformed, however at the present time, the EC procurement guidelines require that all ICB and NCB must be performed when procuring goods and services according to the following threshold guidelines:

International Competitive Bidding (ICB) procedures must be implemented for:

- Works contracts if above a value of EUR 300,000
- Service contracts if above a value of EUR 200,000.

It is a requirement that calls for tenders must be published where they can be viewed by a global audience in such a way as to be accessible to the largest possible group of bidders. This includes the website of the implementing agency and EC, official publications and journals.

Any procurement of contracts with a value between EUR 30,000 and the ICB thresholds, follow national competitive bidding procedures. This requires contracts in this value range to be advertised nationally in ways deemed most appropriate e.g. newspaper, website, radio, etc. Any contracts with a value between EUR 5,000 and EUR 30,000 must follow a 'negotiated procedure' where some competitive bids must be collected from suitable companies (three minimum), but the tender is not required to be published. Contracts with values less than EUR 5,000 can technically be awarded without tendering with no competitive bidding necessary. However in practice implementing agents, including GAA, often still take bids or quotes from companies to ensure costs are minimised, even with these low value contracts, which for a relatively small scale project such as this one, sum to a relatively large proportion of the total funds. In the EC guidelines for NGO funded projects, these threshold guidelines apply for procurement of goods and services by the NGO, however the EC rules specify that sub-contracting by the NGOs is not allowed.

The EC does not have any country-specific rules; only guidelines from HQ are available and should be used for all aid recipient countries. Similarly, the EC delegation in Lao PDR uses procurement guidelines from HQ in Brussels, however this can cause difficulties and delay procurement in some cases when there is specific case where the rules might not be compatible with the situation in-country. For example, a project requiring the procurement of a large quantity of pigs and chickens where the guidelines required sourcing nationally through a competitive bid. However Lao PDR's production capacity of pigs and chickens was not sufficient to meet the volume required for the project and therefore the chickens and pigs had to be sourced internationally from Thailand. This is one case where an exception had to be to the global guidelines to accommodate the local situation which in this case was a local or national level livestock supply issue. Other cases commonly arise where the EC HQ rules are not compatible in Lao PDR.

In the EC procurement rules, no specific rules were found to explicitly or implicitly (e.g. specifications) restrict the sourcing of goods and services to an individual country or specific geographical region.

In the case of this project, GAA procurement guidelines are implemented alongside EC procurement guidelines since GAA is certified as 'P-partner' which implies that ECHO (European Council Humanitarian Organization) accepts the GAA procurement guidelines, and GAA claim the guidelines to be more stringent than EC. For example the threshold for awarding contracts without competitive tendering is EUR 1,000 in GAA's guidelines, compared to EUR 5,000 in the EC guidelines.

In this rural development project, all contracts issued by the implementing agency GAA were below the value threshold of EUR 30,000. Therefore no national or international competitive bidding procedures had to be followed requiring published calls for tender. Most of the contracts issued for goods and services on the project were less than EUR 10,000. Tender openings are evaluated by a committee of at least 3 people (always 5 people for above EUR 5000) and any procurement is approved by the National Project Director and the Project Manager.

6. Results of Procurement on the Project

During the project, GAA issued separate contracts for procurement of goods and separate contracts for work implementation. Therefore contract values are generally much smaller in value since it is not the case that everything is procured as one lot for a particular segment of the project. The main

reasons GAA give for not handling procurement on a large scale as one tender for construction works is due to logistical reasons and storage issues that could lead to unexpected problems (for example feuding within villages, delays in construction, etc.). GAA also found that overall cost savings were made by procuring components separately, and this helps build capacity of more local private enterprises. Even when consultancy services were required, it was generally on a small scale (for a few days or few weeks) and the contract value was very small, never reaching the level where national competitive bidding with published advertisements was required (EUR 30,000).

Main construction works for project are:

- Water Supply construction
- School construction
- Irrigation systems construction
- Suspension bridge construction

The Project is implemented in two districts in Oudomxay province, but GAA found it much more cost efficient to procure goods and materials in Luang Prabang Province and Vientiane Capital compared to the local provincial capital. Regular market price surveys of key goods and services are carried out by GAA's country administrator to ensure that GAA is procuring materials from the lowest cost source

Table 15: List of contracts issued for services and equipment by GAA for values greater than EUR 5,000

Name of tender/contract (with who)	Total Value	Year	Consulting services or construction/equipment?
Mitthaphoum Shop	EUR 5,064	2007	Water Supply Construction material Nammong
Mitthaphoum Shop	EUR 6,832	2007	Water Supply Construction material Houay Thong
LAO Toyota Service Co. LTD	EUR 19,794	2007	Toyota Landcruiser
Phonexay Showroom Toyota	EUR 19,438	2007	10 Motorcycles; Yamaha AG 200 and Honda Wave 125
Mitthaphoum Shop	EUR 6,215	2008	Water Supply Construction material Nam Veun
Mithmixay Construction	EUR 5,194	2008	Suspension Bridge Construction Fee
Salika Tour Company	EUR 5,669	2008	Fee for tour company for exchange visit to China

Source: GAA

As can be seen in table 1, no contract for construction services, other services, or equipment exceeded the minimum EC threshold of EUR 30,000 for national publicised competitive bidding. All winning contracts were selected by GAA using a ‘negotiated procedure without publication’. All of the above contracts sourced the equipment and services from within Lao PDR, and the beneficiaries of each contract were either Lao based establishments (for example Lao Toyota which took part in the tender for vehicles) or companies of Lao nationality. Therefore the procurement of the above items and services displays characteristics of being completely untied.

For tenders 1 and 2, for water supply construction material, in both cases all the short listed companies were of Lao nationality as listed in the table below. The three main items procured under this tender were:

- Steel, of Lao origin

- Cement, of Lao origin
- Pipes, of Thai origin

Market price comparisons were conducted when procuring these materials under the tender.

Table 16: Short listed companies for water supply construction material

Name	Nationality
1Phonexay	Lao
2Mitthaphoum	Lao
3Inthaly	Lao
4Laosakon	Lao
5Mitthaphab	Lao

Source: GAA

In 2008 Mithmixay Construction supplied sand and gravel to the project in Oudomxay, where price paid on the project:

- Gravel- 10 cubic meters of 500,000 kip per cubic meter
- Sand- 15 cubic meters of 250,000 kip per cubic meter

Table 17: Individual Consultants hired by GAA

Consultant/Individual	Nationality	Role	Value	Year
1. Ms Lioba Weingaertner	German	Short term consultant for impact monitoring indicator	EUR 1,618	2007
2. Ms Ny Luangkhot	Lao	Short term consultant for impact monitoring indicator	EUR 3,422	2007 and 2008
3. EDC Company	Lao	Training Needs assessment	EUR 1,799	2007
4. Mr Souphasith Bounjjavong	Lao	Short term support to staff in Namor	EUR 398	2009
5. Mr. Andrew McNaughton	Canadian	Mid Term Review	EUR 6,112	2008

Source: GAA

Table 3 lists individual consultants contracted during the project, where again the values are relatively small. Three of the five consultants are Lao nationals, and one German and one Canadian consultant. With one international consultant hailing from Germany, even though the arrangement for contracting consulting services in fully competitive, it can be inferred that this is a service being sourced from the donor's economic region therefore is a form of tying in practice.

Other workers

During the project so far, in total 10 Lao staff have been employed, with wages varying between 30-500 USD per month (e.g. cleaner, driver, consultant, Mason, etc), again hired at the discretion of GAA using 'unpublished negotiated procedures'.

For example the Mason for school, with a contract value of 500 USD, was contracted after collecting local quotations. The salaries are generally lower than other organisations pay but GAA aim to keep these in line with local salaries, for example they should not be higher paid than their government counterparts to avoid unnecessary tensions. However GAA have the problem of staff moving to other better paid positions with other organisations.

Extent Untied

After holding meetings with the donors and implementing agency, reading through various procurement and project documents, investigating the source of goods and services, it is found the nature of the project is overall untied with respect to donors rules and regulations and practices. No informal rules or practices which unfairly favour donor national sourcing were discovered. Although in practice the EC funded project was won by a German INGO, which can be seen as a case of '*de facto*' tying, this was done through a fully international competitive procedure, and 95% of funds are estimated to be spent in Lao PDR (GAA estimates a 5% rate of administration costs). Of the funds used to procure equipment and construction works, all were sourced within Lao PDR from the cheapest available sources. Of funds disbursed to staff working on the project, two were international consultants, also contracted through a competitive procedure. Therefore the project 'in practice' can be described as majority untied with a small 'tied in practice' component due to the funds being channelled through a German NGO and from contracting a German consultant.

7. Impact

Cost Effectiveness

In this project overall, only a few items of equipment and raw materials were procured, and most of the items that were bought were of relatively low value. Items purchased below EUR 5,000 were not officially subject to any processes of nationally advertised bidding, although were bought locally from the cheapest available source, in a negotiated procedure requiring at least 3 bids or quotes. Hence this can still be interpreted as a competitive and cost efficient procedure, taking into account the value of the contracts.

The largest value items procured for the project were bought directly by the project management team and include one Toyota Land Cruiser and 10 motorbikes (Yamaha AG 200 and Honda Wave 125). The following table demonstrates a trivial cost comparison of vehicles bought on the project, compared with 'market price' of similar or vehicles (obtained from car dealers within Vientiane).

Table 18: Cost effectiveness analysis

Item	Unit Cost on Project (A)	Market Reference Price (USD) (B)	Cost effectiveness ratio (C) = A/B
Toyota Land Cruiser	EUR 19,794 (28,000 USD)	65,000 USD	0.43
Honda Wave 125	EUR 1,943 (2,700 USD)	2,500 USD	1.08

From the cost effectiveness analysis of vehicles procured on the project, it can be noted from the cost effectiveness ratio that the procurement was performed in a very cost effective manner. As a result of the untied status of the project, vehicles could be procured with unrestricted sourcing, therefore the cheapest source could be used. Purchasing the vehicles locally was found to be the cheapest source, and as a result the cost of vehicles was less than or very close to the market reference price, and therefore cost effective use of project funds.

Before 2007, EC bilateral funding was mostly tied, and equipment as well as individual experts sourcing was often restricted to EU origin only. Since 2007 EC ODA is now largely untied. In terms

of how the process of untying by the EC has impacted on the cost efficiency of project expenditures, fewer sourcing restrictions have made it easier to procure equipment at lower cost, more appropriate equipment (e.g. serviceable), and in a shorter time period.

One positive example of the impact of untying was provided by the project manager: For this project, GAA were able to purchase Japanese vehicles sold in Lao PDR, which was the cheapest source. This was also the most convenient source in terms of availability of parts for vehicle maintenance, and time of taken to procure (2 months). Prior to 2007, vehicles were required to be procured from the EU which resulted in higher unit costs, higher repair/maintenance costs since spare parts could not be found locally, and a much longer procurement process. For example in one previous bi-lateral EC project, Land Rovers (UK) were the only vehicle manufacturer permitted, which had a unit cost of over EUR 40,000 (almost a 100% cost increase), took 1-1.5 years to procure, and were very difficult to service locally.

Furthermore, since steps have been taken by the EC towards untying, it is now possible to procure international consultants from any country, whereas before, sourcing was restricted to the EU. For example for this project, an international consultant from Canada for the mid-term review was contracted for EUR 6,112. In projects prior to 2007, EU based consultants were on average considerably more costly.

To draw a conclusion of the cost effectiveness of the untied aid used on this project from the type of guidelines followed, the competitive methods used for sourcing goods and services of even low values, and from the cost effectiveness analysis of key equipment, it can be said the aid was used in a very cost efficient manor. In addition, by researching previous examples of EC projects with tied procurement and comparing procurement from this project, it has been shown that the impact of untying EC aid has had a significant impact on decreasing the cost of inputs and thereby increasing cost effectiveness of aid.

Developmental Effectiveness

Estimating the developmental effectiveness, or implications for local development, of the aid supplied for this specific project which is attributable to the untied nature of the aid, has only been possible in a basic qualitative context as a result of the difficulty in conducting this analysis in practice.

In terms of impacts on employment as a component of developmental effectiveness, this project employed a high proportion of local consultants and staff, thereby suggesting a positive impact on development. However the direct impact on increased employment of local workers as a result of the aid being untied is not entirely clear. It is almost certain that the staff were contracted for a lower cost than otherwise due to untying, but two international staff were still employed. If EC tying regulations were still followed, we can only speculate that there may have been a greater presence of European consultants on the project resulting in fewer employed local staff. Therefore we can estimate a positive effect of untying.

In terms of developmental effectiveness through increased use of local markets as a direct result of untying, we see from this project that no goods or construction services were directly imported but all sourced locally. This implies a positive impact through increased revenue to local traders and producers. From the earlier example of importing vehicles from the EU under tied aid (pre 2007), we can estimate that a proportion of the benefit to local markets would have been attributable to the untied nature of the project (although it is not possible to quantify this benefit).

8. Conclusion

This case study has looked in detail at an EC project based intervention which used funds channelled through an INGO approach, and used the donor's own procurement guidelines from HQ. Although involvement of provincial, district, and village levels of government was encouraged, in practice due to the small nature of the project, government involvement was relatively low and few management responsibilities were undertaken by government authorities. Hence capacity building activities were only on a small scale, and use of donor procurement systems did not help in boosting project management skills in the public sector.

The project was found to be largely untied, and despite small value tenders which did not require national competitive bidding with advertisement, procurement was found to be competitively tendered and cost effective. Cost effectiveness analysis further confirms that procurement was executed at costs in line with market reference prices. Besides two international consultants, other staff and equipment were sourced locally having positive implication for the developmental effectiveness of the aid for this project from its untied status.

Annex C: Case Study of the Nam Theun 2 Hydropower Project (AFD)

1) Background of the Project

With the introduction in 1994 of sponsors EDF of France and ITD of Thailand and the invitation to the World Bank and ADB to participate in the project, NT2 moved from a concept to a development phase. Its design and preparation of a complete set of economical, environmental and social safeguards have taken more than ten years. A temporary delay caused by the Asian crisis allowed the sponsors (which by 2000 also included EGCO of Thailand) to revisit a number of aspects of the Project, and to develop a structure more suited to the appetite of commercial lenders. This finally led to the successful US\$ 1.5 billion Project financing and subsequent beginning of full construction activities in June 2005 and commissioning in December 2009.

The project includes the development, construction, and operation of a 1,070 MW transbasin diversion power plant on the Nam Theun, a tributary of the Mekong. The project site is in the central provinces of Khammouane and Bolikhamxay, about 250 kilometers southeast of Vientiane, and stretches from the top of the Annamite mountain chain along the Lao PDR-Viet Nam border, to the Nakai Plateau, and ultimately to the confluence of the lower Xe Bang Fai with the Mekong. It captures the flow of water from the watershed of the Nam Theun and the Nakai Plateau by building a dam 39 meters (m) high. The Project creates a reservoir of 450 square kilometers (km²) on the Nakai Plateau. Water from the reservoir drops about 350 meters to a powerhouse at the base of the Nakai escarpment near the town of Gnommalat. The water discharged from the powerhouse then flows through a 27 km channel to the Xe Bang Fai, which drains into the Mekong approximately 150 km south of the Nam Theun confluence. A regulating pond constructed downstream of the powerhouse to ensure smooth release of water into the downstream water courses.

The Project constructs a 138 km double circuit 500 kV transmission line to the Thai grid, and a 70 km single circuit 115 kV transmission line and 22 kV connections to the regional Lao grid. Approximately 5,354 GWh of power will be provided to Thailand annually and about 200-300 GWh of power will be transmitted for domestic consumption.

2) Objectives of case study and methodology

The main purpose of this case study is to take a micro level approach in tracking donor funds for a specific project from commitment by the donor to disbursement by the lead implementing agency down to the ground level. From this account, funds dispersed will be investigated to determine the

organisations involved with the disbursements, the procedures used at each stage, and the exact source in terms of countries of origin of the goods purchased and services employed for the project. A key feature of these case studies will be to identify factors which led to the discrimination of goods and services on the basis of nationality and how this occurred, for example a rules and regulations based explanation, or due to an organisation's practices. The second step of the case studies will be to assess the impact of the sourcing of contracts on the cost effectiveness and developmental effectiveness of the original disbursement for the project.

3) Project Structure

The NT2 hydropower component will be implemented by Nam Theun 2 Power Company Limited (NTPC), which was established as a limited liability company incorporated under Lao PDR law. The purpose of NTPC is to develop, finance, build and then operate the Nam Theun 2 hydroelectric project. NTPC is owned by EDF International (EDFI) - a wholly owned subsidiary of Electricité de France (EDF), the Lao Holding State Enterprise (LHSE) - a company wholly owned by the Government of the Lao PDR, Electricity Generating Public Company (EGCO) of Thailand, and Italian-Thai Development Public Company (ITD) of Thailand.

The respective shareholdings are:

- 35% EDF International (EDFI)
- 25% Lao Holding State Enterprise (LHSE)
- 25% Electricity Generating Public Company Limited (EGCO)
- 15% Italian-Thai Development Public Company Limited (ITD)

Electricité de France and EDF International (EDFI) is the Head Contractor and Technical Services and Personnel Management provider. EDF is a public law entity owned by the French Government. The EDF group ranks as one of the largest enterprises in France and is one of the largest electric utility entities in the world. Centre d'Ingénierie Hydro électrique (CIH), the responsible division within EDF, is a world leader in undertaking hydroelectric related work, including the design, construction and commissioning of projects.

Lao Holding State Enterprise (LHSE), is a company set up to hold the government equity in NTPC. It was set up to improve the transparency of the Government's investments in the Project and prevent the cross-subsidization of EdL. The Ministry of Finance will own 100% of LHSE's shares.

Electricity Generating Public Company Limited (EGCO) is the Technical Services and Personnel Management provider, acting through its subsidiary ESCO. EGCO is among the largest publicly listed energy companies in Thailand. It is a leading operator of independent generating capacity within Thailand.

Italian-Thai Development Public Company Limited (ITD) is the Principal Sub-Contractor under the Head Construction Contract. ITD is the largest publicly listed infrastructure construction company in Thailand.

Table 19: Summary of project main Works and Cost estimates (US\$ Million)

Item	Foreign Exchange	Local Currency	Total
A. Construction Costs			
1. Head Construction Contract	94.1	29.1	123.2
2. Civil Works	112.3	239.7	352.0
3. Electro-Mechanical	181.1	45.0	226.1
4. Project Implementation and Management	8.7	1.5	10.2
Subtotal (A)	396.2	315.3	711.5
B. Development Costs			
1. Pre-Operating and Working Capital	16.6	8.0	24.6
2. Environment & Social Mitigation	48.8	0	48.8
3. Compensation to Gov't. and Gov't. Works	32.2	0	32.2
4. NTPC Administration	29.6	4.0	33.6
5. Project Preparation	72.2	2.0	74.2
Subtotal (B)	199.4	14.0	213.4
C. Financing Costs			
1. Interest During Construction (IDC)	98.4	98.0	196.4
2. Insurance and Bonding	30.1	0	30.1
3. Other Financing Charges	44.5	8.3	52.8
Subtotal (C)	173.0	106.3	279.3
D. Contingencies			
1. Head Contract	6.1	5.8	11.9

2. Financial	21.0	12.9	33.9
Subtotal (D)	27.1	18.7	45.8
Total Project Base Costs	795.7	454.3	1,250.0
Contingent Costs			
A. Debt Service	50.0	52.5	102.5
B. Administrative Costs	6.6	0.9	7.5
C. Physical Cost Overruns	17.5	17.5	35.0
D. Liquidated Damages	42.5	12.5	55.0
Subtotal - Contingent Costs	116.6	83.4	200.0
Total Costs (Base + Contingent)	912.3	537.7	1,450.0

+ Bonding facilities US\$ 131.5 million

Notes:

1 local Currency Costs are in Thai baht and Lao kip

2 Under the Concession Agreement, GOL is to be compensated \$30 million for lost of biodiversity and eco-tourism assets.

3 Contingent Costs have been estimated on a 12-month delay scenario due to NTPC/contractor fault.

4 Under Contingent Costs, debt service includes additional IOC and first year principal repayment.

5 Project Preparation costs have been verified by independent audit before being accepted by lenders

Agreements

The Concession Agreement (the "CA") signed between NTPC and the Government of Lao PDR ("GOL") is the basis on which the Government granted NTPC a concession to develop, own, finance, construct, and operate the hydroelectric plant and related facilities, and to transfer the project to GOL at the end of the concession period. The CA is for a period of 25 years from the Commercial Operations Date.

Under the proposed financial and contractual structure, the project's electrical energy will be sold under two long-term "take-or-pay" Power Purchase Agreements (PPA), - the EGAT PPA and a PPA with Electricité du Lao PDR ("EDL").

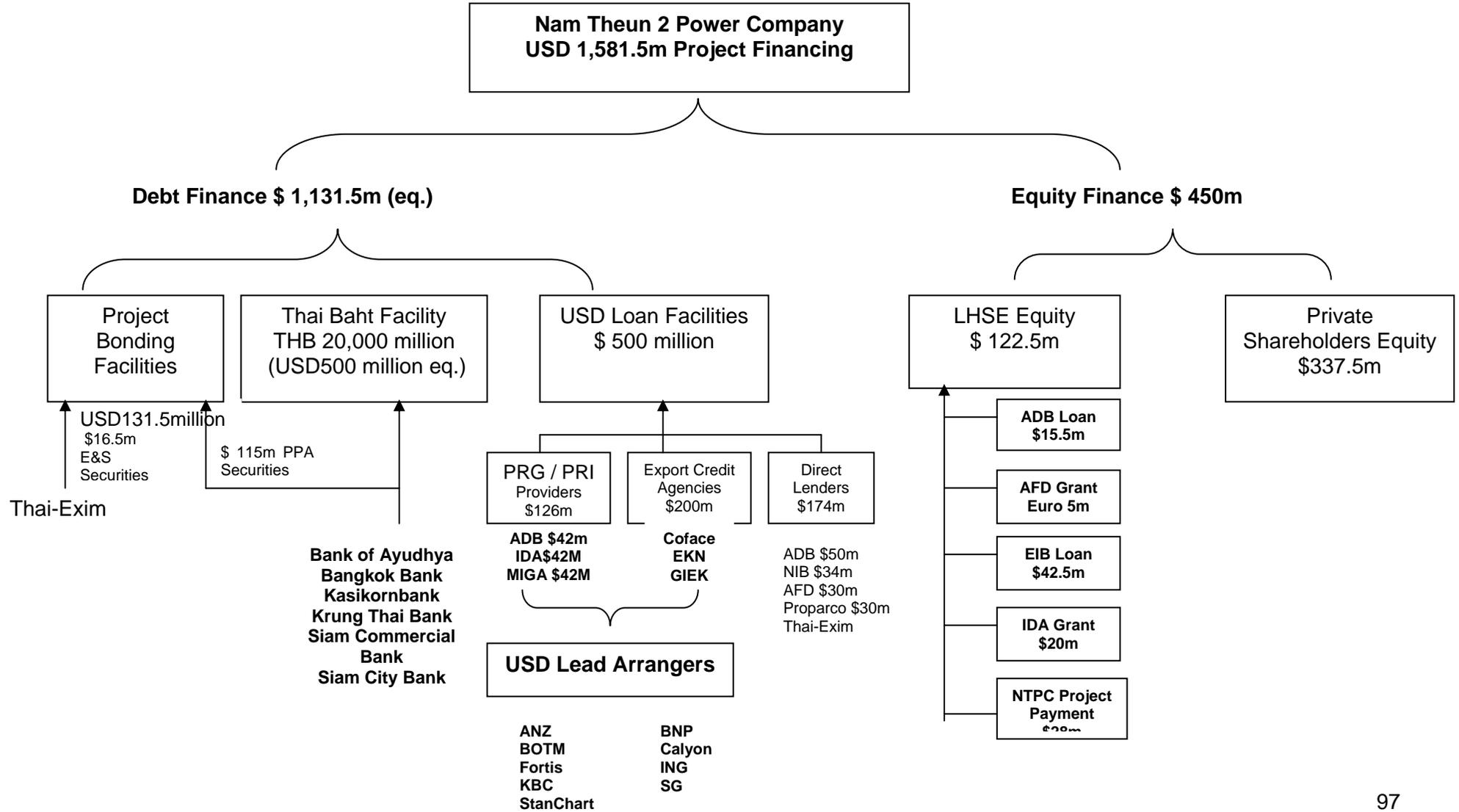
The EGAT Power Purchase Agreement ("EGAT PPA") was signed between NTPC and EGAT. It is the key contract for the project under which NTPC shall make available to EGAT generating capacity

of up to 995 MW and electrical energy of 5,636 GWh per year to be purchased at agreed tariffs on a take-or-pay basis. The EGAT PPA is for a period of 25 years.

The EDL Power Purchase Agreement (or "EDL PPA") was signed between NTPC and EDL. It defines the obligation of NTPC to make available generating capacity of up to 75 MW and electrical energy of 200 GWh per year to EDL to be purchased at an agreed tariff on a take-or-pay basis for a period of 25 years from the date of Commercial Operations.

The Government of Lao (GOL) Undertaking between GOL and EGAT identifies and establishes the parameters and framework that are required by all parties to effect a smooth transition of the project and the Project Agreements following a Company default or prolonged Lao PDR Political Force Majeure under either the Concession Agreement and or the EGAT PPA.

4. Funding Arrangements



5) Tender and procurement process

In the case of Nam Theun 2, the BOT concession awarded to NTPC without ICB, and therefore, to be in compliance with World Bank and other International Financial Institutions' guidelines, all constructions contracts should be subject to ICB. But as Nam Theun 2 is a project of public-private partnership and funds come from a wide variety of both public and private sources, with IDA, ADB, AFD contribution, while very valuable, representing a low percentage in overall and complex scheme of project financing.

Due to the complexity, commercial operation dead line of the project and low percentage contribution of World Bank and other International Institutions, WB, ADB, EIB accept the procurement arrangement by NTPC, except for the IDA fund specific for the Social- Environmental component, which follows the World Bank procurement guideline.

The Head Construction Contract: NTPC enters into the Head Construction Contract (HCC) with EDF (the "Head Contractor" or "HC") without ICB. NTPC will undertake the construction of the project through a HCC which is a turnkey, price-capped engineering, procurement and construction contract between NTPC and the HC.

As head contractor, EDF will have full responsibility for overall project management and delivery of the completed project for a fixed price and by a specific date. Subcontractors will work under its direction on fixed-price, time-certain, lump sum contracts; the only exception being the underground works which are part of civil works contracts (CW2 and CW3), estimated to amount to about US\$20 million of a total HCC cost currently estimated at about US\$722 million. The other three subcontracts place the construction risk fully on the subcontractor.

The Technical Services and Personnel Management Contracts include the operating and maintenance arrangements for the project. NTPC plans to undertake the operation of the project itself, but with the provision of technical support and staffing from EDF and EGCO (acting through its subsidiary ESCO). Technical Services and Personnel Management Contracts are being entered into by NTPC, with Electricité de France (EDF) and EGCO Engineering & Service Co., Ltd. (ESCO), an operational subsidiary of EGCO. These have been developed to ensure that a comprehensive operational structure can be implemented that will meet all of the operational obligations of NTPC under the CA, EGAT PPA and the EDL PPA.

NTPC Implementation Arrangements: To fulfill its environmental and social obligations under the CA and implement the actions specified in the SDP and EAMP, NTPC has established an Environment

and Social Management Division. The work of the division will be undertaken by two offices - Environmental Management Office and the Resettlement Office.

Sub-contracting and workers at ground level

The HC in turn subcontracts the construction works under five principal subcontracts (the Civil Works I "CW1", Civil Works 2 "CW2", Civil Works 3 "CW3", Electromechanical I "EM1" and Electromechanical 2 "EM2" packages), through ICB in compliance with EDF rules and regulations, except the CW1 awarded without ICB to ITD one of the shareholders:

EM 1- Turbines, Generators, 500/115 KV substation, Mechanical & Electrical auxiliaries- awarded to GE Energy (Norway) SA, ABB Inc. (Canada), ABB Power Technologies AB (Sweden), and Clemessy SA (France).

EM 2: consist of 500/115 KV Switchyard, Transmission lines- awarded to ABB, Mitsubishi-Sumitomo

CW 1: consist of Dam, Roads, Residence- awarded to ITD.

CW 2: consist of Power station, Switchyard, Intake, Tailrace and Deviation channels.

CW 3: consist of Regulating dam, Regulating pond, Downstream channel.

[CW 2 & 3 awarded to Nishimatsu JV & Mitsubishi of Japan.]

- The site work force numbers about 8,000 at peak period of construction (2006- 2007), of which 80 percent are Lao nationals, selection and employment directly by the head contractor and sub-contractors.
- More than ten local sub-sub-contractors supply goods and services to the Head Contractors and Sub-Contractors of the project, through direct purchase or procurement from the suppliers; which include workers supply, materials, cars, vehicles, trucks and heavy construction equipments rental, etc.

- Head Contractors and Sub- Contractors procure very few new light and heavy equipments specific for the project, they prefer using their own existing one and also lease from the local construction companies or suppliers. For example the Head Contractor procures only 40 pick up and 4WD Land cruiser (Toyota and Ford), through direct purchase agreement with local dealers in Lao PDR; they were quickly delivered and at competitive price.

6) Impact

The project will generate annually no less than US\$ 200 million; direct revenue accruing to the Lao Government throughout the concession period amounts to around US\$ 2,000 million or about US\$ 80 million per year, this revenue will be used mainly for the poverty reduction program nationwide.

Table 20: NTPC Projected Income Statements (\$US Million) of which Lao Government revenue in form of tax, royalty, dividend

	2009/ 10	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenue	241	210	213	216	219	222	225	228	232	235	238	241	245
Operating Expenses	26	22	22	20	20	25	18	19	18	20	27	37	25
Guarantee	2	2	2	2	2	1	1	1	1	1	0	0	0
Financing Charges	1	1	1	1	1	1	1	1	1	1	0	0	0
Gross Operating Profit	212	185	188	194	197	196	205	208	212	214	210	204	219
Depreciation	58	50	50	50	50	50	50	50	50	50	50	50	50
Earning Before Interest and tax	154	136	139	145	148	146	156	158	162	165	160	154	170
Foreign Exchange Gain/Loss	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Earning from Reserves	0	1	1	1	1	1	1	1	1	1	1	1	0
Net Interest Expenses	82	67	63	59	53	48	41	34	26	18	8	2	0
Profit Before Tax	73	70	77	87	96	100	116	126	138	149	154	153	170
Royalty and Income Tax	13	11	11	11	11	16	17	18	19	19	19	20	36

Net Income	60	59	66	76	84	84	99	108	119	130	134	133	134
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Revenue	248	251	255	259	262	266	269	273	277	281	285	240	
Operating Expenses	25	23	23	24	33	22	26	26	31	34	36	27	
Guarantee	0	0	0	0	0	0	0	0	0	0	0	0	
Financing Charges	0	0	0	0	0	0	0	0	0	0	0	0	
Gross Operating Profit	223	228	232	235	229	243	243	247	245	246	248	213	
Depreciation	50	50	50	50	50	50	50	50	50	50	50	41	
Earning Before Interest and tax	173	179	182	185	180	194	194	197	196	197	199	172	
Foreign Exchange Gain/Loss	0	0	0	0	0	0	0	0	0	0	0	0	
Interest Earning from Reserves	0	0	0	0	0	0	0	0	0	0	0	0	
Net Interest Expenses	0	0	0	0	0	0	0	0	0	0	0	0	
Profit Before Tax	174	179	182	185	180	194	194	197	196	197	199	172	
Royalty and Income Tax	37	38	60	61	60	86	87	117	117	118	119	102	
Net Income	137	141	122	125	120	108	108	81	79	79	79	70	

Social and Environmental Development

- Approximately 1,200 families (6,200 people) who live below the international poverty threshold of US\$ 2 per day are resettled in new villages with electricity, water supply, (including irrigation and portable water), schools, clinics, and other community infrastructure facilities which did not exist in their old villages. A variety of livelihood opportunities are provided such as: agriculture, livestock, forestry, fishery, community development, etc.
- Nam Theun 2 watershed comprising of Nakai-NamTheun National Protected Area of world class primary forest and biodiversity is planned to be protected on a sustainable basis, which includes wildlife especially elephant management program, receiving the fund from NTPC via contribution of US\$ 1 million per year during 30 years period.

- The downstream areas, covering 200 villages, below the power station, benefit the assistance of US\$ 16 million from NTPC to mitigate the impacts by the change of river flows, to be spent 50% before and 50% after Commercial Operation Dead line.
- UXO clearance of 3,400 hectares of land, costing US\$ 8 million is contributed by NTPC, for all project areas including the resettlement areas and related agricultural zones as well as residential areas.
- NTPC with Lao Government cooperate in capacity building by joint work, training, technical assistance, at provincial, district and village levels, in management, health, social, livelihood, and environment areas. As an example 250 people trained in public health, 400 direct employees of NTPC are learning by doing during the 5 years construction period.
- Local constructions companies beside providing rental of cars, vehicles, trucks, heavy equipments (bulldozer, grader, wheel loader, excavator, back hoe, etc.), they are hired to do some parts of works in building roads, canals, transmission lines. For the settlement of villagers, the project assigned to local construction companies, through NCB to build more than one thousand houses and other community infrastructures (schools, irrigation, deep wells, clinics, sawmill, wood furniture mill, etc.

The total amount of revenues of local constructions companies from the project is estimated around 30 percent of the civil work and environment and social cost of the project.

- The local economy is booming during the construction of the project, we can see the increasing number of houses for rent, restaurants, fresh markets and shops in Nakai and Gnommalath. Thakhek as well is moving to improve the services in terms of foods and accommodation (new hotels and guest houses are built).

Annex D: Case Study for The Project for Vientiane Water Supply Development (JICA)

1) Background of the project

The project for The Vientiane Water Supply Development is an urban water supply project undertaken in the Lao PDR capital. The main project objectives are to attain a stable water supply and improve the water supply service ratio in Vientiane Capital. (The Prime Minister's decree in 1999 states that the target water supply service ratio in urban areas of 80% should be achieved). The Government of Japan agreed to provide grant aid to the Government of Lao PDR (GoL) for the project under the Exchange of Notes between the Japanese Ambassador to Lao PDR and the Ministry of Foreign Affairs of the Lao PDR dated 10 February 2006. After the detailed design stage, the full project grant was agreed on 6th June 2006. The project was completed on 31st March 2009, and the facilities are now operational and under the ownership of the GoL.

The motive for the funding request for this project by GoL was an increasing demand on the existing water supply system in Vientiane triggered by an increasing population, and the expansion of industrial and residential areas. The two existing water facilities were stretched to capacity. In addition, existing water facilities and equipment (dating back to 1960s) had a high leakage ratio and low water pressure resulting in an unstable water supply.

2) Objectives of case study and methodology

The main purpose of this case study is to take a micro level approach in tracking donor funds for a specific project from commitment by the donor to disbursement by the lead implementing agency down to the ground level. From this account, funds dispersed will be investigated to determine the organisations involved with the disbursements, the procedures used at each stage, and the exact source in terms of countries of origin of the goods purchased and services employed for the project. A key feature of these case studies will be to identify factors which led to the discrimination of goods and services on the basis of nationality and how this occurred, for example a rules and regulations based explanation, or due to an organisation's practices. The second step of the case studies will be to assess the impact of the sourcing of contracts on the cost effectiveness and developmental effectiveness of the original disbursement for the project.

In order to investigate the tracking of funds from the donor's commitment to disbursement by the project implementing agencies, several sources of information and lines of investigation have been

pursued. This has included the review of secondary data sources including basic design study report documents on the project, donor procurement guidelines (from JICA website), completed case study questionnaires, project monthly progress reports obtained from the donor and PMU, and exchange of notes between the Lao Ministry of Foreign Affairs and the Embassy of Japan in Lao PDR. In addition primary data collection has been initiated at every stage of the investigation wherever possible. This has involved meeting with relevant individuals at the donor, including the senior aid coordinators at JICA, programme officers directly involved with the project, as well as a ground truthing exercise with a site visit to the Kaolio water treatment plant. Face-to-face meetings were held with personnel and high level staff from the project management unit at the Department of Housing and Urban Planning at the Ministry of Public Works and Transport (MPWT), and with the Lao representative from the head contractor of construction works.

3) Project structure

From the basic design study for the project in 2005, it was found that water demand in Vientiane Capital City was 100,000m³/day (80,000m³/day and 20,000m³/day from Chinaimo and Kaolieo treatment plants respectively), which was maximising the daily water supply capacity. It was also estimated at that time that by 2007, water demand would exceed the current water supply capacity by approximately 40,000m³/day. Therefore the goals of the project are to mitigate water shortages in Vientiane and to establish adequate water transmission and distribution systems.

The project was initially proposed by the MPWT through the Lao Ministry of Planning and Investment (MPI). Submitted projects which are considered high priority are selected and short listed. Final evaluation then takes place in Tokyo to agree financing for a project. JICA send a study team from Tokyo to check if the government's request is reasonable and suitable, by conducting a preliminary survey. The preparatory study team for this project first arrived in Lao PDR in August 2002 to agree on the purpose of the study and scope of works. The findings from the preliminary investigation are then presented in a fact finding report. When both sides are satisfied with the findings, funding is then approved by JICA.

The main components of the Vientiane Water Supply Development Project under this Grant Aid are as follows:

1. The Kaolio Water Treatment Plant is expanded to a capacity of 40,000 m³/day;

2. The existing Kaolieo Water Treatment Plant is rehabilitated to achieve its design capacity of 20,000 m³/day;
3. The existing Chinaimo Water Treatment Plant is rehabilitated to achieve its design capacity of 80,000 m³/day; including separation of the transmission /distribution pipelines, construction of a new distribution reservoir (with a capacity of 7,500m³), and construction of a new pumping station
4. The existing Km6 booster pumping station is rehabilitated;
5. The transmission mains of about 720 m long are installed;
6. The distribution mains of about 8,615 m long are installed;
7. Some laboratory equipment for water quality analysis is supplied; and
8. Water treatment plant operators are trained.

Within the components listed above, both consultancy services and construction works are required.

A ground truthing visit was undertaken to the Kaoliao water treatment plant in Vientiane, where both the existing rehabilitated plant, and the brand new facilities to expand the capacity of the plant were visited. From the site visit it was discovered that the following nine facilities are used in the water treatment process had to be constructed/renovated for the plant:

1. Intake pump house (from Mekong river)
2. Raw Water Chamber
3. Receiving well
4. Sedimentation basin
5. Gravel filter
6. Chlorination room
7. Clear water tank
8. Back wash pump
9. Distribution pump

Consultancy services included the initial basic design study conducted by Nihon Suido Consultants Co. Ltd, under contract with JICA from June 2004 to September 2005 (excluded from the grant funds) prior to project implementation. The purpose of which was to examine the feasibility and rationale of the project, and to formulate a basic design.

Once the project was approved by JICA, consultancy services were required for the main project implementation, including detailed design of the project, bidding preparation for construction bids, bid evaluation, contract negotiation, construction supervision, quality control, preparation of monthly progress reports, training of plant operators and capacity building.

One turnkey contract for construction was issued for the entire project, which includes all construction works and procurement of equipment and materials. The main construction works are included in the list of main project components above.

Since there was a remaining amount of grant funds left over at the end of the project, the GoJ agreed to approve two additional works:

- 1) Extension of river bank protection in the Kaolieo water treatment plant
- 2) Uplift prevention measure of the clear water reservoir in the Kaolieo water treatment plant.

The cost of the additional works was 21,915,000 Japanese Yen.

4) Funding Arrangements

On 6th June 2006, an amount of 2,875 million Japanese Yen (30.2 million USD) in the form of grant aid from the Japanese government was pledged for the project. The aid modality used was project based assistance, which was deemed the most appropriate modality by JICA under the circumstances in order to secure suitable quality of the facilities. Developing socioeconomic infrastructure, which is written in 'Japan's Country Assistance Programme for Lao PDR' (September 2006), is one of the main points of Japan's assistance policies for Lao PDR. It was under this policy that the Vientiane water supply project was conducted.

In accordance with standard procedure of Japanese grant aid assisted projects, a bank account in Tokyo is opened by GoL specifically for the project, on approval of the project by JICA. The grant funds are transferred from JICA HQ to the account, denominated in Japanese Yen. When payments to contractors are due, GoL request authorisation from JICA HQ to pay contractor directly from the project bank account (in Japanese Yen). GoL authorise payment based on certain conditions before requesting final authorisation from JICA, which includes a certificate of work completion to the required standard. The disbursements to the head contractor are split into 5 payments, and designed so that each disbursement stage requires a certain level of progress on a specified number of construction tasks. Typically five main tasks and construction components must all be fully completed before the next stage of disbursement payment is achieved.

Government Involvement

The project is owned and managed by the Department of Housing and Urban Planning at the Ministry of Public Works and Transport. Since the project is implemented exclusively within the Vientiane capital, no provincial departments were involved with the implementation of this project. The department at the central ministry had a role in overseeing and accepting the procurement of the consultants and head contractor, which had contracts signed with the department. The department was also responsible for monitoring the process of the project to ensure the contract duties were being fulfilled, and approving contract disbursements.

In addition to the grant aid from the GoJ, the GoL also approved a budget of 1,500 million Kip (175,000 USD) to implement activities under responsibility of the GoL side. Namely this included land acquisition for the Km6 booster pumping station, land rental fee for stockyard and site offices, installation of gates and fences, power supply, water supply and drainage, relocation of administration building and alum factory, and other administrative costs for the GoL side.

5) Tender and Procurement process

Guidelines for the selection of Consultancy Services

For the procurement of consultancy services under the project, JICA guidelines for Japanese Grant Aid were followed. The recipient government (GoL) entered into contract with the consultant for consulting services with regard to the designing, tendering and supervising the procurement of contractors for the project.

For eligibility conditions of the consultant in Japanese grant assisted projects, in accordance with the Exchange of Notes, the Consultant shall be a Japanese national. The term Japanese national whenever used in these guidelines means Japanese physical person or a Japanese juridical person controlled by Japanese physical persons.

For the actual selection of the consultancy company, the consultant is selected by JICA, and is recommended to the recipient for each project (expressed through a letter of recommendation to the recipient government). The actual selection process is not stated in the guidelines, but was said to be a competitive procedure held within Japan. The recommendation is to expedite execution of the project by ensuring the technical consistency from the basic design of the project.

In the contract between the consultant and the recipient government, the guidelines state that the scope of consulting services provided by the consultant will include the following:

- 1) To conduct the detailed design study for the project.
- 2) To assist the recipient in conducting the procurement of contractors in a fair and proper manner.
- 3) To provide appropriate supervision and guidance, on behalf of the recipient, to the contractor.
- 4) To conduct inspections on the products and services in the course of the project implementation, including cargo inspection contracted out to an inspection organization.
- 5) To conduct inspections at the completion stage and at the end of the warranty period.

Guidelines for the selection of Contractors and construction work

Procurement of contractors (for construction), goods and services, followed JICA's grant guidelines specific to products and services. These guidelines also state that the contractor should be Japanese nationals who are capable of procurement of products and services in a proper manner under the grant. However for procurement of 'products and services' e.g. equipment and construction materials, sourcing from countries other than Japan or the recipient country can be made in accordance with the Exchange Notes with the prior consent of JICA. In this regard, the sourcing of equipment and materials for this project is unrestricted by rule, where the purchase of products from countries other than Japan and Lao PDR is permitted, as specified in the exchange of notes.

For procurement of contractors, competitive tendering must be take place as stipulated in the donor's guidelines, and is considered to be the best procedure for efficient use of the grant.

Thus, with the selection of consultants and contractors for the project only open to Japanese nationals, the sourcing of consultants and contractors for construction is effectively tied to the donor country according to the donor's rules and regulations. However there may be untied status relating to the sourcing of goods and equipment, depending on the eligible source countries set out in the exchange notes, with the prior consent of JICA.

Tender Evaluation (Selection procedure for contractors and consultants)

For consultancy services, the consultant will be selected by JICA, which must be an eligible company according to the procurement guidelines (e.g. Japanese). However the procedure used and criteria requirements for selection are not made explicit in the guidelines. Only the fact that selection

includes a competitive element has been expressed in primary information collection from individuals directly involved with the project.

For procurement of construction goods and civil works, competitive bidding is a required procurement procedure. Non competitive procedures may be used with the prior consent of JICA when competitive tendering is inappropriate, only under the following circumstances:

- 1) Where the recipient demonstrates adequate reasons for procurement of spare parts for existing equipment
- 2) Where the recipient demonstrates adequate reasons to maintain the continuity of services being provided under an existing contract
- 3) Where the number of qualified suppliers or contractors is extremely limited
- 4) Where the scale of procurement is so small that it is duly doubtful that potential bidders would be interested, and the advantages of competitive tendering would be outweighed by the administrative burdens involved
- 5) Where emergency procurement is required.

In the above-mentioned cases, the procurement procedures of i) Selective tendering, and ii) Direct contracting, may be used provided that such use is in a manner that complies with the competitive tendering procedures to the fullest possible extent.

According to the JICA guidelines, prequalification is advisable for large or complex work and, exceptionally, for custom-designed equipment or specialized services to ensure, in advance of tendering, that the invitation to tender is to be extended only to those who are capable. Prequalification should be based entirely on the capability and resources of potential bidders to perform the particular work satisfactorily, taking into account, in particular:

- 1) Experience and past performance under similar contracts
- 2) Experience and past performance in the overseas countries
- 3) Capabilities with respect to personnel, equipment and plant
- 4) Financial position.

The invitation to prequalification for a specific contract is required to be publicly announced. As soon as prequalification is completed, the tender documents are issued to the qualified bidders. All such bidders that meet the specified criteria shall be allowed to tender.

Public announcement shall be carried out in such a way that all potential bidders will have a fair opportunity to learn about and participate in the tender. Invitation to prequalification or to tender should be advertised in at least one newspaper in general circulation, and if any, in the official gazette in the recipient country or a general circulation newspaper in its neighboring countries or Japan. The following items must be included in the public announcement:

- name of the project
- brief description of the project
- name of the executing agency
- qualification required of the bidder
- date, time and place of the delivery of tender documents (or date, time and place of the delivery of prequalification documents, in case of prequalification)
- other relevant and important information that potential bidders may need to determine whether to submit a tender.

The tender invitation, tender documents, and contracts should be prepared in English, French or Spanish.

The competitive tendering process follows a quality-cost based selection procedure, and tenders are opened publically in the presence of all the bidders or their representatives. Tender evaluation shall be consistent with the terms and conditions stated in the tender documents. Those tenders which substantially conform to the technical specifications, and are in compliance with the other conditions stipulated in the tender documents, shall be judged solely on the basis of the submitted price, and the bidder who offers the lowest price shall be designated as the successful bidder.

6) Results of Procurement on the Project

Contracts at the primary level

For the Vientiane Water Supply Project, one consultancy company was procured by JICA on behalf of the executing agency to act as the consultant for the duration of the main implementation stages of the project (responsibilities already listed above). In this case JICA sent a letter of recommendation to the Department of Housing and Urban Planning, recommending the consultant company named: NIHON SUIDO Co. Ltd. (Japan) to be signed under contract with the department as the main consultant for the project. This was the same company recruited by JICA for the basic design stage of

the project in 2005, before the implementation of the main project began (and with costs excluded from the grant funds).

In the letter of recommendation, JICA propose using the same consultant as during the initial stages to ensure ‘technical consistency’ and that information of the nature of the project is understood fully by the consultant who is therefore likely to perform better than other competitors during implementation.

The executing agency (EA) was required to sign in order to accept this recommendation. Otherwise if this recommendation was refused by the EA, a valid reason for refusal would have to be submitted in writing to JICA. Since the department of housing did not object to the recommendation, the consultant was signed to provide consultancy services for the entire project, with a total contract value of 159,117,000 Japanese Yen (approximately 1,636,000 USD).

For the procurement of construction services and goods for the project, one ‘turnkey contract’ was tendered through a competitive bidding procedure, where the contractor provided all construction services and equipment for the entire project. The procurement was managed by the EA, although heavily assisted by the consultant, including assistance with advertising the call for bid in Japan, evaluating bids and contract negotiation. The EA were invited by the consultant to attend the publically held opening of bids in Tokyo. The winning bid was from Shimizu Corporation (Japan), with a total contract value of 1,990 million Japanese Yen (approximately 20,462,000 USD). The two other unsuccessful bidders for this contract were Kowate (Japan), and Asawa (Japan).

Sub-contracting and workers at ground level

As a policy, sub-contracting on Japanese grant aid projects is not forbidden and the donor and EA ‘don’t care’ if sub-contracting occurs or not, so therefore hold no records or details of any sub-contractors employed by Shimizu Cooperation for the project. The EA is only aware that it did occur during the project, but further information is not available.

Note: It is up to Shimizu Corporation to disclose this information at their discretion (requested, awaiting response).

According to the EA, all construction workers at the project site were of Lao nationality, although the engineers on site were Japanese (Shimizu Corporation). The ground truthing visit to the completed facilities confirmed that Lao employees now operating the plant received training from the consultants

and the construction company. Operation of the plant requires ten staff full time, with three shifts per day. Since the construction of the facilities was recently completed at the time of the site visit, it was not possible to interview workers, labourers, or contractors on site in order to determine the origin of all skilled and unskilled workers. The new extension to plant was officially finished in August 2008; meanwhile refurbishment of the existing plant was completed in March 2009.

Procurement of goods and services (origin, cost and method)

All of the goods and services required for the project (including equipment and materials) were procured by the head contractor (Shimizu Corporation) and possibly partly by sub-contractors. Under the turnkey contract the head contractor signed with the EA, they are responsible for all construction works and provision of equipment, therefore no separate contracts were issued by the donor or EA for procurement of goods and services.

As specified in the JICA regulations, equipment sourcing is unrestricted for this project. However, from the ground tuthing visit, it was observed that many items of equipment were obviously sourced directly from Japan. This includes items of equipment with ‘made in Japan’ identification marks, where these specialised items were most likely unavailable locally so would have been imported from Japanese suppliers directly. These items include water pumps from the Mekong River (the plant has two pumps operating at any one time drawing water from the Mekong River, plus 2 reserve pumps). Other items seen to be sourced from Japan include:

- distribution pumps made by Toshiba (Japan)
- crane in water pump station
- water valves
- electronic control panels
- small water tanks

Note: unconfirmed by Shimizu Corporation, awaiting their comments on equipment and sourcing

A number of local inputs were also used on the project: steel bar, cement, sand, creole, unskilled labour

Extent Untied

At the primary level the grant aid for this project is fully tied, both in rule and in practice, with the two large contracts with the EA signed with Japanese companies. At the sub-contracting level, the extent of local services employed is unknown and at the labourer level, only Lao workers were used. Statistics obtained from JICA reveal that out of the total value of goods and services procured on the project, 34% of procurement was sourced from Lao PDR, 57% from Japan, and 9% from third party countries (including Thailand and China).

7) Impact

Cost Effectiveness

The procurement of construction and consultancy services at the primary level is tied by regulation; therefore it is not possible to look at the potential benefit of untied aid in terms of using the aid cost effectively. It can be said that the head contractor was still procured through an open competitive bidding process, where the lowest cost bidder was awarded the contract. However since the selection process was limited only to Japanese companies, it is likely there were other lower cost potential bidders, which implied the grant aid was not used cost effectively. In addition procurement of the main consultancy company was single sourced by JICA for the main project phase, and therefore uncompetitive and likely not cost effective.

Information on procurement of sub-contractors and equipment is currently unavailable, although this may tell a different story since procurement at this level is untied by rule, and may be more cost effective. For this project (as for all other Japanese ODA funded projects), sourcing of equipment and materials was unrestricted by regulation and can come from potentially any country, as specified in the exchange of notes, with the prior approval of JICA. Despite this flexibility, large amounts of sourcing of equipment from Japan still did occur on the project as observed in the ground truthing exercise⁴⁴.

Developmental Effectiveness

Again, estimation of the developmental effectiveness of untied aid by looking at this project is not possible at the primary level in the context of a fully tied project. Benefits of winning the project at this stage would have accrued to Japanese nationals. Even though the aid at this level was tied, at the sub-contracting level and purchasing of materials for construction and hiring of construction workers, there are likely to be some untied components where sourcing was conducted locally. Therefore some local development benefits would have been realised. It has already been revealed that all unskilled

⁴⁴ Price data for this equipment is unavailable.

labourers were of Lao nationality and raw materials were purchased locally. This would have provided some local employment and income indirectly from the project funds during the construction stages.

Annex E: Econometric Analysis

Tables 4.1 and 4.2 present the empirical results for Viet Nam and Laos respectively. Regressions have been estimated using simple OLS, fixed effects and random effects panel regressions; however, we are here reporting only results obtained using RE estimator.

Table 4.1 – Laos

<i>Dependent variable: Exports</i>	ODA aggregated	Tying status	ODA disaggregated (loans and grants)	EC variable
GDP	0.836***	0.679***	0.693***	0.686***
GDP per capita	1.51	0.187	0.126	0.089
ODA i	0.286***	0.307***		
ODA All-i	-0.292	-1.509		
Distance	-2.266	-1.534	-1.803	-1.995
Import residual	0.248***	0.259***	0.269***	0.271***
Tying status %		1.123	0.992	0.999
Grants i			0.319***	0.325***
Grants All-i			-1.139	-0.792
Loans i			-0.021	-0.023
Loans All-i			-0.024	-0.023
EC disbursements				-0.021
Constant	-216.785	-303.107	-247.527	-302.001*
N	104	103	103	103
N_g	20	20	20	20
r2_w	0.06	0.133	0.123	0.137
r2_o	0.46	0.485	0.494	0.488
r2_b	0.624	0.69	0.7	0.699

Note: All variables are in natural logarithms (except Common language and Tying status). All regressions include a time trend not reported.

Legend: * significance at 10 percent **significance at 5 percent *** significance at 1 percent.

Data covers the period 2002-2007.

Common language automatically dropped (no donors share common official language with Viet Nam).

Export credits and FDI could not be included due to data unavailability.

Table 4.2 – Econometric results for Viet Nam

<i>Dependent variable: Exports</i>	ODA aggregated	Tying status	ODA disaggregated (loans and grants)	Export credits	EC variable (1)
GDP	0.951***	0.947***	1.071***	1.073***	1.050***
GDP per capita	-0.517	-0.553	-0.615	-0.618	-0.709
ODA i	0.167**	0.170**			
ODA All-i	0.822*	0.825*			
Distance	-1.684***	-1.693***	-2.439***	-2.475***	-2.637***
Import residual	0.794***	0.789***	0.813***	0.808***	0.784***
Tying status %		-0.007	0.224*	0.323**	0.148
Grants i			0.118***	0.116***	0.113***
Grants All-i			-0.354	-0.325	0.061
Loans i			-0.043**	-0.045**	-0.035*
Loans All-i			0.303	0.295	0.414
Export credits				-0.003	-0.003
EC disbursements					-0.039***
Constant	157.632	161.238	-63.569	-62.366	-118.521
N	127	126	126	126	126
N_g	22	22	22	22	22
r2_w	0.503	0.501	0.497	0.503	0.514
r2_o	0.791	0.802	0.819	0.819	0.822
r2_b	0.793	0.795	0.817	0.817	0.82

Note: All variables are in natural logarithms (except Common language and Tying status). All regressions include a time trend not reported.

Legend: * significance at 10 percent **significance at 5 percent *** significance at 1 percent.

Data covers the period 2002-2007.

Common language automatically dropped (no donors share common official language with Viet Nam).

FDI could not be included due to data unavailability.

Theoretical framework

The basic idea is to consider whether there is any trade distorting effects of aid at an aggregated level by examining whether bilateral aid from a particular donor to a recipient country affects trade between that donor and recipient pair differently from aid from other donors.

There could be several reasons why Official Development Assistance could lead to an increase in the donor's exports (*positive impact*).

The most obvious explanation is that *aid is formally tied* to exports from the donor country (direct effect); by definition tied aid results in trade dependency⁴⁵. However, there are several ways for a donor to effectively tie aid without a formal tying agreement⁴⁶. Therefore, also *de facto* tying by covert restrictions on sourcing can generate increased trade with the recipient.

There are however other indirect effects that might lead to a positive correlation between ODA and donor's exports. Aid might have a *macroeconomic impact* in the recipient countries; higher rates of economic growth and structural economic reforms such as trade liberalization might indirectly impact on donor's exports. Moreover, aid flows could result in an increase in trade with the donor, reflecting the *goodwill* of the recipient towards the donor. Finally, the aid relationship might facilitate trade between the donor and the recipient increasing recipient's *proclivity* to procure goods from the donor (reinforcing commercial ties).

In theory, bilateral aid could also decrease donor's exports to the recipient country (*negative impact*); if aid were tied there might be a straight forward *substitution effect* (Osei *et al.*, 2004; Wagner, 2003; Martínez-Zarzoso *et al.*, 2008; Zarin-Nejadan *et al.*, 2008;). Other donor aid could, however, reduce a donor's aid. Also if there were a partial tying restriction, for example to local, regional or developing country sourcing, that could have a negative effect .

In general, earlier studies (Nilsson, 1997; Wagner, 2003; Martínez-Zarzoso *et al.*, 2008; Zarin-Nejadan *et al.*, 2008; Nowak-Lehmann *et al.*, 2008; Petterson and Johansson, 2009) have found a positive correlation between donor aid and donor exports; these results have usually been seen to corroborate the hypothesis that aid is tied (formally or informally) to exports from the donor country (Petterson and Johansson, 2009).

Review of possible methodologies

The aim of the chapter is to study the impact of ODA on bilateral exports; the initial and main hypothesis is however that tying practices are critically important in driving the trade distortion. Some of the methodologies used to study the relationship between bilateral exports and aid which could lend themselves to the possible inclusion of a tying status variable are therefore reviewed.

One option is the *gravity approach*. The original gravity model (Tinbergen, 1962; Bergstrand, 1985) has bilateral exports as a dependent variable and as explanatory variables: GDP and GDP per capita of donor and recipient; distance; dummies for a common language and colony. Additional to the typical gravity variables it is possible to add an aid variable.

⁴⁵ Tied aid may simply finance donor exports that would have been procured from the donor country anyway, however, we would expect tied aid to usually increase donor's exports.

⁴⁶ See Annex – Data issues – 1a.

Nilsson (1997) is the only study, using a gravity model, which tried to control for the degree of tying by including a dummy for those donor countries which, on average, tied more than half of their bilateral aid (the variable, however, was not found to be significant).

However, in the literature there have been criticisms to empirical studies of trade that use aid flows as an explanatory variable (i.e. gravity models). Most of the studies use cross-section or pooled data; however, the nature of the aid-trade links might differ among donor-recipient pairs. Therefore results may be misleading if estimations are performed over the whole sample. For this reason, data should be pre-tested to determine the nature of the aid-trade links for donor-recipient pairs using *Granger causality* (Osei *et al.*, 2004).

Lloyd *et al.* (2000), Arvin *et al.* (2000) and Osei *et al.* (2004) have used this methodology. Arvin *et al.* (2000) is however the only study which distinguishes aid by its tying status. Arvin *et al.* (2000) investigates the relationship between untied assistance and donor country exports using German data over the period 1973-1995.

In general, there is a very limited number of studies which have tried to include explicitly/directly the tying status of aid. Tajoli (1999) estimates the impact of Italian tied aid on total imports of recipient countries and tries to examine whether the distortionary impact of tied aid overcomes the trade generating effect.

Methodology – Empirical specification

The gravity approach has been often praised for its remarkable explanatory variable and it is solidly based in the empirical literature (as opposed to Tajoli methodology which is only a minor approach). Granger causality itself has several limitations⁴⁷ and would be difficult to implement given the limited number of observations available. For this reason it was decided to use a gravity model and adapt it to the country level.

In this section, the empirical specification used to test empirically the hypotheses⁴⁸ is set out. This follows closely the methodology adopted by Massa and Te Velde (2009).

First, the following regression is computed in order to understand whether aid flows have an impact on total donors' export flows to the recipient country at an aggregate level.

$$\ln(\text{Exp}_{it}) = \alpha + \beta_1 \ln(Y_{it}) + \beta_2 \ln(\text{Ypc}_{it}) + \beta_3 \ln(\text{Dist}_{it}) + \beta_4 \ln(\text{ComL}_{it}) + \beta_5 \ln(\text{ExpC}_{it}) + \beta_6 \ln(\text{Im pR}_{it}) + \delta_1 \ln(\text{ODA}_{it}) + \delta_2 \ln(\text{ODA}_{All-it}) + \varepsilon_{it}$$

(ODA aggregated)

The dependent variable Exp_i represents the export flows⁴⁹ from country i to the recipient country;

⁴⁷ See Annex (Problems in estimating the determinants of exports – the aid and trade relationship) for a full discussion on the direction of causality as well as Granger causality drawbacks.

⁴⁸ See Annex for further details on problems in estimating the determinants of exports related to the nature of the aid and trade relationship.

⁴⁹ Exports include all traded goods but not services. Ideally, we would have liked to use exports of goods and services as a dependent variable; this exercise would have proved particularly interesting considering aid is

Y_i and Ypc_i measure respectively the GDP and GDP per capita of donor country i ;
 ODA_i is the country i 's Official Development Assistance to the recipient country whereas ODA_{All-i} represents ODA the recipient country receives from all the bilateral donors other than country i .
 $ExpC_i$ stands for export credits;
 $Dist_i$ stands for the distance between the exporting and the recipient country whereas $ComL_i$ is a dummy indicating whether the donor country and recipient share a common official language⁵⁰. ε_i is the error term, normally distributed, with mean 0 and variance σ_ε^2 .
 $ImpR_i$ stands for import residuals.

There might be a number of unmeasured influences that affect both aid and exports in the model. The omission of variables representing such influences (either difficult to measure, such as political ties and other unmeasurable relationships between the donor and the recipient, or simply underlying relationships not identified as potential determinants) could lead to over-estimating the explanatory power of foreign aid, which could be proxying for several of these omitted variables.

In order to overcome this problem an OLS regression is run on imports from the recipient to the donor and then the residuals from this regression are included in the original equations. This procedure is carried out on the assumption that underlying relationships, and more in general unmeasured variables, between the donor and the recipient (trading partners in this case) affect imports and exports in the same way (Wagner, 2003).

Second, the above regressions is re-estimated including a potentially important extra variable TS (tying status). TS_i stands for the percentage of donor ODA reported as tied. There is a direct link between formally tied aid and trade. When a donor provides tied aid, the recipient is constrained to the purchase of donor country exports.

$$\ln(Exp_{it}) = \alpha + \beta_1 \ln(Y_{it}) + \beta_2 \ln(Ypc_{it}) + \beta_3 \ln(Dist_{it}) + \beta_4 \ln(ComL_{it}) + \beta_5 \ln(ExpC_{it}) + \beta_6 \ln(Im pR_{it}) + \beta_7 \ln(TS_{it}) + \delta_1 \ln(ODA_{it}) + \delta_2 \ln(ODA_{All-it}) + \varepsilon_{it}$$

(Tying status)

Third, the regression above is re-estimated disaggregating ODA into loans and grants⁵¹ to test whether certain aid instruments impact differently on trade flows.

$$\ln(Exp_{it}) = \alpha + \beta_1 \ln(Y_{it}) + \beta_2 \ln(Ypc_{it}) + \beta_3 \ln(Dist_{it}) + \beta_4 \ln(ComL_{it}) + \beta_5 \ln(ExpC_{it}) + \beta_6 \ln(Im pR_{it}) + \beta_7 \ln(TS_{it}) + \delta_1 \ln(Loans_{it}) + \delta_2 \ln(Loans_{All-it}) + \delta_3 \ln(Grants_{it}) + \delta_4 \ln(Grants_{All-it}) + \varepsilon_{it}$$

often tied to consultancy services. However, exports of services had to be excluded due to the unavailability of disaggregated data (see Annex – data issues for further details).

⁵⁰ In order to adapt the original gravity model to the country level, we do not include in the regressions the recipient's GDP and GDP per capita (which only vary across years and not across donors). We also drop the dummy 'colony' indicating whether the donor and the recipient have been in a colonial relationship; at the country level this variable loses its interest and moreover it is likely to be highly correlated with the common language variable.

⁵¹ Aggregated ODA includes loans, grants, equity investment and grant-like (see Annex - definitions). However, once we disaggregate we lose information about equity investment and grant-like.

Aid instruments are distinguished based on the origin of the flows. $Grants_i$ is the country i 's grants to the recipient country whereas $Grants_{All-i}$ represents the grants the recipient country receives from all the bilateral donors other than country i . Similarly, $Loans_i$ and $Loans_{All-i}$ are respectively the loans the recipient country receives from exporting country i , and from all the countries other than country i ⁵².

However, the exclusion of certain potentially important factors may confound the influence of the explanatory variables on export flows. Therefore, the above regression is re-estimated including an EC variable; some donor personnel in Ghana suggested that the ACP-EU relationship might be an influence on exports from EU countries. In order to explore further this relationship we included a variable for EC disbursements.

Data issues

- 1) Data availability. The study can only make use of the data available. However, there are two key areas where it is not immediately apparent that the wanted data is not available.
 - a. Firstly, the data on tying can only capture formal tying. Both the investigation and the literature suggest that there is a substantial amount of *de facto* tying which is therefore not captured in the tables or econometrics. The tying status of aid is determined not only from the formal restrictions on spending which require recipients to contractually procure only from the donor country, but also from actual and practical restrictions which render aid funds *de facto* tied. There are several ways for a donor to effectively tie aid without a formal tying agreement. Informal tying might be the result of donors' commercial interests and pressures (and as such intentionally practised). It can occur when powerful donor countries are able to steer procurement towards national firms; through an implicit contract donors are able to persuade recipients to give preference to their suppliers within competitive bidding procedures (Tajoli, 1999). Donors may direct aid towards projects, goods or countries in which its industries have a comparative advantage in an attempt to assure that the procurement will happen in the donor country (Bhagwati, 1985; Jepma, 1991). Donors may also indirectly support national firms through the advertisement of the tender in publications which are not read outside of the donor country, or by evaluating bids against standards only applicable in the donor country (ActionAid, 2000). Donors might also informally tie their aid by first inviting bids and then deciding to support only those projects for which its home suppliers won the contract (U.S. Congress, 1993). Furthermore, informal tying can manifest itself as a 'secondary consequence of an arrangement already in effect' (Jepma, 1991). Tying of a small amount of aid might indirectly lead to a much larger amount. For example, large projects are usually undertaken after some preliminary examinations; when donors tie their aid to this pre-project phase, they often acquire substantial advantages in bidding for the project (U.S. Congress, 1993). In the provision of equipment with technical specifications, recipient

⁵² We cannot compute the $\log(\text{loans})$ or $\log(\text{grants})$ when the variable is equal to zero (the log is undefined). To handle this type of problem we add 1 to the data before logging it – $\log(0+1)$. We assume that such adjustment is immaterial in the dataset as all positive values in the data are large numbers.

countries might prefer to continue procurement from the same donor so as to avoid incompatibility or extra spending in technical training. The definition of (formal) tied aid might therefore underestimate the actual impact of tying practices on export flows. However, it cannot be excluded that some of the exports procured through tied aid would have been procured from the donor country anyway.

- b. Secondly, *Technical Assistance/Cooperation*, which accounts for a large slice of tied aid, does not usually enter the trade statistics. As highlighted in Stavlöta *et al.* (2006), if donor country representatives carry out consultancy services in a recipient country, the transaction will be registered as domestic (i.e. the consultants bill the donor directly which supplies them as services-in-kind) and will not enter the trade balance although these services could be regarded as export of services. This is important, as TC is both a significant share of ODA and an even larger share of tied ODA. Globally, 27% of TC related aid was tied as compared with only 13% for bilateral ODA in 2006 (Clay *et al.*, 2008, Table 3.5).
 - c. Moreover, the definition of exports in the analysis is restricted to goods and does not include services. This is likely to lead to underestimating the impact of the tying status variable on donor export flows.
 - d. We were also unable to get satisfactory data on additional variables for the econometrics e.g. FDI (for all countries), bilateral trade agreements, etc. FDI were only available for South Africa at a satisfactory level. Although this meant losing observations for 2007.
- 2) Data reliability is mainly an issue of reporting⁵³ quality. As quality has improved over time, we have retained data for only the latest years (2002-2007) but this restricts the sample, leaving us with a limited number of observations. This does not assist the robustness of results. Reporting was particularly bad
- a. Non response (tying status)
 - i. Overall - Some donors e.g. the US, only started reporting the tying status of ODA to the CRS this year (2008).
 - ii. Partial – e.g. reporting of TC components – a high percentage of projects by value do not report the TC status.
 - b. Differential reporting
Different donors interpret the reporting directives differently. For example, whether aid channelled through NGOs is tied or untied or over the precise definition of budget support. This has also changed over time and is becoming more consistent
 - c. Coverage
For the most part the study uses the CRS dataset as it has the project level data required however, comparison with the DAC dataset reveals that especially for the earlier years a substantial amount of ODA is not included.

⁵³ Reporting the tying status of aid is not mandatory; consequently this information is often not complete and missing especially in early years.

- 3) Commitments vs. Disbursements. Where possible the study tries to use the most appropriate, commitments have traditionally had more complete coverage whereas disbursements are closer to reality in terms of trade effects.
- 4) The exports data used in the study includes all traded goods. However, data represents only exports of goods and not services. Data is drawn from the IMF DOTS (Direction of Trade Statistics).

Definitions

Official development assistance (ODA) (source: OECD Glossary)

Grants or Loans to countries and territories on Part I of the Development Assistance Committee (DAC) List of Aid Recipients (developing countries) which are:

- (a) undertaken by the official sector;
- (b) with promotion of economic development and welfare as the main objective;
- (c) at concessional financial terms [if a loan, having a Grant Element of at least 25 per cent].

Official Development Assistance is classified by type of flow in the OECD Creditor Reporting System as follows: ODA Loans, ODA Grants, ODA Grant-like, ODA Equity investments.

Grants

Grants are transfers in cash or in kind for which no legal debt is incurred by the recipient. For DAC/CRS reporting purposes, it also includes debt forgiveness, which does not entail new transfers; support to non-governmental organisations; and certain costs incurred in the implementation of aid programmes.

Loans

Loans are transfers for which the recipient incurs a legal debt and repayment is required in convertible currencies or in kind. This includes any loans repayable in the borrower's currency where the lender intends to repatriate the repayments or to use them in the borrowing country for the lender's benefit.

Only loans with a grant element above 25 per cent are ODA eligible. In addition, an ODA loan has to be concessional in character. This means that its interest rate must be below the prevailing market rate.

Grant-like flows

Grant-like flows comprise a) loans for which the service payments are to be made into an account in the borrowing country and used in the borrowing country for its own benefit, and b) provision of commodities for sale in the recipient's currency the proceeds of which are used in the recipient country for its own benefit.

Equity investment

Equity investment comprises direct financing of enterprises in a developing country which does not (as opposed to direct investment) imply a lasting interest in the enterprise.

The above definitions have been extracted from: DCD/DAC(2007)39/FINAL, Reporting directives for the Creditor reporting System www.oecd.org/dataoecd/16/53/1948102.pdf

For further information on the creditor reporting system refer to the document above reported.

Exports

The coverage of exports statistics should be sufficiently broad to encompass all merchandise leaving a country to another country, except goods being transported through a territory (i.e. transit trade) (IMF, 1993).

Export Credits

Official or private bilateral loans which are primarily export-facilitating in purpose. They are usually tied to a specific export from the extending country and not represented by a negotiable instrument. As they have a primarily commercial motive, official export credits are classified as OOF, not as ODA. Premia paid to insure export credits, and indemnities paid under such insurance, do not constitute flows and are not recorded in DAC statistics (DAC directives available at : www.oecd.org/dac/stats/dac/directives).

Problems in estimating the determinants of exports – the aid and trade relationship

Direction of causality

We believe aid could be endogenous to trade. Although aid flows determine exports, there are several arguments that support that trade impacts on aid and therefore the existence of reverse causation (donors might decide to give aid to countries they have a trading relationship with; both aid and trade are likely to be high to countries donor has had a colonial relationship with; and so on). However, we are not able to instrument for aid; it proves difficult to find any variable that could be used as a credible instrument (and therefore an instrument which is correlated with aid but which does not itself belong in the trade explanatory equation) (Pettersson and Johansson, 2009). Granger causality test could be used to pre-test the nature of the aid-trade links for donor-recipient pairs. However, Granger causality itself has several limitations (for Granger causality drawbacks see Osei et al., 2004:112) and would be difficult to implement given the limited number of observations available.

We would have like to try and control for potential endogeneity of ODA flows to exports by using lagged disbursements. However, the restrictive dataset we used did not allow us to carry out such analysis. There are a limited number of observations in the dataset and the inclusion of an extra variable (lagged disbursements) would have reduced the sample further. Moreover, it is difficult to identify the right lag structure - an assumption is needed to choose the lag lengths for the analysis and the results are crucially dependent upon the lag structure selected for the variable. Several lag lengths were tried with no clear advantage over the results without lags.

Selection bias

When estimating the determinants of exports we only observe trade information on those donor countries that export. If only 50% of DAC donors export to the recipient country under analysis, we will only have export information on those donors that trade. The problem of this kind of model is that the sample actually observed may not be random. In order correct for selection bias the Heckman

procedure should be followed.

References (Econometrics)

Hejazi, W. and A. E. Safarian (2001) 'The Complementarity between U.S. Foreign Direct Investment Stock and Trade', *Atlantic Economic Journal*, 29, pp. 420–437.

Lloyd, T., McGillivray, M., and Morrissey, O. (2000) 'Does aid create trade? An investigation for European donors and African recipients', *European Journal of Development Research* 12 (1): 107-123.

Martínez-Zarzoso, I., Nowak-Lehmann, D. F., and Klasen, S. (2008) 'Does German development aid promote German exports?', Discussion Paper, 170, Goettingen: Ibero-America Institute of Economic Research.

Massa, Isabella and Dirk Willem te Velde (2009) 'The trade distortion implications of loans and grants: an econometric examination.' Report to KfW Entwicklungsbank. Overseas Development Institute, London, May 2009.

Nilsson, L. (1997) Aid and donor exports: The case of the European Union. In *Essays on North-South Trade*, Lund Economic Studies Number 70. University of Lund.

Nowak-Lehmann, D. F., Martínez-Zarzoso, and I., Klasen, S. (2008) 'Aid and Trade – A Donor's Perspective', Discussion Paper, 171, Göttingen: Ibero-America Institute of Economic Research.

Osei, R., Morrissey, O., and Lloyd, T. (2004) 'The Nature of Aid and Trade Relationships', *European Journal of Development Research* 16 (2): 354-374.

Petterson, J., Johansson, L. M. (2009) "Tied Aid, Trade-Facilitating Aid or Trade-Diverting Aid?," Working Paper Series 2009:5, Uppsala University, Department of Economics.

Wagner, D. (2003) 'Aid and trade - An empirical study', *Journal of the Japanese & International Economies* 17 (2): 153.

Zarin-Nejadan, M., Monteiro, J. A. and Noormamode, S. (2008) 'The Impact of Official Development Assistance on Donor Country Exports: Some Empirical Evidence for Switzerland', Technical Working Paper, 08-01, University of Neuchatel.

References

ADB data, accessed from: www.adb.org/Documents/Books/Key_Indicators/2008/pdf/lao.pdf

AusAID cooperation with Lao PDR, accessed

from: http://www.usaid.gov/our_work/cross-cutting_programs/development_cooperation/country/country.cfm?CountryID=35&Region=EastAsia.

Belgian ODA to Lao PDR, accessed

from: http://www.dgdc.be/documents/en/statistics/laos_2007_en.pdf.

China Development Brief (2006), accessed from: <http://www.chinadevelopmentbrief.com/node/454>.

Clay E.J., Geddes M., Natali L., te Velde D. W. (2008) *The Developmental Effectiveness of Untied Aid: Evaluation of the Implementation of the Paris Declaration and of the 2001 DAC Recommendation on untying ODA to the LDCs*, ODI.

CRS Report for Congress (2008) Laos: Background and US relations.

EC delegation to Lao PDR, Lao PDR Country Strategy Paper 2007-2013 and the Lao PDR-EU Multi-Annual Indicative Program 2007-2010, accessed from: http://www.dellao.ec.europa.eu/en/eu_laosLaoPDR/CSP_07_13_en.pdf.

Food and Agricultural Organization (FAO), Food and Agriculture Indicators for Lao PDR, accessed from: <http://www.fao.org/DOCREP/W8190E/w8190e03.htm#2.2%20forest%20resources%20in%20ao%20pdr>

France ODA to Lao PDR, accessed

from: <http://www.afd.fr/jahia/Jahia/site/afd/lang/fr/accespays?pays=LA&srcpage=lstpays>.

Global Partnership for Development: Thailand's contribution to MDG 8 (2005).

http://www.lux-development.lu/publication/LAO_light.pdf.

International Federation of Red Cross (IFRC) (2009), World Disasters Report, accessed

from: <http://www.ifrc.org/Docs/pubs/disasters/wdr2009/WDR2009-full.pdf>

Japan ODA to Lao PDR, accessed from: <http://www.jica.or.id/cdstudy/about/output/pdf/Lao.pdf>.

Japan's Country Assistance Programme for Lao PDR (2006)

Lao PDR Foreign Aid Report (2005-06)

Luxembourg ODA to Lao PDR, accessed from: http://www.lux-development.lu/publication/LAO_light.pdf

McCartan B. (2009) "A Helping Chinese Hand: Trade and Aid with Southeast Asia", *The Asia-Pacific Journal*, Vol. 22-1-09.

Ministry of Information, GoL, Laos Country Profile, accessed from: http://www.culturalprofiles.net/Laos/Directories/Laos_Cultural_Profile/-25.html.

OECD (2008) Report on Implementing the Paris Declaration; Making Aid More Effective by 2010.

Second Taskforce Meeting on Developing Country Action Plan of Vientiane Declaration on Aid Effectiveness (2007).

Sengkeo Kingsada Consulting (2006) 'Mineral Exports; A contribution to Lao development'.

Sweden ODA to Lao PDR, accessed from: http://sida.se/sida/jsp/sida.jsp?d=543&a=36080&language=en_US.

Than M. & Tan L. (1997) 'Lao's Dilemmas and Options', *Institute of South Asian Studies*, p. 260.

UNDP Human Development Index of Lao PDR, accessed from: http://hdrstats.undp.org/countries/data_sheets/cty_ds_LAO.html.

Vientiane Declaration on Aid Effectiveness (2006)

World Bank data, accessed

from: http://siteresources.worldbank.org/INTLAOPRD/Resources/293582-1202380919879/Issue10_English.pdf

World Bank Lao Economic Monitor (2008), accessed

from: http://siteresources.worldbank.org/INTLAOPRD/Resources/293582-1096519010070/534072-1229571730280/LaoEconomicMonitor_Nov2008_final.pdf.